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## Maijon Ruflique,

## THE COVNTREY FARME.

## Compyled in the French Tongue by

Charles Stevens, and Iohn Liebavit, Doctors of Phyficke.
And tranflated into Englifh by Richard Svrfiet, Practitioncr in Phyficke.
> "Now newly Reusiewed, Corrected, and Augmented, with diuers large Additions, out of the
> Works of $\left\{\begin{array}{l}\text { Serres his Agriculture, } \\ \text { Vinethischaifon Champefte, }\end{array}\right\}$ French.

And the Husbandrie of France, Italie, and Spaine, reconciled and made to agree with ours bere in England:

By Gervase Marifam.
The whole Contents are in the Page following.


LONDONs,
Printed byeAdam fllip for fobn Bill.
1616.

## The Contents.

THere is contained in this laft Edition, whatfoeuer can be required for the building, or good ordering, of a Husbandmans Houfc, or Countrey Farme: as namely, to forefec the changes and alterations of Times; to know the motions, and powers, of the Sunne and Moone, vpon the things about which Husbandry is occupied : as, to cure the ficke labouring Man; to cure Beafts and flying Fowles of all forts; to dreffe, plant, or make Gardens, as well for the Kitchin, and Phyficke ve, as alfo in Quarters; with manie faire and cunning portraitures, to make compartments of diuers fafhions in cucric quarter: with a large defcription of the hearbe 2 Icotzana, or Petum; as alfo of the root Cliechoacan: to plane, graft, and order O . range-trees, Citron-trees, and luch orher ftrange Trees; to order Bees: to make Conferues: to preferue Fruits,Flowers, Rootes, and Rindes: to make Honey and Wax: to plant and graft all forts of Fruit-trees: to make Cyder, Perrie, drinke of Ceruiles, and Oyles : to diftill Waters and Oyles, or Quinteffences, of whatfocuer the Husbandmans fore and encreafe; with manie patternes of Limbeckes for the diftilling of them: to feed and preferue Silkewormes: to make and maintaine Medow-grounds : Fifh-ponds of running and fanding waters: to take Fifhes : to meafure and tyll Corne-ground : to bake Bread: to dreffe baked Meats : to brew Beere : to trimme Vines: to make medicinsble Wines; with a very large and excellent difcourfe touching the nature and qualitic of Wine in generall; and after thar, another fpeciall and particular one, of all fuch Wines as grow in Gafconie, Languedoc, Touraine, Orleans, Paris, and other countries of France: to plant Woods of Timber-trees and Vnder-growth: to make a Warren : to breed Herons: and to imparke wild Beatts. As alfo a large difcourfe of hunting the Hart, wild Bore, Hare, Foxe, Gray, Conic, and fuch like: with the ordering of Hawkes, and all forts of Birds.

And lafty, in the end thereof, is bricfely fhewed the nature, manner of taking, and feeding, of the Nightingale,

Linnet, Goldfinch, Siskin, Larke, and other fuch finging and me-



## TO THE MOST NOBLE

 AND MOST WORTHIE LORD Robert, Lord Willowgbbie, Baron of Willoughbie and Eresbie.

Ow euer the greatnefle of your place, or the neceffitie of the times, way cballenge your vertwe (mof $\mathcal{N}$ (oble Lord) to bee wholy taken up, in the contemplation of bigh, and ferious affaires, as ambitious or couetous to enioy a full and abolute man, and making euery thing that is not equall with your worth, too much too inferiour for your cye; yet this excellent gloric of $\mathcal{N}$ (obilitie, well tempered (urtefie (in wbich you are flowing rich) perfuads me that the arguments bandled in this Booke, /ball not appeare Sotriuiallinyour Iudgement, but that as to the tale of an boneft Hulbandman, you will bend your $\mathcal{N}$ (oble eare. And though not for the bettering of your owne knowledge, yet for the benefit which may/pring vnto your neigbbours, grant it your mof S (oble patronage and defence, from the Stormes and frofts of Enuse and Detraction: Ft firf belonged to your moft $\mathcal{N}$ Coble and Heroicall Fatber, as the gift of a

## The Epifle Dedicatorie.

learned and well experienced Genileman, who in the tranMation, tooke a long and well-meriting labour, it muft needs then, now be yours, bout by order and inberitance. eA nd though wben it came to kiffe bis band, it was all French, except the language, fo that many wanted skill to make v/e, and fome were fearefull bow to $\nu / e$ a knowledge so differing from their practife: yet now it is put into other garments, and how bomely foever the ftuffe be yet it is cut with that art and iudgement, that without doubt, it will bothendure the wearing, and become any Husbandman of thisKingdome; or the other, who were firft breeders of the lame: towhofe particular profit 1 leaue it, andmy Jelfe ever to bee difpofed as your

Lordfhipsferuant,

TO THE RIGHT HONOR A BLE, Sir Peregrine Bartie, Knight,Lord Willougbbie, Baron of IVilloughbie and Eresbie, Lord Gouernor of her Maiefties Towne of Barwoicke, and Lord Warden of the East CMarches.

S Darius in his deepe affecting defire, made choice putarch.in of many fuch fubiects and Captaines as Zopurus. Reg. Apooth. and Eacus, after that the Peftılence had vnpeopled Theffalia, did wifh that the fwarmes of Pif mires (whereupon as it isfaid, the Myrmidons tooke their names) might be turned into men: Scruius in 2.Aencid. So I am vndoubtedly perfuaded (right honourable) that you hauing made your chiefe and fpeciall choce of the things which are fromaboue, and ftriuing therein to let vp your reft of contentation, would with like delight haue welcomed fome fuch thing, as had concerned the dreffing and adorning of the foule: rather than any courfe, countrie and domefticall difcourfe (fuch as I am here to offer vnto your Honour) being commonly efteemed but as a tale of a turfe, or matter for a mattocke. And indeed I could haue wifhed that the Heauens had ftoupt as low to haue reuealed vnto you fome of her facred myfteries: as the earth hath aduanced it felfe herein, and opened her mouth to fhew unto you her cabinet of rich prouifion, and casket of pretious iewels. Or elfe, that according to your place and calling, fome Cofar had affoorded you fome learned Commentarie of Martiall Stratagems: or fome Lyctrgrus, fuch treatife of Policie, as wherein you might haue had pointed out and delineated, as with Polycletus his golden rule, the exquifit rules of $\mathrm{vp}-$ right iuftice and lawes of Commen-weales fafe gouernment. But feeing this is that mite which my fore will allow me at this time to offer vnto your Honour, accepting the fame, may it pleafe you to looke a little thereupon, and confider that varietic and ftore of rarities

## The Epifle

ties it mof plainely affoordeth : and I doubt not, but that you fhall find it as pleafant to your Honour, as Virgill knew his to be auaileable to Husbandmen. And that in refpect of the fubiect or matter, which (although others following their veimess servidas, and preiudicate opinions, haue accounted bate and vile) ( know your Honour dothadmire, and (much like vnto the Poet in another point crying out, Nec rox bominuim fonat, O Deacerte!) fay; Ido not take this earth to be worthie to bee accounted of in contemptible wife, but rather to be held as a foueraigne Empreffe, and fole Monarch ouer earthly creatures, as wearing by belt right, and tite, the naturall imperiall Crowne: A Diuine fage, as wearing not only the lawrell, but alfo euery other beautifuli and flowring branch that may be enfigne of the fame: A Celeftiall bodie, as one that being well viewed round about, will be found for hew and ornaments incom-

Ou'd.ibr, I. Metamorpho

Parrhin Chis. rug. $6.24 . C_{0} 3$.

Dancers in Phyjic.Tract. 5, 6,27 . parable : And laftly, mother of Celeftiall offpring. For if we confider it in her figure, wee fhall find it to beexactly fphrricall and round. If in her matter, it is fuch as is full of conception, and. that not with one or two, nor yet eleuen at once, as was that Dorothie of whom Erancijcus Picus Mirandula writech : neither yet with fo fow as fixe and thirrie, as was that noble woman called Margaret, dwelling in the territories of Cracouia, and mentioned by $\mathrm{Marrtinus} \mathrm{Cro-}$ merus: but with an infinite number of millions; infomuch as that in that refpect, it may be compared to thofe Infecta animalia, which haue not their life and vitall power, reftrained more vnto fome one part of their bodies than ro another, but to to the whole indiffe-rently and alike. For fo fruitfull is this great mother of the world, as that not only in her wombe and inward bowels, fhe conceiueth, perfecteth, and bringeth forth moft pretious, feruiceable and beautifull babes : but in euerie other part, euen in her moft fuperficiall and outward cruft. For what is there which gold, filuer, minerals, and pretious ftones, may not bee matcht withall? How durable, faire, and feruiceable are they? And what pleafure, profit, or reliefe againft hard and vnfupportable neceffitie, is like to that of fo manifold forts of corne, trees, herbes, flowers, feedes, licours, gummes, beafts, birds and wormes? Yea, what fo excellent a crea.ture as man and woman, the very quinteffence and Summumarca-mum of all the extractions and preparations that euer were or fhall bee made out of this earthly maffe? For although that hence arife the matter of thofe ftrange and admirable bodies, which worke fo much wonder in the minds of the common people (namely, the

## Dedicatorie.

firie and therefore fearefull meteors, called by the names of the firie pillar,firie fhaft, burning candle, night flafhes, skipping goat, flying fparks;and blazing ftars: and thofe other not firie, and therefore not fo fearefull, as winds, whirlewinds, and earthquakes) yet there is not any one norall of them to be compared with man and woman, called by Plinie a little world, and by Zoroafter, the vttermoft endeauour of nature. Neither fhall you find, that it can want any one of thefe pefections, if you doe but weigh how that it was made to be the mother, and nurfe of euerie liuing thing, and therefore to containe whatfouer neceffarie thing that might bee of vfe, either for the generation or nourifhment of any, or all the liuing things that are. Neither yet feeing it was made, and is maintained by his word, by whom alcne euery thing hath not only his being, but alfo to be fuch as it is, whether of things in heunen, earth, or in the depths: and without whom likewife, nothing can hereafter bee, that now is not, or continue, which alreadie is. And certainely we camot deeme, but that it held this diuine reputation amonglt thofe profound fearchers out of natures fecrets, 8 \& liuely fhadowers and (ertersforch of natures workes : the fonnes of the Mules. For in the light of their piercing reafon, they (falling to admire the furpaffing prerogatiues that the earth was endowed withall) could not but affigne fuch a diuine power to the ordering and difpofing of euery thing concerning the fame, as fhould both for name and thape excell all the reft of the inferiour regents, more than any Emperour that euer was, did excell his leaft Vice-roy: And therefore could not find how berter to expreffe fuch rurall god, than by calling of him Pan, and atrributing vnto him the comprehending of all things, as obe in whom nothing was omitted or wanting that can bee wifhed for ; as alfo by acknowledging the feuerall forts of inferiour gods, in fuch a manner, as was to make them commaünders of fuch pettie dominions, and bounden perticulars, as manifeftly appeare vnto all, to bee the members of his vniuerfall iurifdiction. For fo they haue thought good to tie Eolus to his Winds, and Bacchus to his Wines, Pluto to his Lake of infernall torment, and Ceres to Corne, Siluanus to the W.oods, Flora to Flowers, and Pomona to Apples, \&ec. From the earth likewife it is that there are fo many Emperours, Kings, Queenes, Archdukes, Dukes, Marqueffes, Earles, \&c. being all called Princes of the Earth,as not only begotten and borne of earthly matter : but alfo for that according to the largeneffe of the lauds which they hold in their poffeffion; fo is

## The Epifle

their power, magnificence, and renowme. Furthermore; of or from the earth, is miniftred matter to defend or offend, feed or famifh, cherifh or ftarue, make blind, or reftore fight, to ouerturne, or build vp great towers, to giue, or take away light, to procure health or fickeneffe, foes or friends, peace or warre, pleafure or paine, forrow or mirth, tafte or diftafte, fleepe or watchfulneffe, fores or foundneffe, barremeffe or fruitfulneffe, life or death: and what not? Yea, if you fhould defire to looke vpon the counterfeit of

Ouid: Epif. VirgoinAc. neid.
Plution epitede vit. beautie, or to know Diuine Pandoraher manifold other graces, you need not farre to fearch, feeing herein irreprehenfible fhape,furpafo fing faireneffe, infinite riches, rare attire, robes, ornaments, iffue, abilitie, vtilitie, wifdome, and gouernment: feeing it alfo(as the center of the world attended with fo many glitering globes which the Heauens doe containe, eueric one readie and preft to applie themfelues, and whatfoener is in them in all feruiceable fort, for the effecting of her affaires. For who is he, that vpon fuch grounds can refraine as abfolutelyto giue fentence with it, againitall forts of creatures (not inhabiting the bigheft heauens) as euer was given with Helena for beautie, Penelope for chaftitie, Aeneas for pietie, or Themiftocles for faftneffe of memorie? And finally, this facred goddefle, as the fheweth her beautie, in being clothed in her gaieft colours, and her perfection in her naturall kindneffe, by preffing out of her neuer drying brefts(though euermore conceiued)euen millions of ftreames to feed (as with fweet milke) both the young and old fruit of her wombe : fo if you pleafe to call to mind fuch names, as the Gretians in their wifedome haue giuen thereunto, which are $2 a^{\prime} x, \alpha^{2 \alpha n}$, or $2 \tilde{n}$, of the verbe zaxut to be glorious, or to excel ; or the names affoorded it in the Holie tongue, which are nouk and $\boldsymbol{n}^{2}=$ (the one hauing relation to that kind of earth which bringeth forth food for man, and the other to that which feedeth cattell) you fhall clecrely fee, that there cannot too reuerend an eftimation be had of the earth; and that. it is to faile and come fhort of the fcope of the Creatour(by whom firft and principally all names are given) to account thereof, in any bafe and vile manner. Now feeing the earth is fo diuine a fubftance as hath beene proued, and that euery man, as alfo his labours, are fo much the more or leffe to be regarded, or honoured, as the fubiect is, whereabout he is occupied. I cannot doubt but that this fo renowmed a Grace, fhall bee vouchfafed to haue conferd, all due and worthie dignitie and grace, vpon fuch as take paines, like deuoted fauorites, and feruent true louers, to make

## Dedicatorie.

her admired and honoured of all. Efpecially the fame falling out not vpon any light and want on fantafies, that young and youthful! yeares may breed; (her laft and worlt age, haviing alreadie very deepely feifed vpon her:) but rather of intire affection (if not compulfue dutie) pricking them forwaid (fo much as lieth in them) to pluck off her ftiffe, hard, and drie-growne flough, that fo fhe mighe receise as it were a fecond birth, to the doubling of the thred ot her liuely and luftie daies. And that vpon both the forts of them, as namely thofe which thape their courle, to the purchafing of this hauen, through the frraits of painefull toyle: and the other who endure hard ftormes, till led by learningsload-itone, they haue aifo difcouered the fame by skiiful precept.f nd the rather, feeing that 2. Chro. 6.10 :
 is, lowers and tillers of the carth) the practife of the Worthies of all ages \& nations, whether you call to mind the Romans among ft the Gentiles; or the Kings and kingly race amongtt the Iewes: and thirdly, the eftimonies of profane writers, Li" pecorum pauere greges: And Tempus in agrorum cultu confumere dullece eft, haue not fuffered them to want their due land and praife: fo the common and delightfull reading and ftudying of the fecond; befides the lawrell garland and fatour, with preferment, at the hands of the mightieft Princes, cuer readie and ordained for good writers, doth fufficiendy declare their merit and defert; yea vnlettered and fenfeleffe workes which skill hath framed, cannot but approue and prafe the workeman : and confiquently, the happie hand that was imployed in penning and pointing out the fumme of all that art and cumning. Againe, if fuch as faithfully fet downe the.atts, the fpeeches, and feverall occurrences of perfons and cimes, for performing fo woonderful a worke, as to make the things paft, and perithed, in the firft breathing of the world, hill to liue and yeeld forth a liuely breath vnto the laft and finall end of all ; and on the contrarie, that which Thall be hift, and neuer was before, to bee all befet with the hoarie haires of the very firftand eldeft antiquities, be truely worthic of immortall honour: then how much more fhould they, who from painfull plodding precept,haue reuealed the knowledge of bringing forth, as alfo of recording whatfoeuer fuch famous deedes or fayings? Wherefore accept, and take in good part, R. Honourable, (as one who can neuer lee flip any the leaft kindueffe that hath bin offered to a mother) this laboured worke, the magazin, and ftorehoufe of all fuch knowledge, as may make for the honour, digniA 2

2 Sam., Is Oymp: Nime.
ann, m 2.Ectusi Onid dib:.alde Ponio.

## The Epistle

tie, maintenance, and beanie of that comnon mother; from whore wombe we (euen all of vs) are not onely defcended, but by whom we are flill futtained; and into whofe bofome, death fhal no fooner caft $v s$, than we fhalbe welcome, louingly receiued, throughly and indiftinctiy reunited, and fafely referued vntill the great day of fummons, wherupon the will as readily render and repay, whatfoeuer hath beene thus committed to her cuftodie, and charge. And that God that fhall fend forth his glorious Angels to the executing of this great citation and fummons; and who hath raifed and deriued you from an honourable, princely, yea a Chriftian and truely religious ftemme, (vouchfafed the great dignitic of fellow fuffering with Chrit, and that in a deepe degree ;) continued your life, and drawne out your daies in his feare, and the loue of his truth according to finceritie; and made you as a wall of braffe to the daunting and difappointing of the power of the proud idolaters, and bloudy Nimrods of our time :giue you fill fo to proceed; that fo euen dying you may not onely thew forth the flourifhing ftate of a greene olive tree planted in the Courts of the Lord; but leaue behind you the fprouts of pietie and magnanimitie, in all vnfained holines, prudencie, and fortitude, to expreffe and reprefent, you vnto their liues ends.

Your Honours inall humble dutifuline $\mathrm{Se}^{\text {e, }}$
Ricerad Svrifitio

## axa

## 5 Surfle, to the courteous

Reader.
 Ee fee it in common experience (Gentle Reader) that fuich Cookes, as can contriue and make of Some one Stuffe (and that in it felfe little regarded, and leffe rofed) eitber by adding of jome fers things (and thofe not costly) or elfe by their labour or manner of preparing many, both pleajant and wholefome dilbes, are bad in bigh account and estimation: And that that Mufcian which can roariemeft ropon a plaine-fong, is reputed as cbiefe in his profeffion. Then plie thy felfe, and let notbing hinder, that Liebault, for like, but farre greater art, Sboild reape of thee the like affection, and entire deuotion of a friendly beart. The learned man feemeth runto mee, to baue made this long digreßion, and turning afide, out of bis direct way, namely, the affaires of his particular calling, ropon fome deepe touch, wherewoith bee bad felt himpelfe mooued, to labour the relieung of the mijerable eftate of mankinde, which (either through ignorance, or finifter employment of the gifts of bis minde and nature, or other goods) bee found cuerie where, eitber pinched with penurie, yea, worne out with want, and (as it were) fast fhut rop in prifon, farre from all fufficiencie, or elfe loofely and lewadly running riot: not onely ceafing from the dutics which bee Jhould and could doe, but aljo following fuch practijes as lawnfully bee neither could, nor Sould doe. For can5t thou poßibly auoid him, whofoever thou art? If thou boe one of anie great

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## Surflet to the Reader.

place and polfefions, bee teacheth thee to charge thy felfe as thy reuenues will hberally reach, taking beed of pordigalitie; and firreth thee rop to the knowledge of the ordering and drefjirg of ground, or whatfoeller other thing: that fo thou mayest not onely fee what is to bee done, and bow, but alfo iudge thereof when it is done. If an inferiour perfon and baurng nothing but what thou laboureft for, lacking alfo skill, and so juffering thy field to grow barren: bee teacheth thee all good meanes for the making of it fruitfull. If for lacke of will, pouertie come opon thee as an armed man, know that there is neuer a precept of paynéfull toyle and laborious busbarárie througlout the whole Booke, but it foundeth an alarum, and proclaimeth an open defiance against thee as a Sluggard. If through skill ioyned with will, thou reape the plentifull increafe of a rich Hanuef, but abufe it, to the malitious rexxing and troubling of thy neighbour in the Law, or to the corrup. ting of the bonest and cbaft liues of Maides, or any of thy meighbours Wiues, bee calleth thee from fuch courfes ronto the labours of thy ground: for fcarce to take thy lavefull recreation at lawfull delights (Juch as are Hawking and Hunting) will hee affoord thee any leafure: If a Farmer, bee teacheth thee kindneße by devifing fomething to gratifie thy Lord witball; and gentleneffe in louingly intreating thy leruants. If thy neighbour. enioy any goodly commoditie of Graffe, Corne, or other dead thing, or any other liuing thing whatfoewer that is excellent, becaufe bee woild not baue thee to looke ropon the fame with a rea pining, greedie, and couetous eye; bee calleth thee to the prouiding of Juch of thine, by teaching thee bows to doe it. If thous bee a feruant, bee willeth thee to bee both painefull and pittifull; that fo all thy bufineffe may bee well dorie, and in due time: and the beaftes wherewith thou art charged, may bee tendred of thee in all mildneße. And finally, that all ronboneft and difgracefull waies may bee farre from thee, bee bath taken the paines to inftruct thee in fo many things, as that if thou vilt applie thy Selfe thereunto, and to doe them soell : thou !bale not find the leafure to lend a thought to the euill that might allure thee. And that he might not bee miftaker and thought to forget that woman was made

## Surflet to the Reader.

for a belper, bee bath called ber to bertaske, and that neither little, nor confisting of a fers or bafe things, baving committed runto ber (befides many other matters) the cure and charge of families bealtch. But leaving to §peake any more of ber charge in particular, I could wilf all juch of that jexe as are religious, to looke before they leape, and to bee woije according to fobrietie and grauitie: Sobrietie, not medling, aboue their place and reach, in matters of Phy ficke: and Grautiite, as not bauling any thing to doe in the matter of Fukes, either for resing or preparing of them; Seeing they argue, if not plainely proue, a light, aloofe, and rvery sinfull life.

And finally, feeing that the whole earth was once a Tempe, an Eden (that is, a place of all pleafures and delights) and the ajigned poßesion and naturall inberitance of man and woman, to labour and liue in, with exceeding great ioy and felicitie; and that throught their finne it was curfed, and they were caft our of the most pleafant, commodious, and beneficiall part thereof: I could wibh themiointly to record fuch their former felicitie, and the lofe thereof, to the end that they may applie their bearts ronto mijedome, and learne, that alchough they doc continually labour, yet if they wallow in finnes, they doe but throw downe twice as much as they build rop, destroy and mar more than they make, driue farre away the creatures of meate and maintenance, wisich they labour fo greedily to frrape and pull ronto them, and euein bereaue the earth (if it were pofible) of all manner of fruits and increafe, that fo it might not any more eitber feede or cloth them : For knowiledge, skill, toyle, paine, rijing early, lying downe late, with eurery otber belpe, doth loofe bis vertue and come flowri of his end, if delight of finne beeioyned as a companion therexwithall; it being the bemuie load and burtben runder wobich all creatures dos grone; the burning ague that drieth all Jappe and moifture; and that curfed Jeede orbich cuufeth them as a rapapous brood not onely to fret out their mothers bowels, and bring a curferopon ber bodie ; but thereby alfo to curre and crofe themfelues in all that woberein they would moof gladly thriue and proper.

Surflet to the Reader.
Thus (gentle Render) bauing commended ronto thee the Authors due, and drift, and mine o pone aduice, bow thou maieft moft certainely attaine the fame; I leaue thee, boping, that as they are things that match and fute fo together, as that one of them camnot well goe without the other; fo thou wilt apprebend and lay bold of them all, as that
thou wilt newer fuffer any of them
to be loft, or lie idle.
Farewell.


## sv A Table, to know the beft time, when to

 fowe diuers forts of Seedes.Others would bee fowne in 2 certaine moneth and Moone: as there muft bee fowne in the moneth of Februarie, the Moone being

Spike.
Garlicke:
Borage.
Bugloffe.
Cheruile.
Coriander.
Gourds.
Water-Crefies.
Marierome.
New,
Palma Chrifti.
Flower Gentle.
White Poppic.
Purlane.
Radifh.
Rocket.
Rofemaric.
Sorrell.
Double-marigoldse
Tyme.
r Annife musked.
Violets.
Blites.
Full, Skirworts.
White Succorie.
Fennell.
Parlley.
Holy Thifte. Cole Cabbage. White Cole. Greena Cols. Cucumbers.
Harts-horne. Sampier.
Dyers graine.
Old, Spinage. Cabbage-Letuce.
Melons.
Onions.
Parfineps.
Larks heele.
Burnet.
Lecks.

## cA Table directing when



## to fowe diwers forts of Seedes.

Hearbes growing of feedes that are fowne, may bee tranfplanted at all times (except Cheruile, Arrage, Spinage, and Parfley, which are nothing worth when they are tranflanted) euer oblerued, That fuch tranfplantation bee in a moilt or rainie. weather: for otherwife you muft looke to them, to water them.

[^0]Know, that feedes doe thriue and profper a great deale better, when they are fowne vpon fuch daies as are but warme, and not verie hot, or cold, than in hot, cold, or drie daies.

Faire weather.

Note, that leedes muft be

> Nore, that it doth well to $\left\{\begin{array}{l}\text { Plant in the laft } \\ \text { Gather ghifts in the laft butone } \\ \text { Grift two daies after the change }\end{array}\right\}$ of the Moone:

## eA Table directing wben ©c.

 are growne vp to the knowledge of the Planets and Signes, may exacily obferue thes afpects of the Moone vnto the reft of the Planers, \& how long it abideth in anic of them, for fhee
that it may keepe and maintaine with the profit and encreafe thereof, a painefull and The name of the skilfull Husbandman, and all his Familie : whereupon it commeth to paffe, that the
country boufe is aFarme, Mieefe, or field Inberitance.

The Trangato\%,

The Englijh praciife added to the Erench. countrey inhabitants doe call it at this day the onely or principall and greateft gaine that is, becaufe no other thing bringeth more gaine vnto the mafter thercof than the earth, if it be well husbanded and reafonably maintained.

Now for as much as (with good reafon) my countreymen of England may obiect againft this Worke, that albeit it may fort well with any foyle that is in any degree (how much collaterall foeuer) allyed to this temper, clyme, \& mixture of the French: yet to vs that are fo much remote in nature and qualitie, and whole Earth giucth vnto vs, for our moll generall profit, things and fruits, either litele, or very ftranger-wife, acquainted with them; and in as much as there may be found chat difference inour labours, which may cquall the difference of our tafts, they being as farre from our Barley as wee from their Vine, and wee as farre from their Fruits as they from our Woolls; I will, after the faithfull tranflation of their noble experiences, adde the difference of our cuftorses, and to their labors adde the experience and knowledge of our beft Husbandmen, hoping thereby to giue a publike content to our Nation, who feeing the true difference of both Kingdomes, may, out of an eafie iudgement, both compare and collect that which thall be fittelt for his vfe and commoditie.

> C н A P. I I.
> Abriefe thew of that which fhall more largely be defcribed in that which followeth.

The summe of the firt Booke.
 He better to helpe the memorie, and as it were by the way of pointing out of our French Husbandrie, I will propound and fet before you a champion place feared in fuch a coaft or corner as you may find, not as you could chufe, and there wee will prepare, without extraordinarie cofts or charges, a Houfe with all fuch appurtenances (or verie neere fuch) as are fit and requifite for our time, as good Cato hath drawne and defcribed for his, in that Treatife of Husbandrie fet downe by him for the Commonwealch of the Romans: And in the fame place we will entreat of the ftate and dutic of the Farmer, his Wife, his People, Cattell, flying Fowles, and fuch other things.
At the one fide of this Houfe, euen iuft in the place whereupon the Sunnerifeth,
The Summe of
the SecondBooke and in one part thereof wee will place the houfehold garden, which neere vnto the borders of his quicke-fet hedge flall containe a frame of Railes in forme of an Arbor for Vines to rume vpon, for the furnifhing of our houfehold fore with Veriuice, and other neceffarie hearbes for the houfe: and we fhall not altogecher neglect or forget to provide and plant in the fame place hearbes fit for medicine. And yet furthermore in this garden alfo you fhall plant things to make your profit vpon, as Saffron, Teazill, Woad, red Madder, Hempe, and Flaxe, if it feeme not better to referve this part of Husbandrie for fields that are full of Fennes or waterifh Places. In the other part wee fhall make a garden for flowers and fweet fmels, with his ornaments and quarters, garnifhed with many ftrange Trees. About the Hedge we fhall fee, for to make pottage withall, Peafe, Beanes, and other forts of Pulfe, as alfo MeJons, Citrons, Cucumbers, Artichokes, and fuch like : in which place wee Thall entreat of Bees.
The Surrame of the zhird Booke.

Next to our gardens wee muft dreffe fome well-defenced piece of ground or greene plot for fruits, and there place our nurcerie for kernels and feeds, and there plant fuch ftocks as whereon we intend to graft. After, or next hereto, our fquare of old growne trees, and fuch as haue beene tranfplanted, taken vp, and remoued: and together with thefe things we will write of Silkewormes, and prefcribothe waies to diftill Waters and Oyles, as alfo to make Cyders,

Next

Next in order to our forefaid Greene plot, lying neere fome one or other little The Sunme of Brooke, we are to lay our Medow Grounds, or Paltures for feeding, compaffed a- the fourth booko bour with Ofier, Elme, Aller-tree, and Withie; and by the borders of fuch Hedge we will prouide fome Poole of flanding water or running Spring: and next in order to thefe, the great and large Medowes for the prouifion and reuenues of the Lord.

Betwixt the South and the North we will appoint and fet downe Corne-grounds, The Surme of and teach how to meafure them, and defrribe their fafbion and manner of Tilling: the fitb Booke: in which place wee will fpeake of making and baking of Breads and ouer and aboue the moitic or halfe part of a hanging thing, and the moitic of a Butt or little Hill.

In the place which is neereft vnto the South, we will plant the Vine, and withall The Surme of declare chic ordering of the fame: Wee will fpeake of Vintage, and the making of the fxx Booke. common and medicinable Wines. And thereto wee will adde the diwers forts of Wines which grow in our Councrey of France.

Betwixt the North and the Eaft we will place our Warren, either vpon fome Hill, The Summe of or in fome other place fit to hunt in, and in the higher grounds wee will plant frall Wood and great Timberitrees: not forgetting, in the meane time, any thing which may appertaineto the ordering and gouerning of Wood, or concerning Carpentrie. We will alfo make mention ot Parkes for wild Beafts, of the hunting of them, but that in a few words (for there is ino need that a good Houfeholder frould troublc his braine with much hunting) and of the breeding of Herons. Finally, we will briefely defribe the order and manner of taking of Birds. So that after all thefe things, there fhall not much remaine further to be added hereunto, either concerning the pleafure or profic of a Countrey Farme, efpecially fuch a one as a man ought to defire, which would liue carefully, and within the compaffe of reafon, vpon the labouring of his Land.

## C н я p . III.

## What things are requifite before we goc in band with building of this Cowntrey Farme.


concerning the proprietie of Inheritance (whereofmanic Authors, both Greeke and Latine, hauc entreated fo exactly and curioufly) I doe not as all intend to incomber my felfe therewith, fuppofing, that this Countrey Farme, and the Land belonging vino if, is either defcended by fucceffion, and that there is an intent to make it in fich cafe as may ferue moft commodiounly to the eafe and good liking of the owner: or that (if you haue purchafed and bought it with your moncy) you haue cleered if from all incombrances and claimes before you goe about the building and fitting of it in cuerie point as you would haue it. For like as fome fay, that the firft foundation of a good Houre mult be the Kitchin, that is to fay, the Reuenues and Grounds thereto belonging for the maintenance of the fame: euen fo, the firt point and principall care of an Houfeholder, before he build or trim vp his Houfe, is to bechinke himfelfe how he may make the ftare entire and abfolutely vnto himfelfe, and fo to haue nothing to doe with fuch as are vnder age, Creditors, Rentors, or others in fuperiour place, which may interrupt and commaund him from his intended purpofes and neceffarie affaires. He mulf alfo fee, that all fuch Charges, purchafe by Rites, and Cuftomes, as Law doth require, be fully anfwered, and by name chat it be fatule, the ftwe cleere of all former Sales, Bargaines, and Statutes, which is the fafeft manner of purchafing in thefe daies: for there are found a farre greater number of foolifh buyers than of foolifh fellers. Let there be paft a ycare and a day before he make any exchange, raifing and mouing of new debts,for the clecring of his Inheritance, and lee :.f $\mathrm{B}_{2} \mathrm{him}$
him not lay out to the value of a penny, before he haue fully ended all things, meafured and bounded his grounds from his neighbors, and aflured his peace cuen againlt the moft wayward and troublefome. To be fhort, let him be free from all manner of Courts and Sutes: and if it cannot be otherwife, but that one or vether controuer-

That Land leadeth Jrife in hand. fie doe ftill hang vpon him (feeing, as fome men fay, that Lands doe vnauoidably inferre and bring with them ftrife in the Law)yet lec it be of fuch nature, as that he may be plaintife rather than defendant: I meane in refpect of duties to be performed to the chiefe Lord, and other impofitions by the Prince; in difcharging whereof, euen to the vitermoft Penny, Capon, or whatfoeuer elfe it be, he ought to be no leffe carefull and diligent, than in mending one tyle in the roofe of his houfe, which in courfe of time being left vnrepaired and vnput in againe, caufech others alfo to fall, and fo caufeth great annoyance to the lodgings vnderneath.

## Снат. 1 III.

## The feating and Jitwating of the Countrie Farme, with other his appurtenances.

 Lthough euerie man in all things enquireth after his owne commoditie, and ftraineth himfelfe to come as neere co perfection and excellencie as poffible he can; notwithftanding, the well-inftructed and modeft Houfeholder contenteth himfelfe with that, whatfoever it be, that commeth of the hand and grace of God, and accounteth for great bountifulneffe and liberalitic fuch Pittance, Grounds, and Seat as falleth vnto him, affuring himfelfe, that choice and perpetuall frution belong no more to him than Empires and Kingdomes vnto Princes. Wherefore, if the place wherein he was borne, which he enioyeth by right of Succeffion, or Purchafe, be not naturally fo fit and conuenient, as that he may there-
Labour is requifit in a Housfbolder.

Thet is to fay, that eucy ithing haumgattained bis height, doth, in the end aecreafe.

That a full per
fection of the
filuation of a
Countrie boufe
can no where be found. by be drawne and allured with the loue of it; then he muft endevour fo to fit it by his skill, and endeuour by his labour fo carefully to amend and correct it, that it may be fufficient for the maintaining of hin \& thofe that belong vnto him, and the erecting and fetting vp of an Houfe. For he fhould not learne to luft after, or defire, anie more (if the Prouerbe be true) than a Wheele-barrow for the firft hundred yeares, and a Banner for the fecond hundred yeares.

It I thould here goe about but once to imagine fuch a fituation of a Countric Houfe, as thould be fo perfect and exquifite, as that nothing fhould be wanting therein, I might iuftly feeme to my felfe to be void of all realon. It is verie true, that if anie fuch place could be found, where the Aire, Water, and Earth did all affoord their beft and meft defired fanours and qualities, it would much auaile and make for the purpofe : but fo it is, that neither Emperours nor Kings could cuer attaine the skill to content themtelues orherwife than with the fituation of their owne Countries: fome of them fomctimes being too hot, too cold, verie fubiect to corruption and purrifaction; otherfome lefle profitable for the bringing forth; and fome againe of a rieane and indifferent condition, and contrariwife. Notwithftanding, although the place be not fo ferrile as a man could wifh, neither yet fo commodious as that great Husbandman Cato doth defire it; yet $s$ muft be prouided and forefeene aboue all other things, that it haue the benefit of a good Aire: for fuppofe, that the grounds were verie fruitfull, and endued with ail the beft properties and qualities that a man could poflibly wifh to be in a champian ground; yet notwithftanding, if the Aire

## Agood aire is

 thing neceffarily to be luoked for, and procured to a Coun. trie Farme. be peftilentiall and infectious, or not found, it fhould argue nothing but great foolifhneffe in a man there to imploy his coft and paines. For where a man is in continuall danger of fickneffe, or of death, not onely the gathering of Fruits, but alfo the life of the Workman is continually hazarded : or rather, which is more truely faid, death is there more certaine than any profit. Wherefore (if it be polfible) you muftmake choice of a place farre from marifhes, farre from the Sea flore, and where as nether the Southerne nor Northerne winds doe ordmarily blow, and which lyerh not altogether open to the South Sunne, nor yet vnro the North : but principally fee
that it be placed neere vnoo fome one or other good and honeft neighbour, liceing it is an infupportable thing to be daily haunted ot a brawling and wicked neighbour : lee it not be placed neere to Holds or Townes of Garrilon, thereby to auodd the oucrages of Tyrannie, and inrodes of Souldiors : let $1 t$ in like manner be farre from Riuers and Brookes, which are fubięt to ouerflow, and that in refpect of the vnauoidable charges for the repayring of fuch ruines and fpoyle as fuci ouerflowings doe caule. And yet I could willingly wifh, and greatly defire, that it might not be farre off from fome fmooth and gencle ftreame, able to beare a Bhip, to the end that victuals may with the lefle coft be tranfported thence to other places for your better commoditie fake : as alfo neere fome grear good Towne, that fo the things of readieft fale may be fold for the beft aduancement and making of the moft of the reuenues of the fame. Aithough to wifh to haue a Farme in euerie point fo perfect and well feated, as that nothing fhould be wanting vnto it, were (as hath beene faid) an vnreafonable thing: as it is alfo to expect or looke for grounds and fields fo well conditioned, as a man could defire in a ground of feciall and principall praife and commendation. It is crue, that befides that Neceffitie doth beget skill, and prouoke and Alirre . yp men to take all poffible paine, induftrie, and care; ir doth alfo procure, that there fhould not that difcommoditie be found to offer it felife, which fhall not be recompenced and counterualed either by one or other commoditie : as for example, in hot places there are growne good $W_{\text {mines and }}$ Fruits of long continuance: in cold places, grear ftore of tweer waters, and fometimes fea-water, which greatly encreafeth their profit: in others, for the moft part, when the Earth is barren in the vpper part, it containech forne good things vnderneath, as it falletli in Stone-piss, Mynes, and fuch other things, which make the change for the better. So chen wee arc to hold our felues content with fuch eftare and condition as the place ifall afo foord, where we muft dwell and fietle our habitation : and if it be not fuch as fome curious man in his defire, crone that is hard to pleafe! might require and looke for; then wee fhall ftrane our felues to mend it by the nicanes fet downe hereafter.
There are verie few Farmes to be found fo feated, as that there is not fomething to be fupplyed, as want of Water in high and afcending places; fluch as are the Countries of Beaux and Campaigne, notwichfanding that their grounds there be flrong; as it happenech in rifing and mountainous places : too great fore of water in falling grounds and long valleyes, fuch as are to be found in fome places of Sauoy; Daulphine, Auuergne, and Gafcoigne, in whech places there is more pafture than tillage : orher quarters are giuen by nature to be fandie, as tuwards the Towne of Eframps, Saint Marturin de PArchaut, in Solong ie, and in the Countrey of Lands, which notwithflanding ceafe not to be moift and waterifh : other quareers are chal. kie and clayie, as towards Rheims, Troy, and Chalons in Campaigne:otherfome are flonie, as towards Saint Lou de Serans, Toninerre, Vezelay in Daulphine, and in the Pyrene Mountaines, where is to be found great fore of excellent Marble: and fome are rockie, which are moft fic for the Countries abounding with Vines. Howfoeuer the cafe fland, the building cannot happen in fo inconuenient and ftrange a place, busthit a man may make choice to take the beft quarter for the Sunne-fhine, as that which is moft for the health and wholefomeneffe of the inhabitants, and apply it cuerie way for his vfe and eafe.
If therefore a high and flat place, as Beaux or high France, doe want Water, you mult, for a fupply, make Pooles right ouer agairfft your Courts, and Cefternes

Neert ento a good neisbbor.
Farre fromp plac ces of garificon.
Farref from Ri. uefs and drooks ch

$1 t$ behoneth rs to content ous felues with thats which God and Nature affoor: dech. $\rightarrow$
$\qquad$
$\qquad$
$\qquad$
 h : Rockic grounds good for the bearing of Vines, and $\int 0$ for fuch Counn trics as abound with Vines.
Abigh and fat countrey. in your Gardens: and as for your grounds; you muft draw furrowes thercin in fuch pooles.
fort, as that the earth, caft vp by the way, may retaine moifture a long time: and if cefernesg? fort, as that the earth, caft vp by the way, may retaine moifture a long cime : and it neither yet to let it lye tallow more than euerie fourth yeare. If you calt Pits, .... isitu, 1

B 3
yous

Tits called Aranques.

To make a Ce fierne for to hold and keepe Raine roster.
you muft digge them of a conmenient wideneffe and length, that is to fay, fourefquare; but fomewhat more long than wide, after the fafhion of the Pits cirangines, which are in vfe in the gardens of Prouence and Languedoc, with therr trough laid to the brinkes of the Pits, to receiue fuch water as is drawne :. but if the water be fo low in the ground, that fuch kind of $\mathrm{P}_{\text {its cannot be made, then there mult Pies be }}$ made to go with a wheele, and thofe fo large, as that at cuerie draught you may draw rp halfe a pipe of water at the leaft, which you thall emptie into particular troughes, and keepethem for the vfe of your People and Cattell : but aboue all other things, you mult hane a feciall care to gather and keepe well all Raine water, cither in Ce fterne, or ocherwife.

The Cefterne fhall be fet in fuch a place, as that it may receiue all that commeth from fuch fpouts as are belonging to roofes or lower lofis of the houfe. It mult be firmely and clofely paued with clay and mortar, and after drawne ouer and floored with the fame mortar, to the end that the water be not made muddie, or taft of the earth : and if there happen any clift or chinke, you muft fop it with Cement made of cleane Haire, Tallow, vnquenche Lime, and yolkes of Egges well beat and made into powder, and then all of them well mixed together. The throat or paflige for the water out of it, fhall be fuch as that appointed for the Pits or Wells. Some caft into their Cefternes Eeles and other frefh water fifh for to be fed and kept there, to the end that the water may become the lighter by reafon of their mouing and ftirring of it, and that fo it may the more refemble the nature of running water: but indeed fuch water is nothing wholefome for men, as neither yet for bealts; it were farre ber. ter to ftraw with greene hearbes all the bottome of the faid Cefterne, and caft in little pebbles of the River vpon them, for by this meanes rather the water would be made better.
Moreouer, forthe difcommoditie of Wood, you fhall make leane the earth in cer-
The wasy to pres pare ground for the bearing of. mood.


A Countreg is neare vinto Riuers. taine places neere vnto your lodging with groffe Sand, Fullers earth, and afhes from off the Earth : after that, you fhall either fow or fet there fuch Trees, as you fhall thinke that may ferue yous although indeed it were good to proue what kind of Trees would beft profper there, before you wholly fow or fet it.

- If your place extend and reach vnto fome running ftreame, your medowes fhall not be fo farre off from it as your houfe; which, to be too neere a neighbour vnto Ri uers, would be a caufe of procuring R heumes, and the falling down of fome Roomes: and yer it is not good to haue it too farre off, as well in refpect of watering of the Catell, as for the wafhing of Buckes, Skinnes, Line, and Humpe; for the whiting of Webs of Cloth, if fo be that you intend or purpofe any fuch thing; for the grinding of your Corne, as ailo (if onely the River neere vnto you be nanigable) to fend that which you reape from your Fields vnto the Towne: but you muft chufe the higheft peece of ground to build your dwelling houfe vpon.
- I léaucour the pleafures of Princes and great noble Perfonages, who for their delight fake doe dwell in Summer in watrie places, excellently trimmed and beautified with waters, and furnihed with all delights: for our houfeholder may not ins any cafe charge himfelfe with further cofts, than this his ftate may well beare: for Princes haue wherewith they may be at their change and varietie of lodgings, according to the changes and alterations of the feafons of the yeare, and to turne at their pleafure the fquare into the round, and contrariwife.

Ina drie place, as Beaux and Champaigne, and the mountainous Countries, learne

The pleafures of Princos. to fet your building fo well, as that it may take the Eafterne Equinoatiall, and not lofe the rifing of the Sunne in March and OCtober, or rather in September. ... . If there be euer a Hill, build vpon the edge thereof, making choife to haue your lights towards the Eaft: but if you be in a cold Countrey, open your lights alfo on the South fide, and little or nothing towards the North, if it be not in your Barnes where you put your Corne; or fuch other things, as are fubieet to the Weafell and other vermine. Ouer-againt the North you hall procure fome row or tuft of Trees for to be a marke ynto you of your place, and defence alfo for the fame agaiaft the \&

Nertherac

Northerne windes in the Winter time. But if you be in a hote countrey, you muff fet your faid tuft of Trees on the South fide, againft fuch windes and heat of Sunne as come from thence, and boldly open your lights, efpecially in the faid Barnes which lie on the North fide.
Make good choice of the beff parts of your Grounds, to be molf fit for Fruits; Corne, and Medowes, and plant your Vineyard, to haue the South open vpon it. You fhall make alfo certaine croffe Barnes with their counter-windowes, in the place towards she Sourh, to cpen them in the time of a Northerne wind. Suck places are found in Countries full of Mountaines, which doe greatly defire the Eaft; and yer notwithflanding would therewichall take part of the South, which is fo needfull for thim.
In this and fuch like places Wells are in greacer requeft, and much more neceffarie chan in valleyes and plaine grounds, and that wee may find out the place where it is beft to make them, wee muft chufe the Eafterne fide, at the beginning of the def cenit, fortewhat therewithall bending towards the North, but wee may not haue any thing to doe with the WVefterne fide: and yer fomewhat better toward the South, where hauing ouer night digged the earth in diuers places the quanticie of three feet ouer and fiue in depth, and after returning in the morning at the Sunne-rife, you mult miake triall how ir foundech, being ftrucken with the end of a Holly ftaffe, armed at the faid end with fome round peece of Iron or Latten, after the manner of the end of a Shepheards flaffe without the Crooke; and there, by the iudgement of the eare, to obferue and marke how it founderh vnderneath, as whether it found like a Mortar, or like fas Earth, Poterers clay, or fome ocher that is very hard, or like a Glaffe halfe broken, or clie like a very decpe $\mathrm{P}_{11}$, that touchech the Quarrie or Veine lying vndernearh: and this is the bett way to iudge and make triall. Or ocherwife in the moneth of Auguft or September, at fuch time as the Earth is verie drie, a litcle before the Sunne rife, you muft lye downe flat vpos the ground, hauing your face toward the Eaft, and chufe out that place where you fhall elpie a vapour to rife vp out of the Earth, after the manner of litele Clouds, for this is a coken of a proud (or plentifull ftore of) water. Or elfe to niake a horter criall, to make deepe crenches of foure foot within the ground, and thereen to puif fpoinges or fleeces of Wooll verie drie and cleane, couering them with boughs of Trees, or leaues of Hearbes: then, ffeef fome cime, to take them out of the Earth, and they being wet and moift, doc argue abundance of water, according to the qualicic of moilture which they haue within them: whereas if on the contrarie they be drie when they be taken vp, it arguech that there is no water to be come by. Diuers there be that gather figures of the fringing vp of water in place where, by their fecing of fmall clouds and vapours rifing from thenice into the ayre, in dric, faire, and calme feafons. But howfoeuer, it is not conuenient to content ones felfe with the bare viewing of the hearbes which grow thereupon, without hauing firft made fome criall: for vnder Crowfoot, Folefoot, Plantaine, Dogtooth, Cinquefoile, Milfoile, and three. lcaued Graffe, Water is not farre to feeke, but it is nayght worth, if one digge not verie deepe, as is to be feene at Bagnoiet Belle-Ville vpon the Sand, and other places of Liury. Vider Veruaine is of tentimes foind good Water, and deepe, according to the nature of the ground: and withall, f f the head doe fpring from grounds apt to boyle, as red Sand, or gray Rocke, and not from thofe fides which by and by are dried vp. Aboue all, to the end we may hauic Wells containing water of a good rellifh, and fuch as will neuer welks thatneke? drie vp , we meeft make choice of a fandie, blacke, grauelly;or clayifh ground, or fuch driea a one as is full of pebbles, and efpecially that which is mixed of pebbles and fand to gether, but newer of that water which flowech from Fullers clay, mire, mudde, or fpringech from the grounds where Sallowes, Rofes, Reeds, and otherfuch Plants, which are engendred of a watrie humour, doe grow: for although that fuch places doe. jyecld grear flore of water, notwithftanding that water is naught worth, and will eifily be dried vp. Wherefore as much as lyeth in you procure that yourWells be tarte off fron fuch ditches, as whercin they lay the dung of Stables, Cattell, or Swinc-
coats to rot, or any other place which may annoy in regard of the pifing of beafts, if

Wells of good Water. they be not well digged and made verie deepe. True it is, that Wells will be a gieat deale the better, if they confift of a high rifing water, and not fuch a one as lyeth deepe in the earth. For howfoeuer that fuch Weils be leffe hot in Winter, and in Summer leffe cold, yet notwithflanding it fhall be infinitely better, becaufegt hath more helpe of the Sunne and Aire, which are the two things which doe greatly amend and make better the water : and if necefficie force the water to lye fo deepe and low, wee muft fecke to helpe the inconuenience, by drawing but a lietle, and oft, for the iumbling and firring of the water will rectifie it: and amongft other things, you muft haue fpeciall care not to keepe it couered.

Fountaines.
To find out the heads of Foun taines.

Founraines in like manner rifing fromfuch places of Mountaines, are had in requeft, as well for the profit of the water, which is a great deale better and more pleafant than that drawne out of Wells, as alfo for the beautifying of the Counary Farme.

The beft time to findout Sprin.g. beads. And for to find their Head, or Spring, wee mult vie the like meanes as wee haue layd. downe for the finding of Wells, excepted that wee muft make chiefe choice of tuch as breake forth vpon the North at the bottome of high and great Mountains, hauing hollow places, and compaffed about with plaines, for in fuch plaine grounds the water gatherech it felfe together, and diftilleth through the earth. Now this kind of prouifion of water is when you defire it in great aboundance: but if you ftand vpon and defire the beft and molt excellent water, you muft make choice of high places; and fuch as are not ouer- fladowed, the fall whereof doth enioy the Sunne-rifing, for water out of fuch Fountaines is a great deale more light and pleafant in taft, and by how much it runneth the fwifter and longer way in the Aire and Sunne before it come to the bottome, fo much it groweth the better; as when it falleth from high Rocks, it is (as it were) beaten and broken in falling through the downe-right places of flones and craggednefle of the Rocks. We mult alfo fee that fuch Muuntaines be full of Dogs-tooth, Plantaine, Fox-tanle, wild Penny-ryall, tranfinarine Sage, which is called Adianthum, Milfole, Chamelcon, and generally, all other hearbes and plants, which grow without being planted, and are by nature greene, well branched, good and thicke, and well flowred.
The time molt apt in all the yeare, and affoording greatef perfeuerance for the finding out of the heads of Wells and Fountaines,are the moneths of Auguft or September, for then it is eafie to know the greatneffe of the head, when the earth, by the great heat of Summer, hath no moifture of raine leftremarning in it , and then alfo we may gather affurance of fuch as will neuer drie vp altogecher.
Chanels or Pipes If it happen that the head Fountaine be fomewhat too farre from the Farme, you taines along, may force the water to come thither by litele Riuers, or rather more conueniently by chanels and conduits made of Lead, Wood, or Pot-earth : the beft are made of Aller tree, Firre tree, or Pine tree, out of which diftilleth Perrofen, becaufe that fuch Trees hate an oylie humour, and hot; which eafily refifterh the hurts which water might caufe: Next to them are thofe which are made of Pot-earth, if that the water carried along in them were not the caufe of breeding obftruction: Thefe muft be two fingers thicke, and fharpe at onc end the length of halfe a foot, to goe theone of them into the other: The worft fort is thofe made of Lead, becaule the water carried along by them purchafeth from the L.ead an euill qualitie, and that becaufe of the Cerrufe thereof, fo that it ofentimès caufeth bloudie fluxes and other fuch like difeafes, if we belecue Galen and them which for this caufe call the inhabitants of Paris Squirters, becaule they vfe Fountaine-water which runneth through Leaden pipes: which point notwithftanding feemeth nosto be without all doubt,feeing that Cerufe cannot breed, nor be made of Lead, without vineger, and for that we fee alfo diuers Countres doe drinke of fuch waters, without being troubled with bloudie fluxes: whatfoeuerit is, wee muft fee well together and foulder the pipes with a compound made of vnquenched lime, and the greafe of a hogge, or of Perrofenand the whites of egges; or of lyme, whites of egges, oyle, and the filings of yron; becaufe that all thele things doc hinder corruptions and rottennefte which the water might caufe.

If any Mountaine doe hinder the laying or bringing along of thefe Pipes, wee muft make chem way: if any Valley, we muft teare arches, fuch as are to be feene in a Village neere vnto Paris, called Arcueil; and that becaufe of chofe faid arches; or rayre pillars and other materer to fupport thofe water-paflages.
But it is not fufficient to haue found out thore Heads of Wells and Fountaires, but what waters wee mulf further confider of the goodnefle and wholefomenefle of the Water, as are befl. Arijfotle teachech vs: For feeing the greacelt part of our life dependeth vpon the vee of this element; it is requifie that the Mafter of the Hourehold hould haue care to procure good Water, in as much as $W$ ater muft be the moft of his feruants drinke, and that the Bread which he and his familie doe ear, is kneaded therewith, and the greateft part of his victuals boyled therein. The beft and moft wholefome Water of all ochers is Raine Water falling in Summer, when it thunderech and lightnech verie much; and yet notwithifanding, Raine Water caufeth coffiueneffe and obffrutions, efpecially that which is kept in Cefternes newly made, and thar by reafon of their Mortar wherewith chey are ouer-layd : It doth alfo corrupe very quickly (that onely excepted which fallech in May) and being fo corrupted, it marrect the voice, bringing Hoarfeneffe, and a little Cough. Next to this in goodneffe is the Fountaine Wacer, which fallech from the Mountaines, and runnech along amongt Stones and Rucks. Next to this in goodneffe is Well Water, or that which ifluech at the hanging paris of the Mountaines, or that which fpringeth in the bottome of a Valley. The fourth different fort of Waters is that of the River. The worft of all che reff is that of the Poole and Marifh Grounds: and yet that which runnech not is worfe than all the reft, and more apt to infect. The Water of Snow and Ice is the moft vnwholefome of all, becaure it is the coldef and moft earthie, as not hauing beene prepared by the heat and vertuc of the Sunne. And as concerning the Water of Weils and Fountaines (feeing ic is not found good alwaies and in all places) we fhall know them to be good, if it haue neither talt, fmell, nor any colour whatfoeuer, being notwithftanding verie clecre, and of the nature of the Ayre, taking quickly the colour of anie thing that one fhall caft into it, being alfo cleane, warme in Winter, and cold in Summer, eafie to make hot, and as foone becomming cold againe; in which, Peafon, Beanes, and other fuch like things, doe boyle eafily; and which being put for fome fpace in a Brafen, Copper, or Siluer Veffell, well fcoured, leauech no difcoloured parts or fpors in the fame, and which, when it hath beene boyled in a Caildron, made verie faire and cleane, doth not make any fetling or fhew of fith in che botrome: If fuch as vee to drinke ir, baue a clecre voice, a found breaft, and the die or colour of the face be neat and liuely : finally, that which together with the reft of the markes, is verie light, and by confequent as principallofall the reft thall that be iudged, which excellecth in the forefaid markes and qualities: and for to know which is che lighteft, weigh as much with as much of euerie fort of Water, or elfe take two, three, or foure Clorhes of one and the fame webbe, length, and breadth, according to the quantitic aid fors of Water which you would compare together, and in cueric one wet a Cloth, diftill the Clothes, or let the Water drop out of chem, and then weigh therm, for the Cloth which was moiftened in the lighteft Water, will then weigh lefle chan the reft. Ir is true, that the lightneffe of Water is not fo truely tryed by weighr as by drinking, not caufing at fuch time anie burrhenous weight in the places abour the fhort Ribbes, and paffech through the bodie fpeedily, as allo in being quickly hot and quickly cold.
Drie Places, and Councries abounding with Mouñtaines, doe commonly bring pilaeresgiuent, forth Stones, which is eafily perceiued by the rovigh and boifterous handling of the bring forth fores Earth, and alfo by the Stones lying vpon the vpper part thereof, which otherwife might haue fallen and beene caft there: in manner as fomecimes it fallech out, that men find vpon vncilled grounds the liuely fhapes of Fruits and Corne gathered rogether and growne vnoo the Stone, which is to bee feene neere to Mommirall in Bric, where Wood is growne vnto the Stone : befides that, the Hearth
will make quicke and fpeedie triall hereof. This will doe you feruice in the enclofing either of your Parke, or of your Vineyards, and other fuch like commodities, befides the profit you may make of it by the felling of Milfones and Stones to

Decciifull fonepits.

Why the cayth is termed by the name of a Mo. ther.

That it is $\pi$ gainft the nature of the free Countrey of Beaux to beaye any Ric. Touraine the Garden of France.

Man by labour is able to tame cuery thing.

Watrie and mariff places.

The under parts of matrie grownds.
flands of Flaunders.

To build on
the tops of high ground. build withall. But looke well to your felfe, and take good heed of Quarries, and cafting of Stone-pits, and of their deceits, which oftentimes rewards vs with our paines for our labour.

And as for the Earth (raken and vnderfood generally) it beareth all manner of Corne, Fruits, Hearbes, Timber-trees, Mertals, Stones, and other things, and chis hath beene giuen vnto it cuen fince it was firlt made: and hereupon old Writers haue iuftly ginen vino it the due name of Mother. But although, in refpect of the cold and driefubftance and nature whereof it confiftech, it may be called all of one temperature, yet it purchafeth and getteth contrarie qualities, according to the feuerall fituations it hath in diuers places, as allo vpon occafion of affinitie, interconrfe, and participation it hath with things of repugnant qualitie: and hence doe rife the diuers forts of the fame, and fo diuers, as that euerie ground will not beare euerie thing, but one or two at the moft. For this caufe, to auoid both colt and labour, fee aboue all things, that you proue, either by your owne triall and experience, or elfe by fuch enquirie as you canmake of your neighbors, what kind of Fruits, what kind of Corne, and what forts of Trees, doe profper beft thereon. Some places in France, and the free Countrey of Beaux, beareth no other graine than Rye, which is contrarie to the nature of the ground new broken vp: another loueth nothing but Wheat: Solonge loueth March corne, and fomerime Mefling: Touraine, worthily called the Garden of France, is found moft plentifull in Gardens and Fruit-rrees, as that part called Bric or Braye (becaufe it is fituate betwixt the Riuers of Marne and Seine) doth bring forth Fruits and Corne for fuftenance : and that quarter which lyeth betwixt Marne and the Riuer of Aube bringeth forth an infinite deale of Hay: Notwithftanding, the diligence of the Farmer may by his induftrie ouercome the weakneffe of a ground, euen as well as all forts of wild Bealts may be tamed by the painefulneffe of man.

In watrie znd marifh places it will ftand vs vpon to make our profit of the water, which you fhall ofentimes by fluces turne from his naturall courfes into your pafture grounds and ponds of running and ftanding water, for the profiting and helping of the fame. A bout the brinkes and edges of the moft commodious ones, you fhall fet rankes of fuch Trees and profitable Plants as you know to like and profper in the water. And you muft efpecially obferue and marke the diuerfitie of the botrome and vndermoft part of the ground, which in watrie places is often found to differ much, and to be fomewhat flrange, and according to the nature thercof to fet fuch Trees as may beft agree therewith.

Your Houfe being feated in fuch places, will be moft ftrong and pleafant in Summer, but of greateft maintenance, preferuation, and faferie, it you enuiron it round about with water, after the manner of an Inct, as it is practifed in manie places of Flanders, who make the vfe thereof familiar among them, to reape thereby the benefit of Fifh in his feafon, the flell of wild Fowle, Trees as well for Fruit as for Fire and Building, befides the helpes of their excellent pafture grounds : but indeed your owne health, as alfo the health of thofe of your familie, is impaired hereby, efpecially in Winter. Wherefore it will be heteer to build vpon highground, as the auncient Romans did, and to leaue the waters below, for the comforting of your fight, if fo be you haue not the meanes of clofing in all the fame round about, for your breed of young Colts and other Cattell, all which will like verie well vpon fuch grounds, except it be your Cattell feruing to furnifh you with Wooll.

If your Farme doe, for the moft part, confift of wild Grounds and Defarts, wild grounds, Defarts, and Bull-rubles. you fhall make them arable by labour and paines, and recouer them, deluing them diligently, and raking them often : for the Bull-rufh, Brakes, and fuch other hearbes will foone be killed, when the earth is often turned. But and if you defire with more haft and cercainetie to deftroy them, you fiall burne the ground
the two firlt yeares, and fow therein Lupines or Beanes, to the end that together, with the curing of the difeafe of your fields, you may reape fome profit and commoditie.
Stonie grounds are mended by taking away the ftones, and if the quantitie be great, it will be beft to caft them together in manner of fome fmall hillock in certaine places of the ground, and fo by that meanes the reft will be cleanfed and freed: or rather, when the daies of handie-workes fhall be got good cheape, it will be beft to digge the earth verie deepe, and there burying the ftones before-hand, afterward to couer them with the earth.
If the Farme confift moft of Forrefts and Woods, you fhall make thereof arable tratilled ground, by plucking vp the Trees altogether, as alfo their rontes: but and if there be grounds, but fmallitore, it will beynough to cut them downe and burne them, and then to till the ground. And fuch grounds are wont the firft ycare to bring forth much, becaufe that the moifture and fubfance, which before was fpent in the bringing forth and nourifhing of Trees, Buthes, and Hearbes, doth prepare it felfe wholly for the good of the Corne that is fowne vpon it ; or for that it hauing beene fatred and growne better by the leaues and hearbes of manie yeares, which of it owne accord it brought forth before it was tilled, becommeth afterward fufficient to nourifh and bring forth great abundance of fruits: and fo it commeth to pafle alfo, that being robbed of her former nourifhment, in time it groweth leane, loofing the frefhnelle and moifure which was maintained by the coucre, and therefore continueth not fo fruitfull as it was at the beginning.

Sandie places may be made better by Dung and Marle, which yet nowwithftan- Saindie gromds ding, euen without fuch Husbanding, by meanes of fome currant of water running vnder the Earth in fome Countries, cealeth not to yeeld good profit to their owners: but thefe craue reft, which is the principall remedie to helpe their weake and feeble eftate, and alfo to be fowne with varietic of graine, as after Rye, fome kind of pulfe. The way to know fuch grounds is common : when the great Sand is faft and yellow$i A_{1}$, it is then found to be good for Corne; and when it is white and drie, it is good for Wood and wild fruits. Bur it behoueth the Farmer to apply himfelfe vnto the nature and temper of his field, and according vuto it to fow and plant in euery place fuch things as a leth to knowo Fetches, and orher whe the nathere of Englifh Soyles we find, that our fandie and hard grounds doe beare beft Barley at their firft breaking, or when they are fateft; after, Rye, Oats, Fetches, or Tare.

Theftrong, hearric, and fat Soyle is good for Vineyards, and is apt to beare great Strong grounds. ftore of Wheat-Corne, forefeene that the yeare be drie, efpecially in the moneth of May, but fmall ftore of any other encreafe : yea, and if the cimes be much giuen to raine, they will beare but a little Corne, and great ftore of chaffe. Yet if the Seedsman haue a carefull hand in the beftowing of his feed, and doe not (as it were) cloy or choake his ground therewith, thefe fat Soyles will beare very well and fufficiently the firtt yeare, either whole Straw-Wheat, Pollard-Wheat, or Barley; and the fecond yeare, Beanes, Peafe, or both mixed together; and the third yeare, Wheat or Rye, or both mixed together, which is called Maflyne or blend Corne.

A raw, rough, and tough Soyle is hard to till, and will neither bring forth Rowghground: Corne, nor any other thing, without grear labour, howfoemer the feafons be temperate in moifture and drinefle. To helpe the fame, you muft labour it noft exquifitely, harrow it and manure it verie oft with great ftore of dung, fo you fhall make it better and leffe fubiect to the iniuries of the Sunne, Winds, and Froft: but efpecially defire that they may not be watered with raine, for water is as good as poyfon to them.

The Clay and frong ground, as that in Breffe and other places of Partois,craucth Aclay groms\% great and deepe furrowes when it is eared, and euerie where elfe, as euen in the verie places where ftones lye deepe and ouer-couered againe with good earth: and this to the end that the water may the better be conueyed away, which is
naturally mixt therewith, and cannot fo eafily depart, by reafon of the clammie fliminefte of the earth. This plot is not fo fft either for Trees or Vines, excepts be for fome fruit Trees, and thole well husbanded and nourilhed. If you build there,

To build vpon $a$ bigb ground.

Territories and fields lying in Croye and Ardofe.

The nature of the earth mult be knowne.

An old prowerb,
That of compulfions comes no good.

Good ground, a fruiffull courltrey of France.

The fruitfulines of Aquitaine.

Tbe inconveniences of the Southerne wind in Languedoc, Prouence, and Guienne. then doe it vpon fome high ground, and neere ynough vito the Riner, and caufe the Eafterne and Northerne quarter, becaufe fuch places arefubiect verie much to purri$\mathrm{fa}_{\mathrm{a}}$ tion, and verie vnwholefome.

The territories of Croye and Ardofe are more found and wholefome, rhough they be more barren : but it mult be made better, and much mended, and employed onely to that which it delighteth in: for the Baylife of the Husbandrie ought to know the nature of the ground, and not to force it to beare that which is conrrarie vnto it, notwithftanding whatfoeuer you doe vinto it for the bettering of it : for of forced grounds there comes as much profic as there doth of beafts, by violence vfed towards them. Forfuppofe you may compell them, yet it hall be to your great colt and charges, by reafon of their hurts, maladies, and orherwife, for fuch cattell conimonly ftand not in good plight and ftate. Theold Prouerbe alfo faith, That a Houteholder ihould giue greater heed vnto his profit, and the holding out or continuing of that which he hath vnder his hand, than to his pleafure and rare commoditie.

Euerie Countrie fit for good Vineyards is fonie and grauellie, or full of pebbles, and is found to be beter on the Sonth quarters, or on the defcent of the Hill, lying on the fide toward the Riuer: This place is not fo good for Corne; in the plaine or flat places thereof you muft make it better, and durig it. Make your buildings there on thefloping fide, which looketh into the Southealt, where you may not remone your felfe farre from the Riner, for the reafon afore giuen.

The beft Soyle is that which is blacke, crumbling, and eafily turned ouer, that is to fay, which eafily fallsth into fmall pieces in ones hand, and feeleth light, fweet, and fat in handling, like to that which is found in the countrey of Tourraine, Maine, and Anjou, which are fertile in all manner of fruitfulneffe and aboundance of goods, rich in Hills, Vallies, Pafture-grounds, Vale-grounds, Vineyards, and all forts of fruits: but vpon good caufe they giue place to Prosence, part of Languedoc, and Guienne, and the better places of Aquiraine, all which, by reafon of the heat of the South Sunne, bring forth notonely in greater aboundance, but their fruits of all forts of berter qualities and more forcible. This is the land of Promife in our France, and hath no difcommoditie faue that of the Southerne wind, which they call Aufrault:which except it be tempered by the Northerne winds, doth almoft euerie yeare engender vnhappie calamities both in men and beafts. Wherefore in this Countrie the dwelling places and buildings muft be fee vpon a Flill, and the South wind fhut out and denied all entrance by lights, except when it fhall be needfull, in the depth of Winter.
The fignes of a
Bur to fpeake generally, the Soyle may be knowne to be good and to beare great good and fer tile ftore of fruits by thefe meanes: as, if it be fomewhat blacke, or fonewhat yellow; if groind. it cleaue not when it is ill tilled; if it become not myric when great flore and abundance of raine fhall fall vpon it, but drinkech vp all the water that fhall fall, and sherewithall keepe this moifture and refrefhment a long time; if in Winter time it become not hard in the vpper part thereof; if without being husbanded or mended by great labour, or fatneffe of dung, it bring forth flourifhing hearbes, timber-trees, ftraight, thicke, hauing great armes, and abounding with fore of their feuerall fruits, and thofe good and well-rellifhed in their kinds : and if it yeeld great fruiffulneffe of Corne : if by being watered, or rained vpon, it become blowne vp, and as it were flretched out and blacke, and not hard bound, or turned white: if the water fpringing forth of it be fweet, or if the greene foddes thereof being broken in pieces, and Iteept two or three houres in water that is fweet and of a good taft, doe not marre or make worfe the taft of finch water, which mult be tried by tafting of it, after that it hath beene ftrained and clarified: For naturally water ifluing out from a fpring, or wrung from fomething that hath beene fteept in it, retaineth and carrieth with it the
taft of che Earth: and on the other fide, if the Earth fteept in Water, the fame Water doe after fuch fteeping yeeld a fweer and pleafant rellifh: if calt vp, and two or three dayes after chrowne into the faid ditch againe, it gather on a heape, and rife higher than the faid ditch; for in doing this, it fhewes if efife to be a far Earth : and whereas one fhall doe nothing but pare the faid ditch, without doing anie more, it will be buie indifferent: but and If he come not to touch the edges of the faid ditch, it will be light earth : furthermore, if it be watred with raine, ir yeeldeth a pleafant fmell. On the contrarie, the Earth mult be iudged of no value, if it haue not all thefe fignes of Naughtie earth. goodneffe: and principally, that which is cleauing like Glue, like Potters Clay, Chalkie, Whitill., which fhaketh and tremblech, which is too hard, rough, and flong, which is watrie andmarifh, which hath a falt or bitter taft, which bringech forth Trees and Hearbes that are bitter, cold, and thornie, as Brambles, Ferne, Bryers, Wormewood, Iuniper, Lauander, Broome, Butchers Broome, and other fuch like: as on the contrarie fide, Rufhes, Rofes, fmall Graffe, three-leaued Graffes, Thornes, Danc-woort, wild Plum-trees, and fuch orher things, doe thew the goodnefle and fruitfulnefle of the Soyle: for the chings aboue named are not fqund or nourifhed anie where almof but in the fweer veines of the Earch. Yer,according to the opinion of Serres, all Clayes which are blacke, gray, or marlie, albect a litele tough and gluie, yet, if after their drying they become not hard, but crumble, and (as it were) fall to cynders, or if they be not much fubieat toa kind of vomiting or cafting vp of water, or to an extraordinarie exceffe of coldneffe, they are to be repured the fatteft and beft Soyles for Corne, though not for the Vine : and though they are leffe apt to breed or pur forth Wood, yet the Wood growing vponfuch Soyles is euer the beft and the longeft lafting.

## С н а p. $^{\text {V. }}$

## The building and inclofing of our Countric Farme.

(2)Eace being purchafed, chen build thine Houfe,faith the wife and prudene Houfeholder: and the Author of the Latine Georgickes doth highly prize and value thofe great Farmes and Houfes, whofe appureenances and expences are great: but he counfaileth men to vidertake and deale with fo litele as he knowerh well to doe. For as great Cages make the Birds neuera whit the better, even fo it is nor fo fafe and fure a courfe to haue a coftly and large Building vpon the ground, neisher yet to haue fo faire and large Fields, neither yet fo great quantitic of Grounds, as that they mult be either all ill husbanded, or elfc if for the carefull tilling of one part of them, all the reft be left and let goe vṇilled, as neither to couer greedily, or alpire to poffeffe orher great and flately Farmes, when he is not able to husband and cill that which he hath alreadie in poffeffion, if fo be perhaps thata man long not to bring himfelfe wilfully into the danger of the Lords of fuch Farmes, rather than to aduance or further their owne profit : like to thofe bad Carters, which will not fee or fuffer either Horfe or Man to ftand ftill, vntill by concinuall toyle and vnceffant labouring of them about the grounds of his Farme, he bring to paffe, that both Lands, Horle, and Men be not able to hold out, bur become little.worth : which is the caufe, that a Lord letting his Place and Demeanes to Farme, muft make account, that the earneft defire and watchfull regard he hath to vphold and maintaine his grounds in good plight, will not be accomplifhed or manifefted by deed of Indenture, or pofting oucr of the charge to anorher, but rather it flandeth him vpon in his owne perfon to fee fuch as are to lahour therein, to be fet to their worke,ourer-looking euer \& anon the companie, and ordering vfed by the baylife of his Husbandrie in the handling of his bufineffe, that fo he may preuent the The eye of the milchiefes aboue named. Iris alfo faid of fome men, That the eye of the Maffer doth

Great Cages
make not their. Birds sood.
vafiithulu
Farmers:

## No fteroard like to the Lord

 himselfe.fat the Horfe; and that matters are neuer fo well cared for, or looked to, as by himfelfe. For there are but few, either Hindes, day-Labourers, or Labourers by greats which doe not loue their Mafters profic a great deale leffe than their owne, and euery day are behind hand in one dutie, or piece of worke or ortrer, which ought to haue beene done.

Better therefore is a fmall Houfe of good fluffe, not fumpruous, well feated and well firted (but let it haue of eueric thing a litte) than fo coftly a place, and of fuch large roomes, as that either they become enuied of their Superiours for it, or elfe at length cauferh the Mafter to fell it againe. For the good Roman Husbandman faith, That a Hovieholder muft fo diminifo the charges of euerie thing by his labour, as that he may euermore haue moe things, and more to fell than to buy, and that he euerie day become more ftrong and powerfull than his Field: For feeing that the Lord and it mult needs combate, wrafle, and encounter the one with the other, if the Field be too Atrong, then the Lord is wronged. Euerie place in the Fields is alfo of tentimes to be lonked vito, and if need be, fpeedily repayred, beraufe the decay of anie pare
There muff not
any thing be let go 10 decay, be it neuer folitule.

Grounds in husbanding roaft what they yeeld in encrease.
The nifice of $a$ good houfchol der. of it,or of anje thing which is to be veed in it, being let alone and neglected onely one yeare, drawech on another loffe as great as it felfe, and coftech chrice as much to make it vp againe, as and if it had beene looked vnro within a moneth or fifteene dayes after the decay did fall and happen. And their words in this cafe are of no van lue, which fay, That Grounds troden vpon and trampled with manie feet, are halfe eaten and fpent: or, that Ground lying farre off doth breed nothing but flagons and bottels. For I would haue the Mafter to be more commonly there, than at home at his Houle, and that he fhould fo difpofe of his cftate, as that there nay be borh for all neceffaries of food, and fo forth, and fomewhat to fare : otherwife his Houfe and Demeanes fhould minifter more vnto his feruants than to himfelfe, and his charges fhould exceed che encreafe and reucnues: and that as well in tarrying at home, as alfo when he goeth abroad, he make it his chiefe delight to vnderftand and fee the gouerning of whatocuer belongeth vnto him, not troubling his mind with Hunting, Banquetting, much Companie keeping, Drunkennefle, and welcomming in of cuerie commer; and fo to giue himelfe excoffuely to his delighes and recreation of his feirit.
The placing of fuch Building as is made, is moff fit to be on the edges of fome great Hill, vpon fome fmall Hill, or the top of the Hill, if the Counerie be tempentuous and full of Mountaines: for by this meanes he fhall reape the libettie of the Aire, and a goodly Profpect : he fhall be fafe from the annoyances of foggie Mifts: he fhall not beoppreft with cold in Winter by reafon of Ice, nor ouer hor in Summer, and the Warers and Flouds which runne downe from the top of the Hills fhall not threaten, much lefle doe harme vnto the foundation of his dwelling place:as alfo he fhall not be too much fubiect to the Winds and Raines of the whole yeare: hee Thall procure his principall Lights to farnd vpon the Sunne-rifing in the moneths of March and September:for the Winds blowing from thofe quarters aredrie, more hot than cold, but veric wholefome, as well for the bodie as for the fpirit of Man: and the Sunne, which comenctin to enter betimes in the morning into the Houfe, doth diminifh and waft the darkneffe and groffenefle of the Aire:adde furcher, that looke by how much his Houfe fhall be fer more vpon the faid Eafterne point, by fo much the more cafily it will be able to recejue chat Wind in Summer, and be leffe beaten in Winter with Frofts. The Barnes fhall be open towards the Sunne-fet, in refpeet of their greateft lights, and withall, fiall haue one light feruing toward the North, for the caufe aboue named: but all Houfes for Beafts fhall have their Windowes towards the South, and borrowing fomewhat of the Eaft, for that the Winds blowing from thence will keepe them found at all feafons and times. It is true, that as for Stables for Horfes, $i t$ is neceffarie to make them a light feruing towards the North, to open in the hot time of Summer, during the vehement heat thereof, and that at the hource of their eafe and reft, which is Noone-tide : for at this time and houre, if you gilie cherr not fome breath of aire to coole them withall, the heat of the NooneS Sunne;
which would ftrike in, and cheir owne, which is alwaies in the Stable, as alfo their breathing and preffe of the whole companie of Horfes, being there together, would fet them in fuch a fweat, faintreffe of bodie, and loathing of their mear, as that the verie Stable would wearie, weare, and fpend them as much as the Plough it celfe. And as for the reft of the Buildings,or the bafe Courts, it makech no great inatter ypon what Coafts or Quarters you difpofe them : howbeit, if you fo contriue them, as that they may marke vpon the North, they cannor but be to good purpofe. Thele inftructions for Lights and Windowes are not foftrietly enioyned, as that the differingiqualities and conditions of Countries, where fuch building muft be made, may not moue you to difpofe them otherwife: for feeing there are found in fome Countries fuch Winds as are almoft ordinarie, and may be faid to haue gotten (as it were) a habit, and thofe blowing from fuch Quarters as lye vpon the Sea or Marifhes, or fuch other, and therefore bring with them fome noyfome qualitie, or at leaft litele profitable; it mult needs be permitted in fuch places to alter and change the former directions. And to feeake the truth, feeing that by the meanes of Windowes and counter-Windowes you may cut off the entrance borh of Sunne and whatfoeuer Winds, it thall be left in your free choice to make fuch Lights as may feemie moft neceflarie in your ownc iudgements, being eurrmore direćted againft fuch aninoyance as the Ayre might bring from that place whatfoeucr from whence it commeth.
And alchough that eneric one build after his owne humor, yet the caufe fhould fo fland, as that reafon fhould rule euermore : and furely, fuch a man fhould be efteemed but of a flender iudgement, which hauing a place and commodities belonging thereto, did not fit things in fuch fort, as that on the one fide of his chamber he haue a light open vpon the Court and forepart of his Farme by which they muft enter that come to it, and another open vpon his Gardens and principall Grounds. Whercfore that he may know the more eafily to prepare his Buildings (as it were) anew, or eife repaire it after his owne fanfie, it will be mect and conuenie:nt for him to doe in mantner as followeth.
Draw a great Court and wide, and that verie fquare eueric way, in the middeft thereof caufe to be caft two Finh-ponds at the leaft; one for Geefe, Ducks, and other Cattell: the other, to water, ftecpe, or foften Lupines, Ofiers, Roddes, and fuch other things, as allo for the rotring of your dung: : and fomewhat more to the further fide, a Well with two or three troughs of hewen fone, to watcr your Catell and Poultrie at, if you haue not the bencfit of a running Water, or fome neere Riuer, either great or fmall. Make alfo two Dunghils ; the one, to containe and rot all your new dung, and to keepe it till the yeare following: the orher, that from it you may take the old and rotten dung, and carrie it out into the fields. Thele two Dunghils muft bee farre from them, and on a ground falling from the fore-named Fifh.ponds and Well, if fo be that the place will affoord it, or elfe, at the leaft, caft deepe within the Earth, and paued in the bottome before hand, leaft that the Earth fhould drinke vp the moifure : for Dunghils muft of neceffitie be kept in continuall moiflure, to the end, that if peraduenture amongtt the Straw, Litter, Stubble, or Chaffe, which is brought thicher, there be the feeds of any Hearbes or Thornes mixt among, they may rot, and not bud or bring forth any Weeds, when the dung hall be ipread vpon the ground. And therefore expert and skilfall feruants doe couer with Clay the dung which they caft out of the Stables, to the end the Wind may not drie it vp, or that the Sume or Wind fhould caufe it to fpend all the moifture, and turne it intodufl.
This Court, containing two acres fquare, fhall be compafied in with a Wall of The wells of eighteene ynches thicke, and terne foor high from the ground, for the refting of your Buildings.vpon that are within : and to meet with the danger threatned by Thecues, and ruines procured by Raine, it fhall be flrengthened with chaynes on thofe fides which lye next vnto Wayes, as alfo with good Rafters, according to the greatneffe of the commoditic of your place, and other fuffe.

The dore of the House.

In the middeft of the Wall; and in the fore-part, which is the part lying vpon the Sunne-fer, you fhall make your Gates and their Porch, and in like manner a couer o. uer head, to keepe the faid Gates from the Sunne and Raine, which otherwife would bear full vpon them, and ouerthrow them, as alfo for the fpeciall vfe of your felfe and your familie, as to giue them place and fhelter in the time of Raine, or when they pleafe : And the Gates muft be fo high and wide, as that a Cart laden with Hay or - Corre may goe in with eafe. You fhall raife it halfe a foot aboue the ground, and defend it on the ouffide or vpper ground with a threfhold well and firly layd, and in fuch fort, as that vpon she running downe of water it may not rot, which they would doe, if they fhould come clofe to the ground: and that theeues may not caft them off their hookes with Leauers or Crowes of yron flanding on the outlide, which they mighe the more eafily doe, if they fhould be cut fhort of the Earth, and nor hawe the heipe of the Threfhold.

A parititiona
Ouer-againtt the Porch,toward the trade-way, you fhall make a partition of tenne or twelue furlongs, weil inclofed with Ditch and Quickfer, hedged round about, for the feeding of your tyred, wearie, or ficke Catell, which cannot keepe or goe in companie with others, as alfo wherein they may reft and chaw the cud in faire Weather and in time of grear Heat.

The Farmers Lodge fhall be built neere to the fide of the Porch vpon the lefe hand, and fhall haue the day-light comming in vpon the fide toward the ftreet, Weftward; notwithftanding, that his Windowes fhall lye vpon that fide of the Court which is Eaftward. His Kitchin fhall be rayfed two or three fteps aboue the ground, to the end it may be freed of the moifture wherewith the Court aboundeth in Winter : it muft alfo be high buile and great, to the end that the floore lying next aboue may not be fo fubiect to the danger of thefire, and to the end that all his triends and feruants may atall times eafily beftow themfelues therein. The Ouen fhall be fet without the roome, hauing the mouth in the inner fide of the chimney of the faid Kitchin, and lower than the Mantle-tree, not farre aboue the Hearth.

Acthe entrance of the faid Kitchin, and in fuch place thereof as fhall be leaff fubiect tọ the Sunne, and molt coole, you fhall haue a Dairie-houfe or fmall vaulted Roome paued, and lying flope-wife, and with a guter, to ferue for the hufwifes Dairie, and therein fhee fhall doe all her bufinefle about making of Buter and Cheefe, and the faid Gutter or Sinke fhall feruc for the auoiding and conueying of all fuch wafhings as thee is to make about her Milke veffels. On the other fide of the faid Kitchin the thall haue the like houfe of Office, or vaulted roome, which fhall alfo be for the Hulwifes ve, and ferue for a Spence to keepe her prouifion of victuals in;and vnderneath this, a litele Cellar : and the place for the comming out Shall be in ftead of an vpright Table, fet as you goe into the Kitchin.
The Farmers chamber.

Garners.
Stables for Horre.
Lodgings for men jeruants.

Oxe-houfcs,
On the orher fide of the Kitchin fhall be the Farmers Bed-roome, and one other ioyning to it for his maid feruarts and children, and a third ioyning clofe vnto it, for to keepe foule Linnen: To the walls of which roome you fhall goe furward to ioyne a fourth, which fhall be fufficient large, and the dore to goe into it fhall ftand in the court without, and it fhall ferue for fuell, working tooles, and other neceffarie things. And the vpper part or Lofe of this roome fhall ferue for Garners tolay Fruits, all manner of Pulfe, Corne, Hearbes, and Ruots in, that are to be kept.

Vpon the right hand as you goe in fhall be Stables for Horles, referuing alfo a fufficient great low roome bounding the great Porch, for the Carter and other men Ceruants, às alfo for the keeping of Collars, Cart-faddles, Traits, thicke clothes, and other furniture for Horfes:and along, at the end of your Horfe ftables, you fhall make Houfes for Oxen and Kine. And ouer the faid Stables, Lofts and Roomes for Hay and Prouender for Cattell, adding to the end of thefe great Houfes a little one, to keepe Calues in of both kinds, which you haue wained, with intent to bring vp for further feruices. At the end of all thefe Beaft-houfes, and clofe to the fame, you fhall appoint a Dog-houte, if you like not better to place the fame in the midft of your bafe coure vnder fome fmall Shed layed ouer with boughes, couered wich fraw, open
at two places, to the end the dogges may take fent and breath on two fides, for this watch thus placed will ferue for the whole bafe Court. -
In the place right ouer againft the Porch of the Farme fhall open the dore of your owne houfe, which by a flayre of eight fteps at the moft thall bring you to the firft ftoric of the fame, the entrie whereinto fhall be like vnto a plaine vacant alley of an indifferent wideneffe, with an out-caft at the furcher end vpon the Garden, and that with a defcent of a like paire of flayres vito thofe at the entrance. Vpon the right hand of this entrie fhall be your Kitchin, Store-houfe, Buterrie, and a place of recourfe or lodging for two or three feruing anten: betwixt which Kitchin and Butcrie there fhall be a winding flayre which flall haue his foor into the Kitchin, and thereby you fhall goe vp to the Corne-lofss there aboue. Neere vito your Kicchinn, you fhall make roomesto ftampe and preffe your Grapes in : The firt florie fhall be of fuch length and breadth as your appointed platforme layecth our vito you,borne vpon a rayled vault from the ground, well flayed vpon bearing pillars, and furnifled with cafements to take the Aire at, vpon both fides, and that to the end that you may hauc an vider forie of like length and breadth to that aboue, which fhall be a halfecellar and a halfe-vault; which, brfide that it will preferue your lodging from earthquakes, will alfo ferue you to couch your Wines and CIdres in, without any feare of rotting the hoopes, as alfo to hang your Bacon and other powdred prouifion, your Oyles, Candles, yea, and your Wood allo, and your Fruits likewife during the Froft. Your Lodging or Manfion fhall haue no more than this one ftorie, aboue which you fhall raife no ocher faue onely your Garners and Galleries, keeping your houfe thereby of a lower pitch, and foleffe fubiect to the rage of the Winds, which will faue you a great deale of charges, when as you fhall not be forced to vfe the helping hand of Ty lers euery houre. V pon the left hand of the faid Alley or Entric fhal be your Hall, through which you flall paffe into your Chamber, and our of your Chamber into your Wardrobe and inner Chamber : and at the end hereof, it the bodie of your Houre fhall haue compaffed in place ynough, you fhall make a Chamber to lodge flrangers; the way into, as alfo out of which, hall be by a turning flayre on that fide toward the Court, that fo fuch frangers may be at their libertie, not molefting or troubling you by their paffing in or out: and this if fo be that your good liking and inclination moue you not rather to build for the entertaining of your friends \&c ocher ffrangers on the other fide of your Hall. You fhall make your faireft Lights and Frames towards the Eaft vpon your Garden, referuing onely halfe windowes for the fide lying vpon your Court, feeing they ferue for no other thing, but that you may haue an eye vpon your folke, and to fee who be commers and goers to your lodging: and at the end of euerie fuch litele chamber you flall make a Priuie, for the neceffarie vfe of eurrie of the two faid bodies of the houfe. Whatfocuer roome fhall be ouer head or aboue your Alleyes, Hall, Chamber, Wardrobe, \& Chamber for ftrangers, fhall be for Garners, that fo you may lay apart, and by if celfe, your Rye, Wheat, Pulfe, and Fruits, and caft afide your foule Limnen, and they fhall all of them hauc pretie windowes vpon the Norlh fide, for that quarter is moft coole, and leaft moift: which two things are of great force, long to preferue and keepe Graine. At the end of your Roomes, for the treading and preffing of ycur Grapes, you fhall fet vp your Henne-houfé, and roomes for ocher Fowles, fallhioned foure-fquare like a tower, bur yet more long than wide or broad: in fuch fort, as that the loweff roome llall ferue for Water_Fowles, as for Geefe and Duckes by themfelues; and the vpper for thofe of the yard, togecher with checir Pearches and Baskers to lay in: and you mult make vnder the Henne-loft fonce feparated roome for Turkie Chickins and Turkie Cockes : and vpon high, vnder che floore that is ouer them, you fhall contriue a clofe roome, after the fahhion of a Lettuce, therein to keepe ycur Feafants. As for your Peacockes, you fhall giue them libertie to rouft cuerie where. Neere vnto the fame place you fhall make your ground Doue-houfe (if the Law will permit you fuch a one) in fafhion like a round Turret in the middett of your Court.

Sheepecotes and Smincflies. Lamue cotes. cotesforwiaticrs. Cates foi Sorocs. Cotes for Goats.

Set your Şhecpe-cotes and Swine-fies vpon the South, in fuch manner as they may haue no open place but vpon your Court : and vnto the principall Sheepe-cote you fhall make a partition of veric high Hurdles, to draw the Lambes from the Ewes, as alfo the Rammes in like manner: and clofe vito thefe fhall you make your Swineftie, raifing two inclofures of Wals well dawbed on both fides, the one for the Sowes, and the other for the Hogges. In like fort you fhall deale with Goats, making feuerall Cotes for them:and the vpper parts of all thefe fhall feruc for Garners to lay their meat and whatfocuer food neceffarie for fuch Cattell.
Baynes. Righe ouer againt thefe Shecpe-cotes you fhall make your Barne, with his great dore of the wideneffe of the middle Bay, and that to giue light to the Threfhers: Ouer the porch of the faid Barne (if the Law will not permit you to build a Douehoufe on the ground) you thall make you a place to keepe Birds in, of the fame breadth with the porch, and as high as you will: the lowell part of it fhall ferue for Birds to kcepe themfelues fafe in, when either the Raine, or too much heat of the Sunne, fhall annoy them. One of the fides of your Barne, all along for the fpace of threc Bayes, fhall ferue to pur your Rie and Wheat in, and the other fide, for as much length, flall contame your Pulfe or March Corne : the middle part is that which is of the breadth of the porch, with his roofe aboue.

A banging
boure for to
heepe neceffarie tooles for tivesbandrie in.

And bewwixt the Sheepe-cotes and Swine-fties, right ouer againft the porch of the Barne,you fhall make a place of a competent height, in manner of an Appentice, to fet your Ploughes, great Carts, Drayes, Tumbrcis, Waines, and other Inftuments and Firniture for Husbandrie, if you pleafe not rather to make the ground-worke of your place to keepe and nourifh Birds in, to ferue for thefe purpoles, when as your authoricie will nor beare you out to build a Doue-houfe on the ground, becaufe you hold not in fee Farme, or Copyhold.

Vnder, or vponthe fide of your turne-flayres, according to the breadth of the bo-
Gardens and
their paritions. dic of your Houfe, your Farmer fhall haue a way into the Gardens : but you your felfe fhall haue your way in by another winding flayre, which you fhall make to defcend from aboue, from your alley that is ouer them: the one of which Gardens; as that on the right hand, thall be for Pot-hearbes; and the other for Quarters and Pulfe, together with a place for Bee-hyues.
At the end of a great Alley which you fhall make from your winding-fayre to the Wall of your Orchard, running betwixt the two Gardens, without any manner of partition, except two Hedges of Quick-fet, fhall be your Orchard, feperated from your other Gardens by a wall continuing all along the two fides of the inclofure of your piace. And in the middef of the faid great Alley there fhall be Wells, to water by Pipes and Spouts fo much as is needfull in the Gardens, if it like you not better to conuey fome Fountaine that way, or elfe to fecke for the Heads of fome Springs, or elfe to make a Cefterne well mortered to receiue and keepe Raine water.
Freding or pafure grourd.

The Orchard fhall make the fence on the fide toward your Houfe, and by it you Thall make your way into your Feeding or Pafture grounds, lying along by the fides of fome greene and flourithing Water-bankes: along the fides of which Brooke, as alfo about your Ponds of falt and frefh-water Fifh, you fhall plant Willowes.
The thon Nurce- Where you enter into your Orchard out of your Garden, you fhallon the one fide ries for Pippias make a Nurcerie for Sceds and Kernels, and on the other fide for Stocks and Plants, and Stock. and in the middelt the rankes of remoued and grafted Trees, and at the end below you thall plant by ridges your Ofiers, which may, for their better profpering, take the benefit of the coolencife and moifture of fome fmall Brooke.
The backe gate. The falfe Gate (otherwife called the Backe or field-Gate) on that fide toward your Medow, made for your owne going in and out alone, thall be fet out and garnifhed with two Cheurons, fet vpon one mane Timber, and no moe, and foure or fiue Battlements aboue, and fhut with a ftrong dore : for that way you fhall goe into your Houfc pruily, and in like fort goe forth againe when it feemeth good vnto you, without your ferwants their priuitie, and for your auoiding of the noyfomeneffe of the Beafts Houfes and of your great Court. And to this end you thall haue a pecciall
palfage from your Stable or Garden, not farre from your houife wherein you tread your Grapes, to driue your Cattell by concinually.
Norwithftanding all which, yee my meaning is, that your coft and courfe je buil- The building ding fhould be according to the reuenues of che grounds, or value of the profits, and that (as faith Cato) the dwelling Houfe be not fet after feeking of Grounds, nor Grounds caufed to goe feeke Houfes and Roomes: for great Plots of Building, and Inclofures of Pleafure, coft much to build and maintaine : and Buildings which are leffe than were requifite for the profirs of the grounds, are a great caufe of much loffe in the Fruits of the fane.

> C н а р. VI. The dutie of a Father of a Familic,or Houfcholder.
Free I haue thus difpofed of Roomes and Building, I wifh and defire, that the Lord of the Farme may bea man of grear knowledge, well acquainted and giuen to maters of Husbandrie: for who fo is ignorant of them, hauing had but fmall practife in them, as alfo he which doch take his chiefeft delight in other things, and fpendech his time otherwife, muft of neceffitie commit himfelfe to the mercie and difcretion of a Farnier, which will mock h him to his face, and will impaire his grounds and houfe alfo, heaping thereto a world of quarrels and fuiss,which he will raife: or elfe he muft truft to fonieother accomplif her of the buffneffe, either in gouerning or waiting \& attending: and he asking coinfell of ocher the Darmers thereabout, they wil make him belceue things to be nor fo good by the halfe as they are. And indeed we read for a certainetic in the Roman Hiftories, That the Earth was neuer fo fruifful as then when it was allured \& woon by the induftric of the famous Roman citizens, \&-deliuered out of the ty rannous hand ling of groffe-headed peafants, whom we fee before our eyes, notwithftanding that they are altogether ignorant, to grow rich at our cofts \& charges, \& to the grear fpoile of the ground which they husband \& till, Thiere is nothing comparable to the ouer-looking cye of a prudent \& difcreet Lord, and onc chat is accuftomed to Husbandry, and which looketh after \&ic contenteth himfelfe with fuch eftate as may fand with his profic, and keepeth to himfelfe the principall charge, which is a watchfulnes \& earneft defire to preferue his goods, and hath alwaies carc of his companie, and farmeth not nor yetrenteth out any ching but that which he will haue nothing at all to do withall, except alitele ouer: fight: Nerther yet would I haue him, in fo doing, that he fhould paffe any bargaine by the way of Notaries, or by Writing: for by this meanes he robbeth himfelfe of his libertie. Let him lcarne well to know \& vnderftand the natures and choice of Men, Cattell,\& Grounds, and let not that work pofibly fall our, which he himfelfe know: eth not to doe, if he fhould fland in need, or elic to giue direftions in and to command vnto others; at the leaft lec him vnderfland the times \& feafons when, as alfo the manners how, things were accuftomed to be done: for as a man which feech not any place whereby he may giue lighe to another, can neuer lighten him fo well; euen fo that Lord of Farme, which vinderllandech not, neither knoweth the feafons and proper times for to do any ching belonging to his gouernment \&iurifdiation, neither yet the ordering of things, to execute euery ching accordingly, fhall neuer know fo well what to comnand, and doth nothing to the workman but trouble and griene him: and it is the manner of men to mocke at fuch as command \& will things to be done which are nothing to the purpofe, but mutt afterward be vndone again, or els abide withour any profir. This is it which the great Husbandman Cato hath written, That the ground is very ill entreated \& grienoufly purifhed, whofe Lord \& owner knowerh not to teach \&-cömand that which is to be done:but muft depend \& reclie wholly vpō his Farmer. Therefore it is mofn neceflarie, that the father of the Familie, or owner of the Farme, be mof expert in euerie worke due for euerie Seafon of the yeare, as thus: firt, for fuch Earths as arc applyed onely to Tillage, he fball know; that if the Soyle wherein
he liuech be a nliffe, ftrong, heauie, and tough Clay, he fhall then, from Plow-day, which is euer the Munday after Twelfth-day, till S. Ualentines day, breake vp his Peafe Earth,where he intendeth to fow Peafe and Beancs, which mult lye for Bait, which is, till it haue receiued Froft and Raine, that thereby the Mould may breake: but if his Earth be a mixt Earth, and of a more light nature, then from Plow-day to S: Ualextines, he fhall breake vp or fallow that Earth which he intends to keepetilth the yeare following: From S. Ualentines day till S. Cbaddes he fhall fow his Beancs, Peafe, Fetches, or orher Pulfe whatfocuer: prouided alwairs, that he fow his Beanes firt ,his Peafe next, and his fmaller Pulfe laft of all: He fhall from S. Cbaddes day yll a fortnight beforc our L.adie day, commonly called the Annuntiation, fow his Oats, either vpon the Innams, which is land fowne the yeare before, or on the tilth or fallow ground prepared for the purpofe : from a fortnight before the Annuntiation, till a fortnight after, he fhall fow his Barley, either on Clay ground, haffell, or mixt Earth: and $v p o n$ light fands, from mid Aprill till Whitfontide : from May day till Midfummer he frall fallow his ftiffe Clayes, or Summer.ftirre his lighter mixt Earths: from Midfummer till Lammas he fhall Summer-firre his fiffe Clayes, and foyle his lighter Earths: from Lammas till a fortnight after Michaelmas he fhall Winter-rigge all fuch land as he intends to fow Barley on the yeare following: He fhall alfo in that feafon fow his Wheat, Rye, or Maflyne:he fhall then alfo furrow or cut fluces whereby to drayne the water from his arable land, becaufe the drier that it lyes, the better it is, and curmore the more fruitfull, as the experience of Husbandmen find by a continuall practife. And as hee thus knowech how to difpofe and order his arabie ground, fo hee fhall alfo know how to husband kis Paflure or Medow ground: as namely, in the months of Ianuarie and Februarie he fhall firft plafh and cut his Hedges and Quick-Fets, that thereby they may grow thicke and frong ar the bottomes: hee fhall then caft his Mole-hils leuell, and kill Moles, and prune fuch Fruic-trees as either haue decayed or dead branches in them : or elfe fuch fuperfluous fuccours, as growing from below, robbeth the trees of much fap and nourifhrnent. In March, if your ground be not verie fruiffull, but of an indifferentemperature, you flaill lay all thofe grounds of which you intend to haue Hay: but if they.be fertile, and beare much burchen, then if you lay them at May day, it will be fully early ynougl. At Midfummer you may mow your friviffill low grounds, and at the cranflation of S. Thomas you may mow thofe which lye higher and ate leffe fertile :obferuing this, that if the feafon of the yeare be moilt, then you may let your high grounds grow the longer, and cur your low grounds fooner ; but if the feafon be burning and drie, then you muft cut your high grounds the fooner, and let your low grounds fand the longer, becaufe the firf will burne at the root, and the other retaine his moifture. All thefe months of Iune, Iuly, and May alfo, when either the weather or other hinderances detaine you from thele greater works; you fhall then lead forth your dung, compaffe, or incanure to your tulth or fallow field:and it is alfo a good feafon for the bringing home of your Fuell, efpecially when your prouifions lye farre off. At Lammas pull your Summer fruit, and reape your Corne, and your other Graine, either before or after, as you find them ripen. After S. Matbewes day if you haue any meanure vnlaid, lead it forth, for one Load then beftowed on the Earth, is more precious than two in the former Seafons. A bout a weeke before S. Lukes day begin to skowre your Ponds and Ditches, plant and replant Fruit Trees: and if any of your Hedges were left vnplafht in the Spring, plafh them now, for it is an excellent Seafon. At Allhallontide cut downe your Timber, chiefely your Afh, Elme, or Ewe, or what elfe you prepare for Cart, Plow, or Harrow Timber. Before Chriftmas bruh your Hedges, and weed them from all dead and fuperfluous branches: alfo then, and to the end of Ianuarie, is good ftubbing of Wood grounds, and remouing of Bees : alfo then you fhall bare the roots of your Fruit Trees, and couer them againe with rich Mould the March following. Thus our Husbandman, according to the opinion of Oliver de Serres, hauing enriched his memorie with thefe knowledges, fhall liue a Free man, and no Bondfilaue, a Mafter, and no Prentice, to his Farmer or Baylie.

I meane all this while, that the abode of the owner of the Farme is vpon his Inheritance, and that he haue the Royaltie and Chiefetic of the whole, and that he doth withdraw himfelfe from home, and fecretly returne thither again when it fhall feeme good vnto him, to keepe his people continually in doing of their office and charge : This is the caufe why, among the reft of his Buildings, wee haue counfelled him to prouide a backe gate in the end of his Inclofure. Let him not goc to fee the Towne, except it be vpon his earneft affaires, and let him commit his Suites to be followed (which without great loffe he cannot let paife and neglect) by fome faithfull Attur- To order bis ney, to whom he fhall giue nothing but the onely counterpane of his Euidence: and Suites. being in the Towne, let him not goe to fee any man therein, except it be in Winter, or at iuch time as when his Harueft is in, and his Seed time \& firf arder be difpatchr, to the end that by one and the fame meanes he may attend vpon his catues in controuerfie, and goe about the getting in of his debts. I wilh further, that he carry: himfelfe pleafant and courteous vnto his folke, not commanding them ary thing in his choler: for boifterous and rough handling will preuaile as little with men as with fiffe-necked iades. Let him fpeake familiarly vnto them, let him laugh and iealt with them fometimes, and alfo either giue them occafion, or eife fuffer them to laugh and be merrie: for their vnceffant paines are fomewhar mitigated, when they are vouchiafed fome gentle and courteous intreatance of their Maifter towards them. Notwithftanding, I wifh him nor to be too familiar with them for the auoidiug of contempt: neither would I haue him to acquaint shem with his purpofes, except it be fometime to aske their counfell in a matter, and let him not fare fometimes to feeme to doe after theiraduice, though he had decermined the fame courfe before : for they will worke with more cheerefulneffe, when they thinke that the matter is carried according to their inuention. Let him maintane the caufe of his neighbours, and not to arrogate vnto himfelfe, or take any thing vpon him, as commanding them. Let him alfo relieue them in their neceffities; and yet let him not lend them, except it be fome fmall ehing and fuch as he had rather loofe than aske twice, except it be in their extreame need and neceffitie. Let him patiently and quietly beare their tedious and troublefome natures, whom he knoweth to enuie and repine at himi, neuer falling out with them, or giuing them euer any iuft occafion of difpleafure: but winking at that which he knoweth of their nature and naturall inclination, lec him pleafure them to the vttermoft that he can, and feeme to be at one wih them, as if he had netuer vnderfood any thing to moue him to the contrarie. And thus he may purchafe peace and reft. And there remaineth nothing more for his office, but his feruice to God, loue to his neighbours, good inftructions to his children, honeft examples to his feruants, and peacefulneffe with all men liuing: hee thall rather lend than borrow, rather buy than fell thofe things hee hath vfe for, but eaermore better furnifht to fell than buy neceffarie commodities. This is Serres opinion, and worthie a generall imitation.

## Chap. VII.

## The Office of the Farmer.

 A kevnto you for your Farmer a man of indifferentyeares,not fickly, but liftie and Arong, and of the fame Countrie \& Soile that your Farme lyeth in, if it be poffible, and himfuch a one, as whom you haue knowne of long time, or elfe by the report of heneft men haue heard of, to bea good man, and his wife alfo to be a thriftie hufwife, \& his children well nurtured:Such a one as hath no Farme or Inheritance neere vnto your houfe, who frö his youth hath bin hardly brought vp , and well experienced in matters and bufineffes belonging to Husbandrie, or otherwife, by means of great diligence \& good will toward the fame,

The chiefe kep of all the reft.

- what time the Hauf choder fould hecepe at bis Farme, and mpert be may
ber pese athraad to thic Tomene, or elfteberere.
Mec campat alide to 10 be ranghe enc tractad.
hath attained the Myfterie of Husbandric. One whe is a fparing and fober minded man, not poore and verie needie, a gadder to Townes, quarrelier or haunter of Alehoufes or Tauernes, not fuffering any thing to goe backward, or by little and little to come to nothing: one that will vte to rife firft, and goe to bed laft;not haunting Markets or Faires at Townes, if it be not spon verie vrgent neceffitic; not admitcing of new Wayes or Paths, and Breaches into his grounds; or fuffering any encroachment to be made vpon the leaft part of the Inheritance belonging to the Farme; foran ynch of ground loft in one yeare, is worth a foot within two yeares after: Which will not vndertake to lodge any Gueft, if he be not the verie friend and familiar of the Lord of the Soile : which is giuen to haue himelfe and all his familie cloathed rather for profit than for pleafurc; as namely, to faue them onely from the Wind, Cold, and

Hiusbandmens apparrell. Raine : for which purpofe fhall ferue Garments and Sleeues made of Skinness Caps, Clokes with Hoods, or Caflocks of Canuas : for by this meanes there fhall be no day fo boifterous and cruell, wherein they may not worke abroad: One which will noe hate any other to his fervant, but fuch as is fit for the bufines belonging to the Farme, and for the worke and profit of his Mafter : Not giuen to play the Merchant for himfelfe, nor to lay out his Mafters money in Cattell and other Merchandife; for fuch bufineffes doe turne away and hinder Farmers from attending vpon the affiares of the Houle, and caufe them that they are never able to render any found account vnto the Lord of the Farme: and againe, if they be demanded fuch Monies as they owe, they fhew you nothing but layings out and cofts in fead of pence. Such a one as will make no Bargaines when he is in drinke. And for Wricing and Reading, it

To know to spricc and read; is not neceffarie for a Farmer.
Paper endureth all things.

A Farmer mult baue mucb nnowledge. skillerli not whether he beable ro doe it, or rio: or that hee thould haue any other charge to looke vino befides that of yours: or elfe that he fhould vfe another to fet downe in writing fuch expences as he hath layd out; for Paper will admit any thing. Againe, you thall not put him to make Reckonings of long time, neither yet of moe things than his memorie may well carrie away. It behoueth that he be skilfull in all things, for which be hath Tooles, Inftruments, and handy worke to exercife himfelfe with and in, about his maters of Husbandre: As alfo that he know to gouerne and amend all fuch Tooles as he hath the handing of,or which his folke vfe: otherwife, if there fhould butoneed a handle to a Spade, or a nayleto a Horfe or Tumbrell, there mult prefently bee admitted into wages a Nayle-Smith for the Cart, and a Shoo-Smith for the Horfe. This his knowledge thall alfo feruc him to iudge if he be well dealt withall by fuch Craftsmen, as to whom he fhall of neceffitie be driuen fomerime to commit, either to be mended, or elfenew-made, the Inftruments requifite for his bufineffe. He muft hate Tooles and Intruments twice fo manie in fore as he vfeth to haue Workmen, to the end they need not to borrow any thing of their neighbours, for otherwife hee fhall lure more in dayes workes not fulfiled than would pay for the buying of his yron Tooics. Againe, let him at the firft time doe his worke fo well, as that he need not to gene oucr is the fecond time: For in attemp. ting to mend that which hath beene done amifle for lacke of heed or negligence, befide the lofle of cime, which alwaies is required in labour, the thing it felfe is alfo impaired and made worfe 9 and this is lofle vnto the Lord for the prefent, and without hope of recompence for the time to come, not being fit to yeeld fuch profit as is was wont in yeares paft.

Let him haue his eyes alwaies vpon his people, and ouerfee his Cattell euerie night; and notonely when they are in the houfe, but alfo as they returne from labour, or from the pafture : let him view and looke well vpon their countenance, gate, ftate, and gefture, for to know, if there be any difeafed or languifhing: and from this care he is not to exempt himfelfe any one day in refpect of tho Oxen, Kine, Swine, and Sheepe: for oftentimes in the morning they goe to the place of their walke in good flate and plight, and returne ficke home at euening:let him not goe to bed before he haue appointed euery one of his people what he is to doe the next day in the morning. Let him be laft in bed, and vp againe by breake at the fpring of the day, to fee his companie euery one fet to his appointed worke:let hime euery morning

## the Countrie Farme.

view the ftate of his grounds, let him not fuffer his Cattell to be dulled with labour, and let him know the remedies that are good for them againlt falls; wrenches, and fuch other inconueniences. A boue all things, let him betrue, let himkeepe and hold to performe what he hath fooken, let him not fweare, but fhew fuch example to his people as that thereby he may induce them to efteeme highly of him, to reuerence and to honour him. For as a true and fimple feech makech a man to be highly regardeds cuen fo a blafphemous mouth, and fuêh as is full of oaths, an vnprofitable, wanton, and fcornefuli fpeech, accompanied with euill example of deeds, maketh a man contemprible amongft allmen. Let him eat and drinke among his feruants, and of the fame, and at the fame Table. Let him pay them their owne iufty, declare his mund vito them in mild fort, and not to pay them any thing before hand, ifit be not in cafe of loffe or ficknefle.
If you fer any pieces of ground to him to farme (for fill I vnde:ftand, that the chiefe charge and ouerfight fhould be yours) let him nor runne day after day behind hand with you, leaft fo you might make him negligent, and an ill pay-malter, both to your lofle and his owne, and yet feeming to hold himexcufed, eicher in refpect of the unfeafonablenefle of the time, or hardnefle of the yeare, if either of the two can in any likely fore be alledged: In which cafes alfo you fhall fomewhat beare with him, and let him pay at many and litele payments what he ought to haue payed together, thereby to cale him fo much as may be; and to the end he may bring his Farmer our of his debt, he fhall not let to take it by peniyy and penny, euen by anie verie fmall payments. Doe nor pinch him of fuch neceflaries as hee fhall requelt of you, whether it be for the maintenance of your Houfe, or the repairing of anie other things chat doe belong vnto you. Waich him not fo neere, as that he may hate caufe to complaine, for he may wring you in fome one thing that you would neuer thinke of. And marke, that to be much exacting and ingrating vpon your Farmer, doth oftentimes make him either a nieere negligent, or a plame theele. Praife him for what you fee difcreetly carried in the affaires of your Farme, and rebuke him not fharply for that which you fhall not find fo well done, but counfell him to amend fuch and fuch bad trickes, fignifying vnto him therewich, that in fo doing hee fhall greatly pleafe you. Now adaies Farniers due not thruft themfelues vpon a man, or offer themfelues in multitudes as they haue beene wont to doe in time paft, and therefore it is no, more a common thing for Mafters to make choice of fome one among many; but he muft be content to take fuch a one as he cain find. For this caufe it is needfull for tlie Lord of a Farme to know the diuers difpofitions of men of divers Nations: forthe Norman loseth to be peaceably dealt withall: and cuntrariwife; the Picard doth fand in need to be hiandled hotly. The naturall Frenchman is readie, and full of inuention, but not verie haftie, excepeneceffitie doe mightily prouoke him. You haue a threefold choice of the Bryais, tor chere are fome of them fubtill, and fome fierce and ourragious, and orherfome filly and fottifh. The Lymofins are induftrious, and giuen to fparing, but if you take not heed, he will rather procure his owne profit than yours. The Gafcoine is hot, and quickly fallen into choler. The Prouinciall is haughtie, and cannot endure to be reproied. The Poiteuins are deceitfull. The Auverguaes are induftrious, paisefull, and enduring all alterations of Time and Fortune : but and if he once fpie out the thing whereby you gaine, he will fhare with you, or elfe it fhall goe hard. The Angeuin, 「aurangeois, and Mancean, are wittic, fubtill, and louers of their profit. The Charran, Beauceron,and Soloignois; are laborious, peaceable, apt, and giuen to be gatheref̀s atid clofe grafpers. The Champenois and Burguignons are franke, free, and of a fout heart, but opinatiue, and wedded to their owne conceits, fo that you mult oftentimes let them goe on, vncill the thing it felfe fhew them their error. Theriaccording to the Countrie and complexion that your Farmer is of, whom you fhall place in your Farme, you fhall refolue with your felfe to handle his humeur mildly and cunningly; that fo you may draw froithim, for your profit, as much as poffibly you can, applying and fitcing your feife to beare that in him which you fhall fee paft hope of amendmene.
Bus

To haffen feruanis too much is no preferments so profito.

Neceflarie
things to be prouided.

It is not good 18 exact 100 much at a feruants hands.

The nasurall
inclination of the feuerall countrimen of Tormar Normans. Picards. Bryars. Limosins:

Gafcoins: Prouncials. Poisteuins. Aunerguaes.
Augenins. Taurangeois. Manceans.

But of manie and diuers Nations, haue a care to chufe out of manie bad, the belt, and after fuch choice to be warie and circumpeet to preuent that in him which mighe hurt or hinder you: Confidering, that as grounds are of diuers natures, and loue that which agreeth with their natures; euen fo there are fome men more fit, apr, and en. clined to one ching than vnto others.

Снар. VIII.

> That the Farmer must hawe knowledge of the things forctelling Raine, Wind, faire Weather, and other alterati. ons of the Seafons.

The foretelling of Raine.
clouds : if after that raine is ceafed, there rife a fharpe and cold wind; for thereby the raine will begin againe afreh : if little Birds, haunting the Fennes, be continually wathing themfelues in the water: if the Crow doe wet her head at the brinke of the water, or wade into it, and crie verie much toward euening: if the Rauen found out her fong from the hollow of her throat, and boaft her felfe of her wings: if the Geefe crie and flye more than they haue beene accuftomed: if the Bees will not flye farre from their Hiues: if the Heron wander and whirle about to and fro in the middeft of the fields all fad and lowring : if Oxen eat more than ordinarie, lye downe vpon the right fide, looke toward the South, licke their hoofes all about: if the Kine looke vp into the ayre, and draw in the fame: if the Affes bray: if Cockes crow at all houres, and chiefely at euening, when they are vpon their pearches; for the crowing of the Cocke at an vnufuall houre, as at nine, ten, eleuen a clocke at night, fignifieth indifferently change of westher, from drie ce moift, or contrarie: if the Salt become moift : if the common Iflues or Priuies doe ftinke more than vfually: iffuch creatures as are gentle take not fo good reft and continue not their peaceable courfes as they did before : if the Wolucs yell and runne neere about Houfes: if Spiders fall downe, not being blowne downe of the wind : if Dogs tumble and wallow on the carch: if Piyeons come late home to their houfe : if Flies, Wafpes, and Hornets, Fleas and Gnats, bite more keenely than ordinarily they are wont: if the found of Bells be more lowd and fhrill, and heard further off, than they were wont : if the Crancs forfake the valleyes, and recurne at a verie good houre : if in Summer it lighten when it thundreth not: if Affes, old and young Mules, withour prefent occafion, doe rub their cares a great while: if the Tezill, gathered and hanged vp in fome part of the honfe, doe fhut vp and clofehis prickles, as taking a new fhape, and cafling off all his roughneffe: it the Sparrow crie early: if the little Frogs croope more than or dinaric:if the Soot of the Chimney fall haftily and in great quantitie: if the Afhes clutter together into balls: if the Oyle fparkle in burning Lampes: if the three-leaued Grafle doe clofe vp it felfe and gather togecher his leanes: if the Swine doe play a long time, and runne to and fro, hhaking and rearing what they haue taken in running: if the wormes come out of the Earth: if the Cat, after that fhe hath a long time licked the fole of her foot, and trimming the haire of her head, doe reach the faid fole of her foot oftentimes ouer her eare.
Likewife he fhall foretell great aboundance of Raine, if the Clouds be darke, deepe, and thicke: if the drops of water falling from the Skies be fomewhat whitifh, and make great bubbles and great falls here below : if the Raine fall mildly, and begin to fall with fmall drops : ifthe Water fallen vpon the Earth in great aboundance without any wind, be incontinently drunke up of the Earth : if the Waters of the Fennes and ftanding Pooles grow warme without the heat of the Sunne more than ordinarie: if Hennes with cheir Chickens by and by in the beginning of the Raine doe flye vnto their houfes: or if in the morning they come forth late, and (as it were) not ynconftrained to their feeding: if the heauenly Bow (called in Latine Iris) doe ftretch it felfe cowards the South; or if it appeare double, triple, or foure-fold in the Heauens; and if it appeare after st hath rained, the feare of future Raine is not quite abandoned.

He fhall forefee times of Snow in Winter, if he perceiue that the clouds of darke signes foretoo ones become as it were whitin, chiefely when the North wind blowerh: if round a- kening Snow. bout the Sunne or the Moone there come diuers pale circles, or halfe red ones: if in the time of great Cold the ayre grow thicke, and fomewhat rebated of his Sharpenefle: if it nake a drie Cold, without any Froft: if together with many fignes of Raine there appeare many alfo of Cold approaching.
-He fiall iudge in like fort of Haile, if in the Spring or Autumne he fee that the Hailed clouds of blacke and darke ones become whitifh: or if about the monerh of A prill; rogecher with many fignes of Raine, there be mixt darke and whitifh clouds.
Hee fhall give good heed to the tokens fore-fhewing future Winds, and they are signes foresois thefe: if the Sunne at his fetting be red: ifthe Sunne fet amongft reddifh clouds: if the kening windso

## The first Booke of

Sunne all the day long, or a great while befure his fetting, haue carried a Purple colour, and fetcing, feemeth greater than ordinarie: if the Moone haue a red tace: if the Clouds in a faire Seafon and beaurifull Skie be carried on high : if the Clouds appeare in the Heauens gathered together as they were flockes of sheepe: if Forefts and the high tops of Mountaines doe make a noyle : if the ftarres of Heauen runne euerie way: if they feeme more groffe, and of greater lightethan vfuall : if it thunder in the Morning, or in Winter: if in the Spring time it thunder more mightily and ofter than it lighteneth: if the found of Bells be fomerimes heard very eafily, and by and by not to be heard : if the Sparrowes doe fing and chirpe beyond meafure: if the Dogs tumble themfelues vpon the ground : it the webs and fmall threads of the Spiders doe flye in the Ayre: if the Duckes doe fpread and flicker with sheir wings often and a long time together : if the Heron crie toward night as he is flying: if the flame of the fire calt forth many fmall fparkles : if the Wood doe crackle and breath out wind more than ordinarie.
Hee fhall fore-tell the happening of any, Thunder, Brightneffe, Lightening, and

The fignes foretokening Thura der, Lightnings, and Tempefs. beginelt, when hee fhall fee, that in the morning and euening in Summer, or in the beginning of Autumne, the Sunne yeeldeth a greater heat than ordinaris; and when here appeareth in the ayre a verie thicke and deepe cloud : if the Wind called Typhon, caufing Whirle-winds, doe blow ragingly, and that the ayre be full of many darke clouds: if the dayes in Summer or Autumne be more feruent and hot than the feafon of the yeare can naturally beare:and that fometimes at the Sunnefet there appeare a Raine-bow toward the Welt : if there flye in the ayre many ayrie impreffions and burning flames.
He fhall be affired of faire Weather, when he fhall perceive that the Sunne fhewThe fignes foretokening faire weather. eth it felfe cleane at his rifing, or cleare and Ihining at his fetting, hauing about it manie fmall clouds apart one from another, and withall fomewhat red and pleafant: when the Sunne in the time of raine fetteth, hauing his face red and fierie : and when the Day-breake, which men call the Morning, fhall appeare of the naturall colour of white; and indeed the Prouerbe (A red euenirig and a white morning feteth the pilgrime a walking) teacheth as much : if when the Moone is three or foure dayes old, it fhew it felfe pleafant and cleane without fpots or clouds: if when it is in the full, it be feene cleare : and that that part of the Heauens, called S. Iames his way, appeare cleare and bright: if at euening there appeare many Lightnings, not accome panied with Thunders, or Clouds: if at euening or morning (at what time of the yeare focuer it be) the deaw fall in great abundance : if the Northerne wind blow ftrongly: if the Owle after Sunne-fee doe come forth and whoop all the night without ceafing : if the little Flies before Sunne-fet doe fwarme together, and foort themfelues inthe Sunne-beanies: if the Crowes flocke together in great companies, and call with a full voice : if the Crow call early in the morning: if the Bats doe come forth of their holes at Sunne-fet, and flye vp \& downe in the cpen ayre:if the Cranes flye high, and doe not betake themfelues verie quickly to a lower pitch: "if WaterFowles doe haunt fomewhat farre off from the fide of the Water.
And although that the parts of the yeare ordinarily haue their beginning and en-
Signes for ctokeo ning the begin nings and endings of times. ding at a certaine time: as the Spring beginneth about the feuenteenth of Februarie, and endeth about the feuenteenth of May, and fo confequently of the other: notwithftanding, for as much as thefe parts and feafons doe fquare and fall out of order,fometimes fooner, fometimes later, the good Husbandman fhall haue, ouer and aboue the common, certaine fignes and tokens to fore-fee the beginnings and endings of the times of the yere as they may fall out extraordinarily. As if hee know that WaterFowles forfake the Water, or that the houfe-Nightingale, efpecially the Male, doe fring more than any of all the reft : if the Cranes flocke together, and returne vnto the place from whence they are come: if the Geele fight together for their feeding place, being in great leaneneffe: or if the Sparrow more than ordinarie call betimes in the morning, he fhall fay that Winter is at hand. In like maner, if he fee that theWefterne wind begin to blow, and that the cold rebateth: if the Swallows do returne in flocks:

## the Countrie Farnse.

if the Ducks haue their breaft-bone white at the end of Winter, he fhall iudge, eliat the Spring will be verie quickly: for fuch creacures doe fenfibly feele and obferue the bounds and approaches of Seafons, howfocuer out of courfe and excraordinarie chat chey be.

If in Winter, in the beginning of Frofts, hee perceiue, that the Birds haunting signes foreteftanding Waters; doe betake chemfelues to Flouds and Riuers, which are not fo apt terizing colk. to frecfe: or that the Snow falling from the Skies is but in fmall ond thin flakes : if at the beginning of Froft there fall fome fmall, round, and white Haile : if the litule Birds doe hide themfelues in the Buifhes, and feeke for their liuing neere ro To ownes and Villages : if the Fire giue a more flining flame, and make a hoter coale: if that Woollen or Linnen dipt in Warer doe by and by freefe: if the vemoft pares of the bodie become fuddenly cold: if in Winter the things which were wont to be moift and wet areefpied to become drie: if the drops of Water comming from the roofes of Houfes doe fall one a good while affer another, he fhall hold ic for firme, that cold is neere at hand; or elfe thiat that which is alreadie will be verie violent and of long continuance.
He fhall prognofticate the lengh of Winter, when he fhall fee that the Oakes will A long wirnerr, be full of Acornes, or when tlie Ducke at the end of Winter fhall haue a red breaftbone: or that the Horners doe appeare before the end of October : or that Cattell, which goe together in Heards, doe trample che Eareh to myre.

Hee thall iudge great Summer heat to enfue, if hee fee that the Rammes and old The beat of Sheepe doe couple togecher ofentimes in the Spring: for fo indeed of the coinfitu- Summer: tion and cemper of one part of the yeare, a man may eafily iudge what will be the temper of another: for ordinarily, if one part or quarter of the yeare be cleare, \&aire weather and drie, it muft needs fall out chat the other fhould be rainie; As for cxample, a rainic Winter dorh commonly follow a drie Autumne : in like manner, a drie Spring commeth after a rainie Winter: and fo coniequently; the ocher parts of the yeare doe carrie themfelues in Heat, Cold, Moilture, and Dryneffe. Generally, he thall be able to prognofticate of the fate of the whole yeare, following the Prognoftications of auncient Fathers, as concerning the day wherenpon the firft day of the Feaft of the Naciuitie or New yeares day doch fall. For if it fall vpon the Lords day, the Winter will be mild and cleare, the Spring delightrome, windie, and moift: there fhall be peace 5 Catell fhall be at a good price all manner of good things fhall abound; old things fhall die. If it fall vpon a Murday, the Winter fhall be rindifferent, the Spring in !ike manner, the Summer windie and thundering in diuers places, the time of Harueft temperare : Wine fhall abound, but not Honey ; diuers difcafes fhall raigne ; fome great Princes and Nobles fhall dic. If it fall vpona Tuefday, Winter will be windie, darke, and fnowie; the Spring cold, drie, and moift; the Summer windie and moift; Autumne verie inconflant: Women fhall die : there will be great danger to fuch as are vpon the Sea : vprores will happen betweene the people and their Superiors: fome Fruits will be deare. If if fall vpon a Wednefday, Winter will be verie fharpe; the Spring verie bad; a good Summer, aud a cold and moilt Harueft : Wine,Corne, and Fruits will abound, if they be not (poyled by men of Warre: young folke and children ीall die, and Catell likewife. If it fall ona Thurday, the Winter will be good, windie, and rainie ; the Spring windie; Summer good and Rainie; Autumne moif: Wine, Corne, and Fruits will abound: great Princes will dic: there fhall be peace betwixt Cities añd their Princes. If it fall on Friday, Winter will be cunftant, the Spring good, Summer inconftant, and Harteff time indifferent: the good things of the Earth will abound: Sheepewill die in fome Countries: there will raigne paines in the eyes : and there will fome cumultes and vprores be made. If it fall vpon a Saturday, the Winter will be darke, cloudie, and fharpe; the Spring fomewhat windie; the Summer moderate, and Harueft time drie: the fruis of the Earth will not be plentifull: Fifhes will be in great plentic: there will fall our perils vpon the Waters : great fpoyles by wilfull fires will be committed: and VVarres will raigne.

In like manner, according to the difpofition of the Sunne and the twelue dayes of the Feaft of the Natiuitie, he fhall be able to fore-tell the inclinations of yeares: for if the Sunne be altegether beautifull and cleare vpon Chrifts day, the yeare will be good and peaceable : if vpon the fecond day, Gold and Wheat will fall of their former value and price: if vpon the third day, Churchmen will fall at variance: if vpon the fourth day, young folke will haue troubles: if vpon the fifth day, all goods will encreafe : if vpon the fixe day, Gardens will proue fruitfull: if vpon the feuenth day, there will be great Dearth and Famine: if vpon the eight, abundance of Fifh : ifvpon the ninth, a good feafon for Cattell: if vpont the tenth, great heauineffe of Times : if vpon the cleuenth, great foggie Mifts and Mortalitie: if vpon the twelfth, Vprores and Warfare. Wherefore, it the Sunne fhane in thofe twelue dayes, and that continually, all thefe things will come to paffe.

He fhall likewife prognofticate and fore-know the difpofition of the whole yeare by the difpofition of S. Panles day, which is the twentie fifth of Ianuaric: for if this day be faire, cleare, and fmiling, it promifeth great aboundance of the fruits of the Earth : if vpon this day there be any Mifts, there will enfue grear death of Cattell: if it Raine or Snow, we are to feare a great dearth: if it be windie, there will be Warres and Seditions among the people.

He thall know how cuerie moneth in the yeare will be enclined, by obferuing the

The hrowaledge of the dippofition of exeric moneth.

A formardor a backporra geare.

A good or bad yeare. inclination of the day of the Natiuitıe, and of the Feftiuall dayes following : in fuch fort, as looke what Weather it is vpon the day of the Natiuitie, fuch Weather will follow in the moneth of Ianuarie; and fo confequently the other moneths will carrie themfelaes, and anfwere futably to the other of the twelue Feftiuald dayes.

He.fhall be carefull to forefee whether the yeare will fall out forward or backward : if after Vintage there fall Raine, efpecially before the end of the moneth of OEtober, the yeare will proue forward : if it raine about the end of October, it will proue indifferent : but if it begin to raine fhordly after in Nonember, the yeare will proue backward; and then it will behoue the good Farmer to fow in greater quantitie, for that before the mid time much of the Corne doth rot and fpoyle in the Earth.

He fhall not be ignorant of the tokens forefonewing whecher it will be a good or a bad yeare: and proportionably to this, he fhall learne to vnderftand how Harueft hath beene gathered round abour him, and in neere adioyning Countries, whither their Countrie Corne hath beene accuftomed to be carried: as alfo in fuch Countries as from whence they haue been wont to haue fome brought; to the end, that by buying beforc hand, or euer that fcarcitie pinch, he may either, by keeping of his ftore, or elfe by husbanding of it fparingly and thriftily, referue fuch Corne as he fhall know to be likely to proue decre, and that not onely for the maintenance of his Familie and his Seed, but alfo to the end he may take his beft rime and place to fell his owne for his molt profic.
signes forctokening fruitfulterje. He know a fruitfuil and fertile yeare, if he fee in the Oke apples, commonly called Gals, a Flie engendred and bred : if the Harueft time be beautifull and faire weather; the Spring reafonably hot: if there fall good ftore of Snow in his due time and feafon : if Trees beare but fmall fore of Fruits: if Riuers and Flouds doe nourin but fimall fore of Finh : if the Broome be fruiffull and abundant in bringing forth of flowers: if the Walnut-tree, from his beginning to flourifh, be more laden with flowers, for the bearing of fruits, than with leaues : it the Mafticke tree doe bring forth his fruit well liking and fed: if the wild Onion, or Sea-Onion, called Squilla, caft forth a faire and great flower, which withereth not fo fpeedily.

On the contrarie, he fhall feare a barren yeare, when he fhall fee that the Nut of the Gall fhall bring forth a Spider: if any Comet appeare in the Firmament: if the Spring and Summer be too moift : if the Earth and Aire be full of Spiders, Wormes, Woodfecre, and other fuch like Vermine : if the Walnut tree haue moe leaues than Nuts: if the Deaw and Froft come in vnfeafonable times: if Birds ingreatflockes
doe leaue and forfake the Illands and Woods, and betake themfelues to the plaine Fields, Townes, and Villages: if the Çrow continue not to abide in the Woods: if there fall out great fore of Beanes, and likewife of Fruits and Fifhes: if there happen any great eclipfe of the Sunne at fuch time as the Corne is in flower; for the eares thereof will haue no Corne in them : Which alfo falleth our in like manner, when the Seed which is fowne is cither a leane, a light, or a halfe rotten Corne.

He fhall know whecher Corne will be deare or cheape for the prefent yeare, and Tokens forein which of the moneths thereof. Let him chufe out at aduenture tweluc graines of Shewing corne Corne the firft day of Ianuarie, let him make cleane che fire-Harth, and kilidle a fire therenpon: afterward let him call fome boy or girle of his neighbours, or of his owne houfe, let him command the partie to put one of thele grainies of Corne vpon the Harth, made verie cleane and hot : then hee fhall marke if the faid Graine doe leape or lye fill: if it leape a lietle, then Corne fhall be reafonably cheape; but if it leape verie much, it fhall be verie chcape : if if leape toward the Fire more or leffe, Corne fhall be more or leffe deare : if it lye ftill and leape not, then Corne fhall ftand at one price for this firft monech. He fhall doe in like manner with the fecond Graine for the moneth of Februarie, and fo in order with the reft of the Graines for the reff of the moneths as shey follow. Furthermiore, for the better preferuation of Signes foretokehimelfe and his familie from difciefes, as wcll contagious as ochers caufed of diftemperature and ill difpofition of the $A$ ire, it will be good that he fhould haue fome forefightr to difcerne what difeafes in likelyhood !nay enfuc. But the moft certaine and fure token is, if at the end of the Spring, or during the Summer, it raine ordinarily, and that in great aboundance, and accompanied with great and vehement heat, withour any Wind at all: or if the Southerne. Wind blow : or that as yet therc haue not fallen any Raine at all : if the Aire be full of Fogges and Mifts: if the Sunne endure any Eclipfe : or if there be feene in the Aire any Comets or fierie flames: if the Trees doe fecme to flame and burne : if that the time of Harueft and Winter be verie fog-, gie, and yee notwithflanding rainie: if Bread, fet abroad in the open Aire, doe in the night time draw moifure vinto it, and become mouldie : if Dogs run mad : if that it be found that Wolues run into fome Townes, being mad : if Birds forfake their nefts, egges, and young ones: if there be a great death of Sheepe: if that Fenmes be full of Frogs: if Walls be full of Sowes and fuch other like Vermine: if vpon the way a man carnot bue meet with Wormes, Lifards, Serpents, and Moules, crept out of their holes and lurking places : if Birds fall dead out of the Aire : if in the Nut of a Gall be found a Spider : if young and old folke be troubled with the Pocks and Meafels: if Women with child be brought in bed before their time : if in Summer, after raine, there be to be fecne in the Fcnncs great fore of Frogs, laauing palc or ath-coloured backes and yellow bellies : if Grounds, planted wihh Rofes or with Violets, do bring forth and yeeld flowers in the beginning of Autumne.
He fhall prognoficate grear deach of Catell, if he fee that the leaues of the Elme tree and Peach tree doe fall before their rime. And I would that all men vnderfood that I haue fet downe thefe ehings without any mind to derogate from the good and Almightie prouidence of God, who bindeth not himelfe to the Orders and Lawes whereunto he hath bound and cied Nature, but altereth the fane cuen according to his owne good will and pieafure, as being Creacor of all chings, and as vnto whom all honour appeitaineth. R

## Cmap. IX.

That the Farmer must haue the knowledge of the Motions, as well of the Moone as of the Sumne, and of the power and operations of them both in maticers of Husbandrie.

The Sunne and the Moore great Lights.
of the Moone.

The caule of the grovoth and waree of the Moone.

To flaugheer Cattell in the new of the Meone.
Otwifhflanding, that the confideration and obferuation of the Motions, Faculties, and Effects of the Starres, and chiefely of the two great and admirable Fires of the whole World (called of God, by the mouth of Moyfes, Lights) that is to fay, the Surne and the Moone, doth appercame racher vnto fome excellent Aftrologian, than to a fimple Husbandman: notwithftanding, for as much as the greateft part of matters of Husbandrie, as Bealts, Plants, Trees, and Hearbes doe takecheir generation, nourifhment, growth, and perfect confummation, by the liuely infpiration, action, cafting forth of Beames, and wonderfull mouings of thefe two Organes and principall Inftruments of all the World; it is very expedient that the Farmer and Gouernor of a Husbandrie fhould haue that knowledge gotten by long experience, which teacherh their vertues and powers in matters of Husbandrie, to the end he may handle, manage, and order the fame according to the motions of thofe ewo great Gouerners. So then to fpeake of the Moone in the firt place (which,by reafon of being neereft vnto vs of all the reft of the Planets and coeleftiall Bodies, doth worke her effect in like manner vpon vs as concerning our bodies as well as vpon the reft of earthly things) it is moft certaine, that in leffe than in one moneth it runneth all that courfe and way which the Sunne is in running all the yeare long: and that ir hath no light of it felfe, but that it taketh and receiueth it all from the Sunne, giuing his renerberations and reflections vnto the Earch with more vehemencie when it is further off from the Sunne: as on the contrarie, looke how much it commeth the neerer vnto her coniunction with it, fo much the lefle light and force doth it impart vnto the Earth. Hereupon it commeth, that we fay, that the Moone encreafeth or decreaferh: not that indeed it doth encreafe or decreafe (faue then when it is in his eclipfe) being continually enlighened by the Sunne; but this his brightneffe onely which it cafteth and fpreadech vpon the whole face of the Earth, doth only encreafe and decreafe. And this fhining brightneffe, according as it is longer or leffertime, hath likewife more or leffe force to moue the humors of naturall things to worke their effects. For by how much the more that this light encreaferh, by fo much themore doth the moifture thereof fpread and communicate it felfe aboundantly throughout the outward parts: as on the contrarie, by how much it waneth and groweth leffe, by fo much the naturall humiditic and moifture doth withdraw, and beraketh it feife vnto the inward parts. This is the caufe why men call the Moone the Mother, Nurfe, Regent, and Gouerneffe of all fuch humidities as are in earthly bodies.
Wherefore, to fpeake firft of Field-beafts, the well-aduifed Farmer fhall not kill at any time whatfoeuer his Porkes, Muttons, Beeues, Kine,orother Beafts, of the flefh whereof he would make his houfehold prouifion for the fuftenance of his Familie, in the wane of the Moone. For fuch flefh as is killed in the decreafe of the Moone falleth away and impaireth euerie day, and alfo craueth much fire and time to make it readie withall : nether ought any man to maruaile or ftand aftonifhed at this, if hee confider well, that a Sawfage, or other fuch like kind of meat, doth grow leffe by a quarter when they are boyled. Neither fhall he make account of or buy any Horfeflefh, or other, which was foled or brought forth in the decreafe and old age of the Moone, for that they are more weake and faint than the reft : moreouer, they come to no growth, neither is their flefh of fufficient weight when they be killed. He fhall neuertifh his Pooles, Fifh-ponds, Ditches, or Waters with Galt Fifh, in the decay of the Moone; for both Fifh and ocher Beafts of the Water, efpecially they which are couered
couered with fhells or thicke fcales, as Cray fifhes, Crabs, Oyfters, Mufcles, and fuch like are found verie much impaired in their fubttance and leane in the old age and wane of the Moone: and contrariwife, groffe, fat, and full, when the is in her force; and full. The Faulkoner fhall chufe rather the full Moone to flye in than the wane, for that Hawkes, and all Birds of the prey, are a great deale more nimble, fharpe, and catching about the full Moone than in any other time. The Horle and Beaff fubicet to any maladic of the eyes, is better at eafe in the decreafe than in the encreafe or full of the Moone. He fhall make prouifion of Fars, or of the marrowes of the bones of Mutton, Hart, Beefe, and others, if he haue need, in the full of the Moone, not in the declining. He fhall geld his Bore-Pigs, Rammés, Bull-Calues, or Bulkins, and maleGoats, when the Moone decreafeth. He fhall fer Egges vnder Hennes or other Fowle in the new of the Moone, and principally in the firtt quarter.
As for Trees and other Plants, the wife and difcreet Farmer will plant his Fruit-. Fruit-trees and Trees and ochers in the new of the Moone, and yet not before the firft quarter. At otherso the fame time he will haue regard to cut downe and lop Wood for his fuell: but contrariwife, fuch as he minds to keepe for to bulld wirhall, when the Moone decreafeth, being fure that all matter (be it to build Houfe, Prefles, Bridges, and other things) being cut downe in the decreafe of the Moone, laftech a long time, and is found maruailous good, and yer better when it is cut downe rather at euening than in the morning: which ching may alfo be applyed to hewen fone and milfones, when they be cut out of their Quarries and Pits. He fhall plant his Vine in the encreafe of the Moone, when it is foure or fue daies old: He fhall cut the leane Vines, and fuch as are planted in a bad foyle, in the encreafe likewife of the Moone: but thofe which are more fat, in the going away of the Moone, feeing that thus they will bring forth more Grapes than if they were cur in the encreafe, in as much as then the Moone ftaying vpon them to fofien them' and make them fat, cannot chufe but caufe aboundance of Clufters and Leaules : bur cutting them the Moone being old, the Wood becommech bound, and applyech it felfe onely to bring forth great flore of fruit. He fhall cleanfe, prune, \&e cut at the foot Fruit-trees toward the later eid of the Moone, To claanje trees for fo they will become better laden with fruit. He fhall make his Nurferies of Kernels, the Moone being oure the Earth.
As for Fruits, he flall gather Apples, Peares, and other Fruits, as allo his Grapes, To gather fruitso in the decreafe of the Moone, becaufe thereby the Wines will be the better and lon- Grapes. ger kept, which otherwife would be in danger to fowre and rot in the moneth of March following, being the tume that men are wont to cut their Vines. And which is more, he fhall gather and carrie into his houle whatoener he would haue to endure and laf long, at fuch time as the Moone fhall decreafe. Hee fhall fow his Corne, as Wheat and other Graine; he fhall weed, fanne,fearce, and gather rogecher his Corne vnder a locke; he fhall grind his Corne, the better to keepe it in flowre, in the end and old of the Moone: It is verie true, that the bread encreafeth \& profiteth more, if it be ground, the Moone encreafing and berng new. He fhall mow and cur downe his Corne with Sy the, the Moone wafting. He flall pull Line and Pulfe at the fame To grind corne. time: and yet indeed all Pule gachered or reaped in the growth of the Moone are of cafier digeftion.
As concerning Hearbes, he fhall fow them the Moone being new, and gather them whiles the Moone encreafech in her light, as being then of farre greater force than in the waft and wane. At the fame time he fhall gather Cucunibers, Gourds, Mclons, Cirruls, Pompions, and ail Roots which grow in the head, whether they be Leekes, Garlicke, Radifhes, Turneps, Lillies, Saffron, or fuch like; except Onions, which onions fowne muff be deale withall cleane contrarie: for they become a great deale more groffe in tife ware. and better fed in the declining than in the augmenting or full of the Moone, during which time they haue no fuch force of greatnefle of bodic: notwithflanding, if they be fowne or tranfplanted in the wane of the Moone, and towards the later end, they are a great deale more ftrong, fharpe, and biting, than if it were in the growth or full of the Moone.

Furthermore, he fhall cut downe his Medowes,for the feeding of his Cattell, when the Moone is new : hee fhall dung his grounds and make them tat in the encreale of the fame, in as much as the Moone giueth no lefle power vnto the dung to foften the Earth, than it doth to Trees and Sceds, to bud, grow, and multiplie euerie one in his place: he fhall water his Medowes in the decreafe of the Moone.

And he thall not be concent to know what force and efficacie euerie quater of the Moone hath vpon Beafts, Trees, Plants, Hearbes, Fruits, and other things contained in this inferior World; but thall alfo be carefull to obferue what power euerie day of the Moone hath, not onely vpon Beafts and Plants, but alfo in the difpofition and gouerning of Man, to make his vfe thereof in the time of necefficie, and in cime and place, as occafion offereth : following fuch infallib!e Obferuations as haue beene long continued, and which our Fathers neuer attayned vino ; and they be fuch.

In the firf day of the Moone, Adam was created: if any man fall ficke vpon this day, the ficknefle will belong, but the partie thall recouer : che dreames which he dreameth in the night fhall be found ioyfull : the child that is borne this day thall liue long.
In the fecond day Eue was created: it is good to take any Voyage vpon this day, either by Sea or Land, and the Traueller thall haue happie fuccelle in ail the places where he fhall lodge and foourne. This day is good tor the encreate of pofteritic: It is likewife happic and faunurable to fuch as fhall haue any Surs vnto Princes; or other grear Perfonages. Likewife it will be good to build and fet vp vpon: as alfo to make Gardens, Orchards, and Parkes; to till the Earth, and fow it. A Theff or Robberne committed this day will not long be vnfound out, for it cannor be concealed. If any one fall ficke, he will be quickly healed. It he dreame in the night time, he muft not reipect it, for it thall come to no effea. The child borne vpon this day thriueth and growech iolhly.

In che thurd day Cain was borne : Vpon this day no man is to enterprife any worke, either in Gardening or Planting, except that which he purpofech to lofe: who fo falleth ficke, finll vndergoe and beare it with great paine and griefe vnto the end; but by little and litele, keeping good order of diet, he fhatl recouer his health. Any dreane dreamed this day or night fhall come to naught: likewife the child then borne fhall be of long life.

In the fourth day e Abel was borne: This is a good day to begin a worke in, to make Mills in, and to goe vpon the Water. A Fugitiue or Run-away, as alfo, a lof or ftrayed Bealt, thall be quickly found: The parcie falling ficke vpon his bed, fhall hardly efcape it : if the dreame be good, it fhall come to paffe: if on the contrarie it be euill, it fhall not come to paffe: the child borne this day fhall proue 2 Traytor.

In the fifth day Lamech was borne: If vpon this day any partic haue commitred any thing by hap or accident, and flye for the fame, he doth but lofe his labour by flich flight, for he fhall by and by be punifhed aliue or dead. Robberie committed this day, thall not be found out: who fo fhall fall ficke vpon this day, iball neuer rife againe : the dreames dreamed fhall be doubefull : the child borne fhall die verie quickly.
In the fixt day Ebron was borne : It is good vponthis day to fend children to Schoole, and to goe a Hunting: Theft or Robberie committed this day fhall be quickly found out : likewife the fickneffes which thall be taken, fhall be foone healed: the dreames which a man fhall dreame on that day, are not to be difclofed: the child that thall be borne, Thall be of long life.
In the feuenth day Abel was flaine by Cain: It is good on this day to let bloud, forefeene that the Moone be in a fit figne : into what Coaft or Quarter foeuer that a Malefactor or Theefe doth flye, both he and the theft committed fhall be quickly found outs the fick foone healed; the dreames certane and true; good to buy Swine, and to make food of all manner of Bealts : the child borme fhall be of long life.

The

The eight day Methufalem was borne: It is good for Trauellers: the Patient taken with a difcafe, fhall languifl a long time : the dreames therefore fhall proue true: the child fhall not thew any good fignes in the indgement of Phyfiognomie.

In the ninth day Nabuchodonofor was borne: This faid day is ndifferent: the dreames of the night come to paffe incontinently : the partie that fhall fall ficke will efcape, if he die not within eight dayes, and therefore fhall not languifh or beare it mournefully : the child borne vpon this day fhall be of a long life.

The tenth day Noe was borne: All good things done this day fhall profper : the dreames fhall be of no effect: who fo vpon it fhall fall into tribulation and aduerfitie, fhall not need to feare, for it fhall not long endure : likewife, he that falleth ficke fhall die within tenne dayes, if he be not well fuccoured : the child borne vpon this day fhall erauaile many farre Coafts and Couneries.

Thie eleuenth day Samuel was borne: It is good to change ones houfe in : a good arid ioyfull dreame ihall fall out to be true, and come to paffe within a few dayes: the partie lying downe ficke vpon his bed, fhall there continue a long time, and yet notwithfanding he fhall cfeape: the child borne vpon this day fhall be of a good fpirit, apt and forward to all good fciences, and of a long life.

The twelfth day is very dangerous, and therefore we muft not doe any thing in it, for vpon this day was Canaan borne: who fo flall fall ficke therein, thall be in great danger to die within twelue dayes: the dreames thereof fhall be true, according to their fignification : the child borne this day fhall be altogether hypocritically enclined.

In the thirteenth day it will be cuill to begin any worke : who fo falleth ficke vp. on that day, fhall continue long languithing : the dreames thereof fhall be accomplifhed within nine dayes : the child borne that day fhall tive long.
In the foureteenth day God bleffed Noe and his workes : he that falleth ficke that day, fhall amend againe quickly : the dreames thereof will be doubtfull : she child borne that day will be perfect in all things.

The fifteenth day fhall be indifferent, that is to fay, neither good nor bad : the ficke fhall not die vpon his fickneffe whereinto he fell that day: the dreames thereof will be certaine, and accomplifhed within tenne dayes:the child borne thereon fhall nor be fubiect to women.
In the fixteenth day Iacob was borne: For this caufe it maketh good to buy and tame Horfes, Oxen, and other Catell : the ficke fiall be in grear danger of death, if he change not his Ayre or Houfe : dreames thall come to pafte : the child Chall not liue long.
In the feuenteenth day Sodome and Gomorrha was deftroyed: It is ill to attempr and doe any thing: Phyficke taken will doe no good vnto the Patient: the dreames will be verified within three dayes: the child will not be profperous in all things.
In the cighteenth day Iface was borne: It is good to be at leifure, and to goe about bufineffe : the ficke fhall be in danger of death: the dreame fhall be true : the child flall not trauaile farre, but he fhall ger great goods.

In the nineteenth day King Pharonh was bornc : This day is dangêrous, wherefore it will be good to atoid companie and drunkards, and to liue peaceably without doing any thing: the difeafed will foone recouer : the dreame will proue true: the child will not be malicious, or a mocker.
In the twentieth day the Prophet Ionas was borne: This is a good day for the doing of all things: the difeafe will continue long: the dreame true and apparent: the child which fhall be borne will be malicious and a mocker.
In the one and twentieth day was borne King Saul: It is good to reioyce and cheare vp ones felfe in faire and honeft Apparrell: good to buy prouifion for fuftenance : the thefe committed will be found out : the taken ficke in great danger of his difesfe: the dreame vaine and vnprofitable : the child borne,fubject to endure great trauaile.

In the two and wentieth Tob was borne: It is not goodro goe about Merchandife, nor to encerprife or vnderrake any charge: The ficke fhall be in danger to die of the fickneffe that hee fhall take chis day : the dreame fhall be true : the child borne flall be good and honeft.

In the three and wentiech day was Beniamin borne: Whatoeuer a man dothvpon chat day, it fhall turne to his honour: the difcafe fhall be long, but not mortali: the dreames falfe: the child borne, a diffembling wretch and ill fauoured.

In the foure and twenciech day Iaphet was borne : It is an indifferent day, that is to fay, neisher good nor bad : the fickneffe will hold long, but the patient will recouer the dreame will be of no effect : the child that is borne will be mild and courceous, and will loue to make great cheare.
In the fiue and wwenciech Mortalitie entred into Egypt: The ficke will be in dangcr of death the fixt day after the beginning of the fickneffe: the child that is borne therein Thall be fubieet vnoo many danyers, perils, and aduerficies.
In the fix and twentiech Moifes divided the Sea : the fame day died Saul and Ionathan: for which caufe, the day is verie dangerous, and not good to doc any thing in. He that falleth ficke vpon that day, will neuer efcape: the dreames will proue true : the child borne will not be any man of great profperitie or pleafure, that is to fay, neither poore nor rich.

In the feuen and twentieth it is good to take paines in all manner of bufineffes: the fickneffe will be variable the dreames will be doubffull : the child borne will be mild and louely.
In the eight and twentieth all good things will be good to be done : the fick fhall be recouered of his fickneffe : the child borne fhall be flouthfull and negligent.
In the nine and wentiech day Herod canfed the childrento be flaine : This is a difmall and vnhappie day; wherefore there mult nothing be done that day, nor yee vndertaken : the dreames will be verie certaine: the ficke will turne found : the child borate will liue and keepe fociecie in peaceable manner among men.

The chirtieth and laft day is good to doe all things in : The ficke fhall be in greas danger euen vato death, but if he be well and carefully looked vnto, he will recouer: the dreames will be murned into ioy within the fiff day : the child borne will be fubtill and deceiffull.
As concerning the Sunne (which is the other Inftrument of the whole World, performing the greatelt part of his ations really and in deed during the day, whereof it is the author, as the Moone doch hers during the night, as being then when fhe is in her force and vigour) it by his nacurall heas, influence, actions, and calting forth of his coeleftiall beames, giueth vnoo carthly bodies their forme and vegetatiue life, accompanied with certaine powers and vercues, fo farre forth as eucric naturall bodie is capable, and deferueth or requireth it : Which operations of the Sunne in thefe Earthly matters, are wrought and effeted by certaine his motions, accompliThed in the foure quarters of the yeare, which is that time wherein the Sunne difpatcheth his whole courfe. Wherefore the wife and prudent Husbandman fhall give heed to the foure quarters of the yeare, which are the Spring, Summer, Autumne, and Winter, to the end, that according to the motion and power of the Sunne in thefe foure quarters, hee handle, manage, and gouerne all his affaires of Husbandrie. And this is the thing that wee will more particularly handle at large in the Chapter following, by the workes that the Husbandman muft doc in cuerie feuerall moneth of the yeare.

## Chap. X . <br> The parsicular Workes that a Husbandman must be carefull to doe eueric Moneth is the yeare.

80 8Vrthermore, to the end that his people may not liue idle, and that they may not loofe one fmall minute of time; which being imployed aboue fome one or other worke, he fhall difpofe of his workes fo, as that they may euerie one haue his certaine time, and he fhall know at his fingers ends what things is to be done euerie moneth and time of the yeare. Yet thus euer to gouerne his memorie, that thefe labours following being more naturall to the Kingdome of France than to any of her neighbours, they fhall,for their fatisfaction, becaule the Booke is now intended generall, returne to the fixt Chapter, and there behold the conuenient labours fit for colder Countries, as is the Inland of great Britaine, Ireland, and the Low Countries.
In the moneth of Ianuarie, chiefely toward the end, hee fhall cut downe his Wood which hee appointeth for Building, or other Worke, when the Moone is vnder the Earth : for the brightneffe of the Moone maketh the Wood more tender, and the IVood which thall be cur at fuch time will endure a long time without rotting. He fhall dung the Fruit-trees, not letting the dung touch their roots. He flall graft all fuch great and litele Trees which bud betimes, as Rofe-trees, Damaske, Plum-trees, Apricock-trees, Almond-trees, and Cherry-trees. He Thall digge the Earth for the cafting in of Nuts, Almonds, and the kernels of Apricockes, Peaches, and Plums, and fuchorhers, in grounds that are cold and moift, in the two firf quarters of the Moone. Hee flall cut his Vine in faire and beautifull Weather:- Hee fhall plough the grounds that are drie, light, white, leane, fandie, full of roors and great hearbes, and which were not eared in Oetober. Hee fliall gine the fecond eare vnto thofe his grounds that are moft barren, and fcatter vpon them the cliaffe of Beanes, IVhear, or Barley. Hee fhall cut downe the boughes of the Willowes for Railes for Vines and Stakes for Hedges. Hee fiall prepare props and thicke fquare Laths to vnderfet his Vines. Hee thall cue and take away the fuperfluous boughes of the Trees, the Moone decreafing. Hee thall turne the vppermoft of all the dung made fince S. Martins day vndermoft, and contrarily, to the end it may be well rotten when hee fhall carrie is out to fpread it vpon his Field and Medow. Hee fhall furnifh afrefh or make new his Carts, Tumbrels, Ploughes, and other his Inftruments neceffarie for his Husbandrie. Hee fhall make prouifions of verie fharpe yron tooles to cur and cleance his Trees and Vines. Aboue all things, let them beware of Sowing, bed caufe the Earth as then is too open, heanic, full of vapours, and like vnto Wooll not well carded.
In Februarie in the new Moone he fhall tranfplant Vines of two or three yeare, Februarie. which flall now alreadie haue taken good roor, but he fhall not touch them of one yeare, which will not be remoued becaufe of the fmall ftrength which they haue as yet got. He fhall carrie dung out into his Corne-fields, Vineyards, Medowes, and Gardens. Hee fhall caft trenches for the planting of new Vines. Hee fhall cut the roots of the Vines, and fet fquare Laths or Props for the defending of them. Hee fhall prune and cleanfe the Trees of whatfoeuer is fuperfluous: Hee fhall cleanfe them from wormes, filthineffe, and worme-eatings, canker, and rottenneffe, which are to be found in the drie leaues. Hee fhall make readie his Garden-grounds to fow and fer therein all manner of hearbes. Hee fhall giue the Earth her fecond earing for the receiving of Beanes, Barley, Oates, Hempe, Millet, and fuch orher Seed of Imall Pulfe. He fhall ouerlooke his Vines, efpecially thofe which he knoweth to be weake and tender. He fhall repaire the Hedges of his Gardens. He fhall plant woods for Timberetrees and Talwood. He.flall alfo plant the flips of Oliue erees, Pome-
granate trees, Quince trees, Figge trees, Poplar trees, Willow trees, Elmetrees, Ofiers, and others, as well Fruit Trees as will ones, which haue roots. Hee fhall cleanfe the Doue-houfe, Henne-houfe, and place where the Peacocks and Geefe make their haunt, becaufe that theef Cattell in the end of this moneth begin to be hot, and to tread. Hee fhall ouer-looke his Warren, to ftoare it anew, and to handfome vp the Earths. Hee fhall buy Bees : he Chall make cleane their Hiues verie carefully, and kill their Kings. Hee flall buy Faulcons, Sparrow-hawkes, and other Birds of the prey, which he fhall put into Mue in the end of this moneth.

Ini March, euen in the beginning of it, he fhall fow Lyne, Woad (if it were not fowne in Februarie) Oates, Barley, Millet, Pannick, Hempe, Peafon, Lentils, Tare cuerlatting, Lupines, Imall kinds of Corne, as the Fetch, Fafels, and other fuch like bitter kinds of imali Pulfe. He fhall giue a fecond earder vnto new plowed fallowes, which are now by this time well amended and dunged, fo as that he may make them readie to fow. He flall weed his Corne: hefhall gee Grifts to graft, when the fap beginneth to climbe the Trees, and before that they pur forth any buds. He fhall plane thefe Fruits, great Nuts, Chefnuts, Almonds, fmall Nuts, Filberds, and the ftones of Oliues and Apricocks, and diuers ocher Fruirs. He fhall fow diuers Nurferies with the kernels of Apples, Peares, Mulberries, and fuchother like Fruits. He fhall plane fuch Hearbes as are fee low and clofe by the ground, as the flips of Artichokes, Thiftles neceffarie for vfe, Sage, Lauander, Rofemarie, Strawberrie, Gnofeberrie-buhh, Rofes, Lillies, Citruls, Cucumers, Melons and Pompions. He Ghall trim vp his Gardens as well for the Kitchin or commoditie, as that which is drawne into quarters, or for pleafure, and fhall fow therein whatfocuer neceflarie Seeds. He fhall cut and vncouer the roots of Vines and Fruit-trees, to the end they may bring forth more fruit. He fhall put dung to the roots of the Trees: he hall gather vp the loppings to make Fuell of.
sprill. In Aprill, about S. George his day, you flall fec abroad your Citron and Orenge Trees, as alfo all fuch other Trees as youl had kept within houfe from S. Martins day, from which he fhall remoue the earth from foot to fout, taking from them fuch roots as are put forth towards the vppermolt part of the earth, as alfo all fuperfluous boughes, not fuffering any one branch to exceed another either in breadth or height. He hall plant, if he haue not alreadie done it, Oliue trees, Pomegranate trees, Citron trees, and Mulberrie trees, and Thall prune them carefully. He fhall grafe the Figge tree, Chefnut tree, Cherrie tree, and Orenge tree. He fhall cut the new Vine, for at this time it endurcth beft to be cut. He Thall be carefull to feed his Pigeons; becaufe at this time they find but little in thefields. He Thall put Horfe to his Mares; the hee-Affe to the fhee-Affe, and Rams to the Ewes. He fhall make cleane the Hiues of the Honey-fies, and fhall kill the Butterflies, which abound when Mallowes are in flower.
3aj. $\quad$ In May hee fhall water the Trees that are newly planted : hee fhall fheare his Sheepe, fill vp his Wines, gather great ftore of Butter, and make much Cheefe, geld his Calues, and begin to looke to his Bees and Silkewormes, of which he fhall gather together a great number. He fhall weed his Corne, caft the earth off his Vines the fecond time, vncouering and freeing their roots from the earth about them, to the end that the heat may not hurt them : he fhall take away all the greene branches and tender boughes which beare no fruit: he fhall crop the ouer-ranke boughes of Trees, he thall graft fuch Oliue trees as muft be grafted in the bud.
Fune. In Iune hee fhall make readie his Threfhing floore, and caufe it to be thorowly cleanfed of fraw, dure, and dult : he fhall cur downe his Medowes, mow his Barley, crop his Vines, threfh his Corne to fow iu Seed time.
July. In Iuly hee fhall mow his Wheat and other graine vfed to make pottage of: hee Apples and Peares, and thofe which doc ouer-charge the Trees: he fhall digge his Vines againe the fecond time, and plucke vp from them the Graffe called Dogstooth: he fhall lay ecuen and fill vp the earth where it is any where cleftor broken, to
the end that the Sunne may not burne before hand the Vine:He fhall cur downe fuch Wond as fhall ferue for his Fuell all the yeare long.

In Augult he fhall pull his Line and Hempe; gather fuch fruits from off the Trees Augufo. as he meaneth to preferuc. Hee fhall take away the leaues from about fuch Grapes as are flow and backward, to the end they may rcceiue and reape the more hear from she Sunne. He fhall make his Veriuice. He fhall digge the Earth to make Wells, or to find the heads of Fountaines, if he houe need. He thall thinke vpon making readie his $W$ ine veffels and othcr things ncceffarie for his Vintage.

In Septenber he fhall giue his land that commeth to be rilled againe, after it hath September. beene fallow, the laft earder. He fhall fow his Whear, Mafling, Rye, and fuch like Corrie. Hee hall gather his Vintage : beat downe Nuts: curd downe late Medow gru unds, to haue the after-Crop. Hee fhall gather flubble for the thateching of his houfe, and for fuell to the Ouen all the ycare. He fhall cut away the branches of Madder, and gather the Seed to fow in the beginning of the March following. Hee fhall gather the leaues of Woad, and order them in fuch lort, as that they may bemade vP inno balls, and he fhall caufe them to be dried in the Sunne, or at a fire not verie hot. He fhall cut downe Rice and Millet.
In Octuber he fhall make his IVines, and turne them into Veffels. He fhall be- oliobefo ftow his Orenge, Citron, and Pomegranate Trees in fome couered place, to auoid the danger of the eminent Cold. He hall make his Honey and Waxe, and driue the old Bees.
In Nouember he fhall couch his Wines in his Cellar. He fhall gather Acornes to feed Swine. Hee fhall gacher Chefnuts fmall and grear, and fuch Garden-fruits as will keepe. He fhall take Radifh out of the Earth, taking off their leaues, and putting shem vnder the Sand, to keepe them from the Froft. Hee fhall lay bare the rootes of Artichokes, and couer them againe verie well, that the Frol? may not perifh them. Hee fhall make Oyles. Hee fhall make Hiues for Bees, Panniers, Dung-pots, and Baskets of Ofier. Hee fhall cut Willowes for to make Frames to beare vp Vines, and fhall bind the Vines, and draw the climbing Poles from the Vines.
In December hee fhall oftentimes vifite his Fields, thereby to let out the water Deeemberè which may ftand in them after great Raine. Hee fhall caufe water to runne through the old Medowes, and dung them if need be. Hee fhall make prouifion of Dung to manure his fallowes that are broken vp and silled. Hee fhall couer with dung the rootes of the Trees and Hearbes which he intendeth to keepe vnto the Spring. Hee Ahall cut off the boughes and heads of Willowes, Poplars, Saplings, and other Tress, to the end that their boughes nay more fpeedily put forth and grow fo foone as Winter fhall be paff. Hee fhall cut downe his Wood as well to build withall as to make his fire with. Hee fhall make readie his Nets to carch Birds, and to befet the Hares, when as the Fields fhall be ycie, or coucred with Snow, or ouerflowne with Waters in fuch fort,as that a man can doe no worke in them. Hee fhall alfo occupie himfelfe (as long as he pleafech) in making a thoufand precie Inftruments and necefo farie things of Wood, as are Platters, Trenchers, Spindles, Bathing. Tubs, Dilhes, and orherthings requifite for houfehold fore: as alfo Harrowes, Rakes, and Handles for chefe Tooles. Hie fhall repaire his Teames, Yokes, Ploughes, and all other Inftruments neceffarie for the fitung and garriifhing of Cattell going to Cart or Plough, to the end thar all may be in good urder when they are to goe to labour. He thall alro make prouifion of Spades, Shouels,, Pickaxes, Peeles, Hatchets, Wedges, Sawes, and other furniture fif for a Councric houfe fore.

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## The condition and faste of a FIuswife.

(2)Doe not find the faze or place of a Hufwife or Dairic-woman to be of leffe care and diligecice than the office of her Husband, vnderftood alwayes, that the woman is acquired of Field matters, in as much as fhee is tyed to maters within the Houle and bafe Court (the Hores excepted) as the husband is tyed to doe what concerneth him, euen all the bufineffes of the Field. Likewwife, according to our cuffome of France, Countrie women looke vnto the chings neceflarie and requifie about Kine, Calues, Hogges, Pigges, Pigeons, Geefe, Duckes, Peacockes, Hennes, Fefants, and other forts of Beafts, as well for the feeding of them as for the milking of them : making of Butcer and Checfe: and the kecping of Lard to dreffe the labouring men theirvituals withall. Yea, furchermore they hatie the charge of the Ouen and Cellar : and we leaue che handling of Hempe vint them likewife; as alfo the care of making Webs, of looking to the clipping of Sheepe, of keeping cheir Fleeces; of fpinning and combing of Wooll to make Cloch to cloath the famille, of ordering of the Kitchin Garden, and keeping of the Fruits, Hearbes, Roores, and Secds : and moreouer, of watching and attending the Bees. It is true, that the buying and felling of Catell belorgech vnot the man, as alfo the difpofing and laying out of money, together with the hyring and paying of feruants wages: But che furplufage to be employed and layed out in pettie matters, as in Linnens, Cloches for the hourchold, and all neceflaries of hourchold furniture, that of a certainetie belongech vnto the woman. I meane alfo that fhe muft be fuch a one as is obedient vnto God and to her husband, given to fore vp, to lay vp and keepethings fure vnder locke and key, painefull, peaceable, nor louing to firre from home, mild vnto fuch as are vnder her when there is need, and fharpe and feuere when occafion requirech : not contentious, full of words, toyifh, tatling; nor drowfie-headed. Let her difpofe of her ftuffe and implements vinder her hand in fuch fort, as that eueric thing may haue his certaine place, and that in good order, to the end that when they beto be vfed, they may be found and eafily come by and deliuered. Lether alwayes haue her eye vpon her maids: and let her be alwayes firft at worke, and laft from it, the firft vp, and the laft in bed. Let her not fuffer to be loft or purloyned, no not the leaft trifle that is. Let her not grumble at any time for any feruice done to the Lord of the Farme: for the value of the leaft crum of Bread denyed, or vnwillingly graunted or giuen vnto him or his, may loofe the quantitic of a whole Loafe aferward. Let her not trouble her braine with the reports \& f peeches of others, but let her acquaint her husband with them in good fort and manner. Let her gratifie her neighbors willingly, neuer attempting to inueagle or draw away any of their men feruants or maids from them : neither lee her keepe companie with them, except when fhee may doe them good, or helpe them, or when fhe maketh fome marriage,or affemblies of greas companie. Let her iot fuffer her daughters to gad and wander abroad vpon the Sabbath, except they be in fuch companic as is faithfull, or that fhe her felfe be prefent with them. Let her compell her fonnes to be formoft at worke, and let her fhew them the example of their father, that this may be as a double e purre vnto the men feruants. Let her not endure them to vtter or feeake any vnchaft word, oath, or blafphemie in her houfe: and let her caufe Tale-bearcrs to be filent, and not to trouble thenfelues with ocher folkes matters. Let her keepe clofe vp her Stubble and lopping of Trees for fuell for the Ouen. Let her not fuffer the ftalkes of her Beanes, Peafon, Fetches, Thiftes, Danewort, the refufe of preffed things, and other vnprofitable hearbes, to be loft, for in winter they being burnt into athes, will a affoord prouifion to lay Bucks withall, or elfe be fold by litele and lietle vnto the Towne. Let her giue good account vnro the Miffreffe or Lord of the Egges and young ones, as well of Birds as of other Beafts. Let her be skilfull in naturall Phyficke, for the benefice of her owae folke
and others when they fhall fall our to be ill: and fo in like manner in things good for Kine, Swine, and Fowles: for to haue a Phyfition alwayes, when there is not verie vrgent occafion and great neceffrie, is not tur the profit of the houfe. Let her keepe all them of her houle in friendly good will one toward another, noo fuffering them to beare malice one againft another. Let her gouerne her Bread fo well, as shat no one To vere Bread be fuffered to ve it ocherwife chan in temperate fort: and in the time of Dearth, lee temperatel. her caufe to be ground among 1 her Corne,Beanes, Peafe, Fetches, orSarrafins Corne, in fome fmall quantitie; for this mingling of thefe flowers raifech the pafte, makech the Bread light, and to be of a greater bulke. At the fame time fhe fhall referue the drofle of the Grapes fhee preflecth, affoording them fome little corner, for the imploying of them in the defraying of fome part of charge for the feruants Drinke, that fo the Wine may ferue for her husband and extraordinarie commers. But the naturall remedies which fhee fhail acquaint her feife withall for the fuccour of her folke in their fickneffes, may be thofe, or fuch as thofe are, which I fhall fet downe by wricing, in manner of a Countrie Difpenfatorie, leauing the other more exquifite Remedics to bee vfed by the profefled Phyfitions of the great Townes and Citics.

## Chap. XII.

## The Remedies which a good Hut worfe must be acquainted withall, for to belpe ber people waben they be jicke.

 Irlt, for the Plague fhee fhall make a diftilled water of the hearbe called The Plagyte: Regina prati, atter that fhee hath cauled the fame to be fleept in white Wine: or elfe fhee fhall caule to lye to fleepe in the iuice of Citrons a peece of Gold, or the powder or leaues thereof, for the fpace of 24 houres, and afterward mixe that iuice with white Wine, and the powder or decoetion of the roor of Angelicá, and fo giue it to drinke to the infected. Or elfe let her take two old Walnuts, one Figge, tenne leaues of Rue, one graine of Salt,powne and temper them altogcther, and roft them vnder the afhes, and afterward being fprinkled with Wine, let her giue them to be eaten. Or elfe let her take one head of Garlicke, twentie leaues of Rue, as many of Clarey, and powne them altogether with white Wine and a litrle A qua vitx, afterward let her fraine them out, and giue the partie to drinke thereof a good draught. The water of Naphe drunke to the quanci- Napheo tie of fix ounces, caulech the malignitie of the Plague to breake forth by Sweats : the iuice of Marigolds,Scabious, and of the flowers of Betonie doe the like. Apply vpon the fwelling a loafe very hot, or a Henne cut through the middeft, or a white Onion, made hollow on the roor fide, and filled vp againe with good ftrong Treacle or Mithridate, foftened with the iuice of Citronssit hauing all this within ir, and being well ftupped, mult be rofted vider the ahes till it be rotten; after thar powne it well in a Mortar, and apply it: or elfe, if it be ftrained, the iuice drunke, and the droffic pare applyed to the place, you fhall perceiue the like effect.
For a continuall Feauer (which is otherwife called the hot Difeafe) fine fhall ap- $\mathcal{A}$ continuall ply vpon either wreft of both the armes, the iuice of the flinging Nettle,mixed with Feazer. the oyntment of Poplar buds :or two frings of new-layed Egges, Soor taken off from the Hub of the Chimney, and well beaten together, and mixt with falt and ffrong vineger, let her bind the whole vnto the parties wrefts with a Limnen Cloth: or elfe in place of this fhee fhall take away the heart of an Onion, and fill it with Mi thridate, and apply it faft bound vpon the wreft of the right arme: or elfe fhee fhall take the heart ofa water-Frog, and apply it vpon the heart or backe bone of the ficke partic: or elfe fhe fhall apply vpon the region of the Liuer, or vnto the foles of the feet, quicke Tenches. Many for this caule doe flampe the fmall Sorrell, and make a
drinke
drinke for the great heat thereof, as alfo make a Cataplafme thereof to apply to the wretts of the ficke partic. Others doe the like with the water which they ftraine our of a great Citrull. Others caufe to fteepe in water the whole feed of Flea-wort for the fpace of a night, and mimfter of this water, with a litele Sugar, to the ficke partic to drinke.
For a Quartane Ague, take of fmall Sage, or for want of it, the other Hyfope, Wormewood, Parley, Mints, Mugwort, white fported Trefolle, flampe them all together with the fpring of an Egge, and the groffet Soot that you fhall find cleauing to the Chimney, and of the itrongeft vineger that may be found $;$ infufe them altogether, and make thereof Cataplaimes fit to be applyed to the wrefts of the hands. To the fame purpofe fteepe the crummes of two white Loaues, as they come from the Ouen, in a quarr of Vineger, afterward diftill the fame by a Limbecke, and giue thereof a fmall draught to the ficke partie to drinke, about fome two houres before the fit come. Some hold it allo for a fingular remedie to take the iuice ot the female white Mulleine, before it put torti his ftalke, prefled or drawne forth with white Wine, and drunke a finall fpace before the fit: The like effect hath the juice of Folefoot; the decoction of the leaues and rootes of Veruaine boyled in white Wine; the decoction of Calamme, Peniryall, Organie, Burrage, Buglofle, Langue-de-bouf; the rind of the root of Tamariske, Afh-tree, Betonie, Tyme, Agrimonic, and the roots of Sperage, all boyled in white Wine; the iuice of Wormewood and Rue powred from their fetings, and drunke before the fit; the iuice of Plantaine drunke with honied water. Some doe make great account of the powder of the root of A Carum (otherwife called Cabaret) dryed in the Sunne, or in the Ouen, and taken in the weight of a French crowne, with white Wine, halfe a quarter of an houre before the fit. Furthermore, the Liniment made with Mithridare, or the oyle of Scorpions, applyed to the ridge of the backes, foles of the feet, palmes of the hands, brow, and temples, fome fmall time before the fit. The verie fame vertue hath the oy les of Biyes mixed with Aqua vitæ. Some townefmen doe vfe this fuperftitious rite againft fuch manner of agues : that is to fay, they eat nine dayes together, being fafting, the leaues of Sage; the firl day nine, the fecond eight, and fo confequently, they diminifh euerie day a leafe vntill che laft of the faid nine dayes: and the confident perfuafion that they have of this medicine doth cure them. Some find it verie fingular in a Quartane Ague, after purging, to drinke white wine, wherein there hath beene Sage fteeped all night: if you cat betore the fit a head of Garlicke pilled, you fhall fcape the fit of fhiwering cold: if you drinke one or two ounces of the iuices of the root of Elder flamped and ftrained fome fmall time before the fit, and take the fame againe two or three times, you fhall lofe your ague. The diftilled water of the roots of Sea-Holly : or elfe take a dramme of Myrrhe in powder, and drinke it with Malmefey an houre before the fit. The diftilled warer or decoction of Carduzs Benedictus, and taken before the fit : Pills made of Myrrhe and of Treacle as big as a cich peafe taken an houre before the fir.
Thiryt.
For the Thirf of an Ague, let him roll to and fro vpon his tongue the three-cornered flone found in the heads of Carpes; or the leaues of round Sorrell, or a piece of Siluer or Gold, or a Snayle ftone, or a piece of Cryftall oftenrimes dipt in water, or the leaues of Purflane or of Houfeleeke, or the husked feeds of Cucumbers.

For a Tertian Ague, fteepe in white Wine the bruifed root of hearbe Patience for the face of three or foure houres, afterward Itraine it, and referue about a pretie draught to give the ficke to drinke an houre or two before his fit: or elfe doe the like with the rootes of Plantaine Iteept in equall quancitie of Wine and Water: or take a pretie dranght of the iuice of Plantaine, or of Puflane, or of Pimpernell, and drinke them a verie little while before the fit: or elfe drinke with Wine euerie day fix leaues of Cinquefoile, that is to fay, three in the morning, and three at the euening: or the juice of Smallage, of Sage, and good ftrong Vineger, of euerie one an ounce, three houres before the fit. The molt foueraigne remedie that fome men doe find for it, is to dranke fafting, fue houres before the fit, two ounces

## the Countrie Farme.

of the inice of Pomegranats, and prefently after to lay to the wrifts, temples, and foles of the feet fmall pills, of the bigneffe of a Peafe, made of an ounce of the oyntmens of Populeon, and two drammes of Spiders webs, and there to leaue them, vntill fuch time as that the houre and feare of the fit be paft: or elfe a Cataplafme made of Sage, Rue, Greeke Nettle, gathered before Sunne-rife, of each a handfull, Salt and Soot the quantitic of a $V$ alnut, it being all ftamped with vineger, and applyed to the puifes an houre before the fit. Some doe greatly approue of a Liniment of Earthwormes boyled with Goofe greafe, to rub the brow and temples of the ficke partie withall before the fit : or elfe to carrie about his necke the hornes of a fwift Hart, which is a fingular remedic.

For a Quotidian, it is good to drinke,fomewhat before the fit, the iuice drawne out of Betonse and Plantaine: or to drinke euerie morning a reafonable draught of the decoetion made of the root of Smallage, Parfley, Radinhes, Sperage, leaues of Beronie, and Spleenwort, red cich Peafe, and the middle rinde of Elder : or to fteepe in white wine the roots of. Danewort, and to drinke a fmall draughe thercof an houre before the fit; but after that hee niuft take heed of fleeping: or let him drinke eucrie day witl Wine two leaues of Cinquefoile, one in the morning, and another at cuening: as alfo let him apply vnto his pulfes the Cataplafme that wee haue fer downe for the Quartane Ague.

To take away the paine of the Head, comming of great heat, namely fuch as be- Headach come falleth Mowers during the Summer time, there mult be applyed vpon the browes ming of Heats, nlices of Gourds, or Linnen Clothes dipped in Role water, or the iuice of Plantaine, Nightfhade, Lettuce, Purcelane, and Vineger of white Wine' : or let her beat two whites of egges with Rofe water, and with Flaxe make a Frontlet : or ftampe bit ter Almonds with Veruaine water, and apply them vino the browes: or to wafh the head in warme water, in which hath beene boyled the leaues of Vines and Willowes, the flowers of Water-Lillies and Rofes, and with the fame water to wafh the feet and legges : and if in cafe the paine be lo great, as that there is feare that hee Thould loofe his wits, let there be applyed vpon the crowne of his head, browes, and temples, a Cataplafme made of the white of an egge, Bole-armoniacke, Crabbes throughly boyled, and Poppie feed, with the water of Betonic and Vi-e neger.

If the Head complaine it felfe of too much Drinke, there may be made a Frontlet Headach como with wild Time, Maiden haire, and Rofes : or receiue and take the fume of the decostion of Coleworts: or by and by after the head beginneth to be ill, to eat one or two fhort-flarted Apples, or fome bitter Almonds: or elfe to drinke of the fhauings of Harts-horne, with Fountaine or Riwer water: or if youf fee that your fomacke be not ficke, thou may ft take of the haire of the Beaft that hath made thee ill, and drinke off a good glaffe of Wine.
If the Head become ficke of fome great Cold, apply and lay to the Head a bag Headach pror full of Bramne, Millet, and rubbed Salt: or of Sage, Marierome, Betonie, Tyme, cceding of colds Annife-feed, Fennell-feed, Bay-berries, and Iuniper-berries, as hot as you can endure them: or elfe chafe the temples with the iuice of Nighthade, oyle of Rofes, and Vineger.

To cure the Frenfie that commeth of a hot caufe, you muft apply vpon the head Frenfe. of the patient the lungs of a Sheepe newly killed, or the whole Gather: or fome Henne or Pigeon flit along the backe and applyed vnto the fame place: or rub his browes and all his head oner with oyle of Rofes, Vineger, and Populcon:or with the iuice of Nighthade, oyle of Rofes, and Vineger.

To awake thofe which are giuen to flecpe too foundly, it is good to make a Front- Drowfineffe, or let of Sanorie boyled in Vineger: or to make a perfume for the patients nofthrils beauinefe of with ftrong Vineger, or feed of Rue, or Nigella, or feathers of a Parrridge, or of old Shooe foles, or of the hoofes of an Affe, or of mans haire: or elfe to apply vpon the browes a Cataplafme of Mithridate, and vpon the right arme the head of a Bat.

Too much
watchfulaefle.
To caufe them to fleepe which cannot well nlumber, it is good to make a Frontlee with the feed of Poppie, Henbane, Lettuce, and the iuice of Nighthade: or the milke of a woman giuing a girle fucke : or with the leaues of ground yure, flamped with the white of an egge: or put vnder the pillow a Mandrake apple, or the greene leates of Henbane, and rub the foles of the feet with the greale of a Dormoufe.

For the fwimming in the Head, there is commonly vfed the conferue of the
Swimming in
the Head.
The Apoplexie. flowers of Beronie, or Aqua vitx, or the confection called Electuariuma Anacardinum.
To preferue fuch from the Apoplexie as are fubiect vnto it, let them drinke in Winter a good fpoonefull of Aqua vitx well fugred, and let them eat a bit of White bread by and by afters or in ftead of Aqua vitx, let them drinke the Claret water which I will fet downe hereafter, or of the water of the root of the wild Vine, or of the powder of the root thereof continually for the fpace of a ycare.

For the Pallie, rub the place afllicted with the oyle of Foxes, Bayes, and Caftore-. um, mixing therewith a little Aqua vita : vfe likewife ofentimes the water of Cin namon, and of S. Iohns wort; or the conferues of Sage, Rofemarie, Cowflips, Baulwe, and Mithridate: make him drie Bathes with the decoction of Lauander, Coaftmarie, Danewort, Sage, and Marierome.
The Enilepfie or falling ficknes, a foueraigne thing to drinke for the fpace of nine dayes a liteled draught of the iuice of the hearbe Paralyfis or Cowflips, or of the diftilled water of the Lindentree, or of Coriander : or to vfe euerie morning, for the fpace of fortie dayes, a powder made of the feed of Pionie, and Mifsletoc of the Oake,or of the skull of a Man, and more fpecially of that part of the skull which is neereft vnto the feame of the crowne, with neat Wine, or with the decoction of Pionie: as alfo to hang about his necke the Mifo sletoc of the Oake, or fome piece of a mans skull, or of the root or feed of unale Pionie, or of the ftone that is found in Swallowes neafts: or to weare about his necke, or vpon one of his fingers,fome ring, wherein thal be fet the bone of the foot of the Oxe called Elam or Alce, and that lo, as that the bone may touch the flefh or bare skin: you fhall deliuer them that are in that fit, if you tickle them and pinch their great toe, or rub their lips with mans bloud.
To take away the redneffe of the Face, it is gaod to wafh the face with the decocti-
Redneffe of the fuct.

## spots in the

 face. on of the chaffe of Barley and Oates, and to fement it afterward with the iuice of Citrons : or elfe take foure ounces of Peach kerneis, two ounces of the husked feedes of Gourds, bruife them and preffe them out ftrongly, to the end they may yeeld their oyle: rub or touch with this liquor the pimples or red places.To take away the fpots of the Face, make a compofition of the flower of Lupines, Goats gall, juice of Limons, and verie white Allome, touch the fpotted pla- ces with this oyntment : or elfe make an oyntment with the oyle of bitter Almonds, Honey, Ireos, and Waxe : or elfe rub your face with the bloud of a Cocke, Henne, or Pigeon : or foment it with the water of the flowers of Beanes, Orenges, or Mulberries.
Th Kings euill. For the Kings euill take Leekes, with the leaues and rcots of the hearbe Patience, preffe out about fome pound of the iuice thereof, in which you fhall diflolue an ounce of Pellitorie powdred, and a cruple of Viridis aris, mixe all verie well together, and herewithall you fhall daily foment the faid difeafe: Hang about your necke the roots of water Betonie, and the leffer Plantaine. If you cut the foot of a great Witwall or Toad, when the Moone is declining, and beginneth to ioyne it felfe to the Sunne, and that you apply it round about his neck which hath the Kings euill, you fhall find it verie foueraigne for the faid difeafe. The dung of a Cow or Oxe heated vader the afhes betwixt Vine or Colewort leaues, and mingled with Vineger, hath a propertie to bring the fwelling to ripeneffe. Or elfe vfe this remedie, which is alwayes readie, fingular good, and well approued: Take a fufficient
quantitic of Nicotiana, ftampe it in a verie cleane Mortar, and ap.ply both the iuice and droffie parts thereof vnto the faid tumour together : and doe this nine or tenne times.

The Rheume falling downe vpon the eyes is ftayed by a Cataplafme applyed to ilheyes. the browes, made of the mulcillage of fhell-Snailes, and corporated with the Hower of Frankincenfe and Aloes well ftirred together, vnill that the whole become to the thicknefle of Honey.

For a weake Sight, take Fennell, Veruaine, Clarey, Rue, Eye-bright, and Rofes, of eacha like, and diftill chem all in a Limbecke: of this water diftilled put three or foure drops in your eyes morning and euening. Alfo the water of young Pies diftilled in a Furnace is verie good: in like manner the water of rocten Apples, putting two or three drops thereot into them. It is geod for the fame difeafe to take the vapour of the decoction of Fennell, Eye-bright, and Rue: to drinke everie morning a fruall draught of Eye-bright wine,or to prepare a powder with dried Eye-bright and Sugar, to take thereof eucrie morning the weight of a French crowne, two or three houres before meat. There is a flone found within the gall of an Oxe, which put into the nolthrils, doth maruellouly cleare the fight: fo doch the wine made of the root of Maiden haire, if it be oft vfed in the morning.

For the paine of the Eyes, it is good to make the decoction of Camomile, Meli- paine in the lot, and the feed of Fennell in water and white Wine, and dipping a foure-fold Lin- ejesa nen Cloth therein, and after wringing it well, to apply the fame oftentimes to the eye: or elfe to lay vpon it womans milke and the white of an egge well beat together.
The redneffe of the Eyes is amended by the applying of Linnen Cloches or Pie.. Redneffe in the gets of Flaxe, moittened in the whites of egges well beat togeiher with Rofe or Plan- eye. taine wated: or elfe boyle a fowre and Charpe Apple, take the pulpe chereof, and mix it with Nurce milke; aftecward make a little Liniment to be applyed to the red eyelids. In the meane time you may apply to the temples a frontlet made with Prouence Rofes, or conferue of Rofes, and other aftringent things, to the end that the rheume falling from the braine may beftayed, feeing it is the caufe of fuch redneffe. Other caule imall, chinne, and daintie flices of Veale, or of the necke of an Oxe newly killed, to be fteeped in womans milke, and lay them vpon the eyes, laying againe aboue them fupes of Flaxe. Some caufe little children to make water in Copper, Bratte, or Latten veffels, they fwill the vrine round about the Bafin, and afterward vpon the fuddain doe calt it out of the Bafin, they couer the Bafin with a cleane Linnen Cloth, and let it ftand fo couered foure and twentie houres, they find ruft in the bottome and round about it, they gather and diffulue the faid ruft with Rofe warer, which Rofe water they keepe within a Violl well fopped, and drop thercof into their eyes euening and morning, hold ing them wide open. Many likewife there be which content themfelues with Tuthia prepared.

To take away the filthineffe or gummineffe of the eyes, touch them and rub them Filth is the gye: sound about with a Saphire dipt in cold water.

To preuent that the eye doe not continue blacke or red after a blow, there Ablacke and muft by and by be dropt into the eye the bloud of the wing of a Pigeon or Tur. bewe eye. the douc.

To take away red fpots or blemifhes of the eye, it is good to vfe the like remedie, A blemifh in or elfe to apply to the eye a Cataplafme made of young Wormewood, flamped with the eyt. she milke of a woman and Rofe water.

For an old rednefte in the eye, take the bigneffe of a fmall Nut of white Coppe- Redrefe in ras, and a fcruple of Florence Ireos, as much of Roch Allome, make a powder, which the eyes. you thall mix with halfe a pint of Fountaine water after the meafure of Paris; or elfe boyle themall together vntill the water become cleare, and drop into your eye three or foure drops, cither of the one water, or of the other: or makea Liniment to apply vpon it with the droffe of oyle of Linfeed, gumme Arabicke, Tragacanth, Maftick, and Camphire.

The inflamma tion of the Eye.

For the inflammation of the Eye, it is a fingular remedic to apply to the eye the lungs of a Sheepe newly killed: or to make a Catapla(me of the pulpe of a fweet ap. ple roafted vnder the embers, mingled with Barley meale, the milke of a woman, Rofe water, and the white of an egge : The water of Marigoles is alfo roueraigne good in this cale. A Wolues eye, or the fones that are found in the mawes of Swallowes, haue the like vertuc hanged about the necke. Or take with the point of a needle a piece of Frankincenfe, fet to on fire with a waxe Candle, after quench it in foure ounces of Rofe water, goe ouer this courfe thirtie times, and ftraine the Rofe water through a white Linnen Cloth, and keepe it to drop in fome drops of the fame into the corners of your eyes at night when you goe to bed: and in cafe you may feele great paine in your eyes, mixe togerher with this water a little of womans. milke.

To reftraine teares and all other humors falling vpon the eyes, it is good to take a

The reeping Еуе.

The white fpots of the Eyes. decoction of the leaues of Betonie, the roots of Femnell, and a little fine Frankincenfe, and to make an eye-falue thereof: alfo to wafh the weeping cyes oftentimes with the decoetion of Cheruile, or to drop thereinto fometimes the nuice of Rue mixt with purified Honey. Some hold it for a fecret remedie to tye behind the head fome drops of Amber, which alfo haue the vertue to fay the rheume falling downe into the throat:or eife to drop into the eye water diftilled of the gall of a man and Celandine: or elfe to annoint the edges of the eye-lids with the foor of Butter burned in a Lampe, which is a fecret for to drie vp and ftay all rheumes of the eyes, and to fhut vp moft fpeedily all vicers made in the great corners of the cyes, and all rheumes comming of the tenderneffe or blearednefle of the eye.

For che white fpots of the Eyes, take one or many new egges layd the fame day by one or moe blacke Hennes, or for want of blacke Hennes, by other, roft them hard vpon hot embers, cut them afterward inro equall quarters, and take away the yelke, and put in place thereof as much Sugar candie,made in powder, of the whiteft you can get, ftrayne all together through a Linnen Cloth verie cleane and doubled, that fo you may doc it verie ftrongly: the water or liquor that commeth forth is verie good to drop one drop after another into the difeafed eye, at night when they goe to bed, or at any houre of the day. There is another water verie good for che fame difeale, which is made of white Copperas, Sugar candie, Rofe water, and the hard whites of egges, they being all frayned through a Linnen Cloth, and of this there mull be fome put into the eye after dinner and at night going to bed. Some doe vfe with verie good fucceffe another Water, which is this: Take of Tuthia prepared and powdered an ounce, Mace halfe an ounce, infure chem together in Rofe water and white Wine, of each halfe a pint of Paris meafure, for the fpace of fixe weekes in a Glaffe well ftopped : this Glaffe you fhall fer in the Sunne when it thineth, and take it in whein it fhineth not, or is Night, or Raine; firre the Glafte ewice or thrice euerie day: Thefe remedies are likewife good for red, running, and weake cyes.

Ache in the Eare.

For ach in the Eare, comming of a hot caufe, drop thereinto the oyle of Henbane: take oyle of Rofes, and a little Vineger, and make thereof an iniection into the eare, app!y thereto afterward a bag of Camomill, Melilote, Linfeed, and Holihocks, boyled in milke. If the caufe be of cold, then put therein musked Cotton, or a graine of Muske. Scribonius doth commend greatly the foot of Pitch dropped warme into the eare which aketh by reafon of an inflammation, together with a little of the oyle of Rofes.

Againft the noyre and founding of the Eare, it is good to drop inte the eares of the oyle of Rue, or Spike; oyle of Bitter Almonds, or Bayes, together with a little Aqua vitx, or fat of an Eele : or Aqua vitæ wherein hath beene fteept the feed of Cummin or Annife: or elfe take the ferapings of the wood of Cedar tree, made verie fmall, and thereoffill a bag of crimfon Taffata verie thin, of the greatneffe of an Almond, dip it in verie good Aqua vitx, in fuch fort, as that the faid bagge be throughly drencht with the fame, put the fame bagge well and forward and clofe into the
hole of the eare which bloweth and foundecth, and afterward lye downe vpon the lame eare.
Againft Deafeneffe, you muft drop into your cares the iuice of an Onion; or of Deafeneffe. Brionie, mixed with Honey or Oyle, wherein haue beene boyled the roots of Daffodill: or ot the iuice of the rindes of Radifhes, mixt with oyle of Rofes: or the fat of an Eele, and the oyle of bitter Almonds.
For the loffe of Smelling, or when it is corrupted, make a perfume wish the feed of The fmeling Nigella, che lcaues of Aron, Rue, and other hearbes which have a flrong fauour: allo lof. fmell oft vpon Mints.
For tumors vnder the eare, you mult make a Cataplafme of the flower of Barley swelling inder boyled in honied water, and putting thereto the Mulcilage of Fleawort feed and the the eart. oyle of Lillies. A Caraplafisie made of the dung of Goats, freth Buter, and the refidence of the oy le of Nuts doch digeft the fwellings vinder the eare.
Againft the flinking of the Nofthrils, it is good to fnuffe vp into the nofthrils of Stimking nothe decoetion of Marierome, Calameth, Cloues, Giinger;and Nutmegs,made inwhite Shrilso Wine,or elfe of rhe vineger of Squils.
To flay bleeding at the Nofe, you mult by and by lay your chumbe vpon that fide Bleeding at the of the nofe that bleedech, and you mult put abour your necke a neck-lace of Iafpar fone: you muft tie the vutermoft parts of the bodie fo flate as you can, and put in the nofe a tent of dead Nettles, and hold in your hands the leaues and rootes of Agrimonie : or clfe hold in your mouth verie cold Cefterne water, and change it often. times. Some doc mucli approue the ve of Camphire, the flowers of Villow, the moffe of Quinces, and other hoarte fruits pur into the nofe: and to apply vnto the Browes Camphire, with the leed of Netties, or with the iuice of Plantain or of Nightfhade : or elfe to apply vnto the Temples, and about the necke, efpecially oucragainft the iugular veines, hearbes of a cooling facultie, as Nighthade, Plantanne, Lettuce, dead Netrles,or pricking Nertles, pouncd with falt and vineger, Pervincle,\& orthers. Peruincle alfo pur vnder the Tongue hath the fame vertue. Some doe make in like manner Neck-laces and Bracelers of the hearbe S. Innocent. Some hold in the hand, that is, on that fidethar the nofe doth bleed of, a branch of Holihocke. Diuers Countrie folkes, to ftay any kind of bleeding in any part, doe wrap of Hogsdung in Cotton, and apply it to the place from whence the bloud commeth. Others fnuffe vp into the nofe the powder of a three-cornered fone found in the head of a Carpe,dried and made into powder.
Againft the ach of the Teeth, you nuft boyle in Vineger and Rofewater the root Yooth-ad.: of Henbane; or of the Mulberrie tree, and to hold this decoction in the mouth : otherwife, sake a Cloue of Garlicke, and rof it a little vnder hot embers, afterward bray it,and lay it vpon the pained tooth as hot as you can : in like manner put onc in the eare of the fame fide that the paine is: Some doe bray a Cloue of Garlicke with Salk, and lay it to the pulfe of that arme that is vpon the aking fide. Otherwife, take two drammes of the rootes of Pellitorie brufed, of the leaues of Sage, Rofemarie, of euerie one halfe a handtull: Three far Figges, and you fhall boyle them all in tenne ounces of Wine vnto the confumption of all the Wine : afterward, you fhall take a quantitie of the fard Figges, and apply it to the aking tooth as hot as poffible may be: or elfe wafh and garyle your teech wich the decoction of ground Yure made in Winc, and to the confumption of the third part of the faid Wine. After the fanre manner you muft apply vpon the pulfes of the Temples a playfter made of Pitch, the powder of Ailome, and a Gall, verie hor It is good alfo for the ach of the teech to put thereupon the iuice of Garlicke, Morherwort, Rue, or fome hot oyle, as that of Sage, which is fingular in this behalfe. Some hold it for a fecret, to weare abour the necke the tooth of a man knis within a piece of Taffata : or a Beanc foun!d, in which there is inclofed a Lowfe, taketh away the moff frong paine of the tecth chat may
be endured.
It is good to foment the loofe teeth with the deco\&ion of Rofewater and Allome:. Loofe teethis or elfe of the rootes of Cinquefoile and Allome : and in cafe you would caure
them to fall out,put in thicir hole or hollow place of the afhes of Earch-wormes, or of the dung of Mice, or of the tooth of a Harr, for fuch a fhes will caule them to fall our by and by, without any Iron or Inftrument. Or elfe apply thereunto the ftone of a Mulberrie: or elfe fteepe the root of Mulberrie tree, ftampt and bruifed the fpace of fiue daies in good ftrong vineger in the Sunne, and there let it drie fo as that you may make it into powder, and then apply the fame powder vnto your tooth : or elle you fhall apply thereto the braines of a Partridge: or the iuice of water-Crefles in the place : or elfe pur into the hollow of the tooth the iuice of great Celandine.
To keepe the Teech cleane and bright, and to preferue chem from the falling

Blacke Teeth.

Red Tceth.

Stinking mouthes. downe of all manner of Rheumes, take a pint of Fountaine water, a third part of Rofewater, put therein two drammes of Allome, as much of Cinnamon, boyle them fofty together in a Viall or earthen Pot, well Leaded, vnto the confumption of the third or fourth part, wafh your mouth and teeth therewith euening and morning: or elfe walh your mouth and teech in the warme decotion of fmall Sage, Rotemarie, and great Maricrome, boyled in white Wine to the confumption of the third part.
To flay the Canker of the Tecth, hold in the morning a great graine of Salt vnder your tongue vnill it be chere melted, then rub your teeth therewith.
To take away the flinking of the Mouth, it is good to wafh the mouth with Wine, wherein hath boyled Annifeed and Cloues : or to chaw the root of Acornes: or elfe

## Stinking Teeth.

For the ftinking of the Teeth, it is good to rub them with the leaues of Sage and the rinde of a Citron, or with the powder of Cloues and Nutmegs: in the meane time there muft be auoided the vfe of Milke.meats, raw Fruiss, fharpe things, and fuch as are hard to chew, all victuals of ill digeftion, and all vomiting.
To white and take the wrinkles out of the Hands, take the drofle of oyle of Lim-

## Wrinkled

 Hands.The cough.

For the Squinancie, or foreneffe of the Throat, you mult take a whole Swallowes Neaft boyled with white IVine, and with the oyle of Camomill and fweet Almonds, therewith to make a Cataplafine, and to apply it vnto the throat : or to drinke by and by the weight of a French crowne of the tooth of a wild Boare powdred, with the water of Carduns Benedictus: or to touch the difeafed place with a Liniment made of Linfeed, and the powder of the tooth of a wild Boare : or elfe to apply vito the place a Cataplafine made of the dung of a young boy of a good conftitution, fed for the fpace of three dayes with Lupines and well baked Bread leauened and falted, and hauing Claret Wine to drinke, and no other eycher meates or drinkes, and adding to che forefaid childs dung an equall quantitie of Honey.
Pleurifie.
Agailtt the Pleurifie, drinke prefencly with the fyrrup of Violers, or fome other appropriate to the Breaft whatfoeuer, the weight of a fruple of Nettle feed, or of the Anh Trees : or take three ounces of the difililed water of Maries thiftle, or of Carduus Benedittus, or of Broome, a fpoonefull of white Wine, fix fprings or ftraines of Eg'ges that are verie new, the weight of a French crowne of the fhells of French frmall Nuts made into powder, eighteene graines of red Corall powdred, all being mixed together, le it be gituen warme with as much fpeed as may be: mundified Barley, and the feeds of Melons, Gourds, Cucumbers, and Poppie, are in that cafe highly commended: roaft a fweet apple vnder the embers, mix therwithall when it is roafted
the iuice of Licorice, Starch, and white Sugar; giue thereof vnto the difeafed twice a day, two houres before meat : or elfe take the weight of a French crowne of the powder of a wild Bores tooth, and caufe him to fwallow it, either with the iuice of fweet Almonds and Sugar Candie, or with the broch of red Coleworts, or deco Ation of the water of Barley, or fome other fuch like, which is appropriate for the Breaft : or elfe burne to a hes the pizzle of an Oxe , and give a drana thereof with white Wine, if the ague be but fmall, or with the water of Carduus Benedritus, or Barley water, if the ague be ftrong and great: and affire your felfe, that fuch remedics are fingular if they be vfed withinthree dayes of the beginning of the fickneffe. The manner of making thefe afhes, is to cut che pizzle of the Oxe in gobbets, and laying it vpon the harch that is clofe layd, to fet a new pot ouer it, and afferward to lay hor burning coales os hot embers about the pot, which muft be oft renewed, vnitillone be affured that it is burnt into powder : and the better to iudge of the time, he muff thinke that this will not be done vnder a whole day. It is good to lay a playfter of blacke Pitch vpon the grieued fide: and where it commeth to paffe that the paine of the fide continuech, and that the ficke partie cannot fer, caule him to vee the decoction of the flowers of red Poppie, or of the powder of them, the weight of a French crowne, with the water of Scabious and Pimpernell, and fyrrop of Hyfope, if there be no great Feauer, or Violers, if it be great. Furthermore, for a Pleurifie which is defperate and paft hope, take a fweet Apple, euen a veric excellent one, and take the kernels forth of ir, and fill vp the hollow place with fine Olibanum, roft it couered ouer and rolled in flupes vider the hot embers throughly, and then giue is to the ficke of the Pleurifie to cat.
For che fpecting of Bloud, caufe him to drinke the diftilled water of the firf little Spititing of buds of the leaues of the Oake, or che decoction of Comfrey,or of Plantaine,Horfe- Bloude taile, or Knot-grafte, otherwife called the hearbe of S. Innocent: or to fwallow downe fome fmall drops of Mafticke, or Harrs horne, or Goats horne burnt, or Bole Armoniake, or Terra figillata, or Corall,or Amber, or che powder of the innermoft rind of Cheftnut tree, or of the Corke tree: or frie the dung of an Hogge with frefh Butcer, and of that clutered bloud which the ficke partie fhall haue fper, and fo giue of thefs thus fried together to the ficke partie to eat.
For the beating of the Hearr, it is good to hang about the neck fo much Camphire Tbe beating of. as the quancitie of a Peafe, or to drinke wo or threc ounces of the water of Bugloffe the Hearte: and of Baulme: fome hold the diftilled water following for a fingular and foueraigne remedie. Take two Hogs harts, three Stags harts, or the harts of three Bulls, Nutmeg, Cloues, and Bafill feed, of cach three drams, flowers of Marigolds, Burrage, Buglofle, and Rofemarie, of each halfe a handfull; fteepe them all in Malmefey or Hipucras for the (pace of a night, afeer diftill them with a Limbecke, and referue che water for $\mathbf{v f e}$, which fhall be by taking three or foure ounces when neceffitie doth require. The conferue of Betonie, and Mofemaric flowers: Cinnanon water, Aqua vitx, and Imperiall Waters, which wee hauc fer downe in our worke of the beautifying of mans bodie.
For the faintneite of the Heart, or Swouning, it is good to ftraine and wring the Swookaing. ioynt of the Ring or Phyfitions finger; as alfo to rub the fame with fome piece of Gold and with Saffron : for by the meanes of that finger his neere communicating with the heart, there is from it conucyed and carried fome vertue, reforing and comforting the heart.
For the flagging and hanging breafts of Women, make a liniment with the droffe Flagging, wiof the oyle of Linfeed, a lictele gumme Arabick, Tragacanth,Maftick, and Camphire: or with the iuice of Succorie : or apply thereunto ground Iuie, or the egges of Partridges, which you fhall change ofentimes : or fuall Bafins of the diftilled water of young Pinc-apples, or the iuice of wild Pine-apples.
To procure much Milke vnto Nurfes, they muft ve the frefh and new-gathered wano of milkeg iuice of Fennell oftentimes, or the iuise of Smallage, or of Beets, or the powder of the rootes of Maries thiftle, adding thereto the feed of Fennell and a little Pepper:
the fore-hoofes of a Cow burned, and drunke with Wine, or Broth, or other conuenient liquor : or the powder of Cryftall powdred very finely and drunke with Wine or fome broth: or lee them eat of boyled Coleworts feafoned with Pepper: or of the roots of Rapes boyled with Pepper.

The inflammation of the Breafis.

To caufe Women to loofe their Milke, you muft apply vpon the nipples of their Breafts the roots of great Celandine fodden and powned: or vfe a fomentation of verie flarpe Oxicrate vpon the Breafts: or elfe you Shall apply a Cataplafme of the flower of Beanes : or an emplaifter of Rue, Sage, Mints, Wormewood, Fennell, Branne boyled and mixed with Oyle of Camomill: or the leaues of young and verie greene Gourds : or of Cray-fifhes, all tobrayed and ftamped in a Mortar.

For the inflammation of the Breafts, romming of the great aboundant ftore of Milke, take the dyrt found in the bottome of the Troughes of Cutlers or Grinders, and therewith couer the Breaft, and fo you fhall affwage the paine in one night: you may adde shereto a little of the Oyle of Rofes: or it the Milke be much curded without any grear inflammation in the Breaft, you may apply vnto it a Cataplafme of the flower of Rice, or of pure Wheat, boyled till it become like pappe, with thicke red Wine, and apply it vnto the teates vpon plageats as hot as may be endured.
For belching at the mouth, it is good to take fafting a Dredge made of Annife, Fennell, Caraway, and Coriander feed : or elfe to drinke Wine in the morning two or three times; and that fuch, as wherein hath beene boyled Bay-berries, Annife,Coriander, and Fennell feed; and apply vpon the fomacke a bag full of Rue, Wormewood, Marierome, and Mints.
For the Hicker, it is good to keepe ones breath oftentimes, and long, to fop both his eares, to hold his head awry, and his mouth collered and vpward, ro procure him. felfe to neefe, to labour much, to endure thirft, to caft cold water in bis face which hath the Hicket, thereby to caufe him to feare. Some are of opinion, that if he which hath the Hicket doe count and reckon the firft, faying one, or borrowing, hee fhall haue no moe but that one.

Againft Vomiting, take a coft of bread and fteepe it in the claret water hereafter deferibed, or in the iuice of Mines, fpread it ouer with the powder of Mafticke, apply it warme vnto the fomacke, renewing it euerie three houres. Otherwife, take two handfuls of Mints, and one of Rofes, boyle them in Wine, take afterward two ounces of tofted bread, and let it be well fteeped in Wine, and afterward compounded with Mafticke and the faid Mints and Roles, make thereof a playfter to lay to the flomacke before you goe to mear. It is true, that if the vomiting be with an ague, it will begood to boyle the Mints and Rofes, and to fteepe the tofted bread in vineger. In like manner, Mints brayed and mingled with oyle of Rofes, applyed vnto the fomacke, is a fingular helpe for any kind of vomiting: it is good likewife at the end of meat to fwallow downe one gulpe of Water, or a morfell of Marmalade of Quinces, not drinking afterward: and in the morning, two houres before meat, to fwallow fiue or fix Pepper-cornes whole with Wine, or the firrup of Mints, or of Wormewood, or greene Ginger preferued: It is alfo good to fee cupping Glaffes vpon the bottome of the Stomacke, or vader the Nauell, and then chiefely when the partie eatech : to take reft after meat, and to talke or cough any thing at all.

For the paine of the Stomacke, fill a diff with hot afhes, fprinkle them with Wine, ouer them caft a Linnen cloth, which may couer all the difh, apply this vnto the pained place: or elfe put vnto the ftomacke a hot bagge full of fried Salt : or elfe take the crums of a yood thicke Loafe, and being dipt as it commeth hot out of the Ouen in the Oyle of Camomill, and wrapt in a Linnen cloth, let it be applyed vnto the paine : or elfe fill a Swines bladder with the decottion of the leaues of Bayes, Organie, Marierome, Mints, Time, Camomill, Calamint, Melilote, Annife, and Fennell feed, apply it to the paine, warme it againe when it fall be cold : or clfe make a cake
with
with a handfull of Wormewood, Mints, and Rofes kneaded with Rye, Leauen, and Wine, and apply it vnto the fomacke.

For the obltruction of the Liuer, vfe a decoition made of Succorie, the roots of The Liuer ob? Parfley, Smallage, Fennell, Dogs graffe, Patience, Butchers broome, Cich peafe, frutededo Capillus veneris, Hoppes, and Fumitorie: vfe likewife ofentimes the fhauings of Iuorie.

For the heat of the Liuer, there is nothing better than to vfe Lettuce, Sorrell, Pur- Heat of the celane, Hoppes in poctage, and fomerimes to drinke the waser of the faid hearbes fa- Liker. fting, or the water of Endiue.

Againt the laundife, drinke fafting of the dung of Ganders the weight of a faundifeo French crowne, well mingled with white wine, for the fpace of nine dayes: or elfe of the decoetion of the leaues and roots of Strawberries : or elfe take Mifsleroe of the whire Thorne, gathered before the Sunne rife, aboura handfull, thrce or foure roots of Parfley, bray them all together with white wine, let chem runne through a linnen cloch or ftrainer, and drinke of this euening and morning a reafonable draught:This is a more excellenr remedie than many others; which notwithftanding women with child muift not vfe, but in place of it you muft apply to the wrifts and foles of their feet the leaues of Misteroe of the Oake, of grear Celandine, and Horehound, the whole being brayed with a lietle wine, and made in forme of a Cataplafme. Some commend highly againft the Iaundife, to take of the wórmes of the earth, to wafh them in whire wine, and after to drie them, and making a powder of thein, to giue thereof a fmall fpoonefull in white Wine, or the decoction of Wormewood, or of Horehound: or to drinke fafting ones owne vrine certuine dayes : or to drinke for the fpace of cight mornings with white wine fafting, fiuctrortes of a Goar. Some fay, that to carrie in the left hand three leaucs of wild Rocker, doth cure the Iaundife. Some alfo hold, that to weare vider the foles of the feer the leaues of Shepheards purfe, or of great Celandine, next vnto their bare feer, doth the like.
For the Dropfie, it is good to make a drinke with the feed of Broome, pouned and Dropfaro brayed in whire wine: or to make a drinke of the iuice of the roct of Gladiolus or A farum with white wine : or to drinke fafting his owne vrine for the fpace of certaine dayes: to apply in like manner vnto the moill places a Cataplafme of Cowes dung warme; with which,as Galen teftifiech, a Phy fition of Mifia did maruelloufly heale all manner of Dropfies: or to apply vpon the fwolne place fhell-Snayles aliue, not wafhed, but carefully bruifed. A fecrect remedie againft the Dropfie, is so drinke with honied water the powder of Glaffe feuen' times burned and fenen times quenched in the iuice of Flower-de-luce, or whire wine.
For the paine or heauineffe of the Spleene, drinke wine wherein hath boyled Sco- Paine of the lopendrium, Sperage,and Hoppes: or elfe drinke oftentimes fafting of the broth of Spleene. red Colewors halfe boiled, or of the decortion of R omane Wormwood, or of Payls Beronie, or of fmall Centaurie, or Smiths Forge-water.
For the paine of the Collicke, there is nothing more foueraigne than to weare a- collicke, bout him a Ring or Boxe of filuer, in which is inclofed fome part of the nauell of an infane newly borne, and that the Ring do touch the fefh. Thiere is alfo norhing more fingular, than to drinke, in a precie draught of white wine, the red pill which is to be found in the fpace and cartilaginous griftles of Walnut kernels, dried in the moneth of Auguft, and made into powder: or to drinke foure or fiue ounces of the oyle of Nuts, or of Linfeed, or of the fhells of ripe Nuts, or che water of Camomill, or the decoction of the feed of Hempe, or Wine wherein hath beene ftcepe for the fpace of tenne or twelue houres the root of Enula campana bruifed : or the powder of * Stags pizzile, drunke with water : or the dung of Hennes, drunke with Hypocras made of honey and wine: or a Clifter made of Brine : or the heart of a Larke fwallowed downe while it is frefh and new : or the faid heart of a Larke faftencd to the thigh. As concerning outward remedies, fome approue greatly to take the skin of a theepe all new, or the kell of the intrailes of a fheepe newly killed, \& to a pply it vnto the bellic : or to makea bag of Millet, Branne, Wheat, and Sale fried together, to lap
vpon the bellic : A Cataplafme made of Wolues dung is alfo profitable againft the Collicke: the fame dung drunke with a little wine doch verie much good: the bones found in the dung of a Wolfe, powned frall, and drunke with wine, hane the like qualutie. Some lay, that if you take a hhes comming verie hor from vnder the coales of fire, and put the faid afhes $1 n$ a dinh or por, and afterward poure thereon a good glafle of Claret wine, and afterward coner the faid difh with afhes, with a linnen cloch foure double, and apply it vnto the bellie, you fhall find releafe and mitigation of your paine.

For the humorall flux of the Bellie, it is good to drinke milke, wherein hath beene

Flax of the sellie.

The blondie Flux: quenched a gad of Stecle, or of yron: or milke boyled with: a halfe quantitie of warer, and that vnto the confumption of the waier: or hee fhall take of a Stags pizzle with Cellerne water: to vfe Rice parched: to take a dramme of Mafticke powdred with the yolk e of an egge: to make a Cataplafme with the flower of Wheat to apply all ouer the Nauell, but if mult be wrought with red Wine, and ater baked in the Osen.

For the bloudie Flux, giue to drinke with red wine the bloud of a Hare dried and made in powder, or the powder of mens bones: or elfe gather the dung of a dogge, which for three dayes hath fed vpon noching but bones, and this you muft drie to make into powder : of this powder giue vnto him that is troubled with fuch Flux twice a day in milke, wherein you thall haue quenched manie fones of the Ruver, verie throughly heated in a verie hot fire; concinue this two or three daycs: or elle giue to drinke che diffilled water of the great Burre : or the decoction of fhepheards Purfe: or the diftilled water of Woodbind: or elfe give to drinke the feed of Planraine in powder: or the diftilled water of the firt buds of the Oake : or the powder of Snayles burnte with the powder of Brier-berries, and a little whise Pepper and Galls : or of the Harrs and Goats horne burned: or rather of the pizzle of a Hart prepared, as wee hane taught here aboue, in fetting downe the remedies for the Pleurifie.
Flux of Bloud.
For to ftay the flux of Bloud, drinke a reafonable draught of the iuice or decottion of dead Nettle: : nake Clyfters with the iuice of Plantaine and Horfe-taile : vfe the broth of Coleworts fodden verie tender : the iuice of Pomegranats, and the fubftance it felfe : Sallads of Plantaine and Sorrell : chaw oftentimes lome Rus parbe.
To loofen the Bellie, you muft eat fweet Cherries, or Peaches, Figges, or Mulberries fafting: to fup the firf broths of Coleworts, of Beets, of Mallowes, or Lettuces, or of Cich-peafe wi hout falt : to apply vnto the fomacke a Cataplafme made with Honey, the gall of a Bull, and the rove of Sow-bread: or the leaucs of Apples of Coloquintida : to take a Suppofitorie made of fac Bacon,or the falke of a Mallow or Beet.
To kill the wormes of litele children, it is good to caufe them to vfe preferued Rubarbe, or the conferue of Peach flowers: to drinke the diftilled water of Gentian, or the inice of Citrons, the iuice of Mints or Bafill, of Purcelane, Rue, or Wornswood, or elfe to caufe them to fwallow, wifl a verie finall draught of Wormewood wine, of the powder made of Wormes, firft dried and after burned on a fire-pan red hot, and make it into verie fine powder : or of the powder of bleffed Thintle, or of Coralline, the weight of a Freuch crowne:allo to apply vnto the Nauell a cataplatme made of Wormewood, Tanfie, and an Oxe gali: and all this muft be done toward the later end of the Moone.
To flay the excefflue paine of outward Hemorrhoids, you muft make a Liniment of oyle of Rofes, wathed in the water of Violets, frefh Butter, oyle of Linfeed, the yolke of an egge, and a litelc waxe: or elfe to make a litele cataplafme with the crums of a white loate fleept in Cowes milke, adding thereto two yolkes of egges, a little Saffron, and a little Populeon. There may allo a little Liniment be made wrih frefh butter and dhe powder of Corke-tree burned. In the paine of the Hemorrhoids there is nothing more fingular than the perfume made of flauings of Iuoric.

To ftay the excelfine flux of the Hemorrhoids, it is a moft fingular remedie to The fux of the drinke a dramme of red Corall,or of the f fumme of yron, with the water of Plantain, Hemporthoudso and alfo to make a fomentation of the deccation of whise Henbane: or in place of this, a Cataplafme made of the powder of burnt Paper, or of the fhauings of Lead, or of Bole Armoriack, with the white of an egge, or of three Oyfter fhells finely poudred either raw or burnt, and mixt with a lette frefh butcer.
For the fone in the Reines, you mult drinke often ot the iuice or water of the bo- The fone in the die of the Beech tree: which water nuff be gathered in the Spring time, in as much, Reines. as then the bodic or the rinde thercof being fit or cut to the quiricke, doch yeeld a great quantitie of water, verie fingular for this purpofe: The fruit of the Eglantine preferued before it be ripe, after the manner of Marmalate with Sugar, hauing firft taken the kernels from within, taken fafting to the end of the laft guarter, and firft daics of the Moone following, in drinking lomewhat more than a reafonable draught of white wine, or of the water of wild Tanfie, or fuch other, is verie excellent therefore. He muft alfo drinke very oft with white wine the pouder of the pilling of Reftharrow, or Buck-thorne: or of the gumme which growch round about the rindes of Vines: or of the feed of Goofe-graffe fincly powdred: or to drinke the diffilled water of Radifh roors and Nettle roots, with a lietle Sugar: or the water of Broome : or of Dogs-graffe or of wild Tanfie : the water or iuice of Radifh,wherein is diffolued the powder of egge-fhels burnt: or of the fones of Medlars: or of the eye of a Partridge: or of the braine of a Pie: or of the inward skin of the flomacke of a Henne or Capon. Euerie man prayferh this deco 0 tion, whereof oftius nakech mention in his chapter of Sea-Holly: Takecthe roots of Sea-Holly (the pith taken out) and make them verie cleane, fteepe thenn eight houres in Fountaine water, after that to boyle them till the halfe of the water be confumed; in the end of the boyling caf into the por Licorice bruifed : let this decoation coole ac leifure. And as for outward meanes, it is good to apply a Cataplafne made of Pellitoric of the wall vnto the reines,or elfe a Cataplafme made of the roor of Cypres and the leaues of Bell-flower boyled in wine. The beft and moff foueraigne of all the reff is to prepare a Bath, wherein haue boyled the leaues of water-Panlley, Mallowes,Holihocks, March Violets, Pellitorie, flowers of Broome and Camomifl, and within the Bath, vpon the reines, a bagge full of Branne and water-Parfley.
For the Colliclk, caufed of Grauell, caufe to boyle the leaues and flowers of Camomill in an equall quantitie of water and white wine, to the wafting of the third part, drinke the decoction warme, fuddenly the paine will be appeafed.
Forthe difficulcie of Vrine, drinke the iuice of Winter Cherries, or the decoction Differulie of of Radifh roots in white wine, or the decoction of hearbe Patience, or of the Thiftle, Vrine. faid to haue an hundred heads, or of Bell-flower, or of the white prickly Thifle, or of Sperage, or of Dogs-graffe, or of Reft harrow: alfo apply vpon the yard or fecret parts a Cataplafme or Linment of Fleawort.Some hold if for a great fecret to drinke white wine wherein hath beene brayed Sowes found in caues and hollow places: or to make powder of the faid Sowes dryed, and fo to give the fanve to drinke in white wine. Others doe greatly efteeme the difitled water of the pillings of the root of Ref-harrow, firft teceped in Malmefey.

For the fone ini the Biadder, it is a fingular thing to drinke the iuice of Limons The fone in the with white wine: or to make a powder of the ftones of Medlars, firft wafhed in white Bladder. wine and afer dryed : of Broome-feed, Burnet-feed, and of the feed of Sperage, HoJilockes, Saxifrage, Melons, Pompions, Citruls, and of the hearbe good ayainft pearles, and to vfe thefe with white wine. There is an hearbe growing at the new Towne Le Guyard, called in French Crefpinette, by thofe that dwell thereabouts, and of this the young Ladie of Villeneufue (iffer to the late deceafed Monficur Cardinall of Bellay) caufed to be diftilled a Warer, which is fingular againft the difficultic of Vrine and the thone in the Bladder, as I my felfe haue proued diuers times. Some hold ir alfo for a fingular remedie to make a powder of the fones of Sponges, or of the fone which is found in the head of Cray-fifhes, or of the fhells of fmall Nuts,
or of the gumme of Cherrie trees, and to take it with white Wine or the iuice of Radifhes: Or elferthe diftilled water of the ftalkes of Beanes, red Cich-peafe, and the feed of Holithock. This which followech of Glaffe is a great fecret, which being burned and quenched feuen times in the water of Saxifrage, and afterward made into a verie fine powder, and giuen with white wine vnto the partie troubled with grauell, doth breake che ftone in them in any part of the bodie. Another fecret is that of the fhells of egges which haue brought forth Chickens, being brayed, brewed, and drunke with whire wine, which breaketh the ftone as weil of the Reines as of the Bladder.

For all fuch perfons as piffe in their bed whiles they be aflcepe, and cannot hold their vrine, there is nothing better than to eat oftentimes the lungs of a young Kid rofted: or to drinke with wine the powder of the braines or ftones of a Hare; as alfo the powder of a Cowes bladder, or of a Hogs, Sheepe, or Goats bladder, or the powder made of the roots of Biftort, or of Tormentill, with the iuice of Plantaine, or with the milke of Sheepe, or the afhes of the flefh of an Hedgehog.

Barrenneffe in women.

The mentinuous fur:

The white termes.

For the burning of the Vrine, ler be taken of Ahell-Snayles and whites of egges of each a pound, of the great and fmall cold feeds of each halfe an ounce, halte a pound of the water of Leetuce, foure ounces of good Caffia, chree ounces of Venice Turpentine, powne that which may be powned, and let it all ftand to mix together for the fpace of a night, afterward diftull them in a Limbecke in Maries bath : lecthis water ferle fome time before chat you vfe it; giue thereof halfe anounce euerie morning, with a dramme of Saccharium Rofatum, continue the vfe thereof as long as you are able.

To make a woman fruitfull which is barren, let her drinke foure dayes after the purging of her naturall courle, the iuice of Sage, with a verie litele fale, and let her continue and goe oner this courfe diuers times.
lay the exceniuc flux of the flowers of Women, they muft drinke, with the iuice of Plantaine, the pewder of the Cuttle bone, or the bone of a Shecpes foot burned, or the fhells which Pilgrims bring home after their pilgrimage to S. Iames or of Corall, or of Harts horne, or of the fhells of burnt egges: or of twelue red graines of the feed of Pionic : or to fwallow with the yolke of an egge the powder of Tezill : or the fcumme of yron,firt dipt in vineger,and after made into fine powder. And as for outward meanes, it is good to apply vnto the Nauell Shell-Snayles well brayed, or the red in the void fpace of the Nut, burns, and powdred, and mingled with wine : Make a Cataplafme of Soor, or of the fcraping goi from vnder the bottome of a Cauldron, mingle it with the white of an egge, or che iuice of dead Nettle, or white Mulleine, and apply it vnto the loynes and bottome of the belly : Or to fill a bag fufficient full of groflc falt, to dip in frech waternewly drawne out of the Well, and to apply it to the hollow of the Reines. Some make great account of Cherry-tree gumme infufed in the juice of Plantaine, and calt inco the priuie parts with fmall Sirings: or to apply to the breafts the leaues of Celandine.

For the white termes of Women, after that the bodie is purged, it is good to drinke with the iuice of Plantaine, or the water of Purcelane, the powder of Amber, of Corall, or of Bole Amoniake, or of T erra figillata, or of Sreele prepared, or of Sponge burnt in a por, or of the Sca-Snayle firt burnt and afterward wafhe in wine. And as for outward meanes, there muft be made a Lee with afhes of Oake wood, or of the Figge-tree, or of the Ofier, in which there muft be boyled the rind of Pomegranats, Galis, pieces of Corke, leaues and roots of Biftort and of Peruincle, beyond-fea Rofes, with a verie fmall quantitie of Allome and Salt, and of this to make a fomentation or a halfe bath.

For to caule women to haue their termes, they muft drinke euerie morning two ounces of the water of Mugwort, or of the decoction of Dogs-graffe, Cich-peafe, the feed of common or Romane Nigella, of the root of Smallage, Cinnamon, and Saffron,the roots of Radifh, of the Tafell, in which one may diffolue as much Mirrhe as the quantitic of a Beane. The iuice of Sea。Holly, and of Tafell, mixed with white
wine, is fingular in this cafe: A Bath alfo is verie good, and it may be prepared with water of che Riuer, in which hhall haue boyled Mugwort, Mallowes, Holihock, Camomill, Melilot, and orher fuch like hearbes, and within the Bath to rub the hippes and thighes, drawing them downeward, with a bagge of Mugwort; Celandine; Cheruile, Smallage, Betonie, feeds of Nigella, and other fuch like. Some efteeme it for a rare remedie tor to take the weight of one or two French crownes of the marrow of a Hart, to tye it within a little knot of fine and cleane linnen, and to put the faid knot into the woman her fecret place deepe ynough, but this to be after the bodic hath becne prepared and purged.
For the fuffocation of the Matrix, the legges mult be rubbed alwayes drawing downeward, and tying them liard, to put the partie thercby to great paine : put cup-ping-glaffes vpon the thighe's, rub the flomacke, drawing downeward frome the pit thereof to the nauell. Furthermore, fhe mult be made tof fall vnto things that flinke and frell frong, as she faathers of Partridges or fhooe foles burnt; and below, to apply things that are verie fweet fimelling, as Cloues, Marierome, Amber, Time, Lauander, Calaminth, Penny-ryall, Mugwort, Ciuet; the leaves of white Mulleine, which hath his ftalke rifing verie high : you muftalfo giue her to drinke the quancitic of a bearie of Mithridare, diflolued in the warer of Wormewood, or fifteene red or black feeds of Pionie, bruifed and diflolued in wine. The onely remedie for this difeafe is, that if it fall out that the ficke partie be with child, that then her husband dwell with her : for the remedies before fpoken of are dangerous tor women with child. Sume doe nuch eftecme in this difeafe the courfe following, that is, that the woman euerie weeke, to keepe her felfe free, fhould drinke three fpoonefuis of whire wine, whercinfiath beene boyled and fteept an ounce of the root of Brionic.
For the falling downe of the Mother, the partie mult be caufed to vomite, to haue The falline her armes rubbed zind bound hard to moue great paine, to fer cupping-glaffes vpon dovone of the her brealts, and to caufe her to fmell vnto fweet and odoriferous things; and below, to apply things chat are of a ftrong and ftinking fimell: There muft be giten her to drinke the powder of Harts horne, or of drie Bay leaues with red wine that is verie Tharpe: In like manner, a Cataplafine made of Garlicke ftamped and diffolued in water: or Nettles newly braied and applied vnto the bellie, caulech the Marrix to returne into his place. Holihocks boyled with cyle and the fat of Quailes, made in forme of an eniplaifter, and applyed to the bellie, are verie profitable. A fhes made of egge fuells, wherein Chickens haue beene hatched, mixed with Pitch, and applyed vnto the belly, doe put the Marrix againe into the place. Some are of opinion, that one leafe of Clot-burre, put vnder the fole of the womans foot, drawect downe the Morher, and being applyed vnto the top of the head, doth draw it vp on high.
Fur the inflanmation of the Matrix, it is good to make an iniection with the The infammaiuice of Plantaine, or of Nighthade, or of Houfclecke, or to apply a Cataplafme tion of the stan made of Barley flower, the rinds of Pomegranats, and the iuice of Plantaine, Houfe- trixe leeke,or Nighthade.
For the inflammation of mans yard, the fame Cataplafme will be very foueraigne, The in farmmaif there be added vnto it fome quantitic of drie red Rofes: or clfe take the new dung tion of the eard. of a Cow, frie is in a panne with the flowers of Camomill, Brier, and Melilor, lay, it to the cods, you fhali perceiuc the fwelling to depart quickly.
To take away the finking fimell of the feet, put within your fhoocs the fcumme The stinking of of yron.
For to make a woman fruiffull that cannot conceiue, take a Doe great with fawne, kill her, and draw out of her belly the membrane wherein the fawne lyeth, turne the fawne out of the faid membrane, and without wafhing of it, drie it in the Ouen, after the bread is drawne forth: being dried, make the inner part and place where the fawne lay into powder : giue of this powder three mornings vnto the woman, and that by and by afer midnight, with three or foure fpoonefuls of wine: let her not rife of foure houres after, and aduife her that her husband may lye wish her.

## The first Booke of

Tobe brought in bed before due time.

If a woman with child haue accuffomed to lye downe before her cime, it is good that whiles fhe is with child fhe vee, with the yolke of a new egge, a powder made of the feed of Kermes, otherwite called Diers graine, and of fine Frankincenfe, of each an equall part : or elfe that the vfe oftentimes of the powder of an Oxe pizzle, prepared in fuch fort as we haue fet downe among the remedies for the Pleurifie: or elife that fhe weare continually vpon lome one or ocher of her fingers a Diamond, for a Diamond hath the vertue to keepe the infant in the mothers wombe. Some fay alfo, that the flough of an Adder, dried and made into powder, and giuen with the crums of bread, is fingular good for the flaying of vntimely birth. The Eagles fone is commended for this ahouc all other things, which being worne vnder the left armepit, or hanged ar the arme of the leff fide, doch keepe the infant, and hindcrech vntimely birth.
To bring to bed the woman which is in trauaile of child, you muft tye on the in-
Hard and painjall likbor. fide of her ihigh,not tarre trom the place by which the excrement of ordure pafferh, the Eagles fone, and fo foone as the child is borne, and the weman deliuered, to take it away: for the farne purpofe to glue her the decoetion of Mugwors,Ruc, Dittanic, and Pennyryall, or of the nuice of Parlley drawne with a litete vineger, or of white Wine, or Hypocras, whercin hath beene diffolued of the powder of the Canes of Caffia, of Cinnamon, of the fones of Dates, of the roots of Cypres, of the flowers of Camomill, of the root of round Ariftolochic or Birthwort, er che iuice of Tota bona with whte wine, or elfe the leaues of Tota bona ftamped, layd vpon the fecree parts and round about. And when a woman is in trauaile of child, and loofeth all her ftrength, it is good to giue her bread fteept in Hypocras, ora l pooneffull of the wanter called Claree water, which muft be prepared in this fort: Lay to fteepe in halfe a

The claret ratter. pint of good Aqua vitx, according to the meafure of Paris, about three ounces of Cinnainon well fhaued, by the fpace of three dayes, in the end whereof lee the faid water runne through a cleane linnen cloth, and diffolue chericin an ounce of fine Sugar, after put thereto abour the third part of old red Rofe water, and let all fand together in a bottle of glaffe to ve when need requireth. This water is principally good for all the difeafes ot the Mother, as alfo for Fainting, Swowning, weakencfle of the Stomacke, difficultie of Breathing, of making Warer, and manie others.
To caufe the after-birth to come forth, the remedies next aboue deliuered are very good and profitable : but abouc the reft, it is good to drinke with white Wine, or Hippocras warme, the powder of Beanes, or the flowers of Saffron, or the flowers of Marigolds.
For the Throwes which come after child-birth vnoo women, you nuft giue to Throwes of froomen afier cbild. bursh. drinke a fpoonefull of the forefaid Clarer water, or of the water of Peach flowers, Nutmeg, Carabe, and Ambergrife : you muft make a Cataplafme to apply vnio the belly with the yolkes of egges hard roafted, or fried with oyle of Nuts and Iafmines, putting therero of the feeds of Annule and Cummin powdred, the flower of Beanes, freflh Butter, and oyle of Rue and Dill.

If the Marrix after child-birth be out of frame, it is good to apply vnto the belly a Cataplafme made of Cowes, Sheepes, or Goats dung, adding thereto the feeds of Cummin, Fennell, Annife, and Parfey, with a quancitic of very good wire: and for want of this Cataplafme, the belly may be couered all ouer with the kawle of a newflaughrered Sheepe or Goat: as allo to haue a difh of the Plane tree, or a teft of earth, and after you hane rubbed the edges of the faid teft or earthen drinking-pot with a head of Garlicke, to apply it vnto the Nauell.
For the Rupture For the Rupture, otherwife called the falling of the gurs downe into the flanke, it is good to apply vnto the place a Cataplafine made of the flower of Beanes and the lees of white Wine, or a Cataplafne made of the root of the great and fmall Comfrey, and of fone-Pitch, with a little Mafticke, or double linnen clothes dipped in the iuice or liquor which cormmeth out of the fmall fruit of the Elme, and vpon this Cataplafme to weare a Truffe. It is good alfo to drinke, for the fpace of nine day is, a drinke prepared of the iuice of the roots of Salomons feale, and female Ferne, the
leaues of Bugle and Sanicle, and this to the quantitic of a fmall draught: Or elfe
burne in the Ouen, in a pot well luered, red Snayles, make them into powder, and giue of this powder for the fpace of fifteene dayes, or longer if need be , with fuch pap as is made for litete intants, or with pottage, if they be paft the Teat. For them that are more daintie and delicate, you fhall diftull the faid Snayles in Maries Bath, and giue of the diftilled water to drinke the fame face of time : or elfe make a powder of the moffe of the blacke Thorne, dinke of it with thicke red wine the weight of a French crowne euerie morning ; applying in the meane tume a certaine pap or thicke clamminh fubflance, fuch as is to be had in the Paper-Mills, and tye vpunit a. Trufle.
For paine in che feet and hands, boyle a good handfull of Mugwort in a fuffici-Goutt and acb ent quanticic of oyle Oliue, vnro the fpending of the chird part, make thereof an in the bands. Oyntment for the payned place: Giue alfo to drinke the weight of a French crowne of the feeds of Ebulus, with the decoation of one of the hicarbes called Arthricica.
For the Sciatica, you muft apply to the grieined place a Cataplafme made of the Sciaitict. crummes of Citizens bread, kneaded or boyled in Cow or Sheepes milke, pitting thereto two yolkes of egges and a verie little Saffron : orhervife there muft be prouided a Cataplafme of the roots of Mallowes and Holy hocks, the eeaues of March Violets and of Mallowes, the flowers of Camomill and Metilote, all boyled in the water-broch of Tripes, fter wathe and wrought together with yolks of eg ges, flower of Linfeed, Hogges greafe, and oyle of Camomill: or elfe, and more eafily, you muft make a Cataplafme with Cowes dung, flower of Branes, Branne, Wheat, \& Cummin feed, all beat and made into a math with honied vineger: It is true, that if the grieued part doe grow vito a whitifh colour, and be much puiffed vp, it will be good to adde vnto the former Cataplafmes fone-Pitch and a hetle Brimftone. It will be good alfo to draw the iuice of Dancwort, of Elder arid Iuie, and to boyle them afecrward with oyle of Rue and Wormes, and with a little Wax to makea. Liniment. A Cataplafme made of the dung of an Oxe or a Cow, and wirapt in the leaues of theVine or of Cole-worts, and heated among the embers. And in cafe you would draw out of the vetermoft part,vinder tic skime, that which is fetled in the inner places of the roints, then apply this Caraplafme made of the dung of Sock-doues or Houfe-doues, an ounce ${ }_{j}$ of Muftard and Creffes feed of each two drammes, oyle of old Tyles an ounce, mixe all thefe very well together.
For the fhaking of the parts of the bodie, vfe a long time the decoation of one of the hearbes'Arthriticx, called Primrofe and Sage : eat alfo ofrentimes of Pine Apples.

For Sinewes oppreffed, take che tipe feed of Danewort, put it in a violl halfe full, fill it vp with oyle Oliue, fop it verie clofe, and let it boyle foure and twentie houres prefed. in a Pofnee full of hot water, and as of as the hot water fhall be boyled away, you mult put other in place of it all the time of the foure and twentic houres; which being expired, take away the faid violl of water, and fet it in a dunghill tenne whole dayes. You may alfo make oyle of Danewort for the fame purpofe : fill an carthen velfell, well leeded to the halfe, with the iuice of the leaues of Danewore, and powre thereupon fo much of oyle. Oliue; fee this veffell, well fope with pafte, in an Ouen, after the bread is drawne; there let it ftand till the iuice be wafted: keepe this Oyle for Sinewes that are cold and benummed: Or more eafily apply vno the place the dung of an Oxe or a Cow fried with frong vineger or the oyle of Acornes: or the gumme of the wild Peare-tree foftened with Capons greafe, or the oyle of Linden or Iefamine tree.
For the prickings of Sinewes, take Snayles with their fhells, bruife them, and adde For the priching chereto 2 little of the flying duft that is to be gathered vpon the walls of the Mill-o of the finewes. houre, and apply it to the place pricked: or elfe rub it with the oyle of Wormes.
For Sinewes that are pained, take raw Wormes of the earth, bray them and lay Forthe paimes them haftily and with fpeed vnto the benummed finewes. Or elfe infufe in the Surine of the jinemeso

Taines of the beynts.

Windic fureblings.

Red pimples or swellings.

To fuppurate en Impoflume.

## Anaile, other-

wife called a
furuncle or
cats-tayle.
Tetters:
the flowers of Eider in the oyle of Nurs, and rub therewith the pained finew, or rub and chafe the fame with the oyle of Balcam.
For all other forts of paines in the ioynes, it is good to make an emplainer with the inice of red Coleworts and Daneworr, the flower of Beanes, flowers of Camomill and Rofes made in powder, and to apply them vnto the pained place. Otherwife, cut in thinne fhauings the root of the great Comfrey whiles it is yet greene and but newly pluckt vpout of the earth, fpread that which you haue fhaued or fcraped off vpon a linnen cloth in manner of a Cataplafme, and apply it vnto the pained piace. Otherwife, take the roots and leates of Danewort, the leaues of Scabious, the finall Comfrey, and wild Sage, boyle all together in wine, after let it pafte through a Searce, and put thereto oyle of Spike, A qua vitæ, and the oyle of Neats feet. Otherwife, take a very fat Goofe puid, and the garbage taken cleane out, after ftuffe her with Kitlins that are well liking, and chopped verie fmall with common falt, and roafted at a fmall fire, and looke what droppeth forth, lee be referued for an oyntment for the griened place. Some likewife apply for the paines of the ioints young whelpes vpon the pained places. Galen faith, That hee was wont to foften all fuch hardnefle as is wont to happen about the knees, by applying vnto them old Cheefe all mouldie, ftamped with the broth wherein a falt Gammen of Bacon hath beene boyled.
To take away the Swellings procured of Wind, you mult take fried falt, and pur it berwixe two Linnens vpon the Swelling: or apply a Cataplafme made of the lees of white Wirte, the branne of Wheat, and new Oxe dung.

For fuch Swellings as are verie red, make a Cataplafme with the leaues and flowers of Violets, flowers of Henbane, leanes of Nighthade, flowers of Camomill and Melilote, all boyled in wine and water, Atrayned through a Searce, and applyed vnto the aking place: Or elfe draw the iuice of Houkeleeke, with a little red $W_{1 n e}$, and the flower of Barley, make an emplayfter for the place. The dung of Goats hath power to walt, fperid, and confume the hard Swellings, how hardly foeuer refolued and wafted, efpecially the old hard Swellings abour the Knees, mingling the fame with Barley flower and water and vineger in forme of a Cataplafme.

To ripen an Impoftume, apply vnto it the dung of Goslings, which, haue beene kept from meat three whole dayes together, and afrer fed with the gobbets of a frefh Eele: It is good alfo to apply raw Whear champed or chawed a long time: A Cataplafme made of the leaues and roots of Mallowes, Holihocks, Onions, Lillies, crums of white bread, all fod tegether, and after ftrayned through a Colander, adding thereto the yolke of an Egge and a little Saffron: It is true, that if the Apofteme be very cold, there may be added to the decoction of the Cataplafme abouefaid the roots of Elacampane, Danewort, Lillies, and Brionie, flowers of Camomill and Me lilor, Onions, and Whear Leauens. To ripen a Nalle, otherwife called a Fellon or Cats-haire, take raw IVheat a long time chawed, or the flower of Wheat, the yolke of an Egge, Honey, and Hogges greafe, after heat themall together, and make a plaifter to lay to the fore : or el (e lay vpon it Sheepes dung fleept in vineger, if in cafe you mind to foften and refolue it.
For Tetters you muft vfe the iuice of Purcelane, Celandine, Plantain, Nighthade, and Limons: and if this medicine appeare not to be ftrong ynough, it will be good to mixe fome red Tartar amongft, and with this compofition to rub the fpotted places: Otherwife, infufe for the face of a whole day in ftrong white vineger the root of hearbe Patience, cut into fhiuers, rub the place where the Tetter is with one of the fhiuers three or foure times a day: Or elfe boyle tenne graines of Sublimate, and halfe a dramme of Aloes, in equall quantitic of Plantaine and Nighthade water, vnito the confumption of the one halfe: Or elfe fteepe the powder of a Slate in very good vineger with falt, and rub the place. Otherwife, take the gumme of Cherrie tree, a verie litdle Brimflone, with twice fo much falt as Brimftone, fteepe all together in the ftrongeft vineger you can ger, and with this compofition rub the fotted places: Or clfe rub the place with your fafting fpettle, or with the gumme
that growech about the Vine: but before this, you mult rub them with Salt Nitre, or elfe with the hearbe Nicotiana, applying both droffe and iuice togecher vnto the place.

To takeaway the markes and pits of the finall pocks, take an ounce of Oylc, or of The pits of the the flowers of S. Iolins wort, halfe an ounce of Venice Turpentine, as much of Sper- Small Pocks ma coect, melt it all vpon the firc in a difh of earth well glafed; when it beginnech to boyle and to fwell vpward, take if from the fire, and let it coole, rub and chafe the places of blacke fpots with this oyument, and continue is folong, as cill the pits be filled vp.
For VIcers and Apofemes which happern abour the Nailes; lay vpon che foare a Vteers abours litele worme which is found in the head of the Tafell when it is drie.
For hard Swellings, takce Mallowes, Holyhocks, the ronts of Lillies, Pellitorie, For Schirrows the leaues of white Mullein, feed of Line and Holyhocks, flowers of Camomill and twmorso Melilot, letall be boyled in equall portions of water, wine, and vineger, after paffe them through a Colander, adding thereto the flower of Bairley and Beanes, the powder of Camumill and Rofes, Hennes greafe, and frefla and new Buter: make a playfter to lay tn the foare. Likewife if fhall be good to lay hot thereunto a Caraplafme made of the droffe of Bee-hines diffolued in white wine and fried in a Frying pame.
For fuch as are fallen from on high, giue the weight of halfe a French crowne of Falls from on this powder with good wine, Mummia, Tormentill, R haponticke, Sperma cocti, of bigho each a dramme: or elfe giue the weight of a French crowne of the powder of the feed of Garden-Creffes, of Mummia, of the feed of Hourelecke prepared, and Sugar Candie.
For a greene wound, you muft take Garden Baulme, the great and fmali Comi- A greezie frey, and a litele falt, poune shem all together, and apply them vpon the wound. It mooznd. is good alfo to drop into the wound the iuice of Nicotian, or for the more proficable vfe thereof to apply both the drofle, as alfo the juice thereof ftamped, and to bind vp the wound by and by, and affice your felfe, that within three dayes it will be recoucred. Ocherwife, take che Elme apples, the flowers of S. Iohns wort; and of Rofemarie, the knops or buttons of Rofes, putall togecher in a glaffe-botle'full of oyle Oliue, ftop the bottle diligently; and fet it to the Sunne fo long as till all be fo farre confumed as chat it may feeme to be rotten; afterward let it runne chrough a linnen cloth diuers cimes, and then keepe it in a violl to drop into wounds. The readieft and moft foueraigne remedic is che iuice of Nicotiana, and the droffe or fubftance likewife, and alfo the oyntment made thereof, which wee will handle hereafter, viz. in the feuentie fix chapece of the fecond Booke. This oyntment is very fingular: Take Veruaine, Agrimonie, Beronie, and Pimpernell, of each a handfull, wafli them diligently; and being wafhed; fwing them weill, ftampe them togecher in a mortars, being Itamped, pur them in an earthen veflell well glafed, with feuen pints of white wine, to boyle till halfe of it be confumed, the veffell in the meane time being clofe couered, and che fire burning cleare and foftiy: after draw the veffell fomewhat further from the fire, and let it coole vnto the next morning, then fraine it out a litele, warme the groffer parss, that it may fo be forced through fome hairie ftrainer, and adde thereto of white Pitch meited by it felfe, and allo ftrained through a hairie ftrainer, a pound, halfe a pound of white Waxe in graines, Mafticke and Turpentine of each one ounce, make thereof an oyntment of good confiftence. Likewife there is nothing more fingular than to take of Greeke Pitch, Brimfone, and O libanurr equall parts, to bray them togecher with the whites of egges, and after you haue ftanched and wiped away the bloud in handfome fort, to ioyne and bring together che edges of the wound, and to apply it therero with a linmen cloth and a Cataplafme, afterward to bind and roll it vp with double linnen clothes, and fo to Icaue it for cercaine dayes : or elle boyle the leaues of Carduus Beneditus and flower of Wheat in Wine vinto the forme of an Oyntment, wath the Vleers twice a day with Wine, afterward lay thereunto this Oyntment : Or elfe wafh the wound
with the decoetion of Dent de lion: more eafily thus; $T$ ake the dyrt which you find vnder Buckets, Troughes, or fuch like, and apply it vnto the cut, it clofech it vp incontinently.

Old or news wounds.

For all wounds, as well old as new, vlcers, and whatfoeuer cuts in the flefh, take the leaues of Plantaine, Spearewort, or fmall Plantaine, Mallowes, All-good, of each a handfull, French Sage about foure and twentie leaues; let all the forelaid hearbes be well picked, wafhed, and after ftamped verie well all together : this done, take fiue quarts of old Swines greafe, put thereinto a hot peftill, and caufe it to melt, then boyle it with the faid hearbes, and when you fee that the liquor of the hearbes is confumed, you fhall ftraine it, and put thereunto as much Frankincenfe as a Nut, greene Waxe, and Perrofine, of each as much as two Nurs, melechem, that to they may all be brought vnto the forme of an oynment, of which you fhall make vfe for all forts of wounds. Otherwife, take Brimifone moft finely powdred and fearced, pur it in a Glaffe-veffeil, and powre thereupon fo much oyle Oliue as will doe more then couer it by foure or fuefingers, fer it out vnto all the heat of the Sunne you can for the fpace of tenne daies, and fitrring it about manie times with a Spatull of cleane and faire wood, and keeping the faid veffell clofe thut continually, to the end there may not any dyrt fall thereinto. At the end of the tenne dayes emptie out all the oyle, by leaning the glaffe foftly to the one fide (feeing it hath extracted all the fubftance or eflence of the Brimftone) into another Glaffe-bottell by the helpe of a funnell, and let not any of the drofle or refidence goe in withall : after which, you fhall fop the bottell verie carefully, and at fuch times as you would ve it, you fhall dip Lint, white linnen Cloth, Cotton, or blacke Wooll in it, and apply it vnto the parts that are hurt, whether by Vlcers or Cuts, as alfo vnto Impoltumes, and that folong, as vntill they be cured: You may powre in oyle againe the fecond time vpon the refidence (liff after the oyle powred out, as beforefaid) and doe as was done before. Make account of thefe two later Remedies as of thofe which will not faile you.
The carbuncle Anthrax, ©̛́c.

Vleers of the Pocks.

For the Boyle called Antbrax, Carbunculus, and other fuch peftilent tumours, fee that you apply vito them Rue bruiled and mixt with verie flrong Leauen, Figges, Cantharides, Onions of the Land and Sea, vnquenche Lime, Sope, gumme Ammonacke, and a little Treacle; for this emplafter draweth forth fuch kind of tumours: Or elíe take a Toad, drie her either in the Sunne or in the Ouen, make her into powder, and put of this powder vpon the Carbuncle, \& it will draw forth all the venome: Or elfe apply vnto the Carbuncle a Frog aliue, and iffhe die, then another, and doe this fo of as vntill that one doe liue, and fo you fhall draw out all the venome.

For vicers comming of the Pocks, and fuch other maligne ones, take tenne pints of water, quench therein hot yrons fo long as till the tenne pints become but fiue, and in there flue pints infufe for the fpace of foure and twentie houres a pound of vnquenche Lime, after that ftraine the water, when it is flrained, difolue therein fifteene graines of Verdegreafe, and as much of Vitrioll, and twentie graines of Camphire : this water is fingular to mundifie, cleanfe, and drie vp Vlcers. Otherwife, fet to boyle in a new earthen veffell verie cleare water, when it beginneth to boyle, put into it by and by vnflecke Lime, and prefently thereupon powre it out into another veffell all new, let it reft there fo long, as vitill (after it be fcummed.) it become cleare, the Lime falling to the buttome of the veflell in manner of pap; in the end you fhall gather the water fwimming aloft, by leaning the veffell and letting the Lime abide vnftirred in the bottome : and this water thus gathered fhall be referued in a cleane violl or ocher veffell well ftopped, that fo it may ferue for your vfe; in which, being warme, dip a linnen cloth, and apply it in ftead of an emplaifter vnto the Vlcer, and renew it oft.
Avouid with אhot.

To.draw out miraculoully a Pellet, make a tent of a Quince, and for want of it, of Marmalate of Quinces onely, without any addition of Spices, or orher things, annoint it with the oyle of erges, and put it into the wound or hole made by che fhot of the Piftoll.

For inward wounds, in which there can no tents be put, there mult be drunke oftentimes the decoction of Auens, and the outward wounds wa fhe: or elfe take Mugwort,great and fimall Comfrey, whole Betonie, Agrimonie, the roots of Rubia, otherwife called the Diers hearbe, the roots of fmall Piannaine, orherwife called Carpenreers hearbe, Sage, the leaues of Brambles, Parfley, pricking Nettle, Marigolds, Sanicle, Bugula, Mourfe-care, Burnet, Dendelion, Plantaine, the crops of Hempe, female Ferne, Bugloffe, Gentian, Veruaine, Birds toong, ground Iuie, water Germander, Catmine, hearbe Robert, Cinquefolle, Tanfie, all the Capillar hearbes, of each one halfe handfull; Damaske Railins their flones taken our, Li corice, the feed and flowers of S . Iohns worr, the feed of bleffed Thifle, of each an ounce, che three cordiall flowers, of cach foure ounces; all hefe bsing thus carcfully pickt, and made cleane, lee be brayed veric throughly, after flrained through a hairen firainer, with one pine of whice wine: you muft caufe him which is thruft through to druke of this drinke a lietle draught fafting,or one houre before he eat, and as inuch before his fupper. If thefe juices difpleafe thee, in fead of braying, bruffing, or flamping of the things aforefaid, you inay make a decoCtion in common water, add ing in the end of the decoction, white Wine, honey of Roles, and fyrrup of drie Refes. In the meane time the wound mun be cleanfed with white Wine warme, and there muft be layed vpon it a leafe of red Coleworts warmed at the fire, and reafonably greene: and there muft care be had to keepe the wound from falt and thicke neat, from frong wine, great paine, and vfe of women.
To caure knobs to waft and goe away in any part nf the bodie whatlocuer, take the Knots or knobso oldeft and tmoft mouldie Cheefe that you can find, knead it with broth wherein there hath boyled a piece of fat Bacon or Lard a long time, make thereof a playtfer to lay ypon the place : or elfe fampe in vineger Conchula Indica with Myrrhe, apply it to the place, and you fhali find a maruellous effect. Otherwife take nine punts of vrine, wherein boyle for a good while cwo handfuls of Ballme and Dent de lion in a por of Earth verre clofe coured, and that fo long, as vintill all come to a pint, after ftrayne our the hearbes in the liquor frayned out, put halfe a pound of Hogges greafe verie new and neuer falted, foure ounces of Aquas vitx, boyle them all together the fpace of halfe an houre, after put thereto the oyle of Pike and Rofemarie, of each an ounce, Quickfiluer the weight of two French crownes, mixe them all together, and firre them well with a Spatull, and by this meanes you fhall make an oyntment, with which you thall vfe to chafe the members croubled with knots before the fire:
For haire that is fallen by the difeafe called Tinea, or otherwife : Rub the bare The faluing of and bald place with a piece of dyed Cloth vntill it bleed, afterward annount te with the baire. an oyntment made of Honey, oyle ot Linfeed, and the powder of fmall Flies, burne vpon a tyle red hot: or with Mife dung brayed with honey : or with fhells of Nurs burnt powned and mixed with wine and oyle.
For vicers that are hard to be cured, gather with linnen clothes fpread vpon the Vlcesso graffe before Sunue rife in the moneth of May, the dew of the fame unonecth, afterward wring out the faid linnen for to haue the dew, which you fhall boyle and fcum, and in boyling dip therein diuers bolfers or plegers of fine linnen, which you fhall apply vnto thefe maligne viccrs: afterward, when you fiall perceiue that thefe vlcers doe not continue ary longer fo foule and filthie, and that they begin fomewhat to Shew to haue faire flefh, boyle in this dew water a little Allome and Olibanum, and by this meanes you fhall heale them throughly. Or elfe make a powder of the raw or burnt fhells of Oyffers, or of the dung of a dogge, which hath gnaved and fed vpoin nothing bur bones for che fpace of three dayes; after you haue dried the fame dung, and made it readie to apply vnto the vlcers, there is not any thing to be found that will more drie vp the fame: Or elfe make a powder of a rotten poff.
For Kibes on the hecles, make powder of old fhooe foles burned, and of them Kibes ore the with oyleof Rofes annoint the Kibes: or elfe lay vnto che Kibes the rind of Pame- beetes. granat hoyld in winc.

Black and blew. For the blewneffe comming of ftroakes, or otherwife, fieepe in boyling water Bots through bloppes.

## watt.

Noti'me tario gere.
crab-lice.

Burring.

The Canker.

The Moth in
the haire.
To make the baire blacke. a cloth hauing falt tyed within vpon a kriot, and with this foment the brufted place.
To take away Warts or brawnie tumours in the ioynts, rub them with the milke of Tithymal, or apply thereunto the powder of Saune, or of Hermodactilis mixed with Oxymel Squilliticum, or with the iuice of Marigolds : The dung of Sheepe wrought weich vineger and made foft and applyed doth heale all hanging Warts.

For the Nolime tangere, it is killed if that Nicociana be applyed thereunto, as we will further declare in our fecond Booke and 76 chapter.

To kill Crab-lice, make a decoetion or Lee of the leaues of Wormewood, Aron, and Nur-tree in very firong vineger.
For all Burning or fwinging with fire, take the deco Ction of Radifh, with the lee of vnquenche Lime: or an Onion rofted vnder the embers, or oyle of Nuts with water: or the yolke of an egge diffolued in oyle : or Hennes dung tempered with oyle of Rofes: or mofle of the black Thorne, the fineft that you can find, dried in the Ouen, or in the Sunne, made into fine powder, and with the milke of a woman which giuech fucke vnito a boy, to make a Liniment to annoynt the places burned: or elle take falt warer or brine, dip therein a linnen cloth, and apply it vnto the burning: or common Sope, with honey and butter: or the iuice of an Onion : or the cyle of an Egge : or elfe diffolue Allome, Copperas, the fat of Glaffe, and a litele Camphire in Fountaine water and good vineger, powre this water oftentimes from pot to pot, dip a limmen cloth in the fame water warmed vpon afhes, and apply it to the place : or elfe take two whites of egges, bear them wogecher with oyle of Nuts and Rofe water, adding thereto the remainder of fuch water as Quicke lime hath beene quenched in, flirre them all yet once againe well together, and afeerward lee thems fland and fectle.
For Ringwormes, Scabs, and allmanner of forts of Itchings, which happen in the hands, legs, and other parts of the bodie, take the warer of a Smiths Forge, and puta handfull of falt to melt therein : with this water, made warme, wafh the place where the Ringworme fpreadech ; when the fcab is drie, annoynt it with the creame of Cowes milke. Or elfe take of Venice Turpentine two parts, wafh if fiue or fix times in freth water, ar in Rofe water : after that it is thus well wafhed, adde vnro it one part of new butter falced, the yolke of an egge, and the iuice of a lowre Orenge; make hereof a Liniment, and annoint the fabbie places therewith before the firc. Or elfe for lietle children take the iuice of Nettles and Populeon, and make thereof a Liniment: Or elfe take Soor finely powdred, mix it with ftrong vineger, therewith you fhall annoint the place, hauing firft rubbed it well, cuen to the raifing of redneffe in the skin.
For the Canker, take honey of Rofes, Roch Allome, falt and white wine, boyle all together till the halfe be confumed, ond then ftraine it through a linnen cloth, afterward keepe the water for to wafh the Canker. Some doe greatly allow and like of the difthlled water of Cowes dung newly made, to wafh the places troubled with the Canker.
For the falling of the haire, called the Morh,wafh the head of the pacient with Oxe piffe till the bloud come, and aferward caft vpon it the powder of the white of Hennes dung dried in the Ouen; or of fine Soor, mixt with flrong vineger.
To make any mans haire black: Take fuck quantitic as you thall thinke good of Galls, powder them and put them ouer the fire in an yron chafingdifh, and let them continue there till they become very blacke; then powre vpon them by little $\&$ little the oyle of Oliues,alwaies turning them to \& fro, infuch fort,as that they may drinke vp all the oyle, and after become drie againe, infomuch, as that they being taken from the fire, may be pouned very well:whereunto adde of Virtiol, Rofemarie, Sal gemma, the drie earth whereof tyles are made, \& Cloues, all thefe being likewife made in pouder. On the cther fide, boile in wine the rind of the Walnut, \& of the Pcmgranar.and

Allome,

## the Countrie Farme.

Allome, as much of the one as of the other, fo long as till the Wine become blacke as inke, fraine this IVine, and caft into it your powder: before you vfe it, fcoure your head with fome good lee, and then hauing dried it againe, aterward wafh it with this Wine wherein thefe drugs be, and then put on a coife, and fo keepe it for fiue or fix houres after; in the end wafh it verie well with water and wine, and drie it: the haire will abide blacke for fiuc or fix monechs.
Againt the biring of a mad dogge, give to eatche ront of fweet Eglantiine, foment The bitivg of a the place wich the vrine of a young infant, or wirl the grofle parts of the decoction mad dogge. of Rue, Figges, red Coleworts, and fale mixt with honey and buter.
It the Husbandman,or any of his people, laue beene bitren with a Suake or other The bitings of Serpent, lee him drinke prêtencly an madifferent draughr of the iwice of the Afh tree Serpents. preffed out with whire wine, and let him apply vite the bitten place, in manner of a Cataplafme, the leanes our of which the iunce, was prelled : or let him drop into the hole, imade by the Snakes biting, thiree or fuure drops of the milke of the Figge-tree, or of Figges, or fome Muftard leeds powned with vineger: or elfe take the leaues of whice Muilcin, Auens, red Goofe-berrie bufh, of eacha hand full, boy le:thein all in vineger \& vrine of a man, like much, vino the confumption of the halfe : drinke an indifferent dranghtof this decoction, and foment the bitten place widl the leaues. - If ir fall out that a Snake or any other Serpent be crept into the Farmers hodic, or into the bodie of any of his teruants, lying afleepe with their mourles apen in the Medowes, Gardens, or vether places, there is nothing more foucraigne to force the fame againe out of fuch a bodic, than to take at the mouth, wit' a Fulnell, the fmoake of a pertume made of fome old fhooe fole (for the Snake deteftech fuch ftenking fauours ab ue all.echer things) and to drinke the decoction of Veruaine made in white wine: A thing cried and approued.
If a man haue fwallowed downe a Horfe-leach in drinking water, you muft giue him fleas with frong vineger.
Ifany Rar, Spider, Flie, Wafpe, Hornet, or other venomous Beaft, by his fting or biting haue caufed your fleth to rife, rub verie gently the offended place with the iuice of Houfelecke, and inconcinently the paine and fwelling will ceafe : or elfe rub the place with your owne fpetcle:or elfe put vpon the flung place the dung of Cow or Oxe verie hot.
To kill Lice, rub the place with the iuice of Broome, mixe it with the oyle of Ra- Licto: difh,or of Iuniper, or with he decoction of Stauefacre: or elfe boyle within an earthen por, well leaded, equall parts of Olibanum, and lard of Bacon, make them in forme of an Oyntment, paffe them through a Searce, and keepe it afterward to rub the head withall, or any ocher place where Lice are.
For the danger enfuing of the eating of Mufhromes, drinke with honey and vine- surformes eat ger Hennes dung brayed, and you fhall within an houre be healed of the heauineffe een. and ftrangling fits of the flomacke: or elfe drinke the lee made of the Vine branches with a little falt.
And for as much as in the moft part of the difeafes aboue named, and fuch others; is is needfull chat there fhould fome purgation be taken to caft out the hurffull humors which gather in the bodie, the wife hufwife may prouide and make this purgatiue following: Take Vargins honey one pound,Rubarbe, or Sene, or Agarick, euen of any one of chem, or all three made into powder, foure ounces, mixe this powder with the honey, and lee it fland in the fladow fixtie daies in a pot well couered; flirre it euerie day, and take away the frothwhich you fhall find on the top of it: the honey will keepe all the force of the medicine, and will caft vp in a fcumme the fubfance thereof, infuch fort, as that fill it will abide without mixture. To make this compofition the more pleafant, you may mixe therewithall fome one or other drug that is pleafant and of a good rellifh. If you furtherdefire to be inftructed in diuers other remedies which are readily and eafily to be gotten, looke in our Latine worke called Thcfinurus fanitatis paratu facilis.

Сhap. XIII。

Of Kine and Calues.

Aclecxe Cow bsulea
 Orthe better keeping of Kine, let the Huwwife procure and caure her maids to ouer-looke oftentimes and fee that all things be well in the Cow-houfe; for there is nothing that doth them fo much good, and keepe them fo well in health and good liking, their meat and todder excepred, as the cicane and near keeping of their houres: let them rub them along the backe, about he necke and head, and no more, with a wifpe of Straw hard wry then together, and made lomewhat rough. At their comming from the Pafture, and in the morning ater they haue beene dreffed, lee them carefully fill vp the holes that are in their houfe floore; wherein their piffe might fland and ftinke, and let them caft Sand or Grauell vpon the floore, that they may haue the fafter and furer fetting of their feet. Let them nor be put to the Buil before they be vpoin their third yeare, nor any longer than vnto therr twelfth yeare : for if they be put too fooner than they be growne vp to their tull fieteth and groweth, they will bring forth Calues halfe caft, frmall and litte, weake and teeble. And againe, if you goe about to continue their bearing after twelue yeares, then Callues will not be fo ftrong, nor of fo comely a fhape. Yet in our neighbour Cuunnries, as great Britaine, and other places of like temperacure, their Catiali will beare well tiil fixtecne or eighteene yeares of age, and fome till twentee, but not genierally. You fhall lead them thereto throughout all the time of twe moneth of May, Iune, and Iuly, when the grafle decthmoft flourih: and againe, about this time they are chicfely fet to goe a bulling, feeking for the Bulk of themfelues, withour being led vinto him: And you fhall know their inclination to the taking of the Bull by their hoofes, if they be puffed vp , or fwolne, as alfo by their continuall lowing, and by their leaping vpon the Bulls backe. The profic which rifteh by their taking of the Bull at this time is, for that they will happen abour tenne moneths after (which is the iuft time of their going with Calfe) to calue, and that being at fuch time as new graffe dorh draw on, it will be an occafion of greatly encreafing their milke, and vpon this occafion alfo their Calues fhall be a great deale the betterfed. To the end they may hold bulling the better, you mult fee that at fuch time they be kept bare and leane, for fo they will hold a great deale better: On the concrarie, a good Bull for breed mult be fat, well fet together, and well meated, hauing for two moneths fpace before beene fed with Barley and Fetches. He muft allo be cholen more long than high, of a red haire, large betwixt the floulders, frong legged, round truffed and bodied, broad breafted, fhort headed, broad browed, hierce countenanced, terrible to fight; blacke eyes, fhort hornes,long tayle,and full of haire. Bur in England and other places they neuer vfe to feed their horned Cattell with Conne, for they find it of frmall or no profit, Graffe or Hay being euer fufficient: and shough in France the red colour be cuer moff preferred, yet as Serres alfo affirmeth, the blacke is fuily as excellent; for the red exceedech but in prouing an extraordinarie vertue in the milke, but the blacke is cuer the hardeft, beft feiht, beft tallowed, and hath the ftrongeft hyde. And if it happen that the Cow refufe the Bull, or the Bull her, they muft be brought to have a defire the one to the other, by holding necre their nofthrils the rayle of a Hart burned, or elfe vfing Come orher compofition, whereof we will feake in the Treatife of Horfes. During the time of their going with Calfe, they muft be kepe from leaping of Ditches, as allo from leaping of Hedges or Buifhes: and a litele before the time that they doe calue, to feed them in the houle, or yard adioyning to the houfe, and that with good Prouander, or Bloffomes, not milking them at all; for the milke that they haue then cannoe be but naught, and becommeeth hard as a fone. When they haüe calued, they may not be milked to make any Butter or Chetfe, vntill two moneths be paft:after which time you fhall fend them againe to their pafture, not fuffering their Calues to fucke them
any longer, except it be at night when they recurne from Pafture(fol ong as shey feed vpon trech Prouander, which you fhall haue in read ineffe for them) and in the morning before you fend them to Pa, afture. In what flate foever they be, you fhall not leet hem drinke aboue wwice a day in Summer, and once in Wirter, and char not of Riuer of Floud water, but of fone water which is walme, as Raine water, Fenne or Well warer, having beene drawne a long time before, for $W$ Vell water by reafon of the coldneffe might fonnew hat hurt them. It is strue thar the Cow will nor refurfe any
 as she Horfe, on the contraric, thar which is puddly and troubled, being a fignne of his goodnefle, if fo he tumble che w.ter with his foor betore he drinke. And as for Calues newly calurd, you muf leaue them with yood litere of frefh fraw, vnill fuch time as fhe haue licked, leanifed, and wiped them, and for fome fiue or fix daies after: for the becing of the Cow with the Calfe doth heat and fertle the Calte. Afier fuch time you fhall putit by yif ciffe in fome Shed, proniding it good Literer, and renewing the fame effentiines, and thence you thall bring them forth when you would havie them tucke, and carrie then thith her backe againe fo foone as shey haue fucked : And if you fee, eyther that they will nof fucke, or that being willing to fucke, ,hey can doe nothing but offer ro akee thic paps, without fucking any thing; you fhall looke vnder the tongue f fthey haue not the Barbes, which is a whitiflif fleffineffe growing vnder the congur, almoff afererthe manner of the Pip: which ( and ı it it be fo) you Thall rake away gently, without faying the tongue, wish litete nipping Pincers, wafhing she place afferward either with red $W$ ine of fic felfe, or with he infurion of Salt and Gari icke flamped togecher; for this difeafe will canfe chem to languiih v vito death, by keeping them fronn fucking. Let the huwwife alfo be diligertri in taking away the Lice chat may breed vpon Calues, and make e them languifh and thriue no- Lie e and Subs thing arall, a s doct allo the Scab when they hiauceit: and this is so be knownc by their of callest. $1:$ skins, if fhey become hard and fliffe a feer the manner of lietle ridges, and chat flroaking your hand along, you teele the skin hack a and rough like File, and the haire ftaring and fanding vpright. For the healing of fuch fabss, fhe fhall rub chem with Butrer or with Oyll of the ferlings of the Lampe all ouer the bodie where che frab is Goized: But as sti is a g reax deale berter to pruent difeafes than to curc chem, the hulwiff fhall cur off all entrance from thefe e wo annoy yances, if fhe caurce to be subd with the wifpes of frraw vnbound her Calues twice a day: if fhe fuffer not their piffe to fand inpuddles vnder them: if fhe fee that they be lexpe wish frefh Litter and drie, canling their dung to be carefully caft ouif from among their Liteter.
© But to returne to the keeping and ordering of Kine, the hufwite fhall appoint times Kiwe a for the milking of them, as share they be milikic evening and morning ata conuenient hourc, and wher ihey bear red: That the Millke be ffrained fof foonc asi it s saken, and that Burter be chiend wish levfure, buit not any liffle: that the Cheefe be well crafht, preff, and fieed from their Whey; and efpecially, that ier Pots, kneading Troughs, Strainers, Slics and Checte.prefles, and other implemens feruing for the Dairie, be kept neat and cleane: and that none of her maids haue any thing to doe with either the Butcer or Cheefe when they haue their termes. In the morning before going to field, fhe fhall caufe the Calues to be gelded, and that before they be two yeares old, To geld ths and hot after : for Calues grow the more when they are gelded in the time of their calues. growth, becaufe thereby their bodies are made the more muift. When they are gelded, iṇ refpęt of their paine and griefe there fhal be giuen them Hay fmall fhredded and mingled with Branne, vitill they be comeagaine to their former ftomackes and appetites. They muft norbe gelded either when it is verie hot or cold, or in the old of the Moone: Benginorethan chree yeares old, they fhall be put to the Neat-heard, to begine prepafecthem for the Draugh : and likewife fle fhall deliner him her Kine with Calte, and thofe whidli after nime yeares doe not bring forth any more Calues, furyee they may ferue to draw in the yoake. ${ }^{3}$ Futchermore, fhee frall make much account euermore of the Cow which is of a
colour, or fpotred with whire and blacke, her bagge great and fide, a great bellie, broad betwixe the browes, a blacke eye, and great hornes, not turning in one towards another, nor yet hort or fmall, but brighr, blacke, and of a wide and well-fpread Shape, her eare veric hairic, a narrow iaw, a thick and grofle muzzle, wide nofthrils, and fniuelly, litele and black lips, her baire gliftering and thick fet, her legges fhort, her thighes groffe and thicke, and her necke long and groffe, her backe large and broad, her tayle long euen to the heele, her hoofes fhort and euen, a broad breaft, a great and groffe brisket, and her dugges great and long. As concerning the difeafes of Calues and Kine, they fhall be handled, as fhall be faid hereafeer in the Chapter of the Near-heard.

The dung of a Cow made hot in the embers, being wrapped in certaine Vine leaues, or in the leaus of Colewort, and applyed in forme of a Cataplafme, dorh appeafe the paine called Sciatica : being. fried with vineger, doth ripen the Kings evill: being fried in a Frying-panme with the flowers of Camomile, Melilote, and Brambles, it diminitheth the fwelling of the Cods: applyed very hot vpon the places troubled with the Dropfie, it cureth them throughly: and applyed vnto any place ftung by Bees, Wafpes, and Hornets, it taketh away all the paine.

## Chap. XIIII.

## The way to make greene Cheefe, Dutter, and other forts of Checfe.

(50He fhall be carefull, as well for the feeding of her people, as allo for the gayning of the penny, diligently to fet on worke her daughters and maid feruants about the good ordering of the Milke of her Kine, in the making of the Butcer and Cheefe thereof. And fift as concerning Milke, thee muft not make any account of that which commeth from the Cow after nice hath new calued, to preferue and kecpe it; for befides that it is naught both to make Butter and Cheefe, it is alfo very dangerous for ro vfe: Like as welce, that mothers which nurfe their children, make no account of their firft milke to gine it to them; the reafons whereof you may learne in our Booke of the difeafes of Women. After the Milke is milked, you fhall fer it in a place where it may be warme, to the end it may be kept the longer, and become the thicker in fhort time; in as uach as Heat doth fafegard and thicken the Milke, as Cold doth foure it and make it to turne by and by : and therefore to auoid this danger, it is good to boyle it, and thereupon to ftirre it much before you let it reft, if peraduenture you be not difpofed to keepe it three dayes or fomewhat more. She hall know good Milke by his whitenelle, pleafant fmell, fweet taft, and reafonable thicknefle in fubftance, in fuch fort, as that being dropped vpion ones nayle, it runneth not off prefently, but ftayeth there, and abidech round a good while. She fhall not let her Milke be kept long, as aboue a day in Summer, efpecially in Autumne and the Spring, in which feafons, Milke, becaufe of the heat and remperature of the time, would be fpoyled and prefently turned : but as foone as, fhe can, fhe fhal gather her Creame, greene Cheefe, Butter, prefted Cheefe, Whay, and other commodites, which a good hufwife is wont to rayfe according to the time : alchough in Winter the Kine yeelding fmall fore of Milke, as being then with Calfe, the inay gather three or foure meales together, which will not fo foone be 'Spoiled by reafon of the coldneffe of the Winter, which maketh the Milke to thicken prefently. Likewife at this rime flee fhall gather but fmall fore of Butter, but fhall turne all her Milke into Cheefe. It is true, that feeing Cheefe is not of fo grear price in Winter, neither yer fo good and daintie as in Summer, Spring time, and Autumne, by reafon of the graffe, that therefore it fhall be no great danger to gather che Butter cleaner from the Cheefe in Winter than at any othertime. ? 4.

She fhall gather her Creame from the vppermoft part of her milke prefently after creame. that the nilke is drawne from the Cow, and cooied a lirtle: and with this Creame,to make Creame-cheefe, ordinarily accuftomed to be fold in Sumnier, to be vfed at meetings of fmaller account, or in the cnd of dinner and fupper. The Italians with fuch Creame-cheefe, or Parmifan, doe mixe fine Sugar well powdred, together with

## Rofe water.

The milke curded and thickned without Runnet, will make little Checefe, which Frêb or greene the Parrfiens doe call Ionches.
The Normans doe boyle milke with Garlicke and Onions, and keepe it in veffels Sowre milke of for their vfe, calling it Sowre milke or Serate.
The Whay may ferue for the feeding of the Hogs and Dogs, as alfo in the time of whary. Dearth for fultenance for the Familie, if fhe boyle is buta lietle.
For to make Burter, fhee fhall refrue the neweff and fatteft milke that fhee fhall Butero hant, whereof fhe flall gather no creane: and fhe fhall make account, of ten pounds of milke to make two pounds and a halfe of Butter. To make this Butter, fhee fhall beat or cherne it a great while in Veflels made for the purpofe, efpecially whiles the times of greateft heat endure, feeing fuch heat is the caule that Butter commeth nor, and is not made fo fone as at other times. If fhe will make account to fell it, fhe fhall falt it, and put is in pues of earech, fiuch as wee fee brought to Paris from Britaine, Normandic, and Flanders. The Buter of a yellow colour is the beft; and that of a white colour is the worl: bur that which is gathered in May, is better than either of the other.
As concerning the making of Clicefe, thee fliall chufe the moft groffe and fat The making of milke, being pure and newly drawne, to make Cheefe that fhall keepe a long time: Cheeffo and of fuch minike fhe thali gather neither Butcer nor Creame; but fuch as it commech from the Cow, fuch thall be pur in Veffels for to coagulate and turne to curds. The way to curdie it, is tw mingle therewith of the Runner, of a Lanbe, Kid, or Hare, or To curd ths the flowers of wild Thiftle, or the feed of bleffed Thifte, or the iuice of the Fig-tree, milke. which commeth out of the Tree when one cuttech the greene barke thereof: or the leanes and hoarinefle which groweth a the fmall end of the Artichokes, or Ginger, or the inner skin of a houfe-Hennes ftomack, or the fpawne egges of a Pike, and with thefe it is viuall to make Chefe to be earen in Lent: or the blacke mutable Thiftle, therefore called Chameleon niger. Let her bewarc of cafting in any the leaft quantitie of vineger, for one onely drop of vineger is fufficient to hinder the turning of the milke into curds. But abone all, the belt and moft principallef Runnet is the fmall The bef Rummes Cheeflep bagge or fomacke of a yourig Calfe, not aboue three weekes or a moneth old, well wahht, falted, cleanfed, and feafoned with Cloues, Mace, and a lietle Nutmeg, and fo kept in a clofe por with Bryne, and fo ved according as occafion ferueth. The pot in which the nilke is, muft not be without fome quantitie of heat for to keepe it warme ; and yer norw ithltanding it muft not come neere vnto the fire, as it may not fland farre off : And when it is curded and gathered together, it muft be puoprefently into flices, formes, or fats, for it is profitable that the Whay fhould run out, and feparate it felfe from the Curd. But chiefely, and abouc all other things, it is required, that the maidens which fhall meddle with the making of Cheefe, fhould be cleanly, fit for the purpofe, their flecues from about their hands and armes folded $v_{p}$, and aboue all, farre from being troubled with their termes. In like fort, the people of the Countrey of Auergnac, which make great reckoning of their Cheeff, doe chufe the young children that are but of foureceiene yeares of age, and thofe proper, near, and handlomely trimmed vp, not hauing frabbed or fcuruce hands, neither yet of an vitemperate heat: for they thinke and perfuade themfelues, that fuch firthineffe of che liands doch hinder the full curding and ioyning togcther of the Cheefe, and fo dort make chem full of eies.
If fhe deternine to drie, harden, and kecpe them long, the fhall the more care- Hard Cheefis fully looke torthe ftrayning forth of che Whay and cleare Milke, and afeer to fet theia in rowes vpon Shelues, Lattifes, or Cheefe-heights fis for the fame, and that
withall it be in a cellar, or in fome darke and coole place: or elfe to take them vp into fome high place, hauing ftore of aire; prouided alwayes, that the Sunne haue no power ouer the Cheefe. She fhall Thift them euerie day vntill about the fourth or fifth day, at which time they will begin to caft a flowre, as though it were the flcwre of meale, and then fhee fhall caft a little fmall falt vpon them. The next morning fhee Shall turne the other fide, and doe the like therewith: after fie fhall turne them euery day $;$ and, if need be, make them cleane on both fides and about the edges with a rebated knife made of purpofe, fuch a one as will not cut. After fome time, when thee knoweth that they are fomewhat drie, fhee fhall put them in another place, as vpon boords layd as it were vpon ladders: fhe fhall cleante and fcrape them oft, and keepe her hoords cleane alfo: and if by friuing to keepe thein long, they become hard and bitter, the fhall couer them ouer in Grauell, or $1 n$ Barly flower, or in Cich-peafe, or elfe the fhall couer them with the leaues of Dragons, which likewife doe kecpe them from being eaten of Mites, and that they doe not become mouldie. And in cafe that wormes doe eat them, fhee fhall take away this vermine, and annoint them with oyle of Linfeed, or the droflie parts of the fame, which will preferue them fingularly well: or elfe thee fhall pur them in a great heape of Millet corne or Linfeed, which will keepe them frefli and coole in the hoteft times, and hot in the coldeft times. And feeing the deepeft point of skill about Cheefe, is to beftow them fo as that they may beft mellow, the fhall bring them together in the end, and put them in preffes, the clothes taken our, and fer neere the walls of cellars vnder the ground vpon fmall boords, hauing moiftened them before with oyle Oliue, or Linfeed and vineger mixt together.
She fhall iudge that for good Cheefe which is far and heanie, the meat of it clofe

The goodneffe of Cherfe. and well compact, of colour fomewhat yellowifh, fweet to talt, pleafant to fmell, and nothing mouldie, neither yet full of mites or wormes, and whinch is made of pure Cowes milke, without mixing any fheepes milke therewith, for it maketh the Cheefe leffe fauorie and more whitifh: It is true indeed, that it may be made to looke yellow, fome Saffron mixt therewithall, as is vfuall amongft the inhabitants of Poictou. An old Cheefe all mouldie, brayed and mixed with the decoction of a falt gammon of Bacon, and applyed in forme of a Cataplafme, doth foften all the hard fwellings of the knees.

## С н я р. X V. Of Hennes.

The Hen-bouse kept cleaine.

Butskets for Hennes to lay in.
Pearches and ladaers made cleane and rubd downe. Their dranking troughs kept cleane. Frefb fryaw on the dunghill. The dufting of Puller.
To take aroay
the lets of. Hennes laying.
 $S$ concerning the ordering of Pullen, which is the chiefeft thing that a good Hufvife is to regard, there mult care be had that the Henne-houfe be euerie day made cleane, cuen fo foone as the Pullen be out, and the dung put afide for the fatting of the Medowes: The Baskets for them to lay in oftentimes fhaken vp, and refrefht with new ftraw and neafts, and their Pearches and Ladders fcraped euerie wecke: The roofe or upper part of the houfe fhut in euerie night at Sunne-fet for feare of Fulmers, and opened euerie morning at Sunne-rife: Their Water-pots to let them drinke at, muft be kept cleane, and filled with cleane water euerie day, and that twice in Winter, and thrice in Summer: Let their water be cleare alwayes, leaft ocherwife it caufe them to haue the Pip; which thing happenech as foone vnto them of the filthinefle of their water, as of the want of it : Lether caufe to be caft out vpon the dunghill oftentimes frefh fraw right ouer-againft the Barne, where the Pullen vie so fcrabble; and neere vnto the fame place let her caufe to be pue fand, duft, or afhes, to procure them the pleafure of dufting themfelues in the Sunne, and pruning of their feathers: Let her caufe to be remoued farre from them the refidence of wine or droffe of the Preffe, of whatocuer fruits,and from the place of their
haunt, for fuch things keepe chem from laying. And it further behoueth her to haue this care, as to fee that throughout all the Henne-houle there be neither Lath broken, nor any place of the walls hauing any Lome fallen either without or withn, or any fheet of Lead lifeed vp or raifed, thereby to preuent the danger of Cats, Foxes, Weafels, Polecats, Fulmers, and other beafts, giuen to rauin abroad in the night: as alfo the Kite, Hen-harrow, and Owle, which fometimes will not ict to fwap into the very Brood houfe to catch and carric away the Chickens.
And ro the end you may not lofe any of shem, you muft cut off the greai feathers of one wing from fuch as vfe ofentimes to flye ouer walls, that fo alfo by this meanes you may keepe them out of your Gardens; for they would take it vp for a cuflome, and it would keepe them frem laying. And for a furcer preuention of the forefaid mifchiefes, ouer and aboue that which hath beene faid (for it is not good to clip the wings of Cocks or Capons) you mult faften and fee rowes of thorne taggors vpon the cops of che walls of the faid Gardens and all other places elfewhere.
The Brood-houle fhall be buile afide fromit the Farme-place, farre off from the The Broode lodging of the chiefe Lord, becaure that fuch birds are loathome, doe foule euerie baufeo thing, and fpoyle whatocuer houfehold furriture : curned toward the Eaff, from the Winter and Northerne quarter, neere vnto the Ouen of the Kitchin, if it be poffible, to the end that the heat thercof, which helpeth them to lay, and the fmoake which is verie wholefome for the Pill len, may reach euen vito it. ',
It hall haue a litele window right vpon the Eaft, by which the Pullen may come forch into the Court in che morning, and goe in againe at euening : it fhali be fhut at nighe, to the end they may nefle themfelues more fafely from the daniger of fuch beafts as are apt to offer cherrn wrong: widhout, and on the fide next the Court, they. Thall haue precie ladders, by which the Pullen may flye vp into the window, and into their houre, to rouft and reft themflues for the night tiine. This Henne-houfe muft be well layd with Lome, and fmooched both wirhin and without, to the end; that Cats, Fulmers, and Snakes, and other dangerous beafts, may not come neere vnto the Pultrie: and that neere vnto this Henne-houfe; ;in the middefl of the Court, there be certaine Trees or Arbors for fowre Grapes, to the end that Pullen may haue fhadow vnder it in Surnmer, and that Chickenssmay hane couer and defence againft the Kite, the Owles, and ocher fuch rauenous birds. It is not good that they fliould fleepe vpon the plaine floore, that fo their ordure and dung may not hang vnto their feer, for thus they would grow to haue paine in their feer, and to become gowtie. For this caufe, youl muff fet all along the Henne-houre, a foor higher than the floore, and two feet one from another, fquare Pearches, not round, becaufe that if they fhould be round, the Puilen could net fit faft vpon them. Right oueragainht the Henne-houfe, and a lircle way off fron it, you fhall prepare a dunghill for the benefic of the Pullcn after this fort and manner: Caft a great deale of earth into a great holc of purpofe made for fuch an end, which you fhall befprinkle with the bloud of Oxen and other beafts, killed onely for the Hide; aferward you fhall caft a reafonable quantitic of Oates vpon the fare, and you thall turne the faid earth the vppermiof lowermoft : in a fmall cime there will be engendred fuch a. greas quanticie of wormes, as that the Pullen fhall haue picking worke there for a long time; and the grafle which fhall fticke there, will correet the fat which they fhall get by the wormes which they haue picked: And when you fhall fee the prouifion of wormes to faile, you may begin againe your watering of the earth with bloud, and fowing of Oates thereupon, as ar the firft. Some to haue far $\mathrm{Ca}-$ pons, and of a pleafant flefh, when the Mulberries are in feafon, doe plant Mulberrie trees in their Courts : for Capons, and all other manner of Fowles, which feede vpon Mulberries, become maruellous fat, and of an excellenc tafte and verdure.
To cuerie dozen of Hennes one good Cocke is fufficient: howfoener thofe of former daies doe allow one to eueric fiue; and he muft not be of colour white, nor yet gray, but red, tawnie, or black; his body wel compact,his creft or combe very vpright,

Beafis to be promided againflas enemies to porshtric.
red, thicke, not notched, toothed or gafht with cuts, a well raifed necke and high, the pinions and fight of his wings great, his cares great and verie white, his bill thore, thicke, and crooked, his cye blacke, in a circle that is red, yellow, or azure; his wartles of a rofe colour, ftanding of a white and red mixture; the feathers of his necke long, golden, and changeable; his legges verie fcalie,thick, and thort; his clawes fhort and faft; his furrs ftiffe and fharpe; his tayle vpright, grofle, chicke, and crooking backward ouer his head

The markes of a good Henne.

The Henne wit ßurs.

The daintiemouthed Henne

The tawne or reddifh Henne in like manner is the beft, and that which hath the feathers of her wings blacke, though fhee her felfe be nor altogether blacke : for the gray or blacke colour is but little worth, becaufe they be hard to bring vp, and fparingly giuen to lay egges; and yee noreouer, they be fmall, alwayes leane, vnhealthfull, and their flelh of fmall rellifh. The fature of the Henne mult be indifferent, her head great, her combe vpright and verie red, her bodie great and fquare, her neckechicke, and breaft large. The dwarfe or littie Hennes doe lay oftener than the other, but they are not fo fit to be fet on egges to bring forth Chickens. The greater Hemes are not fo gimen to lay : wherefore Hennes of middle fize are to be preferred before the other, forefene that they have large wings, and their bodies chick fer with feathers: and if they haue fime clawes as the Cockes, they are more wild, and not fo tane as others. The Henne that hath fpurs, fpoyleth her egges, hatchech not fo ordinarily, and tometimes catcth the egges fhe fitecthon. The. Henne which is given dainety to affeet and feed vpon the grapes, being the thing that keepeth her frem laying, will be kept from feeking after and eating of them, by giuing her the berries of the wild Vine; for this doth caufe fuch a roughnefle or edge in her as in thofe chat haue eates fowre fruits. The Henne that is seo fat, or which hath the flux of the belly, layeth wind egges. The young Henne is nothing skilfuli cither to fit or to lead Chickens: wherefore you mult fat the Henne with fpurres, and the Chauntrefle or crowing Henne, and her that feratcheth and allureth the other Hennes, by clocking, as the Cocke is wont to doe; and that, by plucking firft the greateft feathers ot her wings, and gining for to eat great fore of Millet, Barly, and Pafte, cut in gobbets, bruited A cornes, Bran mixt with pottage, the huskes of Rice, Pannickle, and Oates, or the crums of Wheat bread fteept in the water of Barly flower, and to keepe her in a clofe place where fhe cannot flirre, and to pull the feathers of her head, thighs, and rumpe. Such Hennes thus fatted by the hands of a man, may be recouered at any time of the yeare, but the fielh is not of fo good rellifh as when they grow fat going abroad at their libertie: which thing happeneth and falleth out more commonly at ene time of the yeare than at another, the verie righr and naturall feafon of their chiefe fatting being in the moneths of Ianuarie and Februarie, for indeed in thele muneths Hennes

The ouer-fas Henne.

Th: mad-brai ned Henne.

A young Henre clocking.
A youns Henne
good only to lay egges. An old Henne is good to fit. Totake arpay Honnes defire 10 fit.

Capons to brood and lead Chicsens. are nothing inferior vnto Capons. The Henne that is too fat, flall be made leane by mixing of Fullers earth with her water, and of the powder of a foftened Bricke in her meat. And if fhe have a loofe belly, you muft giue her for her firft meat the white of an egge roalted and beaten in a Mortar with the double quantitic of Bulleis. And for the mad Henne, which breaketh her egges and eateth them, you muft caft Alablafter vpon the yolke of an egge, fo long as till it be hard therewith, and fo to make this to ferue(being falhioned like a (hell) for her neaft : or elfe to make an egge of A lablafter or Fullers earth, and to put it in her neaft, and to leane her no more but that only egge after the hath haid. Vnto a young Henne which falleth to clocking, you mult take one of her fmall feathers, and thruft it through her nothrils: for it is not for a young Henne to doe any thing but lay egges, and for the old to fit. Our Hufwiues (in that point too fesere and inurious) doe plucke away all their feathers from vnder their wings, euen all ouer their bellies, \& doe therewithall calt them into the water to coole their hear withall; or elfe they keepe them fafting foure dayes together in a Chicken Cowpe. And if you be not difpofed to keepe a Henne to brood, you mult by and by, or within two daies after that fhe hath broughe forth her young, let her forth again to haue the companie of Cocks, to the end the may forget them and begin againe ro lay; and therewithall to rub the pulled belly of a great and fat Capon, and one that
is young, with Atinging Nettles, and after to dehuer him the Chickens to brood and lead.

The Henne is fubieft to the foors of the cyes when the is old : to the rheume and diftilling of watrie humors at her nofthrils, by liauing taken cold, or hauing drunke frozen water, or at leaft fuch as was too cold, or by realon of the Hemne-houfe being left open in the night, or by hauing roulted vpon the trees inthe open aire; or fually by not hauing found the houle openjor fomecther couert to runne vider, in the time of raine: Vneo the loofeneffe of the belly, when the ir meat is too thinne, oi when they haue eaten fome hearbes apt to worke the fame, or when the Henne-houfe hath beene open all night: Vnto the Pip of the tongue, either for want of drinke, or for drinking troubled and filthie warer: To fleas and vermine when they fit, or when they haue not wherein to tumble and roule, or to make themelues cleane, or when ther dung is lee to continue a long time together in the houle: And to the bitings of vemmous Beafts, which haunt the dunghill and old walls, as che Scorpion, Snake; Spider, Shrew, Lizards, and Newtes of the wall.
-For the feab and inflammation of the eyes, you mutt bath them in the water of Phyfeke for Purcelane, or in Womans milke : and for the fpots, you muft rub the eye with Sal Hennes. Ammoniack, Cummin, and Honey, brayed together in a Mortar, and that as much of the one as of the other, except you hauc the skill to take them vp, or to caufe them to be takenand lifted $v p$ with a needle.

- For the rheume, you muft pue a feather croffe the it noflhrils, and waume their water, and fomecimes chafe their feet, efpecially ittele and yong Pulles, which are wont

The difeafes of old Hennes. to be wrapt in cloth a certaine time for the tame, er elfe in feathers, and then put into a por, and fee in a warme Ouen, or necre vato fome five in fome fie and conuenient place : And if the rheume or matter of the fluffing of their nofthrils be fetled in fome place, as vader the eyes, or cowards their bill, you muf launce the impontume gently, and gitue paffage for that to come forth which is therein contained, and put in place a listle brayed falt.
 : For the loofeneffe of the belly', fome make them meat of the husks of Barly fteept in wine, and incorporated with waxe; and fome doe mingte with their water the de $=$ coction of a Pomegranate or Quinces.

- And if that Pullein be coltiue, efpecially the younger fort, they are pronoked with a wild oat: and fome ve to pull off the feathers of their qumpe, and vpon the infide of their thighs, to the end that their dung may not be lqugdetained and kept within their bodies, becaufe that fo it might fop the paffage : and as for Hemnes, it is fufficio entro put honey into their water by themfelucs.

For the Pip, fome vfe to wath their bill with oyle wherein hath fteene a clour of Garlick: and fome make them to eat ftauefacre amongt their meat :anid for to cure the younger fort, fome put them in a fieue made to dreife Ferches, or Darnell, \& pera fume ehem with Pennyryall, Organie, Hylope, and Line:and fome doe hold the head of the-Pullec ouer the fime, the bill gaping: and in cafe of exeremitie, to take it quite away from them; fome doe vfe to open their bill, draw out their tongue verie gently: and foftl'; and after with their naile raife the higher pare, and draw downe to the end; or loweft pare thercof, the white which is feerie to grow vpon the rop of the tonguc; and afeer it is raifed vp and rooted our, without any breaking of skin, they rub the tongue with fpette, or with a little vineger, or elfe they touch it with a bruifed cloue of Garticke.
$\therefore$ For fleas and vermine, they muft be wafhed in wine wherein hath beene boyled Cummin and Stauefacre, or elfe in water wherein haue boyled wild Lupines. - Againft the biting of venimous Beafts, you muft annoine the place with oyle of Scorpions, and apply vpon it fome Mithridirejand further, caft fome fmall. quantitie of I reacle into their water-poe, and caufe them to drinke.
Forthe danger $\begin{gathered}\text { Beafts, cfpecially of Cars and Fulmers, which come in the night Againf Beafis }\end{gathered}$ sime vnto the hénce-houfe to eattie Hennes and egges,old Writers do giue counfell that eat Pulleind to calt at the entrie of the dore, and to featter thereabouts, bunches of Rue, as alfo to ald
put fome tender fprouss of the fame vnder the wings of the fowle: or elfe to befmeare about the walls of the Henne-houfe, and round about the window, the gall of a Cat or of a Foxe.

- Furchermore, to keepe Pulleine from Foxes, that they doe not eat them, it is good now and then to mingle an:ongtt their mear the fle fh of a Foxe fodden and chred into verie fnall pieces: tor, as fome fay, their flefh doth keepe and recayne a certaine fmell thereof, which is the caufe, that Foxes dare not come neere vnto them.
Hennes begin to lay in Februarie and March, and fonie of them in thofe monechs

The laying of Henimes. being part of cheir firft yeare. They which begin to lay at a yeare and a halfe, or as two yeres, are better to be liked : and then they muft be veric well fed, and that fometimes with Oats and Fenugreeke for to heat them. And if you be defirous that they fhould lay great egges (for commonly the fatteft Hennes lay the fmalleftegges) mix and remper Fullers earth among their meat : or elfe put powned Bricke among Bran, and temper them rogether with a little wine and water, and make chem an ordinarie meat thereof: or elfe make them all their meat of Barley, halfe boyled with Fetches and Millet : or elfe perfurne them in the night with Brimflone, for this will keepe them found allo: if you giue vnto them young Nettles chopped and boyled with Branne, they will lay great fore of egges.
They leaue laying about the chird of Nouember, which is at fuch time as she cold

## To hausegges

 allywinter limáa begininech : but if vpon curiofitie you would keepe by themfelues tome of the faireft to lay egges all iVinter long, you muft feed them with iofted bread fleept from euening to morning, and giue them to their breakfaft: and for their meat in the day time and at night to caft them fome lietle quantitie of Oates, Barley, or Whear, which doth warme them: or fome Muftard leed, which aboue all other things canfeth Hennes to lay egges good fore, that is to fay, in the fharpe cold times of Win* ter, which thing you thall proue verie true by experience, if you make triall of it: or elfe to feed them with Earth-wormes, which will alfo caufe them to lay egges in great number: Youl muft not let them fit prefently afer their firlt yeare of laying: and when they are paft three yeares old, you muft eat them. You muft alfo difparch and make away with thofe that are barren and lay not at all: and as for thofe that doe' lay very much, you muft change their Neafts often, and marke cheir egges, to fet them in time, if it be poffible. When they are cafting off their teathers, otherwife called of the common. people moulting, you muff not fuffer them to goe oit of the place whireinto you haue fhur then, except it be to reffelh them when ir is verie faire, and chen to keepe them that the Eagle and Kite doe not fall vpon rheme thasThe time to et sennes. It is vfitill to fee Hennes the fecond yeare of their laying, and fo the chird and fourth: and fo lee any fer many Hennes at one time, and vnder their ftraw fome pieces of yron,for feare it fhould chunder, or elfe fome Bay leaues, or the heads of Garlicke, or elfe fome greene grafle, for fome fay that this is good againft the Pip and the mions ftrous fruit: They are pui there in the growth of the Moone, after the twelth day of the new Moone vnill the foureteench, laith Florentine; and Columella fairt, from the tench vnto the fifteenth, to the end that the Hennes may hatch in the next new Moone, for ta chat end they fand not in need of any moe daies than one and twentie: And the Neafts of thefe Hennes mult be made in che bottome of a Tunne or Pipe,to the end that when they come off they caufe not any ching to fall or roule. Some perfurme the ftraw shat they are to fit vpon, befure chey lay the egges thercin, with Brim. flone, to keepe the Henne for hatching before her time. And you fhail fer vnder her the egges that you haue marked, and of thofe the faireft and neweft, and if it be poflible, thofe of her owne: And looke that they haue beene layd fince the feuenth of Februarie, and before the two and twentiecth of September : for fuch as are layd ar any other time, are noching worth, no more than thofe which were firf layd, or yet thofe which were layd by the Henne without the help of the Cock: and there muft alwaies care be had that they be odde, that is to fay, in Ianuary fifteene, in March nineteene, and
after Aprill one and twentie. The greatelt part of the inhabitants of Lyons doe admit of no other number than three and twentic. Pitter the fecond of OCtober they fet not any more, neyther indeed ought they, if it be not in Ouens, atcordng to the vfe of the inhiabirants of Maliha; and forme of thofe of Beauceron: But Hennes are too much punifhed and put to paine to breed and bring vp Chickens in Winter. As alfo there is a common opinion receiued, That afeer middIune Hennes are fmall worth, and cannot encreate fo rightly; and well to the purpofe.
If curiofitie draw you to fet egges vnder Hennes which be not their ownè, as thofe of the Goofe, Peacocke, or Indian Henne, or elfe of Ducks, then lee them be put vnder the Henne fome feuen or nine dayes before, and after adde thereto of her owne fome fuch odde number, as hath beene fpoken of before: Bur and ifthey be Fefants egges, you need nor to fer the Henne any foomer vpon them, then and if they were her owne; for they require no more time to be hatcht in : And if you would haue them all Henne-birds, then fee fuch egges as are more round and blunt; for the long and fharpe-pointed ones are comnionly Cock- birds.
Some are carefull not to put one after another into the Neaft, but fet them in rowes in a Woodden Plater, and thence let them flide downe into the Neaft verie foftly. And care muft be had, that neither Cockes, nor any other Hennes, may goe in to fit ypon them : and to that end twice euery day to fer meat and drinke fo neere vnto the Henne, as that fhee need not rife for to feed her felfe; for if bur for her meat fhec once caft off her care of them, it will be much adoe to get her to returne vnto them againe, if fhe be not a free and verie kind Henne. If the Henne haue friall care to recurne vnto her egges, to fit vpon them equally, it will be good fometimes to turne them oucr foftly when fhe fhall be from her Neaft.
There are fome women that cannot fay to the end of the Hatching : but about the fourth day after the feting of the Henne, they will be heauing euerie one of them vp one after one to looke vpon in the clecre Sunne-flime; and ifthey fee not bloudic ftreames or threads within them, they caft them out, and put vnder others in their places. And in like manner, at the one and twenciih day, if they find that fhe fayeth from hatching, they take off the Henne. But good fitting Hennes will not returne any more to their Neafts, after that the egges haue been touched. Likewife the good Hufwife Cayth, That as for the egges which are vnder the Henne, they ought rout to be touched till they be hatched. Likewife they mult be well chofen and viewed in the Sunne betwixt both her hands before that they be put vnder the Henne. Such as To trie the doe any thing doubt that the egges are not all good, and that the Chickens cannot egees that mugb come forth by reafon of the hardneffe of the fhell, muft not faile to bath them about be fto the eighteenth day ina hollow difh and warme water, and to take away fuch as fwim aboue the water, putcing the reft vnder the Herne againe. But you mult not force che Henne to rife off che Neat in your thus doing.

You Shall greally pleafure the Henne, if when the Chickens begin to chirpe, and there be found fome which will not let the Chicken come forth, by reafon of the hardneffe of the fhell, bhat then you helpe her to breake the fame: howfoeuer indeed this is shie part of a good conditioned Henne, as alfo to flye at your face if you come neere to her, after fhe hath once heard them cheape or chirpe vnder her.
The litele Chickens, newly hatched, muft be put vnder a Sieue, and lightly per- The HennePip. fumed with Rofemarie, for to keepe them from the Pip: and for the fpace of two dayes you mult not give them any thing to eat, but put them vnder fome Henne that hath not manie, and which is not eicher of Partridge colour, or wild and vnamed; that thereby they may be kept warme whiles the other are in hatching: or which is better, to put them to follow fome Capon fo foone as they be hatched, rather chan any Henne ; for by that meanes they will be better defended borh from Cold and rauenous Birds, as alfo better fed : befides that, hereby the Henne will be che fitter to fall ro laying of egges againe. It is true indeed, that there muft choice be made of a found and couragious Capon, to plucke away his feathers from vnder his belly, and to netcle him with the frongelf and moff ftinging Netcles that you can get,

## The firsb Booke of

and after to make him drunke with bread fteeped in wine, and to put him vnder a. basker made of Ofiers, with his brood of Chickens, and fo leaue him there fome time; to the end he may fall in loue with them. So foone as he fhall be at hbertie, hee will beare them vp, keepe them, lead thein, and become a more foolifh, doting, or true louer of them, than the Henne her felfe would haue beene: Howbeit, the naturalt dame is verie carefull, and giuen to keepe them vnder her wings verie wifely; without doing them any manner of harne or hurt. When as therefore they be two dayes old, you muft crumble them fome foft Bread and Cheefe, or elfe fome Barley meale, and Garden Crefles, foftened and infufed in wine and watcr, with a few of the leaues of Leekes chopped veriefmall, and a litele fodden, and this will be good for them againft Rheumes and the Pip: And after this time, for the fpace of fifteene dayes, they mult be kepe vnder a Cowpe with the Henne or Capon : and then at the end of thofe dayes to let them rume about both leader and followers, giuing them ftill the fame nourifment to teed vpon. And if you haue manie fitting Hernes that haue hatched at one time, giue and put the Chickens of the one vnto a nother of the eldeft and mot ved to lead, or elfe to a Capon, as hath beene faid, and let the younger Hennes recurne againe to the Cocke : but fee that you put not aboue fue and twentie or thirtie vito any one Henne; becaule fhee will not be able to coucr or brood above that number. Againe, there mult good care be had, that the Henne which leadeth them be not curt and brutifh, that fo the may not hurt them as fhe is feratching, or fet them in a heat by flying;neither yet that fhe be giuento much climbing,or gadding into fuch places as her little ones cannot follow her into. Wherefore it fhall be gond not to fuffer them to goe fo foone to the Court-yard, but rather, for the fpace of fortie dayes, to keepe them that they goe not trom the place where they were hatched. You mult likewife beware that the Snake doe not breath vpon or hiffe at thein: for the fmell of fuch breath is fo peftilent vneo them, as that it generally killeth them all. The remedie is, to burne oftentimes, neere vnto therr Cowpe, Hartshorne, Galbanum, or Womens haire, for the fume or fmoake of thefe doth driue them away.
It is a paine to goe about to hatch Chickens without the heat of the Henne: and although the thing may be done, yet it is not fo certaine nor fo profitable. They are fet on a row, the fharpe pointed end vpward, in an Ouen verie meanely warme, and vpon warme Hennes dung, which muft be renewed cuerie fix dayes; and ouer and vnder them thus fet, fome doe put bagges of Feathers, and they nuff be ftirred now and then : after the cighteenth day, they mult be bathed in warme water; and the one and twentieth, they nuft be holpen to breake the fhell. A gaine, it may be done otherwife: The fame day that you fet a Henne (to the end that you may the better remember, becaufe it is not fo eafie to number the dayes as to tell the egges) you may take as manie egges as you haue fer, and put them vpon bagges full of Hennes dung (well dryed, fitted, and compafled about with Downe, or flich foft Feathers as are on the infide of the thighes) and made after the manner of Neafts. And againe, others doe make a bed of the fard Downe vpon the bagges, and vpon this bed they ranke their egges, as hath been faid, and after couering them with other Downe and bagges aboue, in fuch fort, as chat he Downe and bagges lye clofe round about, and cuerie where touching the egges : which done, after three or foure dayes, they muft be curned once cuerie day, and that fo fottly and nimbly, as that they may not hit one vpon another: And at the twentieth day (being fuch time as the Hennes begin to picke the egge-fhells) you muft helpe to make way for this your brood to come forch, and atter pur then to lome Henne that hath but a few. But there is nothing beyond and befides naturali inclination and difpofition to be attempted in any thing.

- The Henne will fit all Winter as well as in Summer, if fhee haue moat made of Branne, mixt with the leaues and feed of drie Nettles.

You muft make choice of fuch egges as are of blacke Pullets, as fuch as are more

Tobatch Chickens woithout the heat of the Hennc.
want of being fo old: let it not be aboue two dayes old, let it be white and long, according to the common verfe,

$$
\begin{aligned}
& \text { The egge is good, and for delight, } \\
& \text { Thats long and nems, and white in fight. }
\end{aligned}
$$

To know if the egge be new, you muft make fuch triall as we haue fet downe to be veed, to proue and know fuch as are good to be fer.
The lufwife that maketh accomnt to fell egges, muft in Winter keepe them warme vpon ftraw, and well couered; and in Summer coole in Bran, according to the aduife of old IVriters : but (be ir fpoken vinder correction) I am quite of a contrarie minds for the Straw is coole, and the Bran hot: Adde further; that egges kept in Bran in Summer doe corrupt the fooner. They which doe couer and powder thern with fale, or lay them in brine, doe impaire then, and leane them not whole and full, which will be a hinderance in the fale of them: and there is no doubt but that the egge doth take forme bad rellifh alfo by that meanes. The Cellar is a good place to keepe them in both Winser and Summer.
I doe not intend here tn make any difcourfe, which of the two was firft made, the Egge or the Heme: Looke for the deciding of this curious queftion in the end of Macrobius, and in Plutarch his Opufcula: And you fhall learne a great deale better of Arifotle and Plinie, than of Hippocrates, how the Chicken is made within the egge of the white, and nourifhed by the yolke, feeing that the yolke is of more eafie digeftion than the white.
As conserning the cutting of Cock-Chickens, it muft be done fhorlly after that their dam hath forfaken them, and that they run not chirping after her, but begin to crow and to fall in loue with Pullets; for if they fcape the firft yeare and halfe, then there is no order to be taken with them: and youmult take the beft bodied, and thofe which are beft thriuen and fet with feathers, and yet not growne to that full perfection and naturall growth of feathers which Cocks are garnifhed withall: for after you haue made choice of fuch as fhall ferue for the benefit and leading of your Hennes, to keepe them, as thofe which are the beft made, and moft bold, you muft cut the other, for to feed and fat either in the Cowpe or in the Chaffe-houfe.
Somemen (as for example at Mans and in Bretaigne) doe put out their eyes, as To far Capons: they doe vnto Goflings, and giue meat of corne halfe boyled, and of palte well capons of mans crufhe and braked, and made into gobbets, and thus they become fat within fortie and sretaigne. dayes at the moft : but they muft be well looked to, and haue all their feathers pulled from about their heads, to the end to keepe them from vernine.
As concerning other particulars, of the Henne, of the Egge, and of the Medicines which the Husbandman may draw from them for the good of his health:

The Henne will hatch Chickens of diuers colours, if fhee fit vpon egges drawne chickens of di. with variable and diucrs or painted colours: as alfo thee will hatch Pullets of verie Hers colours. pleafant colour to behold, if you make her tread by male Pigeons, or Partridges, or Feafants. To be briefe, you Inall haue Pullets, Pigeons, Feafants, and fuch orher kinds of Fowles of diuers colours, if you prouide aboue, beneath, and on euerie fide of their Cowpes,or other place where they make their abode, places of receit and cowertures, of fuch colour as you thall wifh them to be of.

Hennes will lay grear egges, if you pound Bricks, and mixe them with Bran and Great egges: wine, bray them all very well, and giue them to the Hennes to eat : or elfe make a fine pouder of Brick, mix it with Barly Bran, \& giue it them to eat. Some for the very fame purpole do mollifie the Fullers earth that is red, and mix it among the Hennes meac.

> If by the fpace of foure dayes, or feuen at the moft, you fteepe an egge in verie To make eg Arong vineger, you fhall fo foften the fhell, as chat the egge may eafily be fo handled fofi. as that you may draw it through any fort of ring that you fhall weare vpon your finger, and thruft it into fucha Violl as you your felfe would wifh to haue it put in: likewife you fhall bring it to his former fhape, if you fteepe it in coole water. In like manner, an egge fteepr in Aqua vitz for fome fpace of time, doth quite waft and fperid icfelfe.

How to kecpe egges.

The fone in a
capons fomach
Torofanegse 2wilhout any fire.
An egge writ-
ten upoin.

If you would keepe egges long, that they fhould not breake, fet them fo orderly in baskets, as that they may ftand right vp, and that the end which is tharpe-pointed may be vpward, and by this meanes a man may carrie fuch a burchen of thems as fhall be layd vponhim, without breaking any of them. Likewife this is a thing verie erue and well approued, that an egge hath fo firme and ftrong a frame, as that no man, be he neuer fo ftrong, is able to breake it betwixt the palmes of his hands, being taken and holden long-waies.
It hath beene obierued of a long time, that the egges layd after the new of the Moone in the moneth of Augult, or in the wane of the Moone in the moneth of Nouember, as thofe likewife which are layd on the day of the Natinitie, or on the day of the Afcenfion, are lafting and durable, and not eafily corrupted. Whereof there cannot be deuifed any other reafon, than that in fome of them the fhell is made hard, and not to be pierced through of the ayre by the coldnefle of the time: and in the other there is a moft quick exhaling and expending of that which might be corrupted within the egge, by the heat of the time and fealon then being.
Some find within the ftomacke of a Capon a tone, of the bigneffe of a Beane, which maketh a man ftrong and luftie vnto the act of carnall copulation; and withall, maketh him louing, fauorable, and gracious amonglt women.
Some hold it for an vndoubted truth, that for want of fire an egge may be rofted, being turned and whirled about a long time in a fling.

An egge will take any forme of character that you will, on the infide thereof, if you write vpon the fhell with inke made of Galls, Allome, and Vineger, and after that fuch writing is dried in the Sunne, put the egge in brine that is verie ftrong, and after boyle it and take away the fhell, and therc you fhall find the writing.
The fhell of the egge empried all out, and filled with May dew, and layd forth afo,
An egge lificd
upinto the aire. terward in the Sunne-fhine at noone day, is eafily lifted vp into the ayre without the aid or affifance of any other thing.

An egge armed with thread, and put into the middeft of a hot burning fire, keepeth the thread from burning at all.

A Henne flit in two, and applyed all hot vnto the bitings of venimous beafts,

The applying of a Henne todrame forth venome.

The innermoft skin of the Hens flomach, againg the fux of the belly és grauell.
the broth of a
Henize good to loofen the belly.

The fones of a capon.

The fat of a Henne.

The gall of 6 Непие.
Henne-dings. draweth out the venime thereof: or otherwife, if you take and plucke the fundament of any liuing fowle verie bare, and apply it to the parts offended by the ftinging of a Snake, or to the Carbuncles and Buboes rifing of the infection, doth the like. And this fhewerh, that a Henne hath a naturall contrarietie againft poyfon. And this may further be knowne, becaufe that Hennes doe eat venimous things, as Toades, Vipers, Snakes, Afpes, and other Serpents, without their taking of any harme thereby.

The inward membrane of the Hennes ftomacke or maw, as alfo of a Capons,dried and powdred, is a foucraigne thing gainft the flux of the belly, grauell in the reines, and difficulie to make water.
The broth which is made of a Henne, or old Cocke, is good to loofen the bellie: and yet more effectually, if one fluffe a Henne with Mercurie, Germander, wild Saffron, and fuch other hearbes. Alfo the broch of a Henne or Cocke is fingular againft cuerie difeafe, if fhe be ftuffed with hearbes appropriate and fir for the curc of the faid difeafes.

Theftones of a Capon, nourihhed and fed with meat fteeped in milke, are foueraigne for the fpeedie reftoring of them which are worne away and confumed by continuance of long ficknefle.

The fat of a Henne waftred in Rofe water, is good for the chops and clifts inthe lips, as alfo for thofe which happen in the hands by reafon of Winter cold.-
The gall of a Henne nr Capon dropt into che eye, dothtake away the fpots of the eyes, if you mixe it with the water of Eye-bright:
The dung of a Henne dried and finely powdred, and applyed to the eyes which haue loft their haire, caufech the fame to come againe, if you mixe it with honey, or oyle of Linfeed: If it be tempered with oyle of Rofes, and applyed, it is good
againt

## the Countrie Farme.

againft burnings : being brayed with vineger and honey, it cureth within an houre fuch as are neere ftrangled by eating of Muthromes, for it maketh them to vomite a thicke and flegmatike humor. A Phyfition in Galens sime did cure all manner of old Collickes, giung the ficke to drinke of this dung with Hypocras made of honey and wine.

A hard rofted egge eaten with vineger flayech the flux of the belly, if you mixe Ahard rofed with it the powder of Harts horne.
A Caiaplafme made of the yolke and white of an egge well beaten with the iuice or water of Plantaine and Nighthade, applyed vnto burnings,doth quench and extinguinh them.

The yolle and
The white of an egge beaten, and with the powder of Frankincenfe, Maftick, and Galls applyed vnto the browes, doth fay the bleeding at the nofe.
The yolke of an egge fwallowed alone, flayech the Cough, and fuch other diftillaThe white of tions as fall downe vpon che lungs and orher parts of the bhand fuch other diftilla. The yolte of ant egre, which is layd in the fill egge, which is layd in the full of the Moone, doth cleanfe and take away all manner of fpors appearing in the face. The thin membrane or skin which is on the infide of the egge-fhell dried, fincly poudred and mixt with the white of the egge, doth heale the cilifs of the lips. The egge-fhell made into afhes, and drunke with wine, deth ftay the fpetting of bloud, and is good to whiten and cleanfe the teeth, to comfort and incarnate the gummes. The egge-fhels, out of which there haue come Chickens, being poudred and mixed with white wine, doe breake as well the fone of the reines as of the bladder. The white of the egge mixed with vnquencht Lime, the fhell of an egge burnt to afhes, old Tyle well poudred, and Bitumen, makech a Cement verie excelient to glue and ioyne together againe the broken parts and pieces of Glaffes. An egge fpread vpon wood, or any kind of garment, doth keepe the fame from the burwing of the fire.

## Cиap. XVI.

of Geefe.

(2)He Countrey Farme being for the moft part vnprouided of the beneffits and eafements of water, efpecially running freames, is not fo fit to breed and nourihh Gecfé : except for priuate commodities fake it fall out, that the Farmer doc make him fome Fifh-ponds or fanding Lakes of his owne, and at his ownc proper cofts and charges: For the Goofe, as well as the Geef lone to Ducke, doth loue to fwim, and to coole, plunge, and tumble her felfe euerie day; nei- bath and zwne ther doe they tread almoft any where elfe but in the water. There is great profit, and there is great loffe alfo chereof: proft, becaufeche charge of keeping or feeding them ble themselues in the easter. is not fo coftly, as their watch and ward is good and gainefull; being indced beetrer The Goije ise
than that of the dogge, as hath beene fhewed long agoe by the Geefe of the Capioll bird of gereat than that of the dogge, as hath beene fhewed long agoe by the Geefe of the Capitoll bird of great
in Rome, who awaking the fouldiors and flanding Watch, were the caufe that the profitand dif: in Rome, who awaking the fouldiors and flanding Watch, were the caufe that the enemie was repulfed and driuen backe: Againe, Hhe declareth when Winter draweth nigh, by her continuall fqueaking and crying: fhec layech egges, hatchech Goflings, affoordech feathers twice a yeare, for the Bed, for Writing, and for Shafis, which are gathered at the Spring and Autumne. The loffe or difcommoditie is, becaufe they craue a keeper; for otherwife they will brufe and knap off the young fiences of Trees, the hearbes of the Garden, and the fhoots of Vines, as alfo iniure and hure the Corne when $i t$ is fhooting and putting forth his falke, as well by breaking it,as by dunging vpon it: in fuch fort, as that in the Councries where wild Geefe widd Gesfo (which are fowles keeping togecher in flocks as well as Cranes) doc make their greareft and principall haunt, as in Holland, Heynault, Arroys, and other where, there is found fomecimes a great piecc of Corne all wafted and deftroyed in leffe than halfe a
day. And the houfe or tame Geefe doe no leffe harme, if they be let alone and fuffered to do it; for they pull vp the corne by the root: befides that, where as they dung; there will nothing grow for a long time after.
The beft Goofe and Gander is of colour either white or gray; and fhe that is of a mixt or two colours, is alfo of an indifferent goodneffe: notwithfanding the white doch abound more in laying of egges than the others, and hath allo a better fleth; and it is good to make choice of fuch a one as hath the knee, ioints, and fpace betweene the legges great and large. The Goofe goeth ouer her laying time thrice a yeare, if fhe be kept from fitting and hatching : but indeed it is a great deale better when fhe is fet vpon egges, becaufe the young ones thereby brought forth doe nollrifh betcer than the egges, as alfo doe encreafe the flockc: And at euerie laying time, fone lay twelue egges and moe fometimes, orhers but fiue at the firft, foure at the fecond, and three at the laft; and thefe three feucrall times come betwixt the firf of March and the laft of Iune. And they do neuer forget the place which you fhall haue
brought them to at the firft to lay in : fo that looke where they lay their firlt egges, they will lay all the reft; and in the fame place alfo fet them, if you will. Likewife you muft not let them lay our of their walke or fold, and for that caufe you mult keepe them fhut in at fuch time as when you thinke they will begin to lay: and if you take not vp their egges, they will begin to fit fo foone as they haue their full number: but and if you take them away as they be layd, they will not ceate laying till they come to an hundred, yea two hundred egges; yea, fo long, and fo many, as fome fay; as vntill their fundament fland gaping and open, they not being able to fhut $1 t$, becaufe of the effeet wrought by their much laying.
Geefe loue nor almoft to fit any but their owne egges; and at the leaft you muf fee that the greater part that you fet her on be her owne: And Ihe is not commonly to be fet vpon tewerthan feuen or nine at the leaff, nor vpon moe than thirteene or fifteene at the moft, and you muft looke fhe be fet vpon an odde number. And who fo puttech vider the fraw whereupon fhe fittech fome Nettle roots, doth preuent that the Goflings, when they be hatched, are not fo foone hurt. Some Geefe in a good and fauourable weather do hatch in fiue and ewentie dayes at the mof. And neere vnto the place where fhe fittech you fhall place fleeped Barly in fuch quantitie, as that fhe may take it out of furch water: for fhee loueth not to leaue her young ones, for fometimes the will rather die for hunger; and to the end alfo that fhe may not fand in need to firre or rayre her felfe, except a veric litele for to feed, feeing that thus her egges might take cold. And furthermore, call againe to mind that which hath becie faid of the Henne: you may alfo fet Hennes vpon Geefe egges, and that with better fucceffe than if they had beene fee vnder the Goufe her felfe, but then not aboue feuen
or eight.
The ardering of Goflirgs.

The young Goflings muf abide tenne daies flut vp with the Goofe, and be fed within wihh Barly meale tempered with Honey, Bran, and Water, and now and then with Lettuces and tender and new Sow-thrfles; after that, with Millet and Wheat fteeped and fofened: and at the eerme of thefe daies in acquaint and accuftome them to the Medowes with their dame; but let them be fed before they goe thither:for this bird is fo ravenounly given, as that through fharpeneffe in their hunger they pull the graffe and young fprouts of Trees with fuch force and violence, as that fomecimes therewith they breake their owne necks. They muft be kept from Nettles \& Pricks, from the Bay tree and Mugguet, for they be bane vnto them : in the houfe, from Wolues and Foxes, Cats and Weafels.
How to fat
Gojlings.

Gollings intended to be fatted, muft be choren when they be foure moneths old, and then the faireft and greateft muft be chofen. They muft be put in a Cowpe in fome Cellar vnder ground, or in fome darke and warme place, where the younger fort is to be kept thirtie daies, and the elder fort two moneths. They muft haue giuen them thrice a day Barly and Whear meale tempered with Water and Honey, for the Barly makech the flefl white, and the Wheat maketh them fat, and makech a great liucr. Some doe make them meat with new or drie figges and leauen, and giue them
drinke
drinke aboundantly, vfing to rowle their meat all ouer in Bran. Others pull thefeithers of their head and belly, and alfo the fat feathers of their wings, and doc alfo put out their eyes for to fat them : Aboue all things, you mult not pinch them in their meat and drinke, becaufe they are great eaters, and giuen much to drinke. This you fhall haue them fac at the moft within two moneths.
The common mear of Geefe, is all manner of Pulfe tempered with Bran and warme water. Manie doe giue them nothing but Bran fomewhat groffely boulted, and Lettuces, Succorie, and Garden Creffes, for to get them an apperite : and they fet them this mear morning, euening, and at noone : and for the reff of the day they fend them to the Medowes, and to the Water-Pooles, vnder the cuftodie of fome little fmall Iacke, who may keepe them from going or flying into anie forbidden places, as alfo out of the Nettles and Briers, as alfo from feeding of Henbane, which fome call the Goofebane, and from Hemlockes, which fet them on fuch a deepe fleepe as that they die therewithall.
Ancient IVriters haue not permitted moe than three Geefe to one Gander, but we doe freely allow fixe, and caufe to be taken from them the Downe or foft feathers on the infide of their thighes, and the great feathers of their wings to write withall in March and Sepcember: for the quils of the dead Goofe are not fo fit for all vfes, no more than is the wooll of flaughtered fheepe, or thofe which die of chemfelues. And feldome doe we fee much fewer than thirtie Goflings in one roome, howfoeuer our predeceflors would not put anie moe thant twentie together, for the greacer doe beat the leffer, and hurt them : and for this caufe they muft be put into the Goofe-houfe; and kept afunder with hurdles, in fuch fort as fheepe are kept afunder: and they mult haue new ftraw oftentimes, and that fich as is cleane and verie fmall, for their houre mult be alwaies drie, and ofentimes made cleane for feare of vermine.

And moreouer, they are fubiect vnto the fame difeafes and cafualties that The dijefes of Hennes be, and therefore they muft be tendred after the fame manner: Which Geefe. that I may not repeat, I would haue you to fearch it out in the places concerning the fame.
The Golling, though fhe be of hard digeftion, in as much as the is a water-fowle; and alfo abounding with fuperfluities; yet indeed the Goflings, which exceed not two monechs old, are verie much commended in the Spring time by reafon of their daintineffe, as the old are in Winter fuffed with great Chefruts: her liuer alfo is of verie pleafant taft and eating.
The greafe of Geefe is profitable in this point; if it be mixt with the iuice of an Goofe greafo. Onion, and dropt into the eare, it afluageth paine, and draweth out water. The Goofe tongue dried and made into powder, is good againft the retention of ones vrine. The ftones of Geefe eaten by an incontinene womari after her naturall courfes, doe not onely prouoke carnall cupulation, but alfo make apt to conceiue. The durig of Geefe dried, powdred, and taken in a morning the weight of one dramme with white Wine, doth throughly cure the Iaundife, if it be continually vied for the fpace of nine dayes.

## Снар. XVII.

## Of Ducks, Drakes, Teales, brant Ducks, spater-Hennes, fmall Ducks of the Lakes, Swans, Cranes, Storks, and other water-fowles.

He Ditch or Fifh-poole, which we haue appointed to be in the midft of $\mathcal{A}$ place for our Court and Scraw roome, may ferue for the Duckes and other birds Ducks th fit in: liuing in the water : And neere vnto the faid Pond there mult be prouided for them a low roofe, lightly couered, for them to fit vnder in the night,as alfo in the day, as shey pleafe: for as for any great diligence \& induftric to be

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\mathrm{H}_{3}
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vfed about thefe fowle; indeed there is no fuch need, except it be for the keeping of them from Cats and Weafels, Kites, Eagles, Vultures, and Serpents, which are verie noy lome vnto them. In the place of their haunt they mult haue fome Corne caft, Pulfe, and the droffe of the Riddle or Searce mult be caft about the edges of the Pond: and alfo within the fame, to caufe them to be pudling in the myre, you muft alfo let them haue the libertie of fuch Ponds as you put your fifh into which you meane to falt, as alfo of the next Riuer, as you doe your Gecfe : notwithftanding, it were good that fome fhould fee that they haunt or frequent not your Ponds with fifh, becaufe indeed they will eat up the Imall therein. But in other points they need not to much attendance, feeing for the moft part they are nothing in loue with Gardens. And as for their Neafts to lay in and to fit, they make themelues: and there is no care greater than this, namely, to know their haunt, efpecially that of the wild ones, in or about what place of the Ponds they vfe, that fo you may take their egges to put vider fome. Henne to fit them, thereby to make them tame : for the fowle that is thus ordered will be better than that of the yard, and which ftirrech not out ot the Court, or from about the fides of the ftreets to sread.

To take fuch wild Ducks as are about your Ponds, to make them tame, you mult caft the lees of wine or red wine in that verie place of the Pond fide, where you haue arcuftomed to caft them meat of wine and corne with leauen and flower rempered rogether, and you flall take them when you fee them drunke : or elfe to take of the root and feed of Henbane a good quantuse, and lay it to fteepe in a baten full of water a whole day and a night, aterward put thereinto Wheat, and boyle all together vatill the fand Corne be well fteept and fwelled, afterward you hall put of the fame Corne in the faid place, for the wild Duckes will rume vrioo it, and as foone as they fhall haue eaten it, they will fall downe all aftonifhed and giddie. This kind of fowle is made fat in fuch manner as the young Geefe, that is to fay, with the fame food; onely it remaineth, that you fhould giue vnto them, befides that, the fmall of the fifh, and fo you need not to cowpe them vp: and as for your commonones, the more you fuffer them to runne, the better it is for them.

You may make your profit of this bird, in as much as the flefh thereof is very pleafant to eat, efpecially abour the neeke and breafts, the feathers thereof are Imaller, better, and more wholefome to fleepe vpon than thofe of Geele. She layeth egges in great quantitie, but not fo good or delicate as thofe of the Hennes; but yet of vfe to make Cakes, fried Meats, and other daintie Deuifes : adde hereunto, that you may fet them vnder Hennes.

The bloud of Ducks.
The Drake cureth the collick

Teales.
Y'uag Ducks. Water Hennes. Small Ducks. woadcocks. curlemes.
Birds of a double life.

Sxoannes.

When this bird trimmeth her feathers with her bill, it betokeneth Wind. Alfo fome hold the bloud thereof, hardned and drunke with wine, is good againlt all manner of poyfon. The Drake applyed aliue vnto the bellie, is a foueraigne remedie for the fretting of the Guts and Collicke : infomuch, that fome fay, that this difeafe thus cured, returneth vneo the Drake, and that in fuch fort, as that hee dyeth of it.

Teales, young Ducks, water-Hennes, and finall Ducks of the Pond, will neuer be made tame, but otherwife you may more eafily take them than you can the wild Geefe. We may fay as much of the Woodcocke and Curlew, and other birds haunting the Water and Riuers, and liue notwithftanding vpon the Land: for which caufe they were called by men of old time birds of a two-fold or double kind of liuing and feeding.

Swannes haunt and loue to refort to fome particular places onely, as in watrie, wandring, and folitarie places. There are great fore to be feene in fuch places towards Tours, Angoulefme, Coignac, the Riuer of Sharant (which is reported to be Hoored with Swannes and paued with Trouts) Sameure in Fratnce, as alfo in Flan-
Valentia the
vale of Swans. ders, and towards Valentia, which fome fay to haue beene, in that refpect, called the Valley of Swannes, and may be made tame, and may be put either in Ponds or in Fennes, but indeed they deftroy and fpoyle verie much fifh. Sometimes they feed vpon the greene Corne, as the Golling or wild Goofe, and doe make great fpoile and
waft therein. It is fufficient for two paire to take their pleafure in your Pooles , or How manie Soure, if they be verie great, and one paire onely is ynough in your Fifh-pond: and Smaznes are they mult haue a houfe apart in the Orchard or Garden couered ouer a liette, and ynough to bs free from difturbance, often made cleane and refiethed, for they defile verie much. ${ }^{\text {togethero }}$ If they haue not ynough whereon to feed in the place of their abode, you mulf calt them fome foftened bread, or forme of the fmalleff fifhes. This is a great eating fowle, and chargeable to be kept: he maketh his Neaft himfelte, and hatchech bue once a yeare, and three egges at the moft at a time, bur he is a verie beautifull and pleafane bird. There is a cerraine kind of Swanne which hath his right foot duided into. fingers, and fafhioned with nailes and clawes or tallons, as birds of the prey haue, whereupoin in ftriking into the warer, he catchech and foorech his prey, but his left foot is fafhioned after the common manner of others, and with it he rowech vpon the water. Such a one was feene and killed at the Abbey of Yuilly neere Dampmartin, in the yeare 1554. This kind of Swanne feedeth no where but in the water, and vpon his prey, and is altogecher wild, and cannot liandfomely be tamed: but the common Swanne is not fuch a one.
Socrates in Plato faith, that this vird is dedicated to Apollo, becaufe of the giff of diuination which he hath, by which he forcfeech his death, and fingech verie fweetly and enelodioufly when he perceivech the fame at hand, as feeming thereby to foretee what good Death doth bring with it. I haue obferued, that he doth not onely forefee his owne death, but alfo the death of men, elpecially when he appearech in fuch places as he was not wont to haunt : Witnefle hereof is $S$. Bartholomew his day in the yeare i 572 , two or three dayes before which were feene manie Swamnes, flying, fwimming, and diuing in the Riuer of Seyne, betwixt S. Clou and the Port of Nully.

Cranes are not much vnlike to Swannes, and are not birds of continuall haunt, cranes. but yearely remouing from the Countries that are more hot vnto thofe Countries that are more cold. Their departure is about September, and their returne fhortly. after the Spring feed time : and alchough they doe addict themfelues vnto watrie places, yet they feed, for the moff part, of that which the drie land yeeldeth, and inos of things affoorded by the water, for they liue and teed vpon Corrie as doe the wild Geefe. There is no caufe why you fhould make any great account of the Crane : for alchough hee flay a certaine time with you, yct hee layeth not anie moe than two egges all the yeare long. Wherefore it you be willing to kecpe of them, you may doe it rather to pleafe your fight withall, than for amie hope of encreafe, for they neither lay rior fit anie moc than two egges. And further, their fleh is of a verie hard digeftion, ef pecially if it be riew killed: but if you will eat it, flay fome time after the taking of them, and hang them vpon the arme of fome Figge-tree, that they miay grow tenderer : Alfo eate them rather a long time atter they have beene drefled, than whiles they are yet warme. When you fee them flye aloft in the Ayre, withour making anie noyfe, then looke for faire weather: bue and if youl fee them reft themelues vpon the ground, be ye aflured that it will be rainc.
If your Farme be neere vnto marihes and places, where Snakes, Lizards, Adders, and other fuch like Beafts abound; you may fet vp fome Imall Spire or Turret about your houfe, or plant vpon fonie piece of high mounted ground fome wellfpread Tree, of a great height, for the alluring of Storkes to the fame, that they may storketis helpe to free your houre of thofe faid venimous beafts, for they will kill them to feed their young ones cherewith. But yer perfwade not your felfe, that you can cafily draw and allure them, nor yet retaine and keepe them, Summer being once pafled ; for vpon Wincers recurne they will be packing into anorher Councrey. Notwithfanding, there are fome, which not hauing beene difturbed in the time of their ayring and bringing vo of their young ones, doe cuerie yeare repayre to their wonted ayres, and that by a long flight out of a farre Countrey, and doe ayre and neaft themiclues willingly alfo in the tops of high Towers, not frequented,
as iudging the place to be fuch as will not fuffer any man to doe them annoyance. And in the meane cime you need not take any care of their Neaft, laying, firting, or: feeding, for they be birds carefull ynough of themelues, and not needing the helpe of any other, and which doe come and goe in fuch fort as one cannot perceiue them; in fuch fort, as that we may rather fee them when they be commen, than forefee their comming, for as much as their comming and going is in the night. Some doe thinke that they haue no tongue; make no a ccount of them for to eat them, feeing they are of a verie cuill iuice and venimous feeding: and yet this good is in them, that hee which fhall haue eaten of a Storke, fhall not haue his eyes bleared or running all that yeare. It is obferued in this bird, that the young doe teed the old that breed them, when they cannot flye any more, nor get their prey.

## Снар. XVIII. <br> of Fedfants.

Henncs of NW midia.

(2)T is a point of great curiofitie to keepe Feafants, which Columella callech Hennes of Numidia : but he that can do it, hath both pleafure and profit; and he muft be fuch a one as almof doth nothing elfe: for this bird is chargeable to maintaine; fhe will haue her houfe by her felte, raifed high, and leaning to the inclofure or wall of the Court, and long alfo, thar her troughes may be in the ayre, and where the Sunne giueth. And euerie feuerall bird mult haue her owne roome: and yet there muft be but one dore vnro their Henne-houfe for the cleanfing thereof and giuing of them meat. The reft of their houfe fhall be all open vpon the fore-part, and yet in fuch fort, as that it fhall be fure and faft, by being elhick latred, and of clouen boords, about the height of a fadome below, and verie well couered aboue.

Fealant Cocks and Hennes are hard to tame, if they be not fo hatched, or elfe ta-

Feafant cocks and Hennes not So cafie to make tame.

To fat Feafant Cocks and Hennes.
ken within the yeare: for the elder fort grow fullen and malecontented, and doe accord and buckle themfelues either to lay or fit. And as for the young, they muft be gently handled, vntill they be well trained, and can eafily be content with and apply themflues to the enduring of a conftrained ayre, and that fuch a oneas is not like to that where they were taken. There muft be one Cocke to cuerie two Hennes. The Henne hath but one feafon wherein fhe vfech to lay, and that is March,at which time The beginneth and fo continuect vntill fhe haue orderly layd twentic, and after fhe fitteth them all together, or elfe fifteene of her owne, and fone others of another kind, if you put them vnder her: and fhe firtech thirtie dayes; and in the time of her firting, you muft vee her with the like diligence that you doe the Henne : bue this mult be all within her owne houle. The young ones being hatched, fhall be fed with flower of Barly boyled and cooled, and atterward with the flower of Whear: and fometimes you fhall mix herewith, or elfe giue them by themfelues, fome Grafhoppers and egges of Ants: and you muft oftentimes giue them frefh water, and cleanie, for they are fubieft to the fame difeafes that the Henne is.
Men of old time were wont to fat their Feafant Cockes and Hennes for Feaftiuall dayes, or Banquees and Feafts onely, and not for brood, and gaue vnto them the firft day honied water and ftrong wine, to caufe them to forget their naturall place: after that, of the flower of Barly tempered with water, of ground Beanes, and of cleane Barly, of whole Millet, of Turnep feed, and Linfeed boyled and dryed, mixt with the flower of Barly: and for to heat and cleanfe their fomackes, they gaue them Muftard feed for fiue dayes, and fo fatted them vp in their Cowpes for threefcore dayes.
This is the thing that diuers Cookes of Paris, with certaine other rich Viftuallers, doe know veriéwell to doc: and they muft (as faith Colwmella) giue them their
meat to eat, to the end they may be fat when they are vfed in Banquets : for but few of thefe wild Feafant Hennes doe giue chemfelues to lay and beare the yoake of feruitude both together.

## Сиар. XIX. <br> of Peacockes.

(27H. Peacocke is a bird of more beautifull feathers than any other that is: he is quickly angrie, but he is as farre' off from taking good hold with his feet : he is goodly to behold, verie good to eat, and feruech as a watch in the inner courts for that hee fpying flrangers to come into the lodging, he tayleth not to crie out and to aduertile them of the houfe. It is true that hie is nor kept with a little coft and meat, being a great eater, and quickly digefting his meas: noyfome to the houf,, for that he fpoylech the Gardens, if there be not lome litele Medow ground for him to frequent : hee breaketh the roofe and high place of the houfe : And the Cocke being ourr-rianke by nature, doth breake the Hennes egges, thercby to keepe her from fitting, that fo he may the more freely enioy and vfe her. The Cocke lineth a long time, as from twentie to fiue and tweutie yeares; but the Henne fomewhat leffe, both the one and the other fomewhat troublefome to reare and bring vp whiles they be young, but they need not to haue any great care taken of them after they haue once left the dam, except it be in keeping them from hurting the Corne. They loue a hot and termperate ayre, and that is the caufe that they are not brought vp in manie Countries of France, but wiih much adoe. The place where they moft abound in all the Countrey, is toward Lifiens in Normandie, for from thence there come great numbers to Paris, for great and fumptuous Banquers and Marriages : There they make them fat with the droffe of Cyder and Perric.
People of old and auncient time did caft Intets on the backfide of their Gardens, onely for Peacocks, and there fet vp fome little fhed for them at their pleafire to repaire vnto, and another for the partie that fhould feed them. And in Iralie vnto this day they vfe, in places neere vnto the Sea fhore, to bring vp Peacocks in Inlets fome: what neere vnto the Sea, that fo they may preuent fuch harme as the Foxe might ocherwife doe them; which was alfo the drift why our auncient predeceffors tooke the fame courfe : but wee, which make not fo grear account of them, are content to keepe chem in fome roome ourer the Hennes, cuen in the higheft part of the Hennehoufe, for they loue to rowft on high, and in an open ayre, firting verie often for that caufe vpon trees, but wee prouide them fome place below whither to repaire in the day time. This place muft be kept verie cleane, and looked diligently vnto, euen as the Henne-houfe, for this bird is fubiect vito the fame inconveniences and difeafes that Hennes be, and mulf haue the fame remedies adminiftred vnto them. The place of their abode and haunt muft be ftrewed with Scraw, or greene Grafle, for the Herines doe lay bur feldome, fitting downe low, as is manifeft, The naure of in that her egges are found oftentimes dropt downe from her vider the Pearch: Reab-benneso and this happenect by their falling from her as fhee is afleepe. Thefe bards bring foorth verie well after they be three yeares old ; but befure nothing, or verie listle.
The Pea-henne hath three feucrall cimes or feafons of laying in the yeare: but fhe The fitting of that is fet, hach but one, and paffech ouer her other times in harching and leading of the Pea-bbennes her young ones. She beginnech her firft laying time at mid Februarie, and lay yech fue egges one after another:at the fecond, the layeth foure or three: and at the chird, three or two. If the Cock and the Henne tread not, you mult bring them to it by fuch food and meat as wil fet them in hear, as with Beans rofted in hot afhes. And so know when
the Cocke is in his pride or heat, you need no other figne than his viewing of himfelfe, and couering of his whole bodie with the feathers of his tayle, and then we fay he wheeleth.

When the Pea-henne fiteeth, The withdraweth and hideth her felfe from the Cock
A Peacock of whise colour.

The feeding of youg Peacoeks. You muft feed the young ones the firlt day with Barly meale tempered with wine in manner of thicke pottage : and for the thickening of it, fome put thereto foft Checfe, well kneaded, preffed, and purged from Whay, for Whay will hure them greatly. Sometimes they muft haue Grafhoppers giuen them, their feet pluckt away, Weefels, Spiders, and Flies for their Phyficke; for they driue away vermine naturally, fo that there is fcarce any found where they haunt. After fix moneths they eat boyled Barly as the dam doth, and are fuffered to runne abroad: but euen then they muft be kept from cold and raine, for they chirpe and hang the wing by and by, efpecially in this Countrey, where they are hard to bring vp, if they be not hatched by mid Iune: for when Autumne doth find them verie young, they doe neuer hold out Winter.

They which will haue the Pea-hennes to hold their three feuerall times of laying, mult fee their firft egyes vnder Hennes that are great, well gouerned, and old, and that in the beginning of the growth of the Moone, that fo the Pea-hennes may hold on their feuerall courfes of laying. And as wee haue alreadie faid in the feeding of Hennes, there mult be put vider the Hennes forme fiue of the Pea-hennes, and nine of her owne: after the tenth day, the nine Henne egges fiall be taken away, and other nine put in their place; by this meanes you fhall find, by the end of thirtie daies, that all will be hatched together: And thus you fhall vfe manie Hennes at one and the fame time. And feeing the Pea-hennes egge, for the greatneffe of it, cannot bewell turned by the Henne, you hall turne it your felfe verie foftly at fuch time as the Henne is a feeding, and marke with ynke the place you leaue vppermoft, that fo you may know thereby whether the Henne doe turne them, or no,for elfe you might pof fibly lofe your time and labour : and when all are hatched, giue all the Chickens to one onely Henne, and the young Pea-chickens to a Pea-henne, and fee that the Henne leading her brood, do not haunt where the Pea-henne and her Chickens do come, for fo the would leaue her owne, for the difdaine and iealoufie the conceiueth in feeing the fairenefle and greatnefle of the others.

## The dijeafes of

peacochs.

The flefh of
Peacocks is bard.

Peacocks are verie ficke when they moult, and then they mult be heartened with Honey, Wheat, Oates, and Horfe-beanes: They are verie hot in the Dog-dayes, fo that then you mult not let them want frefh and coole water: and eueric Cock would haue fue or fix. Hennes for change, for he is grieued at them that are readic to lay, and failech not, if he can, to breake their egoes.

The flefh of Peacocks is melancholike, and of hard digeftion: but to make it tender, you muft kill your Peacocke in Summer a day before you cat him, and in Win- ter foure daies, and hang fome heauie thing to his legges, or elfe tye him vpon fome figge-tree ftaffe, becaufe the wood of the figge-tree hath vertue to make flefh cender
that is tough and hard: The roited flefh of a Peacock is well kept a whole moneth, and looferh nothing either of his fmell or good rellifh : The dung of Peacockes is verie foueraigne againt the difeafes of the eyes, if it may be found: bur the Peacock fo much enuieth the good of man, that he eateth his owne dung, hor feare that any man fhould find it.

## Chap. XX。 <br> Of Indisn Hennes.

Hofoeuer he was that brought vs thefe birds from the Ifland of India, Indian Hennes lately difcoucred by the Spaniards and Portugalls, whether iwce call good coffers to them Cockes or Peacockes of India; hath more fitted and prouided for the tooth than for any profit : For they may rightly be tearmed Co-
fers to caft Oates into, a deuouring gulfe of meat, and wherein there is no other pleafure to be taken, but onely in their crie and furioufnefle, when they are come to be great ones; or concinually chirping whiles they be little: befides that, both the one and the other are ill-fauoured and ougly to hehold, for the deformitic of their heads; for the male hath no combe, as our Cockes, but in ftead thereof a red flefhinefle, and vnder his chinne a great wide and long throat, which fwelleth and changeth into manie colours when he beginneth to be angrie. It is verie true, that his fleth is fine and delicate, but without tafte, and of hard digeftion : And this is the caufe why men vfe to powder them, larde' them much; and feafon them with Spices. There is much more pleafure and goodneffe in the flefh of a Peacocke.
The meat fit forthis kind of Bird, is the fame that is good for Hennes, and fo what meat is fit made, and with like diligence : and becaufe his propertic is to be abroad, to feede for Turhies. vpon Graffe, Wormes, and Hearbes, therefore it remaincth that wee fer downe what is required ouer and aboue: And the Farmer may well fay, That locke how manie Turkies he hath in his yard, euen fo manie Mule Colts hath he in refpect of their feeding. Their ordering is leffe troublefome than that of the Peacockes, faue that they doe not fo well endure and abide the cold, neither doe they require to be pearched fo high in the open ayre: but they eat vp and make great waft in Gardens, and arefilthic as Gonings, and therefore fome mult be readie to make them cleane euerie day. In Winter they muft be fet in a warme place, and drie: their pearch muft not be aboue eight or tenne foot from the earth, becaufe they doe not flye high.

As concerning their laying and fitting, it is alogether like to that of the Pea- The times cockes, and their egges may as well be fet vnder Hennes, and ledde afterward wherein тurby the fame, willles the Turkie Hennes doe accomplifh their feuerall cimes of hies doe lay. laying.

Their difeafes and remedies are alfo all alike, fo that it were in vaine to fpeake of The difeafes of them here againe.

The Hulwife fhall not make anie great account of Turkie egges; at leaft, hee Turkie egges. that loueth his health, fhall not efteeme of them for to vfe them : for Phyfitions hold, that egges of Turkies engender grauell, and minifter caufe to breed the Leprofic.

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& \text { C н а P. X X I. } \\
& \text { of Turtle doues, Partridges, Quailes, Stock-dowes, a.sd Tbrubles. }
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He place to put thefe kindes of Birds in (feruing rather for food and pleafure chan for breeding) thall be ordered atter the manner of the Feaíant-houfe, that is, after the manner of a great Cowpe, fo leaning againft the wall of the back-yard, and open toward the light, wouen and wrought with the frings of a fmall Bow, put through wood, after the manner of Bird-cages, with a dore of the fame : And within, efpecially toward the corners, there Chall be great fore of Perches, and branches of boughes of Iuniper, Bayes, and other trecs, within which there fhall be tyed againft the faid wall fmall baskers to allure them to lay and fit in, if fo be they haue any inclination thereunto. If fhall be of the height of a man : and ouerchwart, and euerie way, you fhall hang Perches, flayed vp at both ends, for feats for them to fit vpon; and vnder their Perches much freth 1 fraw, which you muft often renew when you make them cleane. On that fide towards the light, all along their houfe, you fhall weaue and worke in two boords of a good length, and a third vnderneath chem, and there fhall you make places for them to eat their meat, and to fet their water-pots for them to drinke, which you fhall refrefh and make cleare verie often. Thefe birds are all of them fuch as vfe to goe togecher in flockes, and delight in hot ayre, and in cold weather flyc ouer the Sea out of one Countrcy irto another. And therefore to tame them in fuch manner, as to make them like our houfe-birds, would be a verie hard and dificult thing: And againe, wee make no further account of them than for their daincineffe and delicateneffe; which is, the caufe why they are of fuch requeft in Feafts and Banquets.

Of all thefe forc-named kinds of Birds, there is none more apt to tame than the Turtle douss, meither yee fooner fatted:' for to take them after they be fomewhat great, and flie well, you muft giue them wine, for by the means of it they doe quickly fall to forger their liberrie and freedome; for this bird is of a great fomacke, and bearech it therefore verie mournefilly, when fhee perceiueth her felfe taken : for which caufe alfo they almoft neuer lay when they be reftrained and kept in, neither yet feed fat in Winter; quirc contrarie to Thrufhes : They feed vpon Barly, Fetches, and almoft all other kind of graine: they defire faire and cleare water, and of-

What meat Turtles feed vpon.

The difcifes of Turlle doues.
-

- 0 Efpecially they lone Millet and Pannickle, and make no lefle account of Wheat, of which forts of Corne a buhnell will ratisfiefix fcore Birds: And you muft not fororet Grauell, which muft be layd by their water-pots for to be their phylicke, and fome alfo in fome of the corners of the houfe, for them to feratch in. If they hang the wins, and Nurre not ous of their Basket, you muft take them and looke to their billes, whether chey haue the Pip, or no; and, if need be, to take it from them: and to their feet, to fee if theirowne dung make them not that they cannot firre: or vnder their wings for vermine; and in all other places to cure them, as hath beene faid of Hennes. The bloud of theright wing of a Turtle dropt into the eye, is excellent good agamft the flripes and vicers of the eye: And their dung is good againft fors
in the eyes.
Stock-doics. Seock-iones.may be fatted and fed after the verie fame manner, but they are greater eaters, and more hard to tame: in Winter they loue a fup of wine, and doe grow verie fat, fo alfo doc the Turtles. Againe you mult take heed not to forgee yourGrauell.
Partridges of
byanne colour, and $/$ poticd.

The browne or Woudcocke-coloured Partridge is more eafily tamed than the fpotted, or any other fort; likewife they haue not to delicate and fine a flen 2 : being notwithfanding well fed, they are little inferior vnto Feafants: and you mult handle them after the fame manner, and giue them all one meat, but that Partridges loue

## the Countrie Farme.

now and then to eat Corre, and feed vpon greene Graffe. The male Partridges are verie hot, and the Henne doth lay a great fort of egges: The Cocks alfo doe beat one another for the Hennes, vnill the one hath ouercome the other; and he that ouercommeth, ouer-croweth the other which is outercome, and maketh him follow and come behind him, after the manner of the Hennes.

The Henne Partridge is fo fruiefull, that fhe conceinech at the onely voice or flight, or breathing of the Cocke. The meat that they moft delight in, is Milles and Pannicke.

The egges of Partridges often eaten doe bring fruiffulneffe vnto barren women, and grear flore of milke vnto Nurces. The gall of Parrridge doth cleare the fight, and mixt in equall quantitie with honey, doch heale the bruifes of the eyes: the bloud of Partridges hath the like vertue.
Quailes (being birds liuing altogether vpon the earth rather than in the aire) doe Fierce Quailss not make or build themfelues anie Neafts, anie more than all other birds which are heeiuie, and cannot fo well flie : They be verie fierce, and in that refpect they are not accultomed to haue either fo much fcope or light as other birds. Likewife wee fee that they are wont to haue their Coupe couered with nets or skins, leaft in flying vp on high, and rifing with fome boifteroufneffe, they fhould beat themfelues to death. Some prouide them Meat-pots and Water-pots apart, that is, to euerie bird his owne prouifion and diet : They loue greene Corne and Wheat, and Muftard feed is their chiefe and principall feeding. They eat in thofe Countries whereinto they go(being elfewhere than in this our Countrey) great quanticie of Hellebore. And this is the caufe why Didimus faith, that their flefh is laxatiue, and that it doth procure the turning fickneffe and headach, that it caufeth the falling fickneffe, conuulfion, and difenfion of the Mulcies, and for chat caufe that they ought to be fuffed with Millet, or boyled therein: or elfe if anie fhould find themfelues ill after them, for to drinke the decoation of Millet, or of Mirtle tree berries: and it will be good alfo to giue the fame to Quailes to eat. The Cockes are nothing leffe hot than the Partridge: The Henne fo Toone as fhe hath layd her egges, firtech them, and by and by after fhe hath hatched hicr young ones, fhe draweth them into fome other place, to the end that fuch as goe about to take thern,may not find their place: They be birds vfing to flocke together, and they goe away at Spring time, and returne in Winter, and in the beginning of Autumne.
Thrufhes are not naturally breeding in this Countrey, às being an exceffiue cold Thrufbers place: and hardly at anie time doe they endure this aire, and therefore it were but foolifhneffe ro goe about to fat them here. This bird is addicted to hot Countries, as alfo to fuch places as where there are great fore of Olive trees: for they doe greatly delight in Oliues, and grow fat at fuch feafon as they grow ripe. It is a bird alfo giuen to make great hauocke and fooyle : for the Thrufhes doe poure downe theinrelues vpon the Oliue trees in great flights, and hauing eaten thcir full, they alfo carrie away at their departure one in their bill; and one in their clawes, after the manner of men of Warre. They are found alfo and made fat in the mountaine and hillie Countries; but is is in Winter time : for they gather far, and fill themfelues in cold weather, if it be anie whit moderate. The men of old and ancient time did much efteeme them, and fold them in the time of the Romanes for tenne Sous Sous. a peece. Thus alfo to this day doc the Italians and Spaniards; and in this our owne Countrey, thofe of Lyons, Prouence, and Auuergnac: but they are not fo great on this fide the mountaines, as they are beyond. This bird is more fullen than anie of the aforenamed, and dieth thortly after fhe is taken, if fhe be carried out of her ordinarie ayre, or if fhe be not put prefently amongft other old tame ones: They muft haue their meat caft chem vpon a verie cleane flonre, and farre from their Derches: 1 for their Perches: and fome caft them dried figges itamped with the flower of meale,
and that fo much, as that there may fomeching remaine mere than they can eat: And fomerimes, for change of diet, they may haue caft them the fruit of $M$ flicke or Mulberrie trec, or the berries of Iuie and wild Oliue trees: and yet
notwithftanding their meat-pots muft alwaies be full of Millet, for this is their chiefe meat. Againe, you mult fee them prouided of cleare water as well as other birds afore named.

## Снар. XXII。 <br> Of the Done-house.

The profit of 2 Done-bousc.

"(5yHe profit that commeth of the keeping of a Doue-houre, is nothing leffethan that of the keeping of a Hen-houfes efpecially in refpect of the felling of young ones, and others, which euerie yeare increafe innumerably: forthere are fome Farmers which Cell, at cuerie flight, two. hundred and three hundred paire vnto the Victuallers. The care to be had about them is not fo great as that about ocher birds, neither the coff fo great, in as much as they get their owne livings the molt part of the yeare, and in that they lay fixe or feuen times a yeare two egges a pecce: yea, and oftener and greater, if you change the young Houfe-doues Pigeons with thofe of the Cote, after that they be once eight daies old, to the end they may accompanie the Cocke Pigeons which goe by themfelues without anie Matches: but this muft be done fo cunningly, as that the dams doe not perceiue it. It is true, that this bird is of great charges, and wafteth much in refpect of grounds: and for this caufe there is no ground Pigeonhoufe allowed, but to fuch as be Lords in fee fimple; neither yet veric oft anie Douehoufes in vpper roomes, except it be to fuch as haue a competent quantitic of arable ground.
Where a ground Doue-houle is permitted and lawofull to be had.

Pies and Sparrowes, male and female, dō $\overline{t i}$.

Let vs then prepare to our good liking, and for the eafe of the Hufwife, a ground Doue-houfe, out of the noife of folkes, the dafhing of Trees one againft another, and the roaring of Waters, and let it be fet in a place fomewhat raifed : or elfe let vs build it right in the middeft of the bafe Court, which is the place of our Countrey houfe, before in this Booke appointed, and that after the falhion of a ftone Tower made for a Wind-mill, or Comewhat neerely refembling it : but let it be diftant a flight or two from anie water, to the end that theold Pigeon may warme that which thee bringech for to giue to her young ones: For it is certaine, that as the Pies and Sparrowes, the male and the female, doe fit by courfes, and as while the one of them is feeking her food abroad, the other is fitting vpon the egges; fo doe thefe for the fafetie of their young ones, vntill fuch time as they be out of their holes abroad. And I would not haue you to vnderftand, that the Doue-houfe fhould onely lie open vnto the Eaft quarter in this Countrey, but that it take part alfo of the South, becaufe this bird doth greatly delight in the Sunne, beating and cafting his beames ipon their houfe, and entring in at their windowes and loope-holes, or higher lights, efpecially in the Winter time : and further, that vpon the South there be prouided a thutting and opening window in Winter, to give fome heat vnto the Pigeons. There muft not anie window be made vponthe North fide : or if there be anie, for to let in the coole aire in Summer, yet it muft be verie clofe ftopt vp while the cold endureth. Let the South window be turned toward the Barne dore: and by the fide of the faid dore let there be a Water-pot fet vpon a pillar of fone for the Pigeons to drinkeat, and let that Water-pot be made in manner of a bafen, diuided into manie partitions to drinke at, to the end, that when the Pigeons haue pickt vp the Corne fcattered from the Fanne, or ftriked abroad by the Flaile, they may haue their water neere and eafie for manie to come by together, either to drinke or bathe themfelues in: And you muft procure and fee that this Doue-houfe be buile and layd with a good and broad foundation, well couered, and the floore clofe beaten and loamed ouer, to preuent the danger of the dung, which doth vndermine and corrupt the foundation. It muft alfo be well and clofe layd and drawne ouer with Mortar
within,
within, and the chinkers or clefts which may grow muft oftentimes be fearched out and Ifopt, for feare of Rats or Mice, which is a mifchiefe often happening where there is not anie plaifter to come by : and it muf alfo be drawne ouer in like manner boufeso on the outide, for che crackes chat happen in Lime and Sand are in ftead of ladders for Fulmers, Weafels, Cats, and orher beafts to climbe vp by. And for the verie fame caufe you fhall make round about the Doue-houf, on the outfide, two our-cafts of hewed flone, or round zings of plaifter, as broad as three or foure chefle of flones: the one of thefe rings or out-laies fhall be about the middeft of the Doue-houle; and the other clofe vnder the window, at which the Pigeons vfe to goe in, \& vpon which the Pigeon alfo may fport and turnc her felfe round. As concerning the falling window and chiefe entrance into it, it muft be made higher than the dor-window, and larger alfo: And yer I meane, thar this window withour be round compaffed with white plates well mailed to the walls, and that is Thut with a falling lattice thicke wroughr made orifend fil by angine cueving and monnis the danger of Owles and Yennie whuppers. The holes made of earch croden with ftraw, are nore kind for the Pigcon than thofe of Boord, or fquare Tyles,or of Plaifter, howfocuer they be fubieft oo grow full of chinkers and vermine, which infecble the Pigeons when at anic cime chey feize vpon them: And therefore, fy you will haue them good, you snuft draw them ouer with a ftrong cruft of Lime within and with* our. Againe, howfocuer you make them for matere, yer they muft be made follarge, as that the Pigeon may turne her felfe in them, keeping her feathers vnruffed; and fo high, as thar the Pigeon may ftand vpright in it,and not touch the top with her back. If etcher of thefe two points be milfing, then fhe leaucth her hole defolate and forfaken, and oftenumes che houfe to.
It will be good alfo, in refpect of fome beafts which are enemies vnto Pigeons, to hang in the Doue-houfe the head of a Wolfe, which partly by the fmell, and parrly by the fhape, driucth away fuch bealts: or elfe to fticke fome branches of Rue in the windowes or dores of the Doue-houre. Vpon the pinnacle of the roofe make the picture of a Pigeon, either of Potters clay, or of Plaiter, to draw fuch as flie by, thither. Prouide in fome place about your Doue-houfe good fore of Pors for Sparrowes, with ftickes of thome to hang the Pors on, and ochers to reft the Sparrowes vpon : and withall, beware chat this mournefull brds doe not take vp his habitation in your Doue-houfe, for hee would make wild and eftrange your young Pigeons.
To ftore a Doue-houre, you mulf firf confider the concents of it, as whecher it be made to containe manie, or bur a meane fort, or bur a few, and foto pur wherein an ane Goffes a Dowes fwerable number of Pigeous : Twentie paire of Pigeons are ynough for chree hundred holes: Likewife it the Doue-houfe be of a thouland holes, or moe, then fo fmall a companie would nor be ynough; neither indeed would they loue it, they being of fo fmall a number, but would goe away or die in the end.
The Pigeons wherewith you mind to ftore your Doue-houfe mult be young ones, taken when they are halfe downe and halfe feathered, togecher with the old ones their dams, and fo put ac libertie in your Doue-houfe, or racher in grear Cuwpes, and caufe them to be fed winh Fetches and water wihh fome skilfull handler of Pi geons twice a day, fo long as till they become to eat and drinke by themfelues: for by this meanes they will foone haue forgoten both their old houfe, as alfo the old oncs, and fo will yeeld themfelues willingly to carrie in fuch Doue-houfe, as wherein you will firf lodge and pur them; which the old ones would not doe: for being tranflated from another place, they would find out the way to take their flight di. rectly to their former and firft home, fo foone as you had made chem way to get forth., how farre foeuer they had beene brought. The Pigeons good to encreife fore, are the afh, browne, and blacke coloured ; the rough-footed or coppild ones are too mournefull, and keeping too much at home: FO in like manner are they which are of colour like to a Snailes bellie; the pie-coloured ones and the hooded ones, thofe which glifter like gold about their neckes, and haue their cyes and

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feet red, are the freeft of all ocher. The white are ftrong to bring $v p$, but moff fubiet to the Kite and ocher rauenous birds, becaufe chey are veric ealily perceiued as they flye by a farre off. You muft make your choice of the May flighr,becaufe there is no fuch teare of them for the cold : They grow more eafily, and thriue better, and are fooner able to get their owne meat. Aboue all things, let them not be pinched of their meat in the monechs of A prill and May, becaufe the old are veric maniie of them fitting, or elfe haue alreadie hatched.
For to make them faniliar and tame, giue them fome Honey, or fome litele pieces much) and fometimes Wheat among the ridled fraps, and let them not goe out till after fifteene daies of your putting of them in, during which tume you fall cut their wings : you thall keepea ner fpread ouer the windowes, to the end that they may haue the light of the day, and yet not be able to get forth : About the end of fifteene daies you fhall permit them the fields, taking away the faid nets, and yet not before night approch, the time being cloudic, darke, and inclned to raine : for they will not goe farre from the place of their late inlargement, neither will or can they Foffibly but returne vnto the Doue-houre, if it were but to hide their heads that night: In doing whereof, they will learne to marke the place of their recert, and nor furfake or lcaue the fame, hauing neuer had the caft of anie former choice in anie farre remoued place, to returne thither againe. Further, if you lay vpon the window, made for them to light ypon at the comming to the Cote, a loafe made of red earth, Cumimin feed well bruifed, Honey, and Brine, all being well boyled together, and dried in the Ouen; for hauing picked vpon this lumpe, they will neuer fayle to recturne thither againe, they are fo much giuen to the pleafing of their tafte : And furcher, by the verie fent and fmell of this remayning about their billes, they will bee the meanes to allure others along with them euen to their Core, which for the forefaid commoditie fake they will learne neuer to leanc or forgoe.
You fhall alfo keepe them from flying away, if you giue them Lentilsfteeped in honied water, or boyled in fome cuted wine : or elfe drie Figges, mixed with the meale of Male and Honey. Some fay alfo, that Pigeons will neuer goe away, if there be fet vpon the Turret of the Doue-houfe the head of a Bat, or the branch of a wild Vine: or if the dores and windowes of the Cote be rubbed or annoynted with the oyie of Balme : as alfo that Pigeons when they flye into the field will bring home others with them, if you rub their wings with the faid oyle of Balme : or if you giue them, before their going thither, Feeches, befprinkled with wine :or fhall haue fteept in fuch liquor for them the feed of Agnus caftus; for other Pigeons, after they haue fmelt the fauour of your Pigeons mouthes, will not fayle to come with them to their Pigeon-houfe. Perfume oftentimes your Doue-houfe with Iuniper, Rofemarie, and fometimes with a litete fine Frankincenfe; for that doth mightily retaine and keepe them, and caufech them to loue their owne houfe more than anie other. When you fhall perceiue that they begin to lay, giue them then what libertie you can : and you fhall fee, that by cafting of them morning and enening a little cleane Corne vnder the Barne wall, and farre fromshe dung, and in caufing the Water-pot, wherein they bath and refrefh theinfelues, to be oftentimes made cieane, that they will draw diuers ochers from other places, infomuch, as that your twentie paire in fortie dayes will haue flored your houle with twice, yea chrice fo manie; for they bring forth young thrice, and thofe which are good, foure times a yeare : and youi thall not need to care for anie thing, but to keepe the Douehoure cleane. And for this caure it behooucth him that hath the charge of the Doue-houfe to goe into it once a weeke at the leaft, and that in the mornugg, or at the cimes of reliefe, when as the Pigeons are in feeking their mear, and abroad in the Countrey thereabout : for feeing that they doc oidinarily keepe their noonetide in the Douc-houfe, if he fhould enter in at that houre, he flould make wild and eftrange the young ones, yea the old ones themfelues. In going in, he fhall whifte

[^1]them, and caft them fomething to eat, to the end they may be accuftomed with him, and acknowiedge him : Hee fhall emprie and fill vp againe their Water-por with cleare water, he thall pare the floore, he thall caft out fuch as he fhall find dead : he fhall make cleane the holes, to the end that they may not gather anie Fleas, Lice, Punies, or Mothes : efpecially in Summer he hall not pui vp againe into their holés fuch as may be fallers out : he fhall cull out the barren, thar he may put them in fome place by themfelues, that fo he may fat chem, and aferward cither cat of fell them: And if he perceiue the traine of anie Snake or Adder, hie fhall fet along earthen pot vpon the tayle or bottome, and fhall put within it a Pigeon, and placing it right iñ the trade and walke of the Adder, he fhall fee by it fome kind of lietle foot-pace, or fuch other thing, whercby fiee may creepe vp vato the top of the por, and caft her felfe in afterward; for the Adder cannot come forth agains: and fo you fhall cleanfe and rid the Done-houfe. It is rrue, that Pigeons doe require fome coft in Winter, when either through Froft or Snow, or when the Corne is fhot, chey cannot find anie thing in the field: but this paine is not paffing two moneths continuance, or thereabout, that you need to feed them with Corne, with the droffe of the Wine-prefle, or the flones of Grapes; of which things there may be fore and prouffion ynough gathered, during the Vintage cime, vpon a great heape in the houle Court. Likewife at this time they affoord you a flight, which is called the March flight, and they are the monf fat, tender, and daintic of all the yeare.
You fhall keepe well the dung which you take from the Pigeons, not mixing it Pigeons dxug. with that which the Kine make, or the Calues, or Sheepe, for it is verie hot, and lerueth to fat and amend the fennie and wet places of your part of Corne ground, or of your Medowes, or the young Plants and tender Hearbes, and to refrefh and relieue all Trees fubieat to coldnefle and moifture. You may alfo make your vfe thereof for the Sciatici, in making a Cataplafme thereof with the feed of Creffes and Muflard, and putting thereto a little of the Philofophers oyle: as alfo againft Head-ach, if wrought in a Mortar with che oyle of the kernels of Peachfones, you apply it to the place that paineth you.

## Chap. XXIII.

## Of the Neat-beard.

(2950Otwithftanding that wee haue yeelded and giuen the ordering of the Kine vnto the Hufwife, and that Oxen are to be kept and ordered in their meat after the famse manner: notwithftanding, in Countries, and about fuch Farmes, as where they are kept for the Plough and fale, there is prouided a man, which harh no other charge but to thinke vpon and order therm, oblerued and noted that he hath almoft as much pains and labour to take about there as about a Horfc. It is true, that a Cow is not of fo great charge to maintaine and keepe, neither in refpect of her meat, neither yet of her handling and managing; neither yet in furmiure: but the force and frength whereby the Oxe doth cleaue the ground, and draw the Care, requireth one that fhould doe nothing but attend them: notwithflanding that, he muff feed two for one; and that three of the beft Oxen in Bourbon,or in the Foref, do not fo much as one good Horfe of France,or of Beaux. In like manner it is our of doubt, that the labour of $\mathbf{O x e n}$ is not admitted of but where meere neceffitie forceth, becaufe there is no conuenient and commodious keeping of Heards of Horfe, or where Horfe is not to be come by, but out of fome farre Countrey. For though the feeding be good and fingular for Oxen, as in Flanders, and elfewhere ; yet it fallech out fo, that if they can haue Horfe to doe their worke, they doe like beter thereof than of the Oxe : Euen as in Prouence, Languedoc, and Auuergnac, men doe vfe the labour of their Mules and their young Colts
rather than of Oxen and Kine, becaufe they effect not, or difpatch their worke fo well, or yet fo fpeedily: howfocuer, yet the labour of the Oxe is marnellous good, auaileable, and profitable inftrong grounds; for they draw the Ploughes deepe into the earth, and turne oner great furrowes: as may be feene in Italie, where there are great Oxen, long and broad breafted, in Gafcoigne, Bourbnn, Poitou, Aniou, and Mayne. Againe, men of ancient time vfed no other beaft but Oxen, becaufe that Oxen are more faring for the profit of the Farmer; for they are contented to feed vpon pafture, withour anie other food or prouender, befides the great profit and good pronifion comming of them: for being either Moulder-fhot or brufed in anie part, or growne impotent and vnable to worke by reafon of old age, they are fatted, either for to fell, or to kill and falt for his ve; profits and commodites which the other kind of Cattell ( $\frac{T}{1}$ meane the Horfe) doe not affoord.
The Oxe-houfe mult be built of flone, paued with grauell, or fandie ground, fomewhat defcending and floping, that fo the moifture may nor ftand. It muft allo fland vpon the Souch, that fo it may be the more drie, and leffe fubiect vnto cold and frofie winds: it fhall be nine foot wide, and onely of fuch height, as that the Oxe may ftand vpright, and the Oxe-keeper may have face ynough to goe round about them, to lee and ferue them with fodder: as alfo to the end that feeing Oxen will be ftuiking one another with their hornes, the weaker may haue fpace to withdraw himfelfe. The Rackes muft be fo high, as that the Oxen cannot eaflily reach them.

The charge of him that is to keepe the Oxen , is to be gentle and loning vnto the
The oxee-keca
perscharge.
Oxen, drcfling and giuing them their meat, prouiding them good litter, either of ftraw, or fome other thing, to rub them cuerie cuening bifore they lye downe, and in the morning to currie them and wipe them cleane gently, waning their tayles of with warme water:T To keepe their houfe cleane, and not to let Hennes or Swine come therein; for feathers will kill Oxen, and the dung of a difeafed Swine engendrech the Murraine or Plague : To giue frefh fraw vito thefe Cattell, and to calt to them in Summer the greene fprouts and tender fhoots of the arbors of Vines, or others; and in Winter, of Beane ftalkes and graffe euening and morning. Let himbe skilfull to difcerne when Plough Oxen haue labored much or little, that he may accordingly give them a proportionable quantitic of meat, and alfo fuch as fhall be neceffaric: he may not let them take paine or labour in verie hot or verie cold weather, neither yet when it js verie moift : he may not let chem drinke quickly after their trauell:but if they be heated, fo foone as they be come home, hee fall caft a little wine into their throats, and fhall nos tie them to their Manger, vatill fuch time as their wearineffe be ouerpaft. When there commeth together anje companic of Feftiuall dáies and reft, he thall greafe their hornes, and vnder the pafterne, together with the hoofe: or elfe he fhall put vnder an Onion, rolted verie lofs betwixt two coales, tying it thercto with a cloth. Let him oftentimes make cleane and refrefh their pafternes, and not fuffer them to clẹaue or rend: and to that end let him euerie yeare caufe to be repaired the pauement of his Oxe-houfe, which will ferue alfo to keepe away veafts and vermine which are wont to annoy Oxen. Let him remoue them one farre ynough from another, leaft chey fhould ftrike one another. When they labour not,let him water them twice a day in Summer, and once in Winter, and that in cleare, cleane, and coole water : For as hath beene faid heretofore, the Oxefeeketh after the water that is cleare and moft bright, as the Horfe after that which is troubled. Let him carefully looke vpon their comming from field, whether anic of them haue got anie thorne in his foot, if they be fweatie, if the Collar or the Yoke haue caufed them anie hurt about their head, or if they be chafed about the neck, if they haue beene much pricktwith the Goad, or with the Gadflie,or Hornet, and let him accordingly apply fomething for the healing of them.
The gelded oxe. The gelded Oxe is better meat, better marchandife, and better for labour than the more proftitable for moorke than tbe Bull.

Bull, whofe flefh is more hard and tough, like a Hide, and more troublefome to driue: wherefore, of a hundred Calues that the Oxe-keeper may have, he flall not
kecpe aboue two to bull the Kine; the refl he fhall geld, all of them about when chey The time to are two yeares old, for after chis time he cannoe doe it commodioufly. It would be geld oxepe; done in Autumne, and in the later end of the Moone; and the afhes of Vine branches mixt with Lytharge muff be applied to the wound, and three daies after pitch melted and mixt with the faid afhes : you muft not let him drinke the day wherein he is gelded, and he rnull for the fame day alfo cat but a lirtle meat. The manner to The mannee of geld him is to take with two freight rules of wood as it were with quitches or pin- geldmg the Oxe cers the ftrings of his fones, then afterward to open the purfe and cut out his fones, in fuch fort as that he leaue the vpper end thereof whereto the faid frings are faftned : for by this meanes the calfc is not fo much fubject to effufion of bloud, neither yet will it be atrogether fpoyled of courage, not hauing all his pride takent away, bur fome litele efft behind and referued which may ftill expreffe his firft and naturall forme. Hauing gelded him, you mu? feed him well that he may be fit for labour, and feed him according to the feafons and times, cheering and cherifhing him by fometimes giuing him a litele falt, fometime robbing his head with your whole hand, ftroaking his backe, and rubbing the reff with louing and gentle f peeches : notwithftanding fo long as he is in the hourf, let his hornes be cied, and he clofe made faft to the cratch. Couple him with another of the fame greatnefle, grofencfle, age, and ftrengrh, tie them the one by the other, lead them into the ficld's tied together, to the end they may one of them loue another : lee them ofentimes fee the Oxen that drawz the plow, or which thll the ground, or doe any orher manner of worke : and to the end they may loofe their naturall wildneffe, lead then to heare the noife of mills, of men, of forges, and other chingswhich make great rumbling : neere vnto the time when you would haue them to draw, which is from two yeares and a halfe to three, giue then the yoke and beele fif for beafts of their age, and fixtrie daies after you fhall faften them to the waine with the tcame, to draw it through the fields, or foure daies after you fhall faften vnto the teame a piece of wood or other load. In the end, accuftome then to be put to draw before Oxen, which ate in the plongh incouraging and cherifhing them and that without any froakes; vutill fuch time as they bee made cunning: trouble and wearie them not too much with labour the firlt yeare.
If you buy Oxen for labour, take them of the fame coaft and quarter that your To buy Oxeni Farme is : for they canno acquaint themflues fo eafily with a ftrange ayre, as horfes doe: and if vponioccafion you buy them in a ftrange Countric, then buy them fuch as were bred in a barren and plaine Councrie ; and thofe will thriue and take well vvith eurrie place, whether the ayre be hot or ten Jer, or fubrile and thin. Furthermore, it remainech that you chufe them of three yeares oid or thereabout, for fooner you cannot traine then to labour, though you haue bought them: doe not labour them much for the firt yeare, and efpecially in the time of great heat, feeding them rather with good hay than with graffe ; fo they will grow able by litele and little to endure all paine, and will feare the heat the leffe, and will continue found and cherefulla longer time, yea and they will fpend you leffe : for your cattell not feeding vpon graffe, you hall gather the greater itore of hay in your meadowes) and beter then and if your beafts had brouted the graffe, being but young and peeping out of the ground. You fhall know how old they are by looking in their mouthes, To know the for wishin ten monechs of the firft yeare chey change their fore-teeth : and fixe moneths after the nexr, and at elhe end of three yeares they change them all, and when they be in their middle and beft age their teech are white, long, and euen : but when they grow old, shey become fhort, wneuen and blacke.
Labouring Oxen muft not be too fat nor too leane; and thofe which eat foftly Labouring and with leature doe abide and continue better in their ftrength. The good Oxe mulf be of meane fize or flature, gentle to handle, readie, and quicke when he is fooken to, not crauing the goad: and yee notwithflanding quicke alfo when he is prickt, and going forward readily : in regard of his nature well limmed, fhort and broad, of a fquare budie, flout \&\& ftiff, hauing a round muzzle, great eares very hairy
and matches, a wide and curled brow, a great and blacke eye, haire curled, and as in were waued, hornes ftrong, quicke, of a reafonable greatnefle, and blacke, his brisker hanging downe cuen ro his knees, his head fhort and well compafted, broad thoulders and breaft, a great dewlap and belly, a round rumpe, firme and found $\log s_{\text {s }}$. a long taile vnco the ground, fmall and thicke tufted toward the end, Araight and plaine backe, ीreccht-out ribs, large reines, frong thighes and finewie, a fhore and broad hoofe, fhort haire, fhining thicke, and thicke fet, colour blacke and red: this is the beft: The fecond and next chereto is the Bay, the Pie-coloured, and the fpotted: The white is the worft of all: The gray and yellowifh are indifferent, his hide and skin thicke and well fed, betwixt foure and eight yeares old; for at this age he is in his full frength and luftineffe.

The fiuling age of ai oxe

To know the
complexion of
an Oxi.

To take am:ay
frubls in a yous
Oxe.

- +1 : men doe vfe about a young dogge not yet made readie to range, coupling him with another dogge, whech is alreadie firted, old, and ftayed : for if your Oxe-keeper do
couple a young oxe as yet a nouice, with a well experimented and fure old one, and another dogge, which is alreadie firted, old, and ftayed : for if your Oxe-keeper do
couple a young oxe as yet a nouice, with a well experimented and fure old one, and yet to as that they be of one pitch \&eftrength: (tor this is a principall thing to match them in greatnefle, ftrength, and nature) then he which hath beenc alreadie accuftomed to worke, will guide and direct the vnpractifed vnto all the turnings of the
To match Oxen. rede, to all the fammons of the cart and plough. And if the oxe be hard to be nurtured, and yer a comely beaft, and in your judgement fir for the draught, then pur him in a great yoakc, betwixt other two of his owne flarure, which are gentle and wel reclamed to their worke, and in three daies you fhall fee him to buckle himfelte handfomely vincoitalfo.
A wd sf you will only tame them, acquaint him by little and little to indure a rope, and the fâfning of it to his hornes: and after a few daies tye him faft to a fake, and there let him ftand fafting fome certaine time : if he be fomackfull, when his heat is fomewhat onerpafled, caufe him to fmell your hand oftentimes, that fo he may beacquainted with you, and claw him betwixt the legges, and cuerie where elfe, fpeaking for the more his and their eafe, know their nature, and (if I durf fo fay) the complexion of fuch as he would haridle and breake: if he be a flow and flugginh bealt, if he lye downe often, if he be quicke, furious, and headie, fwift to lift and lay about his heeles, or to vfe his hornes: if he be dull of the pricke, trembling, gong backward rather than forward, fearefult to goe into the water: then you muft firft beat him from thefe faults, before you goe about to head-ftall him, if fo there be not anie other thing that might rather hinder and forbid him. And know, that tor to doe thefe things is fomewhat too foone before he be threc yeares old, and fomewhat too late when he is pafl five. Meat and faire words doe accuftome an Oxe to the yoke fooner than feare. And there is no courfe more expedient, than that which huntf-
$-$ and then fet him to the emptie tumbrell, and caufe him tro draw a little pretrie wow afer put into the cumbrell fome load, to trie his ftrength, and in like fort acquane himi with your cryes, words, and goads.
To lame Oxer.
Fafting for Oren. ght ane readie vfed and accuftomed to draw, and that you The Oxe thus made, will ferue you to labour and worke till he be tenne yeares old, and after that, you may fat him and fell him, for he liueth till foureteene or fixa ecene yeare old: You may alfo fit for the Geares, and vnto worke, fuch Kine as are barren or geided. But and if you buy Oxen alreadie trained to the Yoke, and fitted for the Care or Plough, your Oxe-keeper muft deale verie aduifedly with them at the firf, whether it be at the Plough, or anie other labour, and find out his manners, and how he hath been handled, and what qualities the bringer of them vp hath vfed and accuftomed them vnto, to the end they may be nourifhed and continued in the fame, to make their worke the better: bur and if you will acquaint and fit anie of your owne heard vito labour, your Oxe-kecper muft take the paines, and mult, if he be reflie, trembling, furious, or if he will lay himfelfe downe in the hear of the day, and not to correct him for his faults, neither with whip, neither with blowes
with the Goad; for the one makech him furious and raging, and the other hardenech him: but racher to bind his legges, and fo let him ftand and faft a certaine cime; for this fault commeth feldome to anie but fuch as are ouer-fed. Likewife there is a certaine manner and way to be followed in feeding of them: and the lacke of skill therein is not a little fault, neither in refpect of the loundneffe and lafetie of the beaft, neither yet in refpet of the eafineffe of the worke, which is attained when the Oxe is rather fomewhat fat than too leane : for the beaft that is high fed, if he be outragioufly heated by too much labour, is in manifert danger of dcath, by reafon of the moulting and running of his greafe throughout his bodie:and though he efcape and die not, yet will he neucr doe anie good.

Oxen are not to be fed fo frankly and full in Wiuter, when they labour not: They Ordineviemeat loue the fraw of Pulfe, as of Fetches, Pcafe, and Beanes : they are fatned with Barly for to jive boyled, and Beanes bruifed and broken : And as for Hay, it is not grudged them; Oxen. and though he hach it not fo largely as Horfes haue, yet it is his cnely mear when hee laboureth. In the Countrcy of Limofin, and elfewhere, where there is great fore of great Turneps, men vee to fat them therewith : but fuch a beaft is not foltrong, neither his flefh fo faft and folide. The young fprouts and buds of Vines doe refrefh them in Summer: and fome do willingly giue them faggoes to browfe vpon at night. They loue aboue all other things the young buds of the Vinc, and of the Elme.tree: and fuch like account they make of the drofle of the Wine-preffe. The fheaues of Wheat and Rie are good for them: and fometimes Branne mixed with fiftings; both there puffe them yp, and make them nothing ftrong. The A cornes doe make chem fcabbed, if they doe not loath them, and if they eat not all their fodder. Coleworts boyled with Branne make them to haue a good bellie, and doe nourifh fomewhat: fo likewife doth Barly fraw mixed with Branne. There may be mingled amongft their prouender the drofle of the vvine made for the feruants, but not before it be vvafhed and dried: but withour doubt it is better to giue them fuich droffe before it be vvathed, cuen fuch as it is, and fo it vvill ferue them for their vvineand meat, and vvill make them taire,deliherare, and powerfull. Nothing is better to fat them, than to feed them with the graffe which growech in the meadows in Autumne after that they hauc beene cut.
Buthough this for neceffitic fake be the manner of fedding of Oxen in France, The Eng f foma. yet to feed them atter the Englifo manner is the foundeft and beft way, and makech ner of feedng them euer more readie cither for labour or the market ; which is tofay, if you keepe cattell. your Oxe for labour onely, then in the cinie of reff to grue h:m either Peafe ftraw, Barley ftraw, or Oat fraw, is a food that will hold well ynough, if the beaf be luftie and in ftrength, buti f he be poore and weake, then to take two parts fraw, and one part hay, and mix it togecher, which is called blend fodder, is meat that will encreafe ftrength; and when you worke him fore then to giuc him cleanc hay, or ful bit of graffe, is all that he naturally defirech.
The Oxe is fubjeet to fewer difeafes than the horfe. And for to keepe him Toheepe oxen from the moft ordinarie, old and auncient meadid purge them in the end of euerie fromdijeafiso one of the foure quarters of the yeare, and three dayes following. Some with Lu pincs and Cypres-berries brayed together, as much of the one as of the other, and fet forth to intufe in the open ayre one night, in a pint or three halfe pints of common water : others with other fimples, according to the cuftome and diuerfity of the place The fichlie Oxt: and countric. He is knowne to be ficke and fickly. if he eat nut when he hath good fore of fodder or prouender before him.
To helpe the Oxe to a flomach, when he hach no tuft in his meat, by reafon of To get an Oxe being ouer-wearied, or ouer-hcated: it is vfed to rub his tongue and roofe of his afomach. mouth with falt and vinegar.
If he become faint and vnable to doe any thing, there muft be giuen to him elte- For faimtreffe vie Moneth beaten Fetches, fteeped in the water which is to be giuen him for his and dijabilitite drinke.
thin and liquid wish Oyle : but beware and take good heed that you doe not souch his muzzie or nofthrils therewith,for Oyle caufeth them to loofe their fight.
Aganft the rifing of the heart, or defire to vomite, his muzzle mult be rubbed

The rifing of the heart. coliche.

The Stithic,
Mallet, or
Haxmmer.

The flux of the belilic.

Toleornan oxesbellie.

To kecpe biom
found
The Oxe his rheume. with Garlicke or Leckes bruifed, as alfo ginen him to fwallow; or thus, that is, or with a pint of Wine, efpecially when he is troubled with the collicke, and with the rumbling of the bellie : the cullicke is knowne by his complaining and ftretcining of himfelfe in his necke, in his legs, and in his bellic: as allo, by his ofien lying downe and rifing $v p$ againe, by his nor abiding in a place, as alfo by fweating in fuch iort as if he had beene in a Bath of vvater. Sotre add thereto the Oyle of Nuss, and uthers giue hin boyled Onions in red Wine, and others, Myrtles, with Bay-berries fteepe in Wine, and they alfo caure his flefh to be prickt aboue his hooucs, or his taile vntill it bleed. The collicke commeth to him of ve varneffe, and more in the Spring than at any other time, becaufe as then he aboundeth moft vish bloud. In this difeafe he muft be walked, and couered vvith a couering of Wooll.
Oxen become fwoine and blowne vp by hauing eaten ouer ranke graffe, efpecially if therewithall it vverc oucrladen vyith dew : you nuff cakea horn bored through at both ends, annoint it with common Oyle, and put che fore part of it threc or foure fingers into the fundament, and to vvalke and courfe them thereupon vatill they breake vvind, and lecting fill the horne alone in fuch maner as is aboue faid, you fhal rubbe their bellies vvihth barre.

The Stithie happening to the Oxe, being otherwife called a Malle or Hammer, is knowne vvhen the bealt hath his haireftanding vpright all ouer his bodie, not being fo light and liuely as he vvas vvont, hauing his eyes dead and dull, his neck hanging downe, his mouth driueling, his pace flow, liis ridge bone and all along his backe ftiffe, vvithour all defire of meat, and fcarce any thing chewing the cuid. This difeafe may be cured at the beginning, but hauing once eaken deepe root, refufech all maner of cure. Whereunto take of Squilla or Sea-Onion, frmall frred, three ounces, the roots of Melons beaten as much, mixc all togecher with shree handfull of groffe Salt, and fteepe chem all in a pint and a halfe of ftrong vvine, and cuerie day you fhall giue of this vito the beaft the quantitie of a quarter of a pint.
Vnto the flux of the bellie, wvhich fometimes continueth till bloud come, and vyeakeneth the beaft much, there muft be giuen to drinke in red Wine the foones of Raifons, or Galles and Myrtle-berries vvith old Cheefe delaied vvith groffe and thicke Wine, or the leares of the vvild Oliuc-tree, or of the vvild Rofe-tree; keeping the beaft therewithall from eating or drinking any thing for the fpace of foure or fiue daies. And for the laft refuge or excrea:neft remedie, it is vfed to burnc him in the forehead with a hot burning yron.
For to loofen the bellie of an Oxe, you muft caufe him to drinke in vvarme vvater two ounces of Olues made into poulder.
Admit that you would feed and fat him for labour, then you muft vvafh his mouth cuerie eighth day vvith his owne vrine, and thus you fhall draw from him much flegme. vvhich takecth from him his appectite, and doth injurie him in his meat. And ifthis flegme haue caufed him to haue the rheume (vvhich you fhall know, vvhen you fee hum so have a veeping eye, and therewithall alfo vvithout any appecite, and hanging downe of his eare) then vvafh his mouth vvith Thyme famped in vvhite Wine,or elfe rubbe it vvith Garleeke and fmall Salt, and after vvafh it wvith Wine. Some cleanfe away this flegme vvirh Bay-leaues ftamped vvith the rindes of Pomegraners : orhers inject into his nofthrils Wine and Myrtle-berries.
pijing of bloud The Oxe piffech bloud cither by being ouer-heated, or too much cooled, by having eaten euill hearbes in the Summer time, and efpecially at fuch time as the dew licth vpon the graffe : the remedie is, not to fuffer him to drinke any vvater or other thing: to cuufe him to take downe a drinke made of three ounces of Muffard.feed, three ounces of Sea -millet, both ftampedd together, an ounce of treacle, all boyled, in two pints of white Wine, afterward diffolue therin two ounces of Saffron, and make the bealt to drinke it.

Againft the rheume and eyes chat are fwolne and puffed vp, it is vfuall to let the The ibeumie beaft bloud vnder the tongue: or to make him talke the juice of Leeckes, Rue, Smal- in OXer, lage, and Sauine well purified.
For the fpots in the eyes, there is commonly made an eye-falue of Sal-armoniacke, Spots in the moiftened and foked in Honie: fome againe vfe to annoint the eye all round about Eyco vvith pich well tempered vvith Oyle, becaure there is danger in the Honie, as which might draw Bees and Wafps about the beaffs continually.

If he haue the Barbes (which is a flefhie fubftance growing vader the tongue) The Barbets. shey mult be cut, and afterward rubbed with Sale, and bruifed Garlecke together: after this his mourh muft be wafhed with wine, and with a paire of pincers you nuft pinch away the Wormes which breed vnder the fame tongue.
To cleanfe the inward parts of the ficke beaft thoroughly, there is norhing more To pourge foueraigne than to take the droffe of Oliues after the Oyle is prefled out, and to vfe it Oxen. oft abour the beaft.
Vnto an ague which may befall him by ouer-great trauell in hot vveather, with $\mathcal{A}$ Fener. heauineffe in the head, fwolne eyes and extraurdinarie heat, which is felt by touching the skin: the remedie vfed is to let him bloud vpon the veine of the forchead, or of the eare veine, giuing him therewithall cooling meat, as Lettuces and others, and vvalhing his bodie vyith vehice Wine, and then giuing him cold vvater to drinke.
If the pallate of the beafts mouth becing heaued and fwolne, doe caufe him to forfake his meat, and ofen rimes to grone: it vvill be good to lee him bloud vpon the veine of the fayd his pallate : and thien after his bleednng, you fhall giue him nothing to eat but Garlecke vvell foked, bruifed, and husked, with the leaues of the fame or other greene ching, or verie foft Hay, vntill fuch time as he find himfelfe well.

The difeafe of the Lungs is fo defperate and vnrecoucrable both in Oxen and Thediferfe of Kine, as that chere is no other remedie, but to vvafh the fall wherein they haue food the Lhngss vwith vvarme vvater and fweet fmelling Hearbes, before you faften any other therein, which alfo in the meane time whiles this is in doing; muft be beftowed in fome other houre. This difeafe happeneth vnto them by reafon of euill hearbes, or naughric Hay which they eat, or of the, ouer-great aboundance of bloud, but moft of all through horfe piffe, and yer more efpecially by keeping the beafts houfes too clofe and ouer much fhut. And this is the caure why Mares nor Horfes (yet verie vvell Affes) can or ought to beleftin Oxe-houfes, becaufe that the breath of Affes doth preferue cattell from this difeafe.
For the Cough there is ordinarily giuen to drinke the decoetion of Hyflope, and The cougho, to. cat the roots of Leekes, flamped with pure Wheat : others give to be drunkenfeuen daies together che decoction of Mugwort.
If in drinking he fwallow a Horfe-leach, and that the fame doe faften her felfe by the vvay in his throat, then he muft be caft downe vpon his backe, and warme Oyle poured into his mouth; but and if fhe be got into his ftomach, there mult Vinegar be poured in.
If he happen to to haue his horne broken or fhiuered, take fixe ounces of Turpen- His horze broö tine, and one of Gum A rabecke, boyle it all together, and with that oyntment rubbe the horne all about euerie day, for the fpace of ten or twelue daies : which being expired, beat Bole-armoniacke with eight whites of Egges, fpread this compufition vpon plegets, which you fhal lay vpon the horne, leauing them there three whole daies: afterward when thefe plegers fhall begin to be drie, take them away, and in place thereof fpread round about the fayd horne, Sage made into poulder; the horne will heale.
Tofaften a horne which is verie loofe and readie to fall off: firft you fhall feet Aloof home, clofe and faft the horne in his place, afterward you fhall annoint all the vppermoft part of the head, for the fpace offue or fix daies with an oyntment prepared of bruifed Cummin-feed, Turpentiue, Honie, and Bole-armoniacke, all of it being boyled
and incorporated together, afterward you thall foment the horne vvith a decoction of Wine, vvherein haue beene boyled the leaues of Sage and Lauander in fufficient quantitic.
The neckef wooln
${ }^{2}$ If the necke be fwolne that it caufeth fome fufpition of an $A b f$ feffe or A poflume: then you muft open the A poftume with a hot yron, and put in the hole where it was opened, the root of Sow-bread, or of Nettle, and this you fhall renew of ten : it will not be amille to give hin to drinke a great por full of the decoction of medicke fod. der, and in like manner to let him bloud.
The necke fiead or chafed.

If theneck be chated, put vpon the fame an emplaifter made of the marrow of the thigh bones of an Oxe, the feame and greafe of a Male-goat, and Swines-greafe, all being inixt in like quantitic, and molten altogether.
The chine pild and bald.

If the hinder part of the necke be pilled and growne bald and bare without haire, annont the place with a liniment prepared of lixe ounces of Honie, and foure ounces of Mafticke, all boyled together.
The chine For the hardneffe of the hinder parts of the necke, let him take his reft certayne growne bramony daies, during the which time rubbe the place with Butter, Honie, Larde of Porke, and hard. and new Wax in equall quantitic. all being molen and mixt together.
Thecbine For the fwolne Chine, make an oyntinent of the root of Elecampane well boyled, fivothe or puf- and ftampt with Hogs-greafe, the fat of a Weather or Male-goat, raw Honic, Franfed $v$ p. kincenfe, and new Wax; with which you thall rubbe the faid Chine or hinder part of the necke thrice a day; Euening, Morning, and at Noone tide.
Hide-bound. If he be fo leane as that his skinne feeme to cleaue to his ribbes, foment his skinne againft the haire with Wine and Honie, being in fome warme place, or in the Sun: after annoins him with the Lees of Wine and Hogs-greafe, all mixt together, and made in forme ot a linment.

For the paine of the bellie, giue him to drinke Treacle, or Mithridate mixt with Wine, atterward let him bloud the next Morning inder the tongue, and in the nofthrils, or elfe caufe him to drinke the decoction of Rue and Cammomile finely powdred, and let him reft at the leaft feuen or eight daies, giuing him but fmall to eat, and keeping him well couered in a warme houfe; foure ounces of Turpencine incorporated with a litcle Sale finely powdred, is a fingular remedie for the difeafe, if you make him také it in manner of a bole, pill, or drinke.
'For the falling out of the Draught-gut, take three ounces of Turpentine, caufe leane withall, to annoint it diligently, and this to be continued for the fpace of foure or flue daies : in ftead of the Turpentine, the greafe of a Hogge will ferue for an oynunent.

For the loofenefe of the bellie, which commeth of hauing eaten Hearbes, or fuch other like chings of hard digeftion : firlt keepe him from eating of any Graffe or Hearbes for thef pace of two or three dayes, in the which time you fhall giue vnto him the leaues of the vvild Oliue-tree, Plantaine, Horfe-taile, and fometimes of Nighthade-berries; and againe, during this faid time, you fhall giue him but little to drnike, this is to fay, juft nothing for the moft part. Otherwife, fee that he eat no other things for certaine daies, than the Leaues of Organe, and garden Southernvvod, and euerie day you muft allow him onely the quanitice of two eawers of water to drinke.
The bellic
bound.
To loofen his bellie, take two ounces of Hiera, one ounce of Aloes Hepatica, mixe them both vvell in vvarme vvater, and caufe him to drinke them in the Morning.
Abrohen legge It hehaue a broken Legge; for to fet it, draw it your felfe, or caule your feruants cuiningly to ftretch the Legge with a rope, right ought, not more to the one fide than to the other, that fo the broken bones may be joyned and placed againe in euen fort: Afterward, let loofe the two parts, that fo they may joyne clofe togecher; apply abone the place pleagers dipt ina compofition made of the whites of egs,bole armenack, and dragons bloud; thentic vp the member fo ftrong and ftreight, as that
theetwo ends of the bones broken mav joync and grow together againe : aboue there bands applie yet other moe pleagets vvet in Wine, for the comforting of the finews. And to the end that the vpper and lower broken bone may not grow hard or get any other ill difpofition or qualitie eyther by reaton of the binding, or elfe by reafon of the fracture it felfe, you fhall rubbe both the one and the other part, wvith a liniment made of an ounce of Turpentine, with as much Butter, and the like quantitie of Oyle.
For a Legge that is out of joynt, or by fome meanes difplaced, reftore againe the bone into his former place, and bind it vp after that you have annointed it vvith Hogs-greafe.
For afweld Foot, make an emplafter of the leaues of Elder-tree and Hogs-greafe A sould Foot?
vell boyled and mixt together. vvell boyled and mixt rogether.

For airoundred Foot, take the roots of Mallows, and Hollihocks, boyle themina fufficient quantitie of vvater, ftampe them and fraine them through a ftrayner, to that which is frayned out put halfe a pound of Hogs-greafe, three fmall pors of verie frong Wine, boyle them aitogether, vntill the greafe be melted, then put thereto of Linfeed vvell bruifed and beaten in a morter, and fo boyle them altogether to the coniumption of the Wine. Applie fome part of this, cataplafme unto the foot, and let it remaine there three vvhole daies; and then taking away the fame, apply the reff for ocherthree daies.
For Surbstring, or Lameneffe, you may boyle Honie and Hogs-greafe in white Wine; applie vinto the Foot this emplafter, and there let it remayne three vohole daies.
For the Foot pricked wvitha Naile, Glaffe, Thorne, or any fuch other thing that is fharpe, cut the horne of the hoofe as neere vnto the prickt place as poffibly you can, atterward drop into the hole of Turpentine and Oyle, both hot; and lay a plaifer of Honie and fweet Seame melted together all ouer the Foot.

For the Claw that is clouen or Chiuered, take Honie, new Wax, and Turpentine, of each an ounce, and make an oyntment, which you hallapplie round about the Claw for the (pace of fifteene whole daies, vvhich being paft, add vnto this oyntment Aloes Heparica. Mel rofatum, and Roche.Allome, of each halfe an ounce, coner therewith the whole Foor, afier you haue bathed ir in warme Wine mixed vvitḥ Honic.
For the Claw hurt with yron or ftone, digge and pare away the Claw euen to the bottome of the hurt, vith a Smiths paring knife: drop ineo the fore hot oyntment made ofold Swines greale, and fewet of the Male-goat melted togecher, and put into the fore, tents of row dipped in the faid oyntment.
When the hoofe is like ro goe off, you mult firft falue it with the oyntment fpoken The going off of before for the Ghiuered Foot or Claw, and that fo long as vitill the horne of the of the Hoofe. hoofe be fomewhat faftned to againe : afterward, you muft foment it for the pace of flue or fixe daies, thrice euerie day the whole Foor with Wine or Vinegar, wherein have boyled vnquenche Lime and Honie, of each feuenounces.

For the piffing of bloud, caufe him to drinke the juice of Plantaine, with veric Pifing of bloud good Oyle : and afterward, cake the poulder of Tartar, and of vvild Gourds, mingle them vvith red Wine, and the vvhites of Egges, and make him to drinke them vvith a horne: And if this doe not flay his piffing of bloud within foure and. twentic houres, he will die.
If heftale not bur with paine, let him bloud of the bladder veine, and caufe hin Not to be abie totake a drinke made of Honie, Oyle, and white wine all bouled togecher, for three topijfe. Mornings one after another : afterward, let him reft for cight daies.

If he haue aftone in his yard, frift caft the Oxe downe vpon the ground; after let The fione in frim take hold vpon his. pifle with pincers, fomewhat higher than the fone lieth; the yard. then let him make incifion in the fide of the Oxe his pifle to draw out the fone, and then laftly confolidate and heale vp the wound with T urpentine wafhed foure times int dae water of Horfe-taile.

The fone in the bladder.

Ifhe haue the ftone in his bladder, take two ounces of Sea Fennell ftamped, two drams of Cloues,and a dram and a halfe of Pepper : poune them altogether, and make him drinke them ini red Wine warme. If after you haue continued the fame fome certaine daies the ftone come not forth, then in the end you nuft cut the bladder, and fo draw it out.

If his pifle be hardened, annoint it with the oynement made of the ftamped rocts

For the hard-

## nes of the pigle

The Shouldir out of ieynt. Strangles. For his Thoulderout of joynt,you muft firffet it in ayaine, and afterward bind and roll it vp againe with fplenters, verie clofe and faft.

For the frangles or glandules vvhich happen vnder the Oxe his chroat, and fring from the braine ouer-cooled, plucke away their glandules, and after couer his head vvith fome couering, and chafe and annoint vvith Butter his chroatoftentimes.
If his pallate be fwolne, open thefwelling quickly wvith an incifion knife, or hos The pallat of his yron, that fo the corruped bloud may run forth : after giue him for his meat fome mouth fivolne.

## The swo lling

Gralle or foft Hay
If he haue the Ranula vider the tongue much fwolne, then open it vith a hot yron, or a verie fharpe incifion knife, afterward rubbe it vvith Salt and Oyle fo long as till all the corrupt matter be run out; then in the end giue him fome tender hearbes or graffe to eat.
The toung clowert $_{3}$

Lofe of appe tite. oyntment made of Aloss, Roche.Allome, and Honie of Rofes, all being mixt together, then varh them in Wine vvherein Sage hath boyled, or fome fuch other drying herbe.
If he haue loft his appetite, caufe him to dwallow raw Egges well beat together wich Honie, and mingle Salt among his meat, or giuc him in drinke fome horehound finely pouldred with Wine and Oyle : or ftampe the leaues of Rue, Leekes, Snallage,and Sage, and giue him chem to drinke with Wine.

For the eye that is troubled and darke, blow wirhin it of the poulder of Cutticbone, Sugar candie, and Cinnamon verie finely pouldred.
For the fwolne Eye, applie thereto a Cataplafme made of the the flower of Wheat mixt vvith Honie or the vvater of Honic, after the manner of pappe for children.
For a vvhitevpon the eye, applie thereto a cataplamemade of Sal gemma, and

The tumor cal. led porrum.

The weeping eye.
The Cataract.
For the Cataract, which is nothing elfe but an aboundance of vvaterifhneftes ingendred eyther by ouermuch cold, or by too long ftay and refpite within the Eye of the Oxe, in that place where the watrie humour is placed, vpon which the glaffe humour fwimmeth, as the Chryftalline againe vpon it : For the cure chereof take ground Iuie, and fampe it long in a Morter of vvood, of the juice frayned out of it make a medicine for the eye: infteed of this herbe, if you cannot recouer it, take the berries of Tuie or the leaues, and draw the juice of them in manner aforefaid. Continue and ve the one medicine or the other for many daies both morning and euening, the Cataratt will confume and waft away. It is certaine that who fo infteed of Water fhall vfe Wine, fhall feeme to deale more fitly and better to the purpofe.


Epiphora, a difeafe of the eye; called a drie inflammation of choler, is when the Epiphora. beaff feeth not but by halfes, whecher it be of the one cye, or of both: bloud taken away from vider the eye, doth correct and amend the fight : And further, you mulk continually drop honey into it vntill it be perfectly cured.
For bleered eyes, which come with continuall falling downe of excrements out of The bleered ige. the braine, take Myrrhe, fine Frankincenfe, $\&$ S Saffron, of ech two ounces, mix them all togither, $\&$ diffolue them in ceftern water, make therof a Collirie to drop into the eies. -For the agues of $O$ xen, you fhall know it by cheir being exceeding reftleffe, and $A n$ aghe trembling all ouer their bodie, by their great heat in the midft of theirf forchead, and
towards the roots of their hornes, and in their eares; their mouth is verie hot, and fweat aboundantly, and withall, eat almoft nothing at all; the hanging out and drawing in of his tongue verie drie ; heauie in his head; his eyes diftilling, and halfe fhur; his muzzle filled and all to be driucled with flegmatike water; and his taking of his breach long: and yet notwithltanding hee doth not, without great paine and much diftance of time, complaine himfelfe, or turne often. The firtt day that you Shall perceiue him thus ficke, let him faft all the day long: the next day let him bloud in the morning whiles he is fafting, and that vnderthe taile in fmall quantiric. Fiue daies after youl hall feed him with the decoction of Clor-burre with honey and brine; at the leaft you fhall offer him this before all other mear, either greene or moift, as thall be the crops of Lencils, and other young fprouts and buds which you Thall thinke meet and conuenient for the beaft : wahh his mouth thrice a day with a fponge dipt in vineger, and after that, you thall make him drinke verie cold water in like manner three times, and fo you fhalllet him goe into fome pafture ground, vneill his Ague haue cleane left him.

The Cough of an Oxe mult likewife be as carefully looked vnto as that of the Horfe; for it mult nor be fuffered to grow old and endure long vpon him, feeing it is not curable but at the beginning: you fhall make him take fafting halfe a quarter of a peck of Barly meale, wherein you fhall put a whole egge, the fhell excepted, and with a quarter of a pint of cuted wine, you fhall make him drinke it with a horne, or otherwife: Or elfe take of Degges-grafte and ftampe it, after mixe and fteepe it in warme water with Beane meale, cold Gruell, and che meale of Lentils, all chis being well mixed, you fhall giue it to the beaft early in the morning. For an old Cough it is fufficient to take two handfuls of Hyfope, old or new, and make a decoction in common water: after, when you haue ftrained it, you fhall mix therwith of the flower of Starch two parts, and caufe the beaft to take them thus. The diftilled water of Hy fope may be pur amongft, or elfe che decoction of Mints and Hyfope together. The iuice of Leekes is good for the fame, being preffed out well and ftrongly, and giuen -. with oyle Oline : for there hath not beene knowne fo old and long growne a Cough which the roots of Leekes, Wathed, made cleane, and given in decoction with the - Hower of Whear, hath not put downe and rebaced the ftrength of. Of the fame effeat is the flower of the euerlafting. Tare, commonly giuen and vfed, or offred with honied water, at fuch time as the Oxe driuelech moft at his mouth. that he can neither goe nor doe anie other thing well, make fomentations, and apply cataplafmes, with the decoction of Camomill, Melllot, and Linfeed.

For the ach of the head, bray Garlick in wine, and make him lee it downe through his nofthrils: after bath all his head with the decoction of the leaues of Sage,Maric-
rome, Lauander,Rue, Bay leaues, and Walnut-tree leanes in wine rome, Lauander, Rue, Bay leaues, and Walnut-tree leaues in wine,
Scabs. $\quad \begin{aligned} & \text { Scabs are healed with Duckes greafe mingled with oyle Oliue : or elfe take the } \\ & \text { gall of an Oxa, and powder } \\ & \text { and }\end{aligned}$ with Sulphur viuum, adding thereto Myrrhe, Oyle, and Vineger, ànd a little plume Allome well brayed and fmall powned.
Exulcerated places, caufed either without manifeft occafion, or elfe by fome acci-
dent, are verie much holpen with the powder of Galls well brayed in a Mortar: So dent, are verie much holpen with the powder of Galls well brayed in a Mortar : So
are hey likewife by the iuice of Horehound, wherein hath beene feept the foot of a are they likewife
Smiches Forge.
The difeafes of the flankes. In the difeafes of the flanks, wherewith Oxen are oftentimes tormented, you mult make a Cataplaime of three handfuls of the feed of Coleworts, with a quarter of a peck of Starch well powned together and mingled with cold water, applying it afterward vinto the pained places. But the mof loueraigne that may be found, is, to take of the leaues of Cypreffe, withour the boughes, three handfuls, and to doe as is abouefaid, adding thereto ftrong vineger, to knead and diffolue the fame in: bur if this will not, chen take three ounces of Perrnfin, or Colophoni, which is more hard, and diflolue and make them liquid at the heat of the fire, and whiles it is yet good and hot, mixe therewith the flower of Barly, and make it all boyle together,
and fo you fhall applie this caaplafme verie hot vpon the flankes, and foivp to the reines.
Ir is to be knowne char the Oxe hath paines in his reines when lie feemech to draw Tre paine of the his hinder parts afer him, and cannot litt his legges behind for his beft eafe, he ftag - reines. gerech and fotrecth behind; he breakech not vp his taile, but fufferech it to draw all along after him; his thale hath an ill fent, and all his hinder loynes fhew heauic, mooue not but conftrayned; and that in mincing manner. Iftherebe any inflammátion about then, he piffeth red as bloud: If this continue, and chathe caft forth much fuch, there iss chen no more remedie : bur and if it be bur a litele coloured with bloud, there is fome hope of rccouerie. For this difeafe you fhall caufe him be let bloud vpon the taile veines belind, or elfe of the veine called the Mocher-veine, which is found along ft the flanke, to draw neere viro the reines. For his drinke make him to take the juicc of Leeks vvith vvarme yvater; or elfe his owne vrine.
For the inflammacion of che mufcles as well outward as inward of che reciucs and ${ }^{\text {nnfammation. }}$ flankes, vvhich cormmech of fome fall that the beaft hath taken in fome hard and flonie place, and vvlaich happencech not withour the companiie of ac contufion, appoint that the Oxe which hath fallon, fo foone as he conmeth into his houfe, doc noc remoue fromone place, bath the hurt part wich rold vvatect: after dhat, vfe and ape lie vnto it comfortabie liniments and feare-clorkies which may no be too hor. The markes of his difcafe are, the outward parts ouer againft the reiries are hard, the cods hung fhorr, being gathered into the bodie, and that in fuch fort as that there is not much of them lettout to befeene; he ftirech not his hinder legs vvith any eafe: and vvhen he is laid, he rifech not but vvith veric great paine.
Of verie great cold gotten by hauing trauclled in'fnowie and frofen places; or elfe Paine in the. after fome thaw : the faulcallo may be committed in not hauing his pafternes fo well bathed vvith vrine, and coured ouer with dung as shgy fhould ateuening after his labour: for vpon chefe caufes the hecle growech exulcerated, and maketh fhew as shough it would fall off and loofe his place; there beginnect a bearing out, vwhich afterward turnech to an vlcer, and troubleth the gate of the Oxe: the place muft be verie deepely fcarified, and a fleight fire appleed afterward to the places fcarffied, and againe vpon the places fo forched the fweet oynthent, ocherwife called oyncmentor Rofes, vvich a defenfaciuc of vinegar and vvater, and fo bound vp and rolled. The core once fallen out, the place muft be vvathed vvith vrine and vinegar made hot : afer this, there muft be an emplaifer or cataplafme of Meliloc made, cither of che fore appointed, or of old Swincs-greafe, vvrought and plied betwixt your two hands.
If the cods be fwolne vponany occafion whafoeuce, y'cu fhall annoint chem cue- The cods spobine ning and morning vvith tweee feame, or elfe bach them vvith ftrong vinegar, wherein fhall be eempered fine fullers carth, anid the dung of Oxcin. Sorne hold it for a naturall remedic to have che dung of a dogg to curc the fwellings of an Oxes genitories, it fo that they be often rubbed therewithall.
The Oxe is inchanted as vvell as she horle, either by hauing eaten, or by hauing The inchanted
 he becommedh fad and on or chercfull and quickc as hev was wonn ar his svorke, yea he


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 him to rake chis purgation, the roov of fhe Sea-onion, or Harss-chornc, and of conmmon effes ofthe 0 axd Salc, all being boyled in vvacer, and daken in the fance vvacter vvarmes, and giuc him noolhing to drinke or eat vncill it hauc donc purging. And to the end that you may ${ }^{1}$ kecepe him from being ficke all the y yare, at che beginning of the Spring, Summacr, Autume, and Winter, cante hiun to take downea drinke inade of flye leaues of Capers, Merecuric, and Cypres pouned and mixed in water, and lecrefl inthe veffel one whole nigh hs,and foc continungeg this for three mornings.

The biting of Adders, Scor. pions, and Shrews.

The finging of Hornets.

Agsing the ea
ting of Bupre.
ftus, and the
Snaile,

Scabs and Ul. cers, Cornes, and Apofuracs.
eyes. .ふ",
spots.
The weeping
Eye.

Paines of the
Flankes.
i-1.

Paines in the Reynes.

Scabs and lice.
For the fabbe, you muft rubbe it with his owne ftale, and with old falt Butter, or annoint it with Perrofin melted in white Wine. Vnto Lice, you muft vferthe decoAtion of the wild Oliuetree with Salt, and you muft take away the bladders which he hath vnder his tongue. For the paine of the Lungs, fome make him drinke the juice of Leeks with fweet white Wine : and fome pur into his eare the root of Hazle tree:

For che difficultic of breathing, fome doe pierce his eare, or the great skinne of

Difficalt and
bard fetching
of his breath.
Shoulder pitcht.

If he hauc beene bitren of any, Adder, Scorpion, or Shrew, or Mad-dogge, it is ordinarie to annoint the wound with Oyle of Scorpions, or widh Sopetenmpered and foftened in Vinegar : alfo fome vfe to wyath them withithe deco ction of Butterburre.
And againft the ftinging of Horncts, it is accuftomed to rubbe the place with Cerufe tempered in Water: and fome doefprinkle the place of the Oxe his feceding with the decoetion of Bay-berries, thereby to caure the Oxe flies to awoid and keepe away; or elferhey rub the Oxen themfelues with the faid decoction: and if he bealreadie fung, fome doe moiften the place with the Oxe his owne drinell.
. The fmall beaft abiding in the graffe, called of the Latines Buprefis, and refembling in furse fort the bealt which the French men call Fowillemerde, if it be eaten of Oxen, Kine, or Horfe, as they feed in the meadowes, it fo fwelleth them as rhat they burft and die, as we haue oblerued in many, in the yere paft 1572 . Now if the Neatheard doe perceiue that any of his Oxen or Kine haue eaten any of thefe beafts, he muft make thens prefently to drinke fome Cows milke, or the decoction of drie figs, :or Dates in Wine, and withall giue them verie frong Clyfters.
For the fcabbe, fome rubbe them with bruifed Garlicke, Sauorie, Brimftone, and Vinegar of Galls flamped in the juice of Carmint,or Hore-hound and Iuie. And as forivicers, they are rubbed wich Mallows flamped in white Wine : and as for cornes and apof tumes, they muft be killed with ftrong leauens, onions, lillies, or fquils and vinegar, and after ward to digge chem out, and wafh them with the beafts owne flale hot, and alfo put into the hollow places tents of Tarre; and finally, line dipt in Goats or Oxe fewet.
For the paine of the Eyes, if they be fivolne and puffed vp, there mult be made an Eye-falue of the floure of Whear kneaded with Honie and 1 Warer.
..If there be in them euer a fpot or naile, you mult take Sal-armoniacke, and make anoyntment thercof with Honic.
When the Oxe hath his eyecontinually trickling downe teares, and berayeth all his cheekes with the humour dropping downe from it, take of the pappethat is made with Wheat floure, and make a cataplafme to be applyed vnto the eye. The vvild Poppie,ftalke and root,ftampt with Honie, lerueth to make a medicine for this purpofe.
In the paines of the flankes, which oftentimes turment Oxen, you muft makea cataplafme of three handfulls of Colewort feed, with a quarter of a pecke of Starch well ftamped together, and tempered with cold water, and after applie it vnto the parts pained. The beft remedie that can be found for them, is to take of the leaues of Cypres without the boughs three handfulls, and to doe as before, adding to them frong vinegar to worke and diffolue them in.
In the paines of the reines, you mult let him bloud in the veines vnder the tayle behind, or elfe the veine called the Mother-veine, which is found along the flankes drawing neere vinto the reines : for his drinke giue him of the juice ot Leekes with warme water, or elfe with his owne vrine. his throat, with the root of Beare-foot, or Lyons-paw, or Hellebor.

If he haue his houlder pitcht and fhrunke, you muft let him bloud vpon the foot behind, and on the contrariefide : and if boih his Choulders Should be Chrunke, then you muft let him bloud on both his hinder legges.
If he haue his necke broken, and the chine bagging and fwolne, you munt let him
The necke bruised.
and lay vnto the difeafe an emplaifer made wirh an Oxe marrow andifewee of a male Goat, molten in equall pottions in Oyle and Tarre, or melted Pitch: as alfo to rub the fwelled part with a collop of Bacon, withour anie fat, and which is of a Hogge, and a litele heated, and this to be continied morning and euening the fpace of fiue or fix daies.

If his feet fwell, you muft apply vnto him a Cataplafme made of the leaues of smotric fett: the Elder tree, flampt with feame made of Hogges greafe.
If his hide cleaue to his bones, you muft bath hum with wine, either alone, or mingled with honey.
If he hale by taking cold on his feet, you muff wafh them with his owne fale, old and warme: If ir come chrough aboundance of bloud fall ling vpon his pafterne and foot, it muft be diflolued by rubbing it hard and fcarrifying it. If yet it will not away, and be notwichflarding bur newly fallen downe, you muft cleaue the horne of the hoofe ar the cip thereof cuen to the quicke, and fo caufe it come forth, and wrap his pafterne in a Leather pouch, in fuch fort, as that the water may not hurt him till he be whole. If hee hale by reafon of fome finew, hauing taken a blow by fomeother beafts heelc, then you mufl bath his legges with oyle and falt. If it come with anie fwelling in the knee, you muft bath ic with vineger made hot, or with the decoetion of Millet and Linfeed. In all fuch haps, you mift burne with a hot yron the part difeafed, and then put vpon it frefh butter wafht in water and vineger, and after in the end to make an oyntment with falt butter and the greafe of a male Goat. If it grow vpon anie fplint, or daih againft anie flone or flocke, you mult bath the place with hor ftale, and lay ypon it old Hogges greafe melted in Oyle and Tarre. And there is norhing that will more keepe them from halting, than to wafh their feet with cold water fo foone as they be vnyoaked, and after to chafe them with old Hogges greafe.

If the horne cleaue or fhiucr, you muff firf foment it with vineger, falt, and oyle The horre clomingled rogecher: after put vpon it old Swines greafe melted with new Pitch, or *eno elfe to. greale it there with Spech-greafe for fue or fixe daies, forthis will fay the cleauing of the horne, and nuake is clofe and faft where it was ीiuucred or anie way fundered.

If an Oxe doe put forth new and young clawes, his hoofe being fallen off, then make an oincment with an ounce of Turpentine, an ounce of Honey, and as much of new Waxe, and therewith you fhall annoint the claw for the lpace of fifteene daies: after that walh it with warme wine boyled with honey: or elle applie thercto a Cataplafme made of Aloes, honey of Rofes, and halfe an ounce of Allome made in powder.
Buffes,or wild Oxen, called Buffes, are better for driwing of a Load, than in the Buffes, or wild turning of the Ground; for they are neuer fof free, nor yef fo fout fy flanding to their Bulls, worke: cleane concrarie to the Oxen of France, which are fiterer for the cilling of the Ground, than for the Cart, as being more frong, more nimble, and fitcer to toyle fo great diuerfitie of Grounds as we haue in France, wherherchey be Mountaines, tops of Hils, Vall eyes, void Fields,or Plaines : to be bricte, where Ground is loff, rough, light, hard, whice, black, and of divers natures. In. Italie, about Pifa and along the Marenne (as it is shere called) their Buffes, of which they hane greas fore, are imployed in Draught, being tafteried by couples ene afrer another to the number of twentic or thirrie together in one Teame. The Chece which is made of the milke of the females, and turned rnund, is of an vnlauorie caft:but when it is cut in flices, and fried in a pan, is is fanoric. Wild Oxen, which are called in Prouence $\&$ L Languedoc Brans or Branes, are not fit for anie ching, by rea! en of their grear furioufnefle \& wild neffe, exceptonly for the fhambles. Such Oxen are lrought vp in the fennie places of Lamargues, and vpon the Sea-coaft, farre from the haunt of orher beafts, or wall ke of man.
As alfo the Bull which is brought vp in the Paftures of Villages, and keeping a- The laboxr of mong the heards of ocher beafts, and acquainted with men, is not good or profitable the Bull is mes for the plough,for that he is too Alurdie,\& wil not match himfelfe with gelded Oxen, good.

The time for the Kinc to take the Bull.
One Bull for thareforore Kine.

To fat Oxen :o. sell. 's. 's"

Neithen yet is thereanie great good reaped of the labour of a gelded Cow : but you muftikepeand fat the Bull by himfelfe for the Kine, which, fhatl be put to take him about the moneths of May, Iune, and Iuly : and one Bull is ynough for threefcore Kinc.

The Oxen intended to be kept to be fatted and fold, fhall not draw but fome onee or twice a weeke, and that when it is faire weather, and a good feafon; and that the earth is eafie and gentic: and they fiall meddle but with litele burthens, oncly to exercife themsand they fhall cat nothing but Barly, Hay, and Sheaues, and fomecimes the young buds of Vincs, and others, fuch as they loue : and that Oxe which hath wrought in the morning, thall reft at afternoone. The ancient Romanes did faften fome fmall quantitie of Hay to the hornes of fuch Oxen as would ftrike with the horne, io the end that all that met him fhould take heed. And hence rifeth the French Prouetbe, He weareth Hay on his horne; pointing out a hot and wrathfull man: in as much as Oxen, Horfe, Affes, and Men themelues become fierce and outragious, by being ouer-fed, and eating their full according to their hearts defire.

When as once the Farmer doth perceiue chat his Draught Oxe is vinfir for labor, he flatliteed bim fometime, not letting him doe anie thing: after which, he fhall kill him and fair him in pieces, for the ycarely nourihment of his familic, and by the fame meanes fhall referuc the marrow and the gall of the Oxe for his feruice and vfe when he fhall haue need: for the marrow of the Oxe doth veriemuch good in refoluing and foftning hard tumors. The gall of the Oxe is yet better than that of the Bull: it doth throughly heale the vleers of the fundament, mixed with the iuice of Leekes: being drope into the eare, it doth take away the buzzing of the eare : being rubbed abour childrens nauels, it killeth the wormes: being mixt with honey, it is good for the inflamation of the throat: mixt with the iuice of Beets, and drawne into the nofe, it puttech away the fit of the falling fickneffe : it is more profitable chan anic other thing to giue'a yellow dic and colour vnro Skins and Brafe: being fcatered \& fprinkled vp-

The fone of the Oxic gall. Melilor, and Brambles, and applyed vnto the fwolne Tefticles, it reftoreth them vnto their naturall proportion and bigneffe. on feeds, it maketh that the reaped corne will not be deuoured or eaten with Mice. a yellowi col merimes found in an ore siuen in drinke, is verie good againft the Stone and Tand of applyed vnto the nothrils, it makech the fight more cleare, and hindereth the falling downe of rheume vpon the cyes. In like manner,Husbandmen may doe themfelues much good by the vfe of Neats dung: for it cureth the flingings of Bees, refolueth fwellings, and all manuer of tumors, mitigateth the paine of the Sciatica, and maketh a great deale leffe the fwelling called the Kings euill: mixt with vineger, it wafterh tumors comming of Dropfie:being fried in a panme with the flowers of Camomill,

## Снар. XXIIII. <br> Of the Hogheard.

The Hogee a greater feeder than anie beaft which is for mans food.

Six pailes of Grapes found in the bellis of me Sow.
 Mongt all Cattell feruing for food, the moft rauenous, the moft filthie, and the mof harmefull (thar is to fay the Swine) is had in great eftimation, and much commended amonglt vs for the fweetneffe of the flefh, whiles yet it fuckech and is young, both for the Sowce and faleed parts thereof, as alfo for the Lard, the Skinne, and the Briftles thereof. The rauenoufneffe and greedie feeding of chis Beaft, is witneffed by the Sow which the French King killed in huncing, within whofe bellie werefound fix pailes fullof Grapes. Their filthineffeend ftench, their wallowing of themfelues, their eating of ftinking and filthic things, as alfo the harme that they doe, may be anfwered and proued by their rooting vp and vndermining of Walls by the foot and bottome, the crampling which
they keepe about Trees, Medowes, and vnfowne places. For this caufe, in a Farme of great reuenues (fuch a one as wee defrribe in this place) there needech a fpeciall man onely for that purpofe, to gouerne and guide them in the fields: euen fuch a one as knowech to dreffe and order his Heard in good time, and in cleane and cleanely fort to put the Pigges that are wained, in one place,with the Bores and Hogges; and the Sowes, with their young ones, into a fecond place by themfelues: and yet further, the ficke and difeafed into a third particular place by themfelues. Frefh ftraw often. The commoditie times giuing them, and renewed, doth fat them as much astheir meat: And you muft of friffffraw. take care, that their Troughes be alwaies cleane: And againft variable weather, the Hogheard muft haue in fore much Acornes, Beanes, Crabs, or wild Peares, or fome swines ineat. other rotten Fruit, or fome manner of Pulfe, or fome Wafhings of Veffell : and for waut hereof, fome fleept Barly, togecther with Bran and Coleworts, or boyled Turneps, or great Nauers, to offer vnto them. And cuerie day when they come from the fisld, let the Hufivife procure in readineffe for rhem fome daintie hor mear;as Whay, the droppings of the Cheefe mingled with Bran and Water, hauing firt had three or foure boiles together : for befides that, this good attendance will caule them to make haft home, and not to forfake their companie to runne fragling abroad, when the Hogheard would haue them to come home : Thefe hot drinkes and meats doe alfo heat the cold meats which they fhall haue fed vpon in the field all the day long: and thirdly, they will reft better in the night: and laftly, not become fo fubiect ro difeafes. And let there be fpeciall care had that their meat be noo cold, nor too thinne, leaft it caufe them the flux of the bellie.
Thiere is alfo two other Foods, which are verie naturall and excellent for Hogges: the firft whereof is Ale or Beerc Graines, that is to fay, after your Malt hath beene ground and maflh, and that you haue drawne both your beft and your fmaller drinke from it, then with the remaines, mixteither with Whay, Buttermilke, Wafhings of Veffels, or fuch like, you fhall feed your Swine twice a day, and befure to fill their bellies. This food will preferue and keepe them in good plight and liking: and though it will not fatten, or make them readie for flaughter, yet it will hold them in good flefh, and prepare them fo well for feeding, that with lefle coft you may make them feruiceable. The fecond is Chaundlers Graines, which is the dregs, skins, and ocher fubflances, which at the meleing of his Tallow will by no meanes be diffolued: thefe you fhall mixe with the Swines Wafh, being a litele warmed, and giue him a good meale thereof three times a day, and it will fatten him exceedingly, and in verie fhort fpace.

Alfo if you take raw Malt when it is almof readie to goe to the Kilne, and as the To feed Swine Husbandman faich, is only well comed, and with it feed your Swine, there is nothing 』geedilyo in the world that will fooner fatten them: for befides that it is a grear feeder, it feedeth and makech both the flefh and fat excceding white, and pleafant both to the eye and saft : Only this obferuation you muft euer hold, that when you haue fed your Swine to his full proofe, wish what food foeuer it be that you feed them, that then you harden that fatneffe, by giuing the Swine good fore of drie Peafe or Beanes foure or fue daies before he come to flaughter : for without it, the fat will confume in the pot, and the flefh will much leffen. Now during the time that you feed your Swine, it hall be good that once or twice you giue them good flore of Veriuice and Radle or red Okker mixe togethier: for this will not oncly flay the flux of the bellie, butallo cleanfe and preucne the Meazle, which is veric incident, and generally happeneth to all Swine in their feeding. Alfo you fhall note, that the Husbandman is of opinion, that you cannot ouer-feed or make your Swine too fat : for (layth he) the fatter your Bacon is, the more is your profit, and three bits of fuch Lard fhall fooner cloy and fill the bellie of a hyınde, than a whole Gammon of fuch Bacon as is halfefed, and hath the leane e thereof equally mixed with the fat together. Whence it commeth, that the thriftie Husbandman will feeke all meanes, both by Maft, Corne, Hippes; Haves, or anie other meat, to raife his Swine to as great proofe as he can anie way compaffe.

Thefwine cote. Let the floore or pauement of their cote be layed with thicke paning fone, and eucrie monech renewed with graull or fand to drie vp their pifte, for chis beaft though he be flutrifh and dirtie, doth notwithfanding profper beft in a clean houfe that is well kept and maintained. And to the end that the corruption of the aire which this kind of beaft maketh in clofe places may not caule him to hauc either any ill fent or other difeafs to grow vpon then in their cotes, efpecially when they are in any number together : it behooucth that the doore thereof be made with thorough lights of great barres, or clouen bords, to the end that their euill aire may paffe away, and that which is good may come in place continually, and it is meet that the doore fhould giue downe verie neere vnto the cauley, to the end that they may not lift it vp with their fnouts, and caft it off the hinges: for this cattell can hardly indure to be fhit $v p$, but gnaw and bite wihh their teech, wharfoeuer it bethat hindrech them from comming forth where they arc inclofed.
The Hogges which you iotend to keepe in and to fat,fhall not come forth of their

The ferding of Hogres. ftie, being alone and free from others, neither fhall they haue any light but at the doore which is made to go in at for to dreffe them. The care about them is not fo great as of other catcell, excepted onely the keeping of them cleane, and knowing how to make them good meat, fo long as vntill they be fat, for after that they will euerie day leaue fome of their meat, not flirring out of their place, as though they vvere vvithout feeling and power for to moue, in fuch manner as that though the great height of fannefle, that they are growne vnto, and the thicknefle therewithall, Mife may fometimes make their nifts vpon their backes, and yet they not feele them, for they are fometimes feene to heape fuch quantitie of fat vpon the liue flefh, as that there are fome Hoyges found a foot and a halfe thicke of Lard.
Keepe not aboue ten Bores for a hundred Sowes, and fo forth proportionably:

Tenme bores, for a hundred Sowes.
sightcene pigs to one Som.
Signes of a good Hogge. the reft as vvell Males as Females let them be wained, and gelded after a yeare old, or fixe monechs at the leaft, howbeit the moft infallibe tume and opportunitie is, vvhen they begin to grow hot, and goe a brimming. Suffer not aboue cighteene $\mathrm{P}_{1 \text { gges ordinarily to fucke one Sow, but fell the reft at eight or ten daies old: and a }}$ yeare after, waine and geld the reft, and fo put them into the field : keepe thofe efpecially which haue a fhorr and broad head, the fnour fer high, and long without, the breff fat and broad, the chine of the necke large, his feet thort, his thighs great, and in the reft, verie fhort, groffe, fquare, and well packt togecher, of coluur blacke or vvhite, and full of briftles vpon his backe, for to make Bores : and chofe which are verie long, fide bellied, grear headed, large buttockt, and fides giuing out, likewife allof white colour, a fmall head, and Thortlegges,for your Sowes : of the reft make prouifion for the houle.

## The lime for

## the Somo to take

Bore.
Let not your Gylt goe to bore, till the be paft a yeare old, and let the Boore be The time to purd foure: for after he be patt fiue, he mult be gelded to be fatned. is beft in the firft quarter of the Moone, and vnto the full, for before it is not good, no more than it is in the old of the Moone: and it fhall be from the beginning of Fe bruarie vnto mid March, or a litele atter, to the end that in Iune, Iulie, and Auguft, your Pigges may grow to haue fome ftrength, and may be vvell growne and thicke of haire by September : for Winter Pigges are hard to reare, and not fo kind as the other : becaufe this kind of cattell is more chill than the others, which is the caufe that in many places they haue their cote and ftie prouided and dreffed with lime and ftraw, although they haue fufficient flore of ftone, lime, fand, and plafter: you muft alfo beware that the Boore keepe not companie with the Sows that are with Pigge, for he would but bite them and caufe them to caft their Pigyes.
The hog canmos This beaft is a great eater, and cannot endure hunger, efpecially the Sows, which absdi sunger. in this neceffithe haue beene feene fómetimes to eat their owne Piggs, and thofe ofothuir ozone pigs and colldren.

Sowes eating thers, as alfo children in their cradles, which is no fmall inconuenience: and there-
thu fore youmult haue care that their troughs be neuer emptie.

For to make Hogges verie fat, you muft geld them. It is beft to geld them in The time to geld the old of the Moone, in the new, or in the wane, and in the Spring, or September, Hegges. the time being temperate. If you geld them young, the felh will be the better, but then they grow not fo much : If you geld them, growne fomewhat bigge, they grow a deale more, but then the flefh is not fo good: And therefore is will be good to doe it when they are betwixt foure and lixe moneths old, and at the moft not to goe aboue a yeare. They are fubiect vnto manie difeafes: And the Hogge is knowne to be ficke, when hee hangeth the eare verie much, and doth become more flow and heauie than hee hath beene accuftomed; or that he is found to be without appetite: For your better cercaintie, when there doe not appeare anie of thefe fignes, pull from him, againft the haire, a handfull of the briftes of his backe; if they be cleane and white at the :oor, hee is found and healchfull: but and if that they be bloudie, or ocherwife fported, he is ficke.

But he is fubiect efpecially to be meazled, becaufe of his much and fithie fee- The mearis in ding: and this is the caule why fome doe fearch the roots of his tongue, and others Hogges. behind the eares, when he is carried to the Markets to be fold in Farres or in good Townes. And I thinke that this was the caufe why our fore-fathers made it not an ordinarie thing to ear, and that the Iewes doe abhorre to eat it at all. This difeafe is nor cured bur with grear difficultie: notwithftanding it will in fome fort be cured, if his Srie be eucrie day made cleane : if he be fuffered to walke and goe into the fields in the frefhaire : if he be caufed to bath or wallow himfelfe offentimes in Sea water, or falt water: If he haue Bay-berries beaten and mingled amongft his meat: if there be giuen him the droffe of the lVine-prefle, mingled with Branne and Leauen. Now there are ehree infallible fignes to know the Swine ro be meazled: as if there be found vnder his tongue blackifh puftules : if he cannot carrie himfelfe vpright of his hinder legges: and thirdly, if his briftles, puld off his backe, flow bloudie at the roots. Likewife, for that the Hogge, by reafon of his filthinefle, for the moft part hath one fault or other betwixt his skinne and flefh, how found focuer he be; it is good, after he be killed, to haue his haire fwinged off with ftraw, rathes than to fald them off with hot water : for the fire doth draw out a great deale more edfily than warme water that, whatfoener it is, that may be betwixt the skinne and the flefh. Yet the fealding of Hogges keepeth the flell whiteft, plumpeft, and fulleft, neither is the Bacon fo apt to reaft as the other; befides, it will make it fome. what apect co take falt: howfoeuer, if it be for Porke, then you mult neceffarily fcald them, becaufe the fire will elfe biarden the skinne too much, and make the flefh vokindly: befides, the fwindging of Hogges leaueth the roots of the haires in the skinne, and the falding bringeth them forth, which makes the ferth the better.

He is alfo fubieft vnto the paine and fwelling of the Spleene, and to the Murraine, subieci to the which in contagious times doth a great deale the more eafily ferze vpon foule and filthie bodies, and fuch as are of a bad feeding.
Againft his want of flomacke to his meat, it is vfed to caufe him to faft a day and a night clofe fhut vp in fome darke place, that fo he may waft his fuperfluous humors, and fall to eat his meat againe.
For the Ague, he is to be lee bloud in the taile: and for the R heume and fwelling Pbyficke for of the kernels of the necke, or yet when he is butfufpected to be meazled, he is to be let bloud vinder the tongue.

How to kromo the difeafes of
Hoses. Hogges.

The eating of Henbane or Hemlock.
Ibirft.
swine borored of the Egypti: ans.

Furthermore, the good Houfeholder (befides the good prouilion that hee fhall make for himfelfe and his familie of the Porke cut in pieces, and well falted in his Larder) Chall further gather his greafe for the axle-trees of his Waines and Carts. Againe, the good Hulwife fhall make her profit of it in like manner for the difeafes of her familie, in as much as it is verie good to draw to a head all forts of apoftemes, being mixt with leauen, as alfo to heale the moles of the heeles, if the powder of Galls be mixt therewithall, and the athes of the flower of Barly.
swines dung.
good vied in a common prouerbe, That the Swine hath nothing in him but it is good, his ordure and dung excepted; but experience fheweth the contrarie: for the dung of a Swine fried with frefh butter and equall quantitie of lumpes of cluttered bloud, fpet out by him that bleedeth aboundantly, being giuen to the partie fo bleeding to eat, dorh ftay and ftop prefently his fpecting of bloud.
To powaier
Swines fleft.
It remaineth that we declare how we ought to falt Swines flefh. All manner of Cattell (but efpecially the Swine) which we intend to vfe for meat, muft be killed in the new of the Moone, or in the firt quarter: For if you thould kill it in the decreafe of the Moone, looke how much the longer you deferre to falt it, fo much the more time and fire mult it haue to boyle it when you Should vfe it : and for this reafon, a Sawfidge, or fuch other like meat, doth become leffe by a quarter when they are boiled. For this caufe alfo it is, that the skilfull Husbandman will not buy thefe kinds of beafts to make his prouifion of, if he be not fure that they were borne in the encreafe of the Moone : for otherwife alfo they doe grow buc little, and their flefh is
To kill Swine in not of fufficient weight when as one hath killed them. Kill therefore your Swine in
the encreafe of the Moone. orelfe of Hemlocke, he mult be made tu drinke the decoction of wild.Cucumers: well warmed, for to caufe him ro vomit.

He muft aboue all other things be well kept with drinke in the cime of the Dog daies, and other fuch hot times, and to fuffer him to moile and tumble in the dyre at his pleafure ; for thirft caufeth him to become poore and leane and in weake eftace.

The Egyptians doe greatly honour the Swine, and giue him manifold thanks for hauing firft thewed them the manner of tilling the ground, by cleauing and cutting of it with the fore-part of his 'nout, and as one that by little and little hath taughe them to make the Ploughs culter. In like manner, they which dwell in low and fofe places along by the Riuer Nilus; haue no encreafe of the earch but what they toyle and labour out of the fame with the Plough : but the Peafants doe nothing but put their Swine into their Fields, and goe after them with Seed; and becaufe that Swine haue the gift to digge vp the earth with their fnouts, and to tread in the Corne with their feet, they vfe them to our-turne all their Ground out of hand, and fo to coucr the Seed which the Countrey people haue caft vpon the fame. the encreafe of the Moone, and lee them not drinke the day before you intend to kill them, that fo their flefh may be the more drie: for and if they drinke, the falting time

If he haue eaten of Henbane, which ancient men haue called the Hogges beane, will haue the greater quantitie of fuperfluous moifture to drinke vp: Alfo the flefh will be the better, if they be kept fafting but one halfe day before they be killed. Now when you haue thus killed them in their whinf, and halfe famifhed, it fhall be for the beft to take out as manie of the bones as you can, for this will caule the falting to be of better effect, preferuing the fleth the longer from corruption. After cur the flefn in pieces, and put it into the falting Tub, making as manic beds of falt groffely brayed as there is of flefh, the one aboue the other: And when the falting Tub fhall be in a manner full, you flall fill vp the head with falt, and preffe all downe together with verie heauie weights. Some put thefe pieces and the fale within a table-cloth, or within a fack that hath ewo mouths, and fhake it vp and downe therein, that fo it may take fale in enerie place, and afterward lay it orderly in the falting Tub, ftrawing fale vpon euerie bed. In fome Countries they vfe not in fuch fort to cut it in pieces to caufe it to take falt, neither do other fome put it in fale brine in a clofe powdring Tub:
but ffer that they haue made it into pieces, they diuideall the Lard in two, and fale thefe ewo halfes all of them, making the falt to pierce and enter into them with a rowling-pinne: and this thing is not done at one time, or in one day, but at two or three cinies, and in two or three dayes fpace : ater they hang them to the soice of fome boorded floore, or to the crookes fet vp in fome vaulted roofe, it fo be there be anie vault; and the Lard thus falted, is more taft, and of a hecter caft : And if it fall out to be long kept, and to pafle a yeare, it growerh to be ot a goiden colour : So ic is better to falt and keepe it thus for them which defire to have that which is excellent good, rather chan after anie other faflion that hath becne fpoken of heretofore.

## Снар. XXV. of the Shepheard.

(2)F the greater part of the profit of a Farme depend vpon and confift in the keeping of Cattell; which is pertormed by that part of encreafe which che Farmer (parech in his Fodder; Siftings, Redlings, and fuch orher things, which coft him nothing but the paine to gather and lay them vp : then I dare be bold to atoun his, that the molt proficable and fruiffull proufifon for the Countrey Houfe is of fuch beafts as bring forth Wooll. It is true, clint there muff all diligence be vfed to keepe them from Cold, fiom the Purples, trom the Scab, froni two nuuch rankneffe of bloud, trom che Rot, wid dher fuch inconucsicences as fomerimes pread and proceed from one to another, and that he hath likewtic care, and doe his whole endeauour, in keeping them borh in the Fields and at the Cratch: but it is as tue that there rifech as great profit and comno ditice to the Farmer. For befides the dung which they make, and which exceedeth all other knids of dung in goodneffe, for ilie great fubflance, flrength, and hieartening which it git ueth vnto the ground, they bring yer infinite orher commodicies sas by Wooll, whicteof are made Cloth, Hats, Caps, and manie ocher ftuffes: bytheir Fells, which hlerue for Furre or for Leather : by their Milke, whereof are made Cheefes verie excellent, as may be feene by thofe which the Towne of Betune doshafftoord: and finally, by their flefh, which is fo good and excellent of it felfe, that ho continuall vfe of it dech euer make it the lefle pleafant in the eating: fo shat for cerraine it may be faid of it, that if the fleth of chis Beaft were as. fcarce as that of the Fawne, Hind, and ocher Venifon, it would be the onely Venifon of requeft before all other in the world. And this furcher is to be feene and obferued for a rare and fingular comnoditie in all che forefaid things proceeding from thefe Cattell that bring forth Wooll, and not lightly to be pafted ouer of the Husbandman; namely, that there is not anic one of them which is not alwaies readie, and of prefent imploy ment, and whercot there are not moe buyers than fellers, fo that the. Husbandman need not doubt of anie long ftaying for the fale thereof. For firt of all, the Dung is in imployment the verie firt houre; the Wooll no fooner fhorne, but it is greed ily eatche vp; and fo foone as the Mucton is flead, you haue a chapman for the flefh, and another for the Fell: The Cheefe will either ferue you at your Table, ore elfe the Marchans. Bur and if you be not difpofed thus to recaite the feuerall commodities of this beaft, you fhall find chapmen to buy then in groffe: Which is yee more, if you be not able to abide vnell they be full growne, and in their ripeff feafor,to be made mony of, yee tlien masy you find to content your felfe, and procure perice by fell ing away fuch of the Lambes as may be culled out of the whole flocke. Let it not then leeme ftrange, if we reach the good Husbandman, that he attend and haue a fpeciall care ourer his Sheepefold, arid that in a higher meafure than ouer anic other of his Catell. Wheretore tie fhall fer his Sheepe-houre in the higheft part of his Courr, right in the face of the South Sun,
to the end it may be the leffe annoyed with moiflure, and more open to a wholefome aire: which thall be of fuch length, as that his flocke may haue roome therein without treading one vpon another, fetting it round abour with Mangers or Sheep-racks of a low pitch for to fodder them in. There fhall be a floore of fawed boords betwixt the Sheqpe roome and the Roofe, to the end that they may be the warmer in the Winter, and that the Snow, which may beat in at the tile, doe not fall downe vpon their fleeces, and fo melting with their heat, pierce downe vnto the skin, and make them cold. He fhall haue a Shepheard for to guide them, which fiall be gente, louing his flocke, nimble, of a loud voice, and able to whoop well, giuen to take pains, able tw reckon, and by nature enclined to good and honeft things: for there are bur few of this profeflion now adaies (efpecially neere to Townes and Cities) but that by their flourhfulneffe and great leylure doe giue themflues to fomè cuill deuifes, pratifes, and malice, rather than to che good and profit of cheir mafters : fo that of them ill d, frpofed, we daily fee to enfue and grow manie chefts, filching and pillering
shepheards she inuestrors of Afrrologie, © © c. prankes, out-rodes, witch crafts, arid infinite other mufchiefes. On the contrarie, the firt Shepheards of Egypt and other places were the bringers to light of Aftrologie, Phyfick,Mufick, and manie other liberall Sciences: and I know not whether I may father the worthic art of Warfare vpon them,or no; as alfo Policie, Principalitie,and the Gouernment and welding of Kingdomes : for fure I am, that they did intrench themfelues in the Field, and there lued vnder Cotages and Cabincs made of boughs manie yeares, obferuing at leyfure the courfes of the Starres, the ditpofitions of che Seafons, and by long vie and obferuation marking the goodnefle and profperoufneffe, as allo the iriconueniences and hard fucceffes, of $T$ imes: in fuch iort, as that of the Shepheards of thole times came and fprung the men of deepe knowledge and vnderfanding: The Hieroolyphicks may witnefle che fame. To conclude cherefore, there is great care to be had in the chufing of a good Shepheard.

Sigres of good shecpe.
 may have a faire flocke of Sheepe, doth buy them vnhorne, not hauing a gray or fpotted Wooll partie-coloured, becaufe of the vicerrainetie of the colour. He fhall. reiect as barren all fuch as have teech of moe than three yeares, and he fhall make choife of them of two yeares, hauing great bodies, long neckes, long deepe Wooll, filken, fmall,and bright fhining: great bellies, and cou:ceded with Wooll: great paps, great eyes, long legges, and along taile. He fhall much eftecme the Ramme which is all of bodic and long, which hath a great bellic, and couered with Wooll, a long The fynes of a go.d Kammee. taile, and a thicke fleece, a broad forehead, and thicke fet with haire, blacke eyes, and befet with frong Wooll, groffe flones, large loynes, great cares, and couered with Wooll of one colour, not duenlly coloured in anie part of his bodie, well horned, and notwithfanding but fmall hornes, wrythen and turned backe rather than frair and open, his tongue and palate white, to the end that the Lambes which he flall beget may haue their fleeces all white: for if he fhould haue it all blacke, or elfe befpoted wish blacke vnder the tongue, howfoeuer he may be of a white Wooll, notwithflanding, the Lambs which he fhiall ingender will haue mingled and footted coats, either with blacke or gray, and Io by this mcanes will become of leffe account and profita A by nature, he feekech to doe noching more than to fight, and is fo much the more earneft with the Sheepe, vrging them mightily thereunto: notwithftanding, he is much better than one without hornes: for he knowing himfelfe without hornes, is not fo
The R.mme but according to the experience of other Countries, the Ramme without hornes is the beff for breed, being beft fhaped, beft woolled, and beft mettalled, hauing beene offen feene to haucflaine with his bare head him that hath beene more than exrraordinarily armed, with great, fpacious, and round twyned hornes. Befides, the Ramme without hornes begettech his young without anie danger to the Ewe in her yeaning, whereas the Ramme which hath hornes, begettech his Lambes with fuch hornes, that the damme dieth of before the be able ro yeane it.

Now.

Now the Shepheards are wont to bridle and correct the heat and furie of a Ramme that is two headie and difpofed to fight, by binding to his head a good frong boord, The rage of a ftricken full of naile points on the fide toward his forehead: for tuch one will keepe Rammeo them from pulhing one at another, feeing they cannot iurre but that they muft hurt themfclues: or elfe they bore their hornes through, neete vnto che eares; for fo are fome Shepheards accultomed to doc.

The Sheepe-core, as well as the Swine-core, fhall be paued with pauing fones, and made to hang ouer the Court towards she dunghill pit, where muf be fee forme Rotemarie of Beaux, in refpeci of the fucll of the finke conucying their piffe. It nuuf be fituated (as hath been faid before) vpon the South: for thefe Catell, hiowfoever they be well couered by Natures worke, are notwithifainding fuch as cannot endure or away with Cold, and as badly can they abide the heat of Summer: and therefore they muft hate made forthem a long houfe, verie low, and fufficient wide. The firwation of the Mangers fhall be abour a foot and a halfe from the floore : and there fhall be high fraight poles, and let thick, made faft vnto the faid Mangers, that fo the Shrepe may be kept from going on the other fide uf their racks. The Shepheard fhall keepe The office of a his racks and hurdles for void rnomes, and making of feparation betweene roome shepbeard. and roome, verie cleane: and he flall alfo make them fo faft, as that they may not in anie cafe fall, and that fo the Rammes may not goe vnto the Ewes, nor the Lambes vnto the difeafed Sheepe. He Thall be carefull to make his Ewes take Ramme after the firft two yeares, for che fpace of the next fiue after enfuing; for when the fenenth yeare is once paft, they begin to faile and wither away: and againe, the female taking Ramme before fhe be two yeare old, bringech torth a feeble and a weake brood, without anie freng,h; but and if fhee bring forth before chat age, you muft fell her Lambes: The Ramme that is to blefome Ewes, muft not be vnder three, nor aboue eight: One Ramme will crue to bleforme fiffie Ewes : The time moft fit to couple and put them togecher, is abous the Winter Solftice, which is in the moneth of Nouember, to the end that the Ewe which gocth with Lambe fiue monechs, may Latnbe in the Spring, in which time fhe fhall find the graffe beginning to fpring, and io fhall returne home with hei Vdder weil filled, to fuffice for the feeding of her yong:which will be growne to good perfection by Eafter; at which time the Burchers will be rea-- die to buy thern. Furtheimore, for fome daies before that the Ramme and the Ewe be coupled together, you muft giue them to drinke falt watcr; fo the Ewe will hold better, and the Ramme will be the morre luftie : but after that the Ewe is with Lambe, you mulf not ler her drinke anie fuch water, becaufe it would caufe her to Lambe before her time. If the Farmer defire to have manie Weather Lambes, it will be good, arcordn ng to thie counfell of Ariffotle, to obferuc and fpie out a drie time when the Lambes. Northerne wind blow erh, and then to caufeche flock to feced, drawing directly vpon the fanie wind ; and in that verie time, and after that fort, to make the Ewes take Ranime: bur and if he would haue manie Ewc Lambes, he nuft draw chem to feed vpon a Sourherne wind, and foles the Rammes couer them.
When the Fwe is in Lanibing, care fhall be had to helpe her if need require, draw- The Lambing of ing the whole Lambe out of her bodie, if it lic ouerthwart, and cannot come forth: Ewes. For this poore Beaft is pained in Lambing, as Women be in bearing of their children) and oftentimes (being void of reafori) Atee crauailech with much greater paines. The Lambe being come forth, it muft be lifted vp and holden right, and afterward put to the teats of the Ewe, thereby to vfe it to fucke the damme : and yee not fo forthwith, but that there be fome of her formoft milke drawne ouf firf, which otherwife might hurt the Lambe. Afterward it thall be fhut vp with the damme for the two firf daies after that it is lambed, to the end fhe may keepe it the warmer, and it may the better learne to know her. In the meane tume, care muft be had to feed the Ewe with the beff Hay that may be frund, and with a little Branne and Salt amongf: to keepe her in a houle verie faft and fure, antd not to fuffer her to goe forth of threc or foure daies: to carrie her water to drinke, a litele warme; and whierein is mixed a little of the flower of Miller and of Salt : to draw from her her firft
milkes
milke, becaufe it is not good. And fo foone as her Lambe flall begin to know her, the may be lee loofe to goe feed in the fields; and to keepe the Lambe faft in a warme and darke houfe, vnill fuch time as it begin to play the wanton: out of which houfe it thall be let loofe morning and euening to fucke the damme at her comming home and going to the fields. And afer that it thall be grownca lietele fronger, you fhall giuc 15, within houfe,fome Bran, or verie fimall Hay, and that the beft that is to be gotten, to keepe it occupied with all the time that the damme is in field.
The wile Sheplieard will not keepe, for to fore his flock, anie orher Lambes than
what Lambes are to be keps for the furnifhing of the flock.

Togeld Lambs. (uch as are the groffeft, mult corpulent, f frong, and which will well be able to hold
 renew the loffes that may fall by death or by fickneffe.
The wife Shepheard will not geld his Lambes till they be betwixt fiue and fix monechs old : and for to geld them, he fhall vee the meanes fet downe in the geld ding of Calues. In Winer hee fhall fodder them wirl the beft theaues of Corne in the Barne: and he fhall rake to gether the fcaterings which they make from time to time, which after will ferue for Litter for the Kine and Horfe.
For want of Corne-fheaues, he may fodder them with the greene boughs or leaucs
Fodder fur
Sheepe.

What time Sheepe Jhould be carried to pafinre.
of Elmes, or elfe of the Aifh tree, gathered in their feafon, or with Aurumne Hay or the after-crop. The tree called Cycifus is good for them, if it may be found in this cold Countrey, and being a thing fo much defired and fought after of the Goats, as they who by the vee chereof are made fruirfull in milke, fo likewife is the Fetch: notwithftanding, the fraw of Pulle will be neceffarie for them when they cannot haue anie other thing, but that all other manner of Fodder is gone, and not to be come by.
As concerning the cime when they are to be led forth to feeding, in Winter, Autumne, and Spring time, you fhall keepe thene clofe in the n:orning, and you fhal not for at thefe te thes tields, vntil the day haue taken the frof away from off the ground: the head and los the frozen gratie doth beget in them a rhewme and heauineffe of pafture by the point of day, when as the tender graffe is couered with the dew: and toward noonc he fhall looke out either vaults and hollow places of the earth, or elfethe couert and fhadow of fome thicket, to keepe his Cattell from the heat of the Sunne: or elfe fome old Oke, fltetching forth his boughes: or the Forefts and place of tall Timber trees, which gine a fhadow. And in as nuch as shis Beaft is verie tender aboue the head, and is greatly offended by the Sunne, he fhall be carefull in Summer, during the great heat, to obfruue when the Canicular daics begin, that fo before noone-tide he may draw his flocke to feed vpon the Wef, and after noone vpon the Eaft. For this is a thing of great moment, that the head of the Sheepe which are feeding, be turned contrarie to the Sunne, which ofentimes hurecth that kind of Cattell, at fuch time as the Canicular daies come in.
In cold and moift weather, as in $W$ inter and Spring time, he fhall water them only once a day', but in Summer twice, that is to fay, foure houres afer Sunne rife, and

To water
Sheepe. at night, after the heat is rebated and well ouer-paft.

The Shepheard faall order and gouerne them with great genteneffe, as it is moft
requifite for all Heards of wharfoeuer Cateell that it be, who mulft rather be and fhew themfelues leaders and guides of their beafts, han lords. Guiding them to the field, he muft alwaies goe before them, to hinder and keepe them backe from running mio fields where they might feed vpon euill and hurtfull grafle: and efpecially fuch grounds as wherein the water vecth to ftand, or where the ground hath beene ouer-wafht with fome Floud, and breaking forth of fome Riuer, becaule that by pafturing in fuch places, they could not chufe but in leffe than fortic daies be teinted, and die, except they were relieued and fuccoured by fome good meancs. He fhall rather keepe a white dogge than one of anie other colour to folIow his Sheepe, and he himeclfe allo muft be apparelled in whice, becaure chat Sheepe
are naturally fo inclined to feare, as that and if they fee but a beaff of anic other colour, they doube prefently that it is the Wolfe which commeth to deuoure them. This dogge muft haue a collar of yron about his neck, befer with good Iharpe points of nailes, to the end that he may the more cheerefully fight with the Wolfe, perceiuing himfelfe thereby to haue the aduantage, as alfo that the Wolfe may not takeoccafion to hang him in his owne collar: If it happen that his Sheepe be fcattered, to call them in and bring them together againe, whecher it be for keeping them out of harme, or to caufe them to know his call, he mulf whoope and whiftle after them, threanning them with his Sheepe-crooke, or elfe ferting his dogge after them, which he fhall haue trained to doe them that feruice: but he may not calt anie thing at them, neither may he goe farre from them, neither yct take himfelfe leaue to lye or fit downe: he muft accuftome them to two forts of cries, the one pleafant and fhrill, to make them goe forward : but to call them backe, to another and diuers crie, to the end, that the Sheepe hearing thele two different cries, may learne and apply themfelues to doe that, which is thereby commanded them. If he walke nor, yer he mult fland, to che end he may be as a vigilant watch vinto his Cattell: and he muft nor fufo fert the Slower, or thofe which are with Lambe to ftraggle from the reff, or come farre behind them, by hanging backe, when the light-footed, and fuch as have alreadie Lambed, doe runne before, leaft by that meancs fome theefe or deuouring beaft deceiue them, and come $v$ pon them bufie at their meat, He muft fometime make them merrie, cheering them vp widh fongs, or elfe by his whifle and Pipe: for che Sheepe at the hearing therevf will feed the more hungerly, they will not fraggle fo farre abroad, but they will loue him the better.
He fhall not draw them into anie grounds, but fuch as aré tilled and turned, or to the graffie tops of Hills, to the high Woods, or elfe fuch Medow grounds as are not moift \& wet; but neuer into Marifh grounds, nor into Forefts,or ocher places, whereas there are Thornes, Burres, and Thifles : for fuch doth nothing but make them itchie and fcuruie, and to lofe their Wooll. Alfo it is not fo good fodder, nor fogood feeding, which for long time hath been in continuall vfe : for fo the Cattell will grow wearie of it, and offended therewith, except the prudent Shepheard ve fome remedie againt it, by mingling fome falt amongft it, or fprinkle it with brine or dregs of oy le vpon fome floure, and fo with their meat he fhould giue them both fawce and appetice.
In the high time of Summer, the Shepheard Thall come wihh his flocke to their The Shepberrds lodging, and hall fold them annengft the fallowes, and there make his foid with hur- life in Summer. dles, aterer he manner of the Sheepecocote, the couering excepted: And at the foure corners of his fold he fhall tie his dogge for a lentinelland ftanding watch, lodging himfelfe in the faid fold, within his Cabin of Wood, which he thall driue vpon wheeles to and fro, as he flall haue occafion to change his field and fold. He fhall cleanfe his Sheepe-cote but once a yeare, and that fhall be prefently after Auguf, ofs in ty , Augit, or elfe in Iuly, being the time when his Heard is folded: but neuer in the Sheppe-coteo Autumne, nor in Winter, for then their dung will ferue to keepe them warme. And then forthwith the Farmer fhall caufe the fame dung to be carried vnto the leanef parts of his land, and fhall leaue it there on hillocks to drie in the heat of the Summer vncill O Ctober, and then to caufe it to be (pread vpon the ground; or elfe to mingle is with Marle,to dung and manure the carth: howbeit, Marle muff not be reicerated fo oft as dung, for which caufe he muft vef fuch diferetion, as that he muft not lay anie Marle but from fiue yeares to fule yeares in anie place. It will be good after that the Sheepe-cote is madecleane, to perfume it with Womens haire,or Harts horne, or the hornes of Goars clawes, thereby to driue a way Adders and Snakes, and ocher beafts; which oftentimes annoy hhis kind of Catcell.
He fhall procure his Sheepe to be florne the firft hor feafon falling out in the Shearing time. Spring, if it be in a hot and Southerly Countrey; but in the Countrey that is cold, and not fo warme, about the end of luly: but neucr in Suminet, or in Winter, and but from eight a clock in the morning vntill noone, and that in faire weather, withous
wind, and the Moone growing old. Afterward you thall ftrake the florne Sheepe all ouer their skins with your drie hand, moiftened in oyle and wine mingled together, to comfort them withall: and if there be anie fnips in their skins, you thall apply vnto them melted Wax or Tarre with fweet Seame, for this doth heale them and keepe them from the fcab, and caufeth allo a finer and longer Wooll to grow vp and come in place. To kecpe your Sheepe in good plight, you hall giue them Bay berries drie with falt, beginning prefently atter they haue Lambed, and concinuing vntill they goe againe to Ramme : by this meanes they will be fat,found, $\&$ full of milke: After they be once with Lambe, you muft giue olver that courfe, leaft you caufe them to caft therr Lambes: they muft not at anie time drinke foone after this meat.

The frabs of
Sheepe.
Scabs in Sheepe ter, or Brine, and laftly, with common water. The verie fame remedie feruech for the roten Sheepe.

For the Cough, if it continue, you muft make them drinke in the morning with a
The ratter
Sboepe.
$\qquad$
$\qquad$ horne the oylc of fweet Almonds, and a little white Wine, being wamed rogether, and giue them frefh ftraw, and caufe chem to feed vpon Folefoot; for it is commonly in the Spring time that they are troubled with this difeafe: bur and if it fhould happen at anie other time, there may a litte Fenigreeke be giuen them, beaten with Cu$\mathrm{min}_{\text {, and }}$ of the powder for Horfes. The hearbe called Knot-grafle is verie bad for Sheepe : for and if they eat anie of it, all their bellie is fwolne and blowne vp, frothing out a thinne and verie flinking humor. You mult prefently let fuch bloud vnder the taile, in that place which is neere vnto the buttockes: In like manner, it will be no leffe good to let them bloud vpon the veine which is in the nether and vpper lippe: But to make fure to preuent the dangerous and common difeafe of the rot, which being once caught, is after impoffible to be cured; you thall in the morning, as foone as you drive them from the Fold, or bring them from your Sheepe-houfe to the place where you would haue them feed, with a litele dogge chafe them vp and downe the fpace of an houre and more, till you haue (as it were) almoft tyred them, and then lee them refl and fall to their food at their owne pleafure: A nd thus you fhall doe in the enening, alfo; the reafon whereof is this: In the morning your Sheepe comming hungrie from the Fold, and finding the thicke Dew, Cobwebs, Meldewes, and fuch likefilthineffe vpon the grafle, they will with all greedineffe deuoure and eat it, than whech, nothing in the world fooner procureth rotting: Now being thus chafed wear rie, they will not onely with their feet beat that corruption from the ground, but alfo, through their wearineffe. forbeare to eat, till fuch time as the ftrength of the Sunnes beames haue exhaled and drawne away thofe fogges, and made the graffe both pure and wholfome: by which experiment it hath been approued, that where ten thoufand
haue died for want of this exercife, not one hath quelled which hath beerie vifed in this manner.
For a fhort breath, you muft flit their nofthrils, as is vfiully to be done vnto hor- shorteffe of fes; or elfe cut chcir eares one after another.
Vnto the fheepe which haue the ague, it is good to be let bloud in the hecle, or The Sbeppes betwixt the two clawes of his feet, or vpon hiseares, afterward keeping him from aguse drinking, were it neuer fo litetle. The moft foueraigne remedie to cure thicm of the ague, as alfo of many ocher difeafes, is to caufe to be boyled in Water and Wine a Rammes fomach, and giue it them to drinke vvith broch.
The fniuell of fheepe, as that alfo of horfes, doch keepe iefelfe fo clofe within the The sniurl, ope, lungs, as that neither by bloud letting, nor by drinkes it can be expelled. The beft frof. remedie is to frangle the beaft if the difeafe continue but two dales: for the ocher, as well males as females, doe greatly defire and delight in that which thefe driuelers do leaue vpon the edges of the rackes, and licke it away, thereby themfelues fhortly after falling into the fame difeafe. Certaise marrers of Mules rather than keepers of Mules, fay, that there muft be hung about therr necke a Toad ot the vine whiles the is liuing, made vp in a bagge of new cloth, and foleaue her there tur the fpace of nine daies : others, that he muft be put to graffe, if it be a horfe; and one theepe by it felfe in a feuerall pafture: others fay, that Garleeke and frefh Sage muft be famped together, and a drinke made thereof vvihh flrong Vinegar, vyhecher it bee for Horfe, or Sheepe, or any other beaft : ochers giue them to drinke a fpoonefull of Aqua vitx, with Mithridate. There vvill no other fucceffe come thereof, but the corrupting of the Lungs, and the Cough, which fuch hauc as are rotten. And as for helpefor this difeale, there is not any other, but euen the auoyding of them out of the way.
The Cornes which vfe to vex and torment fheepe, are healed with Allome,Brim- Corres trowftone, and Vinegar mingled together, or with a Pormegranet whiles it is young and bling Sbeepis tender, and no kernels growne in it, being flamped with Allome, and a verie little Vinegar : or with gals burnt, and the fame flaued and put in groffe,or red wine, and fo laid vpon the cornes.
S. Anchonies fire, which the Shepheards call the flying fire, is hard to cure, be- s; Anthonies caufe that neither falue nor burning, nor yee any other medicine can helpe the fame. fre ens Sbegeged There is nothing elfe to be done vnoo them but to foment them with the milke of Goats , and it is good to fhed and remoue out of the flocke the firf fheepe that fhall . be taken with this difeafe.

The bloud is a turning about, called the flurdie, and it takech them in the times of For the biewn the greateff heat; fo as that thereupon they turne about, fumble, and leape with- in Sheepeo out any caufe, and if you touch cherr head or feet, you fhall find them in a verie greas heat. For chis you muft fpeedily take a fharpe horne and make incifion in the veine which is aboue the nofthrils, and that juft in themiddeft thcreof, and as high as poffibly you can : hereupon, the beaft will prefenlly faint, but come vntu himfelfe againe withina fhort time after, and that fometime to his good, but fometimes (and that doth ofner fall out) vnto his cuill. Some Shepheards haue tried the letting of them bloud in fome fmall quancicie in the Temples, and haue found it to eafe them fometimes; as othervifc, for fuch as haue had the cough or cold, they haue giuen 2 fpoonefull of Aqua virx with Mithridatc.
For the Plague, there is the like remedies for beafts, as there is for men: and I thinke, thatethis fort of cattell is the more fubica vnto it than any other, as is alfo the Swine in refpect of the filthineflechereof, and ftinking of the dung. But for the better preventing thereof, it hath beene deuifed and thought good offentimes to perfume their cratches vvith fuch fweet hearbies as hiath beene Ipoken of before, as Penniroyall, wild Balme, Rue, and Iuniper:berriess and oftencimes to make them eat amongft their meat, common Melilot in feed of free and mountaine Melilor, commonly called Cycifus, and of wild Penniroyall: moreouer, Organic, as alfo wild. Balme is goodas well for chis difeafe as for the cought...............

For the murre raine of plogue amangis Shecpe.

## 116

## The first Booke of

Lameneffe in Brepe.
$\because \therefore$
$\cdots \cdot$

Horfeleaches frallowed.

An impoftume.

Ewes waith
Lambes.

The wolfe.

The dijeafes of Lambes.

The itch of the cbin.

## Sheepes-feet,

The eumning of
Lambes.

The bavels of
a weather. His langs. His skinne.

The roooll of a weather.

The biting of the wolfe.

If the fheepe become lame through tenderneffe of his clawes too much foftened, by hauing ftood ouer lons vpon his owne dung, and that in fuch fort as that he cannot goe, you muft cut off the tip of his fo decayed claw or clawes, and put thercupon quicke lime, tying it on with fome linnen cloth, and this is to be continued onely for the fpace of a day: and then vpon the day following, to applie vnto it fome verdigreafe, and thus to vfe thefe two things in the like courfes, folong as vntill the hoofe be whole and found.

If the fheepe haue fwallowed a Horfe-leach, then you muft put downe into his throte ftrong Vinegar vvhich is vvarme, or elfe Oyle.
If the theepe haue any Impoftume in the vpper part of her flefh, then it muft be opened, and Salt pouned fmall and burned, and mixed with meleed pitch, mult be puc into the wound.
When the Ewe is with Lambe, if fhe haue a blacke tongue, it is a figne that fle will haue a blacke Lambe; and contrariwife; and fo a Lambe partie coloured, if her tonguchaue fpots of diuers colours.
The Wolte will doe no hure vnto the Theepe, if you cie wild Garlecke vnto the necke of him that goeth formolt.
It is good alfo to fuccour Lambes if they need, as whether they haue an ague, or fome other difeafe : if they be ficke, they nuft be taken from their dammes, but giue them nowithfanding their milke to drinke, mixt with as much raine water, if they haue an ague. Oftentimes they haue the fcabbe and itch vpon their chin after they haue eaten grafle couered ouer with deaw. The remedie is to take Hyffope, and as much bruifed Salt sogether, and therewith to rubbe the pallate of the mouth, the tongue, and all the muzzle, and afterward to wanh the vlcers with Vinegar, and fo to annoint them with tarre and fwines-greale.
Beware of cating any fheepes feet, whereout you haue not taken a worme that lyeth betwixt their clawes, for this worme fwallowed downe, doth prouoke vomic, loathing, and great paine of the fomach. As for the 1 cft , the runnet of a Lambe drunken is good againtt all forts of poyfons. The bowels or lunys of a Weather newly killed, applied vnto the head, is foneraigne againft frenfics, \& for fuch as are deadly grieued with head-ach. The lungs of a fheepe dried and made into powder, doth heale the kibes of the heeles. The fell of a Theepe newly kild, applied to the bro. ken, beaten, or blew parts of the bodie fo made by rodds of twiggs, by treading vpon, or fuch like, is a fpeedie and fingular remedie for the fame; prouided, that they haue not beene cauted by the biting of a Wolfe. The wooll of a fheepe doth appeafe the aches and fwellings of fuch places as it is applied vnto, fo tliat they haue not been caufed of the touch of any Wolues tooth, for fo in fteed of taking away the paine, it would aggrauate and increafeit. And which is more, as Plutarchmakethmention in his fmall workes, the wooll of a Weather or Ewe touched with the teech of a Wolfe, dothmake it apt to ingender rottennefle, but contrariwile in the flefh, as making it more tender and delicate by the biting of it, for as much as the breath of the Wolfe is fo hot and burning, as that it melteth and digefteth the veric bones in his fomach: Candles made of the fewet of a Weather or Ramme of it felfe and without any thing mixt with it, put in a cheft among clothes or linnen, doth keepe them from the Mife. The dung of Ewes with vinegar doth cure all hanging warts, as hard fwellings, whether they be called car-haires or cornes.
Now hauing foken thus generally of Sheepe, their profits, matures, qualities, keepings, and preferuations, we will a little (according to the opinion of Serres) wade further into their vfe and properties, you fhall then vnderfand that fheepe
Dinerfatic of
sbeepe. aretwo waies two fold, firt they are either pafture fheepe, or field fheepe; theepe bred either of á fruitfull ground, and richleare, or vpon barren ground, and poore leare, your pafture Sheepe are thofe vvhich are kept in feuerall and inclofed grounds, being either fertile or hard, and haue their preferuation either for breed or the fhambles; and the field fieepe are thofe which are kept on the tylth or fallow fields, or elfe vpon open and waft commons, and are preferued either for breed or the
manuring of arable ground, and thofe fheepe which are to walke vpon the fallow fields, you fhall purto the Rammer rather before than after Michaelmas, that their Lambes may haue Rtrengch before May day to follow their dammes ouer the clors and rough grounds, and your pafture theepe you thall put to the Rammes not before S. Lukes day that the dammes may haue full bit and flengeth of graffe to feed vp and faten their Lambes quickly, for the choyce of your fheepe for any of thefe foiles, you fhall take fuch as agree with the leare and colour of your earth, rather bringing them from a worfe foyle to a better, than from a good foyle to a bad; knowing withall, that your fac earth though ic beare a great fheepe, and much burthen of vvooll, yetit is but courfe, and your barren earths, though it beare bur a fmall heepe, and tmaller burthen of wooll, yet if the leare be right, the vvooll will be fineft and deereft, except the foyle be veric much cold, or verie much moift, and then the flaple will be but hairie, as may be feene in the Northerne and leffe fruiffull Councries. Now for the leares of fhecpe, you fhall vriderfand that the browne hazell leare is of all other the beft, the redd leare next to it, the yellow leare next to the redd, and the dunne dyrtie leare of all other che worft, and leaft profitable, all manner of fand grounds yeeld good leares, fo doc mof of your mixt earths, your clays, if not too wet, are reafonable, but your flyntic, grauelly, peeble foiles, yeeld neuer any goodnefic at all, your doded vvhite faft theepe that is roughand well woolled about the eyes, is euer profirable both to the fheares and the fhambles, being commonly of good bone, and good burchen, but the bare or blacke faft theepe, though he may haue a good coat, yct it is fo light that he cannor be held much commodious to cither.

## Сняр. XXVI.

## Of the Goat-heard.



Vidric countries inEurope, and particularly fome pláces of France are to befound, where they haue not the commoditie and benefit of any greacer cattell than the Goat, and of this they can make milke meats, much Butcer, and more wholefome than that of the fheepe, as ocher throys allo accompanying thefame, the wooll and skin onely excepred, of which notwithfanding chey make Chamlet in Turkie, and as for their yourg ones, they arc fold in their reafon, and make as good meat as any that can be found. And this time is whenas birds doe couple and match togecher, and other beafis goe to rut, for the young ones of this kind being indeed veric young, are aptro be compared vvith the Lambes of the fame age. Witneffe to the Cookes and Vittailers, vvhich craftily fet che cayle of a Kid vpon the quarter of a lambe, which is found to haue but a skinnie and vnfauorie fefh, without any daintineffe or taft at all fauc of the milke.

The Goar is fed as it were with nothing : he brouferh and feederh of all manner of graffe, of pricking things be chey neuer fo fharpe: vpon the hedges, buthes, brambles, yea vpon venimous and infectious chings, he louech to broufe the wood of fruit trees : he delighteeth to licke the moift walls, and rockes tafting of Salcpetur, in fuch fort as that you thall neuer fee a Goat dye of hunger : he feedech for the moft part ofa more folide urieat than the Weather, and climech into higher places, and where che Sunne hath greater power: befides, he is of greaterftirring, and more giuen to exercie, and therewithall framed of a more ftrong and luftie bodic. Thefe haue beene the caufes why men in cimes paft haue efteemed them, as they doc yet alfo in hillie countries : and we for the few that we haue, doe prouide Heards and Houfes for them amongft the Sheepe, and wee feperate the male Goats in fuch fore as vee doe the Rammes. Thieir houle muft bee paued vvich ftone, eyther by workemen or naturally : for thefe catell are not allowed any kind oflitter at all, and that becaule they like it better to lye vpon the bare and hard
ground, than to lie vpon litter : yea and oftentimes they will lie afleepe vpon the verie points of rockes, or vpon the fteepe corners of high hills toward the heat of the Sume, rather than vrider any fhadow; or elfe vpon the frefh and foft graffe: but they be of variable complexions; and therefore it is no thame for a man to call another goatie, if he be found mutable and full of changes in his manners and carriage. And tor asmuch as we are farre off from Languedoc, Auuergne, and the hillie places of Sauoy, in which this kind of prouifion being a fecciall commoditie of thofe countries, is had in great eftimation, we will make a fhorter defcription and difcourfe both of the maner of ordriny them, than we do in the like cafe of fuch as beare wooll, as alfo for that thefe two forts of cattell are placed togecher vider one roofe, and at one cratch,feeding vpon the like fodder, and are as at were handled after the fame manner, and kept in the fame flocke.
The painefull Goat-heard fhall make cleane their houfe eucrie day, and fhall not

The office of the Goat-heard. fuffer any dung or moifture therein, or that with trampling they make any dirt, for all thefe are verie contrarie vnto goats. He himfelfe muft be of the nature of goats, shat is to fay, nimble, courayious, rough, hard, diligent, patient, cheerefull, and bold, and aducnturing to goe amongtt the rockes, through deferts and bufhes, not that he fhould follow his flocke into euerie place as other heards doe their cattell, but that he be euerie day before them. He muft not be charged with moe than fiftie, becaufe this catell is foclifh and diffolute, eafie to ftray abroad hither and thither, contrarie vnto fheepe, which keepe together, and crouble not their heard with gathering of them together. He fhall beware and not fuffer them to feed in cold places, for cold is more hurffull vnto them than any other thing. He fhall draw them forth to the fields by breake of day follong as the dew falleth; that fo hauing filled them. felues of the grafle thus bedewed, they may returne home about nine of the clocke their vdders ol milke : and then againe, about three, they are to be fent to the fields, that they may feed and continue there vntill the euening. In Winter time he may lead them to fields from nine a clocke votill night, withour any hurt done vnto them, either by the open aire, or cold, be it neuer fo fharpe, they are of foftrong a nature Ie is true, that if the weather be tedious, or Rainie, or full of Snow, as in Winter, he fhall keepe them in their cote, and giue them to eat the tender fprouts and falkes of herbes garhered in September, and dried in the Sunne, and afterward kept in the hay lofs, or fome fuch other place out of the raine. He fhall vfe the meanes to caufe
them ro ingender in Autumne before the moneth of December, as he doth the fheep,
Tbe goats bucking tume. to the end, that in the Spring, when the trees bud, and the woods begin to pur forth new leaues, they may bring forth their young ones. When he would hauc his goats to haue good fore of milke, he fhall giue them to eat ynough five-leaued grafle, or Shall tie about their bellies the hearbe Dittanie, or elfe carre them to feed in fome place where there growerh great ftore of it.
The goodneffe of a goat muft be efteemed and gathered by thefe fignes. If the be one yeareold, and nor paft fiue; if fhe haue a grear bodie, firme and fwift, thicke haire, great and groffe teats, large beneath the taile, and about her thighs, tather of a reddifh or blacke colour than of a white; for although that fome fay, that the white doe yeeld more milke, yet the reddifh coloured and blacke are more pleafant, frolicke, and merrily difpofed : without hornes, rather than horned; for thole which haue no hornes, doe not caft their young fo foone, and they doe keepemore conue niently amongtt theepe, than thofe which haue hornes.
The male geat.

The male goat is much to be efteemed if he be not aboue five yeare old (for in refpeat of his hear, which is exceeding great, he doth eafily grow old:) which hath a great bodie, groffelegges, a thicke and Thort necke, hanging and great eares, a fmall head, blacke haire, thicke, neat, and long, withour hornes; for fuch as haue hornes, by reafon of their pufhing and eagernefle, are dangerous: which hath likewife vnder his chaps two bearded knobs or kernels.
The profit that the farmer may make of his goats, is their dung, whether it be by folding them vpon their fallowes in the Summer time, or that it be fuch as is maide
and gathered in their coats: the Kids, the fleth whereof is held fo daintie: the Goatskin, whereof gloues are made; as alfo counterfeit Shamois, dric leather, or Spanifh leather, and alt the baggs wherein Oyles are wont to be carried in to and fro: the skin of the male goas, whereof are made the beft drie and Spanifh leather, fo much: inrequelf for pumpes and pantofles : the fewet of the male Bucke, whereof the phyfitions doe make fuch vfe, and find fo. fingular in the curing of bloudie fluxes: the skins of Kids, whercof are made handlomie, daintie, and fote gloues, good girdles, purfes, and needle-cafes: and Cheefe which fhall be madeafer che fafhon of Cow-milke-cheefe. It is moft true that fome doe make them after the fafhion of litetle thin Angelors, and thofe are the excellent cheefes, which hane beene wont to be made at Nilimes heretofore, as Plinie recordeth, howlocuer now at this prefent, Baus doth carrie away the name.
And now fomewhat as concerning the baggs made of Goats-skins for to carrie Baggs made of Oyle in, as we have daily experience our of the countries of Proucnce and Languc. goarsskins. doc: you muff fift cut trom the dead Goat the head onely clofe by the necke, and the feet at the fecond joynt of the leggs: afterward, fleying the reft of the leggs vnio the orivie parts of the beaft, to turne the reft ouer all the bodie, aind keeping the hairie fide ourward to falt it three or foure times, and to rubbe ouer all the skin cuerie where with falt verie weli; afterward, to few it and make ic into a bagge for Oyle, as it :nay beff ferue : you muft notwithftanding kcepe it alwaies full, blown vp, and tied fomewhere vp on high, that it may not touch the earth, for otherwife is would be grawed in pieces of vermine. She fhall not make account to nake Butter of thsir Butter of goats milke in any grear quantitie, for the milke of goats harh no fuch ftorc of fat or oilic milhe. fubltance in it, feeing there is alwaies much adue to get forth cuen fome friall portion; and yct, which is more, when it is out, it looketh whitifh, hard, and tafteth like tallow : and chirdly, becaufe in Languedoc and Prouence, they gather not any Butter at all, being giuen to make Cheefe, namely thofe Cheefes which are called frmall Cbeces.
As concerning the difeafes of a Goat, fle is neuer without an ague in this Coun. The gat is ne: erie, and that in luch fort, as that if they be free from it but a litte, they die: befides the difeafes of fhecpe, whereunto Goats are lubject, there are chree other, whercunto the Goat is fubject, that is to fay, the dropfie, fwelling after fhe hath brought forth her young, and the drie difeafe. The dropfie happenech vato her by Thedifafes of drinking too much vvater, and then you mult make incifion vnder the fhoulder, goats. and draw forthall the gathered fupetfluous moiflure, "and after heale the wound vvith tarre. After fhe hath brought forth her 5 oung, if her matrix befwolne, or if the The matrix be not vvell purged of her after-birth, you mift caufe her to drinke g great glaffe ful fwolne. of verie good wine. The drie difeafe commeth vpon her in the time of hor feafons, The drie difeafe as wherein her teats are fo dried vp , as chat they are like vnio wood for drineffe, and infuch cale you mult rubbe her tears with creame: and as for orher her difeafes, you muft cure then with thole remedies vulhich are fee downe for the difeafes of cwes
The good hufwife chatfettech by the health of her folke, fhall not giue any goats The filfin of Geh vinto her people to eat, excepr it be int time of great dearth and icarcitie; be- gatso caufe the eating of this fleth doth breed the falling fickneffe. Likewifc our predeceffours had the flefh in luch a loathed deceflation, as that they would nor deine to touch ir, no not name it: notwithflanding if neceffitie due force ws to feed vpon it, as many poore peafants divelling in villages doe (hauing good fore of goats, and which onely arethe flore of their powdring tubs, as alfo being perfuaded thereto through couetoufneffe.) then they muft boyle them in a pot not couered, and in great quancitic of vivater, with good forc of fices and cloues, and yet after all this, not ro eat it before is be cold, ihe may gatier fome profitable ething both of the male and female goat for the health of her familie : For the milk of the female is ve- Goats milhe. tie fingular for che hard neffe of the fpléne, if fo be that the haue beene fed any fpace of time with Iuie. The reddifh and bloudlike liquor which diftillech from her liner
whers

Goat, bloud. The bloud of the malegeat. The goats horne
vihen it is roafted, is good for the sveake eyes. The bloud of the male or female Goat fried, flayeth the flux of the bellie. The bloud of the male hardened and dried vp in lumps, is fingular againft the ftone. The poulder of the Goars horne burned, cleanfech and maketh vvhite the reeth: drunke with Rofe or Plantaine vater, it flayeth the bloudie flux: The fume or fmoake comming of the burning of Guats horne doth driue away Serpents in vvhat place focuer that they be. The dung of Guats applyed in forme of a cataplafme doth refolue fwellings vnder the eares, in the flankes, the Sciatica, and other Apollumes, efpecially if it be mixed vvith the floure ot Barley, and vvater and vinegar, or with frefh Butter or the dregs of the Oyle of Nuts; rvhich is more, if you giue but fuetreteles of Goats dung with a fmall draught of vvite Wine, the face of eight dayes enerie morning, it doth heale the laundife.

## Chap. XXVII. of the Dogges Kenell.

 Nnto the Shepheard, feruing alfo in fteed of the Goatheard, doth belong the charge of the Dog houle, in the ordering of this our Countrie gouernment, as vvell becaule neceffitie commaunderh that he fhould haue Bloud hounds to fight and chafe away the Wolues; Hounds and vvater Spanels for the purpofe of luch things as now and then he may meet withall in the fields, or vvhich efcapeth vnawares out of the riuers or ftanding vvaters: as alfo, Maftiues, vvhich are ginen him in charge by the farmer, as being tor the guard and keeping of his houfe, and of thefe there fhall be one or two vwhich fhall be ke pe faft all the day, chained to fome poft reared in the Court on the left hand as you goe in, for to giue aduertifement of the comming in or going out of ftrangers, and to make fuch afraid as mighe come to doe mifchiefe : but on the night fuch dugges fhall be let loofe, and pur amongtt thereft whin come from the field, to bolden them in their charge, as in ranging and kecping the Court, as well to detend it from theeues, as to free it from the rauen of vvild beafts, wwhich giue themfelues wholly to the purchafe in the night time. This then is his charge, to feed them, to make them cleane, to bruhthern and wipe off the duft from them, to correat them, reclame them, teach and fit them for that which it is needfull that they frould doe, and to this end the farmer mult not withhold from him the great of the fiftings, which may be prepared for theny at euerie bakny, befides what may come unto them for their fees vpon euerie purchafe either of tame or wild thing. He fhall hikewife haue care to fee to the collars that are requifite about the faid dogs be fhall fee them wathed inTo meet with the madnejle of doges. the heat of the weather for feare they fhould goe mad: as allo that they may he vpona frefh and off fraw after that they haue trauelled : they muft alfo be fparingly fed, thereby to make them the mere fierce vpon the pray, and the readier to courfe, and he thall watch with his Cros - bow or Piftoll, to meer with fome wild flefh, it any corse in thofe quarters, which bis bufinefle doch draw him vnto.
Thref forts of i meane therefore that the Husbandmari fhould haue care to prouide three forts do iges needfull abcut a country farme. of dogges in his houfe. The one called the watch dogge, to difcouer the fecret and covert conueyances of things folne by men : the fecond, called the Shrpheards dogge, to refift the injuries and outrages offered by men or wild beafls, and to driue them away: the third, called Hounds, or Hunting. degges, and thefe doe not bring any profit to the Husbandman, but rather may be fayd to hinder his worke, and keepe him from his bufineffer: But I will onely lpeake of thofe which are for the keeping of the houfe and careell, and referue che hunting dogge for to intreat of in our feuenth Booke, wvhere I intend to fpeake a vvord or two of hunting.

The

The dogge appointed for the keeping of the Farme, muft be of groffe and great Tbe qualities of corpulencic, hauing his bodie well and fquarecompact, and rather thort than long. a watcc. dooge\% Let his head be fo great and thicke, as that it may fhew to be the greatell.part of his mabs. bodie, his countenance fomewhat refenbling a mans, his throat grear and wide, thick and great lips hollowed after the manner of valle ys, his niecke thicke and fhort, his eares great and hanging, his eyes blacke or Azure, fierie, and fparkling, his breaft broad, and full of haire, his taile fhort and thicke, which is a marke of ftrengeth, for the long and fruall taile is onely a figne of fwifteffe, his foot and nailes great, his barke bale, loud, and fearefull, he muft be reafonably fierce, for the gentle doggs doe faune vpon thecues, and the ouel-fierce would not les to leape in the botome of your familiar friends, and feruants: efpecially let him be warchtull, \& keeping good guard, not a rouer, running hither and thither, but foone fatisfied and fayed, rather than actiue and bufily gadding, he muft alfo be blacke,to the end he may be more terrible vnto the chiefe by day, and not fo well perceiued of him by night, or it he be blew, of opnfiuest brended, or a darke fallow, not any of thefe colours are amilte, but fhew much ftrength, valor, and fierceneffe, and are commonly the beft breeds of all ochers, as is to be feene in England, from whence France hath beene onely inriched with all her chiefeft Maftiues.
The Shepheards dogge needs not, nor muft not, be fo great and heauie as chat of The qualitito of the Farme, and yet notwith fanding he mult be ftrong and luftie, and fomewhat rea- the Shepheerds die and light : for he is vfed both for fighting and running; intended, that he muft doge. warch and hunt away the Wolues, and it they fould carrie anie thing away, then to purfue them, and take it from chem: Wherefore in chis refpect it were better that he fhould be long made rather than thore and fquare, feeing. euerie beaft of a long bodie is more fit for the race, than that which lath a fhort and fquare bodie. He muft be of a white colour, that fo the Shepheard may more eafily difcerne him from aniongft the Wolues, and know him as well in the twylight, as alfo in che very darkeft time of the fame. If he be in the reft of his limmes like vnto the houre dogge, he cannor chufe but be a good one. . Both thefe forss of dogges are fed with like meat, as The meat fit for with Wheaten bread, the flower of Barley with Whay, warme broth, and fodden dogges Beanes. The Shepheard which hath this charge, fhall not let cither Dogge or Bitch ${ }^{\text {The }}$ time for engender before they be a yeare old, and not atter that they be ten yeares old. He fhal degs and bitches take from the Bitch her firft litter, for being young and newly acquainted with fuch matters, fhe flowuld not feed and nourifh thern well; and againe, luch her feeding of them would hinder her in her grouth euerie manner of way : asalfo, the dogge of the firft litter is of feeble and weake condition, and for the mof part fubject to runne madd. Sixe moneths after the Bitch hath whelped, he flall not fuffer the Whelpes to goe forth, vntill fuch time as they become frong, except it be oncly to play and fport themfelues with their damme, for feare that in attempting to leape hedge or ditch, they doe nor burf and beat our their guts. He fhall nor letthem fucke any o- The ordering of ther milke but that of their owne Bierch, and if it happen that fhe want and haue not whelpes. ynough, they fhall haue Goats milke giuen them vntill they be foure moneths old: he fhall not call them by verie long name, that foa afloone as they be called they may The names of know that they are cailled. And againe, it is not good that their name fhould be of deggeso lefferhan two fyllables. When thete Whelpes are fortie daies old, he fhall breake 1 frew in the thetip of their taile, and fhall draw out a finew that rumneth along the joynts of the tailes of dogges. backe, euen vnto the end of the taile, this will keeperhem from growing too much in length, and will alfo be a meanesto keepe them from'running madd. He fhall Tomate himb make his dogges come after him, and the meanes to doe it (as fome fay) is to giue felf followed them now and then fome boyled froggs to eat; or to make it more fure to giue thein ${ }^{\text {of dogges. }}$ bruifed Salt, or elfe to caft them a peece of bread, which he hath kept a good while heepe dogs fona vnder his arme-pits, in fuch forr as that it be a litele moyftened wich the fweat of runnung at youro them, or elfe to ler them funell the after-birth of another Bitch, which he fhall haue wrapped vp in a cloth. Likewife he fhall learne fome peece of cunning to make that he nay nor be barked at, nor fet vpon by other dogges how raging foeuer they be.

## The first Booke of

And to effet this, he flall hold in his hand the eye of a blacke dogge pulled from himaliue, or for the more certaintie, the cye or the heart of a Wolfe, or the tongue

To make dogs fibn.
Does may not eat Sbeepes flef.

## Doggs dijeafes.

 fpecially wnto three difeafes, madneffe, the fquinancie, and the paine of the thighs Madneife taketh them in the extreame Sommer heat, and in the exceffiue cold of Wincer: and for the better keeping of them from this difeafe, it will be good that during the time of excefflue heat and cold, they haue often giuen chem cold water to cocle them withall, and to temper the heat of their bloud: or for the more certaintie, whiles shey be yet yong,you may plucke from them at their tailes end, a finew, which goeth along through the joints of the backe bone : Or elfe to take from vnder their tongue a litetiefinew which is like vnto a fmall broad and round worme. To cure then of this difeare, fo foone as the matter is perceiued, he fhall caufe him to drinke the juice of Beets, with the pith of Elder rree : or elfe burne him in the brow with an hot yron: or eife ro foufe him euerie day tor the fpace of fiftene or twentie daics together in Sea-water, three or foure times a day : or elfe in warme water made falt: for falted or Sea-water hath a fingular vertue againft the madneffe of a dogge. And thefe are the fignes of a madd dogge : he is more drie and leane than ordinarily he was wont to be, he eateeth nothing, neither drinketh, although he feeme to be muich altered and ftarued with want of them; he hatech water more than any thing elfe, at the fight whereof he fallech into trembling and ftaring of his haire all ouer his body; his eyes are red and fierie, his looke is afide,fterne, and fixed vpon him whom he beholdech : he doth nothing but run hither and thicher without reafon, his head and eares call downe, his mouth verie much gaping, hanging out a great blacke and wan tongue; fom ng and driueling at his mouth, and fniuell at his nofe; his taile hanging betwixt his legges; barking with a hoarfe voice, and hanging his lead vpon the one fidcor thic orher: he fetteth vpon without barking, and bitech whatoeuer he meeteth with, whecher it be his maifter, men knowne vnto him, or vnknowne, beaff, rree, flone, yea his owne fradow: fomerimes he flandech fill, fometimes he runnect, now on the right hand, now on the left hand : other dogges runne from him, which notwithfanding he fauneth vpon if he meet them, and maketh them afraid.The Squinancie, and paine of the thighs, is healed and cured after the fame maner The Iquinancie. Thatic is in Sheepe: nowwithflanding the common remedie is to cuufe them to take a The paine of the
thighte
grearg glafle full of warme Oyle , and after to open the veine of the chigh. For their exVleers of the eares.
uicerate eares comming through fleas, he muft rub them with bitter Almonds bruifed : For to kill the fleas of dogges, you muff rub them with Sea-water, or with brine with vvater, or with the old lees of oyle of Olines.
The other difeafes may be cured by the fame remedies, which we haue alreadie fet downe for Sheepe.
Shut vp a dogge clofe in fome place for three daies, in fuch fort as that he may gnaw nothing but bones, then gather his dung, and drie it: the powder of this dung is good againft all bloudie fluxes, if it be taken twice a day with milke, and fo continued for the fpace of three daies, remembring moreouer before you mixe the faid milke, to quench diuers fmall pebble fones made red hot in the fire in it. This powder likewife is verie fingular in maligne vlcers, and thofe that are giuen to be rebellious : likewref fuch an emplaifter of dogs dung is excellent for the fquinancie.

## 

Of the Carter, or Herfe-keeper.

(5xE haue heretofore fooken offuch liuing creatures as are for the profit and vfe of men inhabiting Countrie villages: in clat which followeth we will fpeake of thofe which ferue not onely for meninhabiting the faid villages, but alfo for them which inhabite and dwell in Cities and great Townes, as are the Horfe, the Mule, and the Affe. I fet the Horfe before the relt, as being feruiceable for the Peafant and Countrie-drudge, and alfo affording great feruices to Nobles, Priuces, Prelates, and to be fhort, to all forts of men, as being the beaft which is peereleffe, for his comelinefle, beautie, courage, furniture, profit, and commoditie.
Therefore (I fay) let the Carter or Horfe-keeper, to whom appertayneth the charge of Countrie horfe, be a fober and patient man, louing his bealts well and newer beating them : but well may he acquaint them with the lath, the whisking noife of his rod, with his fieech, and with his cal : let them nut at any time labor more than they well may, either in draught or trauell, let him currie them cherefully and merrily eucrie morning, and in Sommer fometimes after noone: he mult not giue them to drinke but at ordinarie houres, and afer cheir reft, let him oftentimes vfe to wath their feet in Sommer with cold water, and fometime with wine, or the lees of wine for to ftrengthen them withall, and with vrine if they be dulled or blunted, in the night time putting of their owne dung in the hollow or fole of their hoofe: and if they be chafed or heated, or put out of the loue and defire of their meat, he mult walh their throat with Vinegar and Salt: let him not giue them Hay, Prouender, Chaffe, Oats, or Litter, before they be verie well dufted: he muft not let them goe without fhooes or nailes : and let him be carefull that their traife, cart-faddles, collars, bridles; or other parts of their geares, and harneffe, be not Forne, or rent, or rotten. He mult alfo know to tow with fmall threed, packthreed, and fhoothreed, to fluffe and inake faft his faddics : to be flfore, he muft be acquainted with the Sadlers trade, as alfo with the Farriers, and therefore he mult neuer be vnprouided of his budgee and pouch furnifhe with tooles and neceflaries about harnefle and faddles, nor yet of his yron ftuffe for his beafts feet : as namely needle threed and filke, fleame ro ler bloud with, knife to launce and cut with, cornet, butrys, pincers, hamner, paring-yron, and rape; he muft alfo haue barnacles, pafternes, trauerfes, and colling-fheares, with whatfoewerelfe is needfull to be vfed in any time of occafion or necenfitie. He muft be verie carcfull to find out the caufe vvhen he feeth any one of his Horfes halt, of what foot it is, and in velat place of the foot being handled or tried, he moft complayneth himfelfe, and to putabout his pafternes tometimes Spech-grafe, and fomerimés dung.

He muft alfo take great heed when his beaft doe caft the old hoofe, and haue a The calingot new growing, and caufe fome thing to be giuen him for the helpe of the growth of houses. the new hoofe, and vehenhe hath his throat heated to caufe him to be couered, if therewith he haue the cough: and if in trauaile he hauc taken cold by raine or tedious vveather, to give him then to eat fome Fenugreeke or Anife-feed amongtt his prouender : to change him vvhen he is palt age: and alfo to take acknowledgement of the loue that one Horfe beareth towards another, and accordingly tofet them one by another in the Stable appointed for them, which he mult cuerie To wake oleane morning may cleane in Sommer, carrying our the dung and filth, and lecting none his barfs fable. remaine, and at night giue them frefh Litter. He muft alfo calt an eye about, and fee whether his horfes doe grow leane or no, and then to fat them with Ferches boyled in water, and mixed amongीt their Oats, as alfo with millet, pannicke, rice, fodden and mingled with meale of Beanes, and a little Salt; or where thefe are mifing, to take
good
good fweet Barley chaffe, or Peafe pulfe well mixt withfome drie Beanes, and to give him thereof good fore aftercuerie watering, or vvhen he inewly commeth froni his labour; as for fodden Barley, or other boyled corne, they are onely good to loofen the skinne, but the fat which they gather is neuer of any indurance. He mut be content to take vp his lodging in the ftable, for feare of their falling ficke, intangling themfelues in their halters, and growing of his beafts, and let him be carefull and wife in ordering and placing his lightin fuch forr, as that it may be our of daunger, and to lockevp and keepe his harneffe well, and made readie ouer night againt morning, thatfo when he is to recurne to his labour into the field, he be not to feeke of any thing. If he haue any Mules or young Colts, he inuft put them by themfelucs, and referuethem for fome other labour : and if any of his Horfes fall ficke, if it be not of wearineffe, dulneffe, or chafing, he mult puthim our from among the reft.

The faults of Horfes.
'A Horle going backroard. If he haue any Horfe that hath ill propertic or fault, he fhall be carefuil how to amend it, as if he be fearefull or timerous, or if he will not abide while one gettech vpon his backe, or if he will not goe by or into any place, he fhall hang wfhin his eare fome pretcie littleftone : and if this doe him no good, he fhall hoodwinke him, or fet behind himathis taile fome flame offire, or fome Tharpe pricking thing; it he whinie much, he Thall tie to his head a ftone with a hole through it: if when a man is vpon his backe, herife and come alof, he fhall hit him with his rod vpen the forelegges : if he lye downe, he mult be raifed vp againe with rough words and ftrokes : if he gue backward, you fhall tye a cord to his codds, wwhich fhall be fo long, as that reaching betwixt his forelegges, he which ridech him may hold it in his hand, and when as the Horfe fhall goe backward, he fhall pull is hard with his hand to make him goe forward, for fo vvithout all doubt he will goe forthright, and amend his fault : if the Horle be gelded, he muft beat his chighs vvith a long ftaffe taken out of the fire verie hot, and burnt at the end: or he fhall giue him feele of his whisking rodd betwixt his eares: if the Horfe be hard to thooe, and troublefome to hardle and dreffe in the ftable, he fhall pur in one or both of his eares a little round pebble, and there make it fure with one or both his hands, and keepe them in his eares, and thus he fhall make him as gentle and ineeke as a Lambe.
It is alfo the Carters part to gouerne his heard of Mares and Coles carefully, that no inconuenience may befall them : he fhall put them to feed, and fhall fend them to. graffe when it thall be due time, and that in large and marifa grounds. Notwithftanding marifh ground doth foften their hoofe verie much, and maketh them tender. fighted, and begettech water in their feet: and for this caule I could like the high and hillic grounds better, being fuch as from time to time haue raine or deaws dropping downe vpon them, and not drie at any time, and fuch as are rather void and free, than incombred with vvood or other bodics of trees or legges : and yet further, hauing a foft and fweet graffe, 1 atherthan a high, great, and ftrong graffe. And notwithftanding that Mares be not fo frolicke nor couragious as Horfes be, yet they goe beyond them farre in the race, and ftand it out a great deale longer; and againe, they are not fo chargeable to keepe as Horfes are, for they are not fed with the beft hay, they content themfelues to run in paftures all the yeare long : crue it is, that in Winter, and when the ground is all couered with fnow, as alfo in the cime of continuall raine, they mult be put in fome one houfe or other, and giue them fuch Hay as is good to eat, and in Sommer to keepe them in fome good coole fhadowie place, and well growne with good Graffe, and ferueth vvith cleare vvaters : but neuer vpon the rough and ragged mountaines, as vvell for that they doe hardly feed there,as alfo becaufe that fuch as are with foale can hardly clime without great paine, fuffer the Mare to take Horfe ofter than euerietwo yeare, according to the opinion of the curious Horfemen; but yet the beter experienced allow the conueying of Mares euerie yeare, for it keepeth the wombe open, and giueth the Foale a large bed to lye in, to keepe and breed of the beft kind, and race, and not to bring in a bafe and degenerate kind: againe, to fee that it be dene about mid March,
to the end, that at the fame time that the Mares were couered and horfed, they may eafily feed their Coits, hauing render and foft graffe after Harueft : for about the end of the eleuenth or twelfth moneth they foale, and fo their milke is the fafter, better conditioned, begetteth alfo and nourifheth fairer Colts, and fuch as thriue cuen as we our felues would wifh. The Stalions alfo thus attended are the ftronger, and doe more abound with a well concooted and flimie nature, and not with a thinne and waterie, and withall, they couer them with more courage, and beget greater Cobss, and fuch as are more hardic and ftrong. He fhall know that the Mares are readie to The fignes of the take Horfe, when they yeeld a whitifl hunsor at the place of generation, and that Mares being their priuie parts are more fwolne than they were woint ro be, as alfo more hot than readie to tate ordinarie, and eat not fo much as they were wont. He fhall let her take Horfe twice ${ }^{\text {Liorfe. }}$ a day, cuening and morning, before he let her drinke; and ehis hall be continued but tenne daies: which paft, if fhe refure him, he fhall put her afide as with foale, and Thall take away the Horfe, leaft with his furious rage he make her that the doe not conceine.
The Horfe that is leffe than three yeares old, is not fit to couer Mares, but he may $\mathcal{A}$ Horfe toce: continue good till he be twentic yeare old. The Mare is fit to take Horfe when fhe uer Jares. is two yeares old, that fo being three by her foaling time, fhe may be able to feed it well: but fhe is nothing worth for this purpofe after the is once renne yeares old: for Horles begotten of an old Mare are loofe and heauie. One good Horfe is ynough for twentie Mares: which, at fuch time as he is to couer them, muft be well fed, and when the time approchecth, muft be farted with Barly, Fetches, and Ciches, to the end he may the beterer ferue for the purpofe : for the ftronger and more difpofed he fhall be co coucr them, the ftronger will the Colts be which he begeteth. If he haue no courage, but be feeble and out of heart, you muft rub the fecret parts of the Mare with a new and cleane fpunge, and after rub the muzzle of the ftalion with the fame: If the Mare will not admit the Horfe, you muft bruife a Sea-Onion, and rub her fee cret part therewith, for this will warme her: And to haue a Horfe of the colour that you would defire, couer the Mare with a couering of the fame colour, at fuch time as the Horfe fhall couer her.

The Mare whereof we defire to haue a good race, muft not be vnder two jeares A Mare fos. old, as hath beene faid, nor aboue tenne or ewelue ; and vnderftand withall, that be. breed. ing of a colder complexion than Horfes, fo the faileth before them in that worke: the muit be well made of bodie, broad ípread toward one, hauing a comely and pleafant looke, her flanke and rumpe large, well fed, but a little leane, to the end that the may hold her horfing the better : that the haue not trauelled of a long time: that fhe beare not but eucrie two yeares, to the end the may the better feed her Colt: When fhe is with Colt, you nulf feed her well, you mult not trauell or runne her, nor leaue her to the extremitic of the Cold, but keepe her in houfe when it raineth and froweth, and as long as anie great cold weather is, that fo the may the better bring forth a perfect Colt. If the Mare be in foaling, or that fhe hath caft her Colt, The Mare rea* you muft bruife Polipodie, and mingling it with warme water, caufe her to drinke die to foale. it with a horne. If fhe haue foaled well,you may not touch her Colt with your hand, forand if yourouch it neuer folitrle you hurr it. So foone as the hath foaled in the The Mare thas houfe, you muft fuccour her with drinks of warme water, mingling falt therewith and meale alfo both cuening and morning, for the fpace of three daies at the leaft : after this, you mutt giue her good Hay and fufficient Corne, keepe her cleane with good Litter, that fo fhe may reft at eafe; for this lier good feeding doth caufe her Colt to profper, and Atrengtheneth it.

After that the Colt is foaled, it mult be left with the Mare in a warme and wide roorder is Cole place, to the end that cold may not hurt it, neither yet the Mare, by reafon of the new forled! ftraitneffe of the place: and when it Thall be ftronger, it thall be accuftomed to eat Hay, to the end that the dams milke failing, it nay hane learned to feed vpon a firmer nourifhment: but it fhall be let run with the Mare in the pafture, that fo fhe may not mourne for lacke of the fight of her Colt: for commonly Mares are ficke for
the loue of their colts, if they cannot feethem. When it fhall be eighteene moneths old, you fhall begin to waine it, and put it in the houfe buile for coles, afeerward you fhall tame it, putting a halter about the necke, and that rather of wooll than of coard, that fo it may not fecle any hard thing to annoy it : and ifit will not abide to betied you muft make it faft with two thongs of leather or of hempe, or with a bridle vnto the manger, that fo it may be acquainted with tourhing and handling, and that fo alfo it may learne not to be afraid of any noife that fhall be made : it vvill be good alfo to fet it amongft others that are alreadie tamed, for fecing them fo haltred, it will at length accuftome it felfe tofubjection: as yet you muft fpeake it faire, and touch it with your hand, fometimes rubbing the backe, head, or bellie, and fometinies the rumpe, legges, and feet, fometimes raifing it vp, making it cleane, and rubbing it verie mildly and gently ; to be fhort, making fo much of it, as vntill it become fo tame that it know the boy or horfeman that currieth it , and the rider thar nult backe it, and vvithall vnderftand their vvords and voyces, and fmelling him, to know him before he get vpon him: fometimes you fhall fet a child vp. on the backe, to the end he may learne to endure to beare one; give it good hay and good graffe : lead it to water with one alreadie managed and firted to the hand : after it hath drunke, giue it Oats, at euening ftraw it with litter vp to theknees, and in the morning rubbe the legges and the whole bodie with the fame litter, and after lead it to drinke. When it is three yeares old, you mult breake and acquaint and fit it for fuch worke as you fhall thinke meet. As for example, if you would appoint it and make it ferue you fometimes to takea journey vpon, I could wifh you to giue it a burning with fire vpon the legges: and this you fhall commir to the doing of fome skilfull Farrier, efpecially in the Spring, Aucumne, and decreafe of the Moone, and at fuch time as thefe young horfe are full two yeares old: and this mult be done as wel in the legs before as behind: fuch courfe of burning doth harden and ftrengthen their loofe flefl, being foft and not clofe fet together, ir doch bring downe that which is puffed $v p$ : it drieth that which hath much moifture in it : it diffolueth that which is gathered together, it burneth away and wafteth rotenneffe if there be any, and healech old aches, curing and reftoring the declined parts of the bodie, leffening that which is growne too grear, and not fuffering it to grow any further. Add hereunto, that the icabbe, farcie, and other malanders accuftomed to feife vpon theirleggs, cannot haue the power to breed vpon them. After you haue thus burnt them with a knobd hot yron, carrie them to pafture, and that at fuch an houre, as when the deaw is vpon the gralle: for fo it will doe them a great deale more good than any thing that a man can giue vnto them in the ftable, for fo alfo you fhall caufe that the fcarres of the burnings fhall appeare leffe, and that if they thew at all that yet it fhall be with grod fetting out of the legge.
As for that retained opinion amongft our Frenchmen, that the flitting of a horfes nofthrils when they are full growne, will make them fit for the courfe or race, as being an occafion of more libertie to his wind, or that it will helpe a broken winded horfe, it is a meere fallacie and deception, and hath no fuch vertue at all, but rather worketh the contrarie, and by difmembring the organ or inftrument whereby he draweth vp the aire, doth breed in him a greater difficultie of breathing, the painefulneffe whereof inay be perceined when he ftandeth ftill without any trouble or moleftation, therefore I would haue all horfe-groomes to forbeare the practife, and to hold it.rather a difgrace than any benefit, for $1 t$ is to be vndeffood, that nature hath made euerie thing perfect without want or fuperflutie, and to alter any thing in her maine workmanfhip, is rather to ouerthrow than helpe the building.
If you will geld them and make them Geldings, that fo they may liue the more quietly amongit Mares and other Horfes, as alfo for the fitting of them which defire peaceable Horfes, you may doe it, but not before they be a full yeare old, becaule that then their fecret parts doe openly flew themfelues, and for the better performance thereot, it vvere better to vurith about and mortifie their codds altogether with pincers, than to geld them all at once, notwithitanding they be of full and fufficient age:

For

For in gelding of them, manie doe die of extreame paine, becaufe you take all away from them ; but if they die not, yet they remaine weakened and enfecbled both in heart and ftrength: whereas if you pinch them onely with Pincers, they are not onely free from all perill of loofirg their life, but alfo continue thi more bold; there remaining vnto themi fome fmall parts of the cords and finewes of the generatine members. Yet other of the beft French horlemen doc affirme,T That to geld a Colt cleane, by way of incifion and calterizing, is the beft courfe that can be taken, and maketh the fineft fhaped and beft mettalled Gelding: for (fay they) when anie of the cords or ftrings of genération are left behind, then the Gelding proues rammifh, Marewood, foulc headed, thicke neckt, and groffely crefted. And of this opinion are all the Englifh Horfemen : to whom we mult yeeld, becaufe they are knowne to be Maffers of the onely Geldings of the world; and thofe of whom we moll boaft, we haue onely from them, either by gift or purchafe. Therefore I leaue to the skilfull Groome the confideration of this action, to chufe chat to which he ftands moft affected.
Furthernore, caufe him to be curried by a feruant pertaining and belonging to thofe bufineffes: and being wife, gentle, and louing that fo by fuch his gentleneffe it may be preuented and forcleene, that the young Colt doe not learne ill manners, fecing it is fo difficulte a ching to take from them butone ill qualitie, after thatthey be hardened therein. And in this refpect it behoueth all the feruants about the Stable to handle thern kind ly, and fpeake genaly vnto their Horfes, thereby to make them know and loue them the better. And by fuch meanes and carriage it is wroughr, thar they fuffer themflues to be gouerned : that they fuffer meat to be given them, and anie man to lead them to drinke : that they fuffer themfelues to be hatidled, touched, curried : to hauc their clorhes put vpon their backes, either the Linnen one to keepe the Flics away, or elfe the Wooilen one to keepe them warme: and that they fuffer him to make the fame faft with a Surcingle, for the better keeping of them on vnto the morning, when they are to be new curried againe. There muft all Litter be taken from vider them, the cleane and whole chruft vider theiManger, the foule and filhic, togecher with the dung, being carried out to the appointed dunghill, neuer forgetting to keepe the Stable verie cleane, nor yet to lauie it fuirnifhed with all man: ner of neceflaries, and cueric thing in his place. Yec this euer by the way is to be vnderftood, that as foone as you haue cleanfed your Stablecleane, dreft your Horfe, warered hitn, and giuen him fuch prouender as you thinke meet.for him, that then; before you leaue him to his reft, you forget not to put downe his Litter about him that at his pleafure he may lye downe and take his eale, which is to anie Horfe as wholefome a reliefe as anie whatfecuer; giuing much comfore to his limbes and fincwes, making fiwift digeffion, and adding fich flength and courage to his heart and vitall fpiris, that he is thereby a great deale the better cuabled to endure his labour, and leffe apt to take furfets, and other mifchiefes, much incident to Horfes: where on the contrarie, when Horfes are compelled to fland all day on the bare planchers, out of a foolifh receiued opinion, to make them hard and of more enduo rance, the Horfe taking no delight to lye downe, humors defcends into his legges, ftrange fiwellings doe breed, Spauens, Curbs,Ringbones, and gourding of Sinewes, encreafe aboundantiy : and manic a good beaft, for lucre to faue one or two bottles of baggage Straw, is fipyled and made vtterly vnfif for anie feruice. And as I would haue you carefull thus to keepe Litter vnder your Horfe ; fo alfo I would haue your verie obferuant, to fee that your planchers lye euen and leuell, and not higher before chan behind, as is che common cuftome of moft men, efpecialiy Horfe-courfers, and fuch as keepe Horfes more for the fale than vfe: for albeit the vneuen laying of the planchers guech to the Horfe fome more beautic than ocherwife he would hauc, erecting vp his fore-parss higher than his hinder, and fo making him fhew with a goodly and well-raifed fore-head, yet it brings lameneffe, and is cherefore cuermore to be efchewed. When as the Horfes are in currying, it is meet that they fhould be tyed and made faft vnto fome high barre fee vpright, that fo they might haue their heads holden on high, and then after that to currie all their bodic,to rub them with a cloth,
cloth, to bath with fpunges well, in verie coole water, their head, eyes, lippes, eares, iawes, nofthrils, mane, and taile, and afterward to combe them verie diligently : and when this is done, to rub all their bodies ouer, but efpecially their legges and pafternes, with wifpes of ftraw, well bound and truffed cogether : for otherwife they will grow full of the Farcie through the flouthfulnefle of the feruants and the mafter himfelfe. Abouic all things, they mult be looked vnto whether they lacke anie thing about their feet, or no: feeing that oftentimes the want but of one naile is the caule that a Horfe cafterh his Shooe in the mid way, to the great preiudice of the poore beaft, which fometimes thereby is in danger of lofing his whole foor, efpecially when he trauelleth in anie rough and ftonie ground: for a Horfe that hath loft his fhoor, and goeth vnfhod, hurteth himfelfe in a minute of an houre, and fo foileth his hoofe, as that it is ofentimes feene to be quite loft, or at lealt to become vnfit for feruice. And when your Horfe is thus curried, fpunged, rubbed, and well fmoother, and euerie offence about him pickt, trimmed, and raken away, you fhall then cloch him vp with fuch clothes as are neceffarie for his health, and anfwerable to the cime and feafon of the yeare, as either with double Clothes, fingle Clothes, lined Clothes, Woole, len, Linnen, or both together, vfing moft in the Winter, fewer in the Spring, and feweft of all in the Summer. Yet for a better fatisfaction, and that you may rightly know what number or quantitie of clothes you fhall $v f_{3}$, you fhall view well the flate of your Horfes bodie, and looke carefully how his hairelyeth, efpecially vpon his necke, and other outward parts which are vnclothed, and if you perceiuc that in anie of thofe places the haire ftandeth vpright, ftareth,or looks rugged, then you fhall be affured that the Horfe wanteth clothes, and is inwardly cold at the heare : therefore you fhall then encreafe his clothes, and not ceafe fo to doe, till you haue brought his haire to lie ftraight and fmooth; which once perceiued, then you may be well affured that he is fufficiently clad : and you hall by no meanes exceed anic further. Now when you begin thus to encreate your Clothes, if you fhall find when you come to your Horfe early in the morning, that he \{weateth much, efpecially in his flanks, at his eare-roots, and in fuch like vfuall places, yet notwithftanding his haire Atill ftareth; you fhall then know, that fuch fweating is but a faint naughtic fweat, in. gendred by corruption of food, or elfe want of moderate and wholefome exercife: and therefore by no meanes thall you abate anie of his clothes, but rather encreafe them, till that naughtie faint fwear leaue him. But if you perceiue that his haire lieth fmooth and cleane, and yeenotwithftanding he fweateth, then you fhall know that his clothes are fomewhat too manie, and you fhall abate chem till fuch fweating leaue him. This is a moft infallible rule, and fuch a fecret as is worthie to be imprinted in the mind of euerie good Horfeman and Groome that intends to keepe their Horfes found and well prepared for all manner of labour. The Horfes drefled and ordered as they fhould be, and hauing eaten a little Hay, muft be led to water, or rather ridden forth a myle or more to their water ; which would euer be fome cleere Spring or running Riuer: where, after your Horfe hath taiken one good draught or two, you fhall bring him forth into fome plaine ground, and there gallop him gently vp and downe (to warme the water in his bellie) a little fpace, and then bring him to the water againe, and let him take another draught, then gallop him againe, and thus doe till he will drinke no more, and then with all gentlenefle walke him faire and foftly home to the Stable, and there cloth him vp. This nanner of watering your Horfe is of all other the moft wholefome, gining vinto him by this moderate exercife great ftrength both of wind and bodie, and alfo diffoluing ail thofe groffe, cold, and tough humors, which are ingendred by the corruption of water when it is taken without exercife, and lyeth cold and troublefome in his bodie, making the Horre to quake and tremble; as anie man may perceiue, when at anie time he pleafeth to approue the fame, and hauing giuen his Horle water, will but lay his hand vpon his bodic or buttocke: But this I have alreadie Spoken is at full fufficient touching a Horfes watering. From whence when they are returned, they fhall have Oates giuen them well fifted and fanned, and they fiall be marked whether they eat
well or not, that, if need be, they may be looked in the mouth, to fee whether there be anie thing to keepe them from eating, or no, and accordingly to take them in cure, or not: for the common prouerbe is, That Horfes goe vpon their feet, but it is their meat that doth vphold them, and caufe them to endure trauell. It is meet alfo to giue them fometimes fome rare and daintie thíng which may pleafe them, and may be more than ordinarie ; for it is all one as when one doth make them fo gente, tractable, and tame, as that afterward they will fuffer themfelues to be gouerned eafily: to vee them kindly alfo, and not to beat them, to torment them, or caft them into feare with high fpeeches and threatening words, or elfe by anie other meanes, fo long as they be in the Stable: but rather to handle them with all meekneffe, as well in word as in touchingor hand. ling, in what manner foever it be.
To fit the Cols for the Saddie, the good Rider muft firft put vpon his head a hal- To breake,or ter,with a Rouler of Wood, not attempting to doe anie other thing at that time, and fo to leaue him for two or three houres vpon the reines, being of cords, and after fuch sime to take all away for that day: the next day, fomewhat late, to put it on againe, and fo so leaue it for fome certaine time: afterward taking him by his reines, he mult lead him a little out of his place, drawing him along fome twentie or thirtic paces from thence, fometime walking him, and otherfome time flaying him, ftill vpon the fuddaine, according as he fhall fee it good, that is, according to the fubborneneffe and frowardueffe, or the eafinefle and genteneffe of the Colt. So foone as he is come inro the Stable, he thall haue this halter taken from off him, putting him in his accuftomed Head-ftall, and giue him rather fome Hay to eat, than to lead him to water, and after that to giue him his ordinarie of Oats. The third day he fhall not onely put on his forefaid halter at the accuftomed houre, but alfo a faddle, without ftirrups, peterell, or crupper, girding him gently, and in all kind manner faftening and buckling the fame verie lightly:he fhall yet doe nothing but lead him out of the Stable by his halter, handling him alwaies louingly, and leading him with all gentleneffe whither he will willingly goe: and after that he is come into the fallowes and plowed grounds, he fhall get into them : where hauing taken with him fome long fmall whisking wand, he fhall firt make him to ftand ftll : then afterward he fhall make his Colt goe a litele pace, and from that litele, fomewhat fafter and fafter, now and then giuing him a gentle touch or remembrance with his faid fmall rod, which hee th.ll then fhew vnto him : after making him ftand ftill againe, he fhall hold him vp with courceous and friendly words, and rubbing him with his hand, thall carrie him backe againe vnto his Stable, and there prefently take off his faid furniture, and put him in his ordinarie Tiall or Head-ftall. The fourth day he fhall make him readie as he did the day before, and hauing fpoken him faire, he fhall fet a litele boy vpon him: and if he fee chat he begin not to fmite and fnort, and to take on anie whit at all, he thall lead him by the reines out of the Stable, and lead him a pretie way off, making much of him with his hand, and touching his head, necke; and breaft: and flall lead him to fome blocke made to get vp by (and this folong as he is ridden without ftirrups:) and there caufing the boy to come off, he himfelfe fhall get vpon him verie lightly, and holding the reines cuen in his hand, fhall caufe one to giue him fome frmall whisking rod, and with it hefhall touch or ftroake his necke, and flacking the reines a litde, fhall caufe him to goe forward foftly: if he play anie leaping ericks, he fhall ftay him with the bridle, ftill fpeaking louingly vnto him: and feeing that he groweth quice, he fhall make him goe foftly, and fet him on by a little fafter and fafter, vntill he make him pace and trot. Hauing done this in good fort for fome prete while, he fhall bring him againe to his Stable : where, hauing faftened him to the Manger, he fhall couer him that he take no coldjand about an houre after he fhall take off his faddle and bridle at once, rubbing him with frefh ftraw, but efpecially the places wet with fweat: and then couering him with his Cloth, and after hruing rubbed his legges and feet, he fhall let him drinke, and giue him to eat, and thake vp his litter about him. This is the accuftomable vfe of fome of our French Riders for the firft breaking of Colts: but it is by others, more expert and induftri-
ous in the Art, held to be a little too tedious; and they find a neerer way to the end

## Tt: best hand

 ling of Colls.of their purpofe, as thus: Hauing made the Colt gentle and louing in the Stable and abroad, obedient and willing to be handled, led forth, and ordered as a man pleafch, without affright, diflike, or rebellion; they then at firft fet a good fufficient Saddle on his backe, with Pyrrop and ftyrrop-leathers, which after they rub ap and downe his fides, a ftrong crupper, and a good breaft-plate, which bcing well gytt on, they in the morning caule him to be led forth in the Groomes hand, that hemay be acquainted and familiar with thofe ornaments that are about him : then, in the afternoone of the fame day, they put into his mouth, with ftrong head-ftall and reines, cither a good watering trench, or a watering fnaffle, and then ouer it a ftrong foft chafle halter, and to lead him forth with all genteneffe into fome new-plowed field, or elfe fome other ground of the like nature, and there make the Colt trot a ring of both hands foure or five times about the Rider: then the Rider goes to the Colt and cherihhes him, and the Groome holding him faft by the chafle halter, neere to the Colts head, with one hand, and ftaying the ftyrrop with the other, the Rider offers to put his foot in the flyrrop, and with manie leifurable heaues and lifts to take the Saddle, at anie of which if the Colt ftartle, or feeme to be difpleafed, the Rider fhall defcend againe, and make the Colt, as before, to trot a ring foure or fiue times about him, and then offer to mount his backe againe, not ceafing thus to doe, till the Colt with all gentleneffe doe receiue him:then fhall the Rider and the Groome both cherifh him verie much, and then the Groome thal offer to lead the Colt forward; at which if hefind faule cither in action or countenance, or but in the gathering together of his rumpe, legges, and bodie, as though he would leape and plunge, immediately the Groome fhall fay him, the Rider fhall alight, and, as before, fhall compell him to trot his rings about him, and then take his back againe, not ceafing thus to doe, till the Colt with all willingneffe preffe forward and be content to be led with the Rider on his backe whither and which way foeuer the Groome pleafeth : in all which motion, the Rider fhall with his voice, and the thrufting forward of his feet hard vpon the fty rrop-leathers, encourage and as it were enforce the Colt to goe forward, now and then fhaking his rod ouer the Colts head, to make him heare the noife thereof, and euer and anon as the Cole is thusled vp and downe, the Rider fhall with his bridle hand flop him, make him ftand ftill, and cherifh him, then caufe him to be led forward againe, and as the Colt growes more and more willing to goe forward, fo the Groome Thall withdraw his hand more and more from the Colss head, and loofen the chaffe halter, infomuch, that the Colt may haue no feeling of the Groomes leading him, but may goe forward by the helpe and encouragement of the Rider onely : then flall the Groome gine the reine of the chaffe halter into the Riders hands, and he fhall make the Colt goe forward, euer and anon cherfhing him when he doth according to his defire, and giuing him threatening words when he doth the contrarie. Thus fhall he labour and apply the Colt, till he will goe forward willingly, gently, and with courage, according to his defire, the Rider cuer obferuing, as neere as he can, to make the Colt goe ftraight forth-right, and by no meanes to turne or twynd him about anie way, contraric to his owne will, but for this firft day to giue him leaue to goe which way he will, not expecting from him anie other obedience, than to goe forward in either pace or trot when the Rider pleafeth, and alfo to ftand fill and firme when at anie time he fhall be reftrained. This worike being brought to paffe the firft day, the Rider fhall in the field alight from the Colts backe, and hauing cherifht him much, and given him a little Graffe o: Bread to eat, he fhall deliver him to the Groome, who with all gentlenefle fhall lead him home, and there dreffe him, cloth him, and feed him well. The next day the Colt being fadled and bridled as aforefaid, the Groome thall lead him forth to the former place, and there the Rider hall take his backe as he did the day before, and in all points fhal make the Colt perfeetly repeat oner his firf daies leffon:which when he hath done very willingly and obediently, without compulfion or reffifance, then the Groome fhall mount the backe of fome old ftaunch Horfe or Gelding, and leading
leading the way before the Colt, fhall trot faire and foftly round about the field, ftopping his Gelding as oft as the Rider ftoppcth the Colt, then goe forward againe, fometimes leading the way before the Colt, and fomectimes riddng cheeke by ioll by the Colt, till he be brought to fuch perfectnefle, that he will take his way forward how or which way the Rider pleafech : then they fhall ride gently home, and there light neere vnot the Stable dore', and fo fer vp the Colt, clorh him, dreffc, and feed him. Then the third day the Rider fhall take the Colts back at the Stable dore, and the Groome his Geldings back, and fo ride forth into forne plaine High way, the fmoother the better, the Gelding leading the way to the Colt, and lee them lo ride fraight forth-right at leaft wo myles or more, ftopping fundrie times, and cherifhing the Colf, and then gently returne home, the Colt lomecimes leading the way, and fometimes the Gelding, and alighting at the Stable dore as before, ict vp the Colr, dreffe him, and feed him: And thus if you doe twice or thrice in this third day, it hall be fo much the betcer. The fourth day the Rider fhall take our the Colt, and the Groome the Gelding, bur the Colt thall then lead the way, and the Gelding fhall follow, onely now and then, to giue the Colt encouragement, the Gelding fhall come and ride vp to the tace of the Colt, and then efffoones fall back behind him againe. This day you fiaill, in a large fpacious compaffe, trot the Cole round; firft on the one hand, then on the other, making him bend and come about, according to the bowing of your bodie, or the curning min of your hand, and in euerie motion make your felfe mafter of whatfoeuer he doth, giuing him a true vnderftanding, that what he doth, is your will, and nor his pleafure: and withall, by no meanes forgetting to chernfh him when he doch well; not after, bait enen in the inflant and prefenteclic of time, wherr he performech your plature, that he may thereby know why he is rewarded with kindneffe: and in like manner, when he doth anie thing concrarie to your will, you fhall chaftife him with the threatening of your voice, and fometimes with the noife and flake of your rod, or when extremitie vrgech, with a good lath or two with your rod vnder his bellie, in the very felfe-fame inltant that he offendeth. And when the Colt hach performed all things anfwerable to your liking, you fhall returne home, not the fame way that you camre forth, but, if conueniently you can, fome other way, thereby to breed in the Colt an ignorance of his owne eafe: which is the onely meanes to preferue and keepe him from reftyueneffe, and other wicked qualities. And being come to the Stable dore, you flall there alight, and cherifh him, and then fer him vp, drefle him, and feed him. And this you fhall doe at leaft thrice in this fourth day. The fifth day hauing fadled, bridled, and girded him as he had beene accuftomed, he fhall lead him to the place of getting vp, and there fhall get vpon him, lead him through all manner of Waies, fometimes trotting fomesimes foftly, vntill he begin to wax hot: And this ordei fhall be obferued cuerie day, yet fill encreafing his exercife, making him goe and trot fo long as vncill he be wea. ries this being the beft way to make him lift his legges, and to carrie himfelfe handfomely in the reft of his parts : not failing thereupon to bring him backe verie foftly vnto the Stable, where he fhall walke him vntill fuch time as he leaue fweating, and then he fhall fer him vp in his place. Yee of the later and more experienceft Horfmen it is chought good not to walke him at all, but prefently to fet him vp,cloth him well, walking Hemfs and giue him liter ynough, with found and drie rubbing: for it is an infallible expe- not goods riment, that the walking of Horfes in the hand is the readieft way to giue Colds, and breed Feuers,becaufe then the humors coole too fuddenly;and the vitall parts leauing (as it were) their motions in an inftant, the heart and other inward parts receive the cold aire fo vnprouided and vnarmed, that wancing the afffiflance of their orther feruants, which is ation and firit,, they are ouercome, and yeeld to the arref of dulnefle and numbneffe : Thercfore it is held beft not to walke at all, but rather to houfe the Horfe, and with rubbing, fretting, clawing, \&picking, to keepe the oucr-heated parrs warme, till they may coole by a moderate eemper : and this queftomleffe is the lafeft courfe for a Horfe that is extreamly heared, as the Englihh hunting and running Hor(es are. But our French Horfes, which are heared by a more deliberate \& flower way,
as it were onely but warming the bloud, not melting the greafe; 1 hold it the beft and fafeft way, when you come from riding, and haue made your Horfe fweas foundly, then prefently to carrse him into the Stable, and taking the Saddle off, whileft onic Groome is rubbing and chafing his legges (which isaction ynough to keepe him from cold; for it is a perfect rule, That whileft the Groome rubs well, the Horfe neuer takes cold) another Groome fhall take a piece of a Sword blade, two foot and more in length, and with the fame he Chall with the edge ftrype and wype downe the Horfe, cuen from the tip of his eares to the pitch of his moulders and cambrell, leauing, fo neere as he can, not anie moifture amongtt his haires: then clapping on his Clothes, he fhall vpon them fee the Saddle, and then girding it on gently, take the Horfe forth againe, and in his hand walke him vp and downe in the ayre till he be throughly cooled and drie : then he fhall take him into the Stable, fet him vp, after a little paufe feed him, and at a conuenient watering houre curric and drefle him, as hath beene before fpoken. But to returne to our former difcourfe: Hee fhall hold on this courfe with the Horfe, vntill hee fee him throughly woon, and then hee fhall caufe him to be thooed on his hindernoft feetondy, to the end he may carrie him through rough and ftonie waies, without hurting of his hoofe: and he fhall not vfe anie thing elfe to ride him with, faue onely his whipper and trench, for to make him goe, trot, gallop, rume, flie, turne, leape, to rife behind and before: alfo he fhall traine him to fcoure vuer fmall Hills, the tops of Hills, and great high Hills, and againe, to come downe the fame verie foftly: and fomecimes riding him to the places where Mills, Forges, and fuch other Hammer-workes are, as alfo where there is beating of Linnens, to the end that afterward he may not be afraid at anie fuch noife. Hee Shall bring him alfo to the place where are Carts, Waines, Tumbrels, Carres, Coaches, Charets, Wagons, flockes of Sheepe, heards of Swine, Kine, and Goats; making him likewife to fee Lambs and Calues, or other Beafts and Cattell, hauing their throats cut. He fhall marke all thefe things day by day, till he perceiue him readie, and fee him certainely with his owne eyes, that he doth not vfe to fnuffe and take on at the fmels of the forefaid things, and then he Thali furnifh him with all manner of things, and getting vpon him, hall guide him into manie places, making him to goe by fteps, to trot, to leape Ditches, to fwimme Riuers, and other Waters: And notwithftanding this, he fhall not faile to giue him fuch a kind of pace and going as fhall feeme molt agrecable vnto him: for a Gennet would be trained vnto one manner of pace, and a Courler to another; and foa Horfe pofition. Of which paces to giue you a little taft and experience, you naall vnder-
Horse tret well. ftand, that to bring a Horfe to a comely, cleane, and a loftie trot, you fhall vfe to ride him vpon new-plowed Lands, or in Wayes that are decpe and heauie, for that will make him twitch vp his legges, and ftrike them cleane and high : but if ynu find it toylefome to your Colt, and that by reafon of his young yeares you are afraid to put him to fo extreame labour, becaufe manie forances grow thereby, then you fhall ride him forth into fome plaine piece of ground that is much ouer-growne with long Thiftles, fliort Gorffe, Whynnes, or fuch like fharpe Weeds, among the which you fhall ride your Horfe a good face twice or thrice a day, and the Thiftles or Gorfle pricking his fhinnes, will make him take vp his legges roundly and loftily, and in verie hort fpace bring him to a cleane, eafie, and braue trot, although the Horfe had neuer eroted before in all his life: Bus if you find that the flouenlineffe and vncomelineffe of his trot commeth out of a naturall carclefneffe, or in refpect of his way, and that by reafon of a dull and heauic difpofition wherewith he is infected, he is not by anie of the former wayes to be reclarmed, then you fhall watch when the nights are moft darke and clouded, even fo thicke, that you can hardly fee your hand (for ener the darker the better:) then you fhall take oue your Horfe, and ride him into fome new-plowed field, where the lands lye mont high and vneuen, or into the like vncertaine and much worne wayes, and there tror him forth roundly and fwifily, rushing him now ouer-thwart, then end-wife, fometimes one
waies, fometimes another, not fuffering him to take leifure, or regard to his way, how dangerous or falle of foot-hold focuer it be: And alchough at firlf(asit is moft likely) he will fumble, or be readie to fall, yet doe not you make anie care thereof, but bearing a good ftiffe hand vpon him, ftrike your fpurres hard into his fides, and the more he fumbles, the more encreafe you the fwiftneffe of his pace, onely by no meanes whatfoeuer fuffer him to gallop. And thus exercifing him fundrie nights together, you fhall not onely bring him to a braue and molt gallant trot, but alfo breed in him a great height of firit and mettall, as alfo it will make him verie hardie and valiant. And it hee were fubiect to that intollerable To betpe fuxme. vice of ftumbling, yet this manner of riding and correction would amend and bling. cure the fame : for you fhall vnderftand, that a Horfe is, as a man, fearefull and vigilant of his way, and when the fight thereof is taken from him, all his pores and vitall fpirits are awakened and flirred vp to preuent the dangers that may happen vnto him : fo that when all courfes eife fhall faile, yet this is moft affured: But if you would haue your Horfe, by reafon of your manie occafions to iourncy, or becaufe your bodie is vnapt and vnable to endure the hard pace of trotting, to amble, which is of all paces whatfoeurer the eafieft, you fhall vnderftand, that to bring him thereunto, there are but onely two wayes; that is to fay, eitherthe Tra:mell, or the Hand ; the betterhood of which, I leaue to your confideration, when your experience hath made triall of them both, and done to necither iniurie, but vfed them carefully, artificially, and according to the truth of the rules prefcribed. To give you then a litele light what the Tramell is, you fhall vnderftand, that is is called a Tramell when a Horfes neere fore-legge and his neere hinder-legge, two handfull aboue the pafterne ioynts, are fo fattened togecher with leathers and cords, that he cannot put forward his fore-legge, buthe mult perforce hale his hinder-legge after it, and fo likewife his farre fore-legge to his farre hinderlegge, and then another flat and foft leather going ouer the fillets of the Horfes backe, and faftened to both the lynes on both fides the Horfe; which piece of leather fhall hold vp the lynes, that they fall not nor tangle vnder the Horfes feer as he goech. This is called the tramelling of a Hore : and with thefe you thall firt in your hand make him goe foftly or fwifily ar your pleafure; and when you find that he will take his way perfectly in them, without danger of falling; then you fhail take his backe, and ride him thus in the tramels the ipace of a weeke in fome faire, plainc, and fmooth Way or Roade : then the next weeke following you fhall ride him in vneuen wayes, ouer layes, vp hill and downe hill, and in fuch like vncertaine places: then the next weeke you fhall take off the tramels of one fide; and faften the backe band to the faddle, and fo ride him for a day or two: then put on that tramell againe, and take off the other which was on before, and fo ride him another day or two : then take both cleane away, and fo ride him and keepe him to his pace; which he will hardly or neuer forfake, if you haue anie care ae all. Now for the fpeciall refpects which are to be obferued in the tramelling of Horfes, you fhall firf obferue, that the leathers which goe about the Horfes legges be foff, frooth, and well lyned, neither fo ftrait, that they may offend the maine finewes of the legges, nor fo flacke, that they may fall off: the buckles with which you make them longer or fhorter, muft be verie ftrong alfo, thar they may abide the twirches and flraines of the Horif, when at anie time he frikech a falfe ftroake: the lynes which paffe betweene thefe leathers, mult be a good round rope made of frong Hempe well twound, with a loope at either end whereto to fixe the leathers;and there lynes mult beboth of a iuft and euen length, not one exceeding another a frawes breadth, they mult be fo fixed to the Horles legges, that they muft by no meanes cither draw them inward, or giue them libertie to fradle outward, but fo, as they may keepe the Horfe in his true, iuft, and naturall proportion. Now if your Horfe ftrike too fhort, then you fhall fraiten your lynes halfe an inch at leaft, for that will maké him ouerftrike halfe a foot, and a whole inch a whole foot: and fo of the contrary part if heouerftrike, you flall let forth your tramell in the famm maner that you tooke it in.

There

There be fome that will put on thefe tramels, and make the Horfe runne at graffe with them a moneth or two, and when they take them vp, they will amble as readi1 y and perfectly, as if they had beene naturall bred amblers: and fure there is greatit likelyhood thereof; for a pace that is fo given without compulfion, is euer the foreft and moft vnchangeable. Now for the making of a Horfe to amble with your hand, it may be done either in fome faire defcending ground, or vpon the fallow lands, and cither out of his trot or gallop, as thus: Hauing taken your Horfes backe, and put him either into a fwift trot or a fwift gallop, you fhall on the fuds daine chocke him in the weeks of the mouth, and iert his head vp aloft, making him to fhuffe his feet together, and to ftrike them confufedly; and thus you fhall doe fo oft, till you make him frike an amble : then you fhall cherifh him, and bring him to the fmooth ground, and there with the helpe of your hand, held firmely aloft, make him continue his amble : which when at anie time he offereth to forfake, you fhall forthwith toyle him as you did before, and then bring him to the plaine ground chiefely vp the hill, and there hold him to his pace: which after he hath gotten in anie reafonable fort, he will naturally, and for his owne eafe, feeke to encreafe it, and then you fhall apply him at leaft three or foure cimes a day, and in one moneth there is no doubt but you fhall bring him to that perfection your owne heart can wifh. There is alfo a third pace, which is neither trot nor amble, but is called a racking pace, that is to fay, betweene an amble and a trot: and though it and the amble haue both one manner of motion, that is to fay, taking vp of both legges of one fide together, yet this racking moueth much fwifter and fhorter, Ariking thicke, yet feldome beyond the ftep of the forefoor. This pace is of fome reputed the eafieft of all paces: but I leaue that to cuerie feuerall mans feeling. Cerraine it is, that manie men take much delight therein, becaufe there is no racking Horfe but can trot, and fo in deepe and filthie wayes are able to make much better riddance of the way: whereas diuers ambling Horfes can by no meanes trot, and fo leffe able to driue through the myre: or if they doe, it is with much toyle, and foule dafhing and myring of cheir Mafters. To bring a Horfe then to this racking pace, the onely beft way is held to be fore and long trauell, as much Hunting, Running, and fuch like, and then when you feele your Horle begin to te a litrle wearie, to hold vp your bridle hand, and chocking the Horfe in the weeks of the mouth, to make him breake his pacee, and to flrike a rack, which his wearineffe, and the eafe that the pace bringeth him, will quickly make him doe, then to cherifh and nourifh him in the fame, and by no meanes to force him paft his ftrength, or to make him goe fafter than of his owne inclination he is willing to doe, for too much haft in this worke is the onely fpoyle thereof: And thus in leffe than a moneths hunting or riding of your Horfe, you thall bring him to a verie fwift and moft readie racke; in which the Horfe will take fo much delight, that you fhall not at anie time need to feare his forfaking of the fame: Laftly, for the bringing of your Horfe to a cleane and good gallop, you naall vnderftand, that there be two forts of gallopings : the firlt, ftately and aloft, the Horfe winding vp his legges high, and gathering them round and clofe together in loftie manner : and this is fit for great Horfes which are trayned vp for feruice in the Warres, or for the pleafure of Princes and other great Perfonages, which take delight in ftirring Horfes, which can leape, bound, yarke behind, coruet, and other fales of like nature. The other is a fwift, fmooth, eafie, and long gallop, wherein the Horfe fretcheth out his bodie to the vttermoft length, and carrying his feet neere vnto the ground, fwoopeth away fwiftly, nimbly, and eafily : and this kind of gallop is meet for hunting Horfes, running Horfes, or Horfes preferred onely for labour and trauell. Now to bring a Horfe to gallop aloft, which is the firt kind of galloping fpuken of, you fhall daily vfe to yallop him at his firt riding on new-plowed lands, which are deepe, yet lye flat: and withall, you fhall euer obferue to keepe a ftrait hand vpon his head, preferuing the comelineffe of his reyne, and by no meanes fuffering him to gallop faft,
but the flower the better; euer and anon with your hand; rod, and fpurre riaifing vp his bodie, and making him gather his feet vp roundly together: for it is the price of his reine, and the flowneffe of the gallop, which brings hum to the gallantrie and löftinefle of the motion. Now, for the other kind of galloping you fhall vee a cleane contrarie courle, that is to fay, you fhall traine your Horle vpon the plaineft and Imoothef ground you can find, you fhall giue him !ibertie of reine, , hat hee may ftrecth forch his bodie and legges, and lay himfelte clofe to the ground like a Hare or a Greyhound: and this exercife you thall give your Horfe morning and euening after his water, for then it is mon wholefome, and hie the apteff to learne and doe as you wou'd haue him. Alfo it fhall be good for you now and then to pur himit ot the height of his fpeed: for the more you traine hum, the imore he couchech his bodie; and the leffe diffance cuer hee taketh his feet from tie groind : to follow the Hounds all the day twice or thrice a weeke: or to giue himi a courfe once a weeke of foure or fuc myles end-wayes, are boch verie good waies of training a Horle to chis fwift gallop: becaufe that length of exercile taketh the fire edge from a Horfe, and makech him more temperate and fober in his doingss whereas the heat and exceffic of his courage makech him praunce and doe things rafhly and loftily. Manie other obfcruations there be, but thefe few before rehearled are fully fufficient to bring a Horfe to anie pace the Rider pleafech.

That Colt, Horfe, or Stalion may be iudged to be good, that is great, thicke signes of a goods boned, of a good fhape, hauing a finall head, and fo drie, as that there is nothing of it but skinne and bones : Imall eares, harpe and ftraight : bur great cyes, ftanding our, blacke and cleane : verie wide nofthrils, piffed vp and great : fmall iawes, thinne and drie : his throat equally diuided on both fides : a necke fomewhat long, and made compafle-wile, being thinne neere vnto the head : a fhort backe, broad and fomewhat fhrinking downe like a valley: His mane curled, thicke, and long, and hanging downe vpon the righi fide : a broad breaft, open, bofled out, and verie fleflie : his floulders great ant fliaight, his ribbes round his chine double, his bellie round truffed, his cods alike greatrand fmall, his reines large, and fomewhar giuing downe : his taile long', and tuffed with haire, thicke and curled : his legges matches, thicke of bone, but thinne, drie, and bare of fiefh, liigh and fraight: his knee round and fmall, and not wrefted inward : a round buitrocke : thicke chighes, long, flefhie, finewie, atidd flong : a blacke hoofe, hard, high, hollowed, round, good, and operi, and rifing vp as is fhould toward the pafiernes, and the crowne or top of it verie finall aboue: which is cheerefill, quicks gentle, hauing no ill qualisie nor difeafes: for they which are of fuch a nature, are veric eafie and tractable, and patiently endure anie labbour : alfo hee muft nor be mad or franticke, fearefull, running backward: hauing the Sciatica, a flacke eaect, not foowring much, not vfed to lye downe in Waters or Riuers : And yee though hee haue loft an eye, or haue beene hurt in anie part of his bodie in anie combate or fight, he is not to be accounted the worfe for that, provided that in the reft of his bodie he be found. Againe, that Horfe is to be efteeined for 2 good Stalion which hath followed the Warres, becaule he will beget noble and couragious Colts, and fuch as thall be fierce in all aduentures and d.fficult and long enterprifes: befides, that he be of colour bay, browne, red, dapple gray, watchet, or Moufe colour, which is a certaine note of an actiue and couragious Horfe. And to fpeake in a word of the goodneffe and fairenefle of a Horfe: bee muft haue the eyes and ioints of an Oxe; the firength of a Mule, the foot of the fame; the hoofes and thighes of an Afte, the throat and neecke of a Woife, the eare and tayle of a Foxe, the breaft and haire of a Woman, the boldneffe of a Lyon, the fharpe and quicke fight of a Serpent, the pace of a Car, lightneffe and nimbleneffe of a Hare; a high Pace, a deliberate Trot, a pleafant Gallop, a fwift Running; and bounding Leape and prefent, and be quicke in hand,

## The beft marke

 in a Horse.To know the age of Horfes.

Againe, you fhall take it for the beft and principalleft note of a good Horfe, if he haue an Oftridge feather on each fide his creft : for they are of excellcnte endurance, and will feldone or neuer tyre: Againe, to have the neere foot white behind, the farre foot white before, to haue both fee white behind, or both feet white on either fide, are all approued markes of a veric good Horfe, prouided that all fuch whites be vader the pafterne: for to haue them higher, is a figne of an airrand Iade. Alfo to haue a white ftarre in the forehead, a white rache downe the face, or a white frip on the nofe, are markes of a good Horle; prouided, that the flarre be not artificiall, the rache too broad, enclining to baldneffe, nor the frip raw: all which are euill fignes. Alfo a little fout is a figne of fwifteneffe, a thinne haire a figne of mettall, a loofe throppell a figne of much wind, and a fhort, wellknit, and vpright pafterne a figne of ftrength and great endurance. There be manie other fignes of a good Horfe, bue none more materiall than thefe, nor none more common or eafie to be perceiued.
The Carter likewife muft haue knowledge of the age of his Horfes, to the end he may fo fet them on worke, as their flength will beft beare. The age of Horfes is knowne by their feet, hoofes, and fpecially by their teech. The Horle for the moft part hath eight and twentie teeth. In is true that Aristotle would haue the Horfe to haue fortie. He beginnerh to haue teeth the firft three moneths, and by the end of the firt yeare he hath fix aboue and as manie below : At thirtie moneths hee changeth two aboue and two below: and at fortie two monechs hee hath foure new ones on both fides, which touch chofe which he had laft comuning. When he is foure yeares old, then the teeth called Dogges-ceeth doe fall our, and others come in their place. Before the fixt yeare, the great iaw-bone-tech that are on the ypper fide doe fall out: a and in the fixt yeare, thofe that were firlt fallen doe grow againe. In the feuenth yeare all the whole number is fulfilled, and they are all hollow : and after this time, no man can certainely krow how old a Horic is, but that about the twelfth yeare there is to be feene in them an extraordinarie blacknefle: Adde further, that by hows much the Horfe groweth older, fo his teeth grow longer, except fome certaine ones, which are fhorter by reafon of his cating of his meat; and thefe flew themfelues the more, as they draw neerer and neerer the fore-part of the iaw. The tenth yeare the temples begin to fall and grow hollow, and fometimes the eye.browes doe waxe gray haired s the Horfe doch make fhew of fadneffe and a minc of melancholie in his forchead ; he ftoupech in his necke; he is heauie of bodie; he hath cyes of a deadly colour; his haire gray, that efpecially of Bay, Blacke, and Roane coloured; as that alfo of the Cheftnut colour, and other colours ftanding vpon darke : the gray flea-bitten groweth white, and the white flea-bitten becommeth dapple-gray and fomewhat darke: There are manie wrinkles and plaiss in the vpper part of his broome or brufhing taile, and they are commonly counted to be as manie yeares old as there is wrinkles found in that place. Furthermore, an old Horfe skinne drawne vp with our fingers abidech fo a long time, but a young Horfes fallech downe againe by and by. Alfo the vppermoff ioint, at the fetting on of a Horfes taile clofe to his bodie, fhewech the age of a Horfe: for it when you fhall handle it, you find the bone flandeth out and is eafic to be felt, then you thall be aftured that the Hore is young: bue if the bone be not to be felt, but that the fterne feemeth plaine and frmooth, then you fhall be aflured that the Horfe is old; as aboue tenne at the leaft. A gaine, if you put your finger into the Horfes mouth, and fecle his vpper tufh, if you fecle in the infide a little hole fharpe and fhellie, then you fhall be afliured, that Horfe is ynung, but if it be worne out and fmooth, not to be felt, the Horfe then is old; as ae boure elcuen at the leaf: If the nether tufh haue a ring (as it were) of new flefh about it, which may be difcerned from the other flefh, then is the Horfe young: but if the flefh be all fmooth and plaine without difference, and the sufh a litsle blunsed, then is the Horfe enclining to old age; as aboue nine at the leaft:
manic
manie other obferuations are held, but nione truly cerraine but thefe alreadie re-hearfed.
It is likewife the charge of a Carter, to haue efpeciall care of the health of his To order focte Horfes; whofe continuance and terme of life (as faith Arifotle) mult be betwixt Horfes. fixteene and twentie ac the leaft: wherefore, when he feech them in health, and yet notwithflanding leane, he fhall give them parched Wheat, or of powned Barly the double meafure. He fhall rub them verie well cuerie day all ouer their bodies : affuring himfelfe, that it doth more profit them, being ofren handed and ribbed, than to giue them a great deale of meat. Likewife fome fay, that the hand feedeth a diffechlisie of Horfe more than his meat. If they cannot ftale, which is knowne by the fwelling virine. of the bladder, and about the yard, he fhall make them drinke pottage made of a pint of Wine, ftamped Garlicke, and tenne whites of egyes: or elfe the iuice of red Coleworts, mixed with white Wine. In the meane cime hee muft take away from them their Oates and Barly altogecher, and to feed them with nothing but their owne and accuftomed Fodder and Graffe meat, to fee and if they will recouer through the time of the yeare. It will be good alfo to put within the fheath of their yard a Collirie of Honey boyled with Salt, or elfe-a Gnat or live Flie, or quicke Fless, or a prettic little piece of Frankincenfe : as alfo to lay vnto the Reines and Flankes Oyle mixed with Wine: or elfe to annoynt his yard with Wormewood flamped and boyled with Vineger ; and moreouer, to fquirt a Syring full of coole water againf his cods. Thefe Medicines are good when The falding of the V rine hath fcalded the priuie parts, or when they haue great heat in their Vrine.
The cruell paine of the Head, and rage of the Horfe, is cured by the ofen vee Paine of ite of Smallage and much Branne, in which you fhall haue chopped the leaues of head. Lettuce and Barly ftraw newly gathered : let him bloud ypon the place where the braine lyeth, or vpon the temples, or vpon both places, and let him ftand in a verie darke Stable, and fuch a one as ftandeth low. You fhall know if hee haue paine in his head, by the diftilling and dropping downe of water from it, in that his eares will be withered and hanging, his necke and head heauie and hanging downe.
The ouer-cooled Horfe is cured by giuing him to drinke Swines bloud all hot The Hore bee with Wine, or Mafticke and Rue boyled with Honey, or a little common Oyle nummed with with Pepper. This difeafe commeth vnto him, when as fweating and being hot, he is fer in a cold place, and thereupon it drawech vp his finewes, and hardenech his hide : you muft fet him in a verie hor place, couering him verie warme with couerings downe to the ground, and putting vnder his bellie feuen or eight greas thicke ftones red hot, you fhall quench them there, by cafting warme water.vpon them by a little and little, and off, that fo by this meanes the heat may make hin fweat.
The naile in the eye fhaill be liffed vp with a lietle fmall needle of Iuorie, and then The naile in cur quite away with Scizars : or elfe make a powder of a greene Lizard, and Arfe- the ge. nicke, put it into the eye, for to fret away the naile.
Againt the fuffufion there is a fingular remedre: an Eye-falue made of the iuice $\mathcal{A g a i n f}$ the of ground Iuie flampt in a Woodden Mortar: or elfe the iuice of the berries of bloudd.goteten Iuie running along vpon the ground: or the leaues of great Clarie beaten and flamped in a Mortar in Wine, after that you haue let the Horfe bloud vpon the veine of the eye that hath the fuffufion, and to continue this remedie manie daies cuening and morning: Or elfe blow into the cye through fome Pipe or Quill the bone of Cuttle powned fmall, or the feed of Rocket whole: or elfe the feed of the hearbe called Tota bona, and there lee it alone, till by his vertue it have cleanfed and taken away the fpots: or the powder of the yolke of an egge and fali burnt together, and put into the eye : or the powder of Sal-Armoniake, Myrrhe, Saffron, and the fhauings of the Cuttle bone.


The fruckere eie.

## The bleared

 eyes.The ftrucken eye is cured by applying vnto it a cataplafme made of bread crums fteept in coole water, or bread tofted and fteept in white wine: if this doe no good, you mult open the head veine.
The bleared eye is cured by an cye-falue made with frankincenfe, myrrhe, ftarch, and fine honie : as alio by a frontet made of frankincenfe \& maltick finely powdred
and brayed wwith the vyhites of egges, applied to the brows, and fuffered there to lye vntill the eyes ceafe to fhed teares, and after to raife the frontale vvith annointing the edges thereof vvith Oyle and warme water beaten together.
The fcarres of the eyes are healed with rubbing them vvith your owne fafting Theskarre of fpittle and Salt, or wvith the powder of the Curtle-bone mingled wvith burnt Salt, the eyes. or the feed of vvild Parfnep pouned, and preffed out of a linnen cloch vpon your eye fcarres.
All paines of the ejes are cured by annointing them vvith the juice of Plantaine Paire of tle vvith Honie.
The Enceur dorih bring prefent death vnto horfes: wvherefore you mult fo foone. The harifore or as euer you fee the breft kernell to be fwolne, plucke it away immediatly without a- fwelling of the ny faying : and if in thus pulling of it away, any veine fhould burf, you muft tie is kernels of the at both ends with a filke threed : looke how much the kernell fall grow greater, fo barth much greater an impoltumation it would make, and not fo onely, but therewithall caufe death.
The horfe hauinf drunke much, or watered verie quickly after his heat and tra- The anivsso uaile, and vpon it growing cold, and not being vvalked, doth beget the Auiues, which doe but lietle differ from the difeafe called the Kings-euill, becaufe as well in beafts as in man the Kings-euill commeth of too much cooling of water, the throas hauing beene heated, whereupon the horfe looferh his appertee to eat, and his reft likewile, and his eares become cold: you muft prefently prouide to helpe him, in taking away the Auiues after this manner : Bend downe the eare betwixt his necke and his chyne, make incifion with a knife for the purpofe along vpon the hard flechineffe, which one would fay to be nothing bur a verie white finew : plucke away the white carnofitic or flefhie fubflance: lay to the place as well within as with. out, a linnen cloch dipt in the white of an egge, couer the horfe by and by wiith a good couering, and vvalke him fo leng as vntill that his eares become warme, giuing him a drinke made with water, falt, and meales but firt caufing him to eata little good Hay : lec him refl three daies in the flable, anid ear and drinke there : or elfe make him hot fomenations, and thofe of fuch things as are proper in that cafe, to be applied vnto the part, for to remoue the humour, afterward applie a cataplafme made of Barley meale, and three ounces of Rofin, all boyled in due fort in good ftrong red winc ; and when the matter fhall be gathered and readie for fuppuration, giue ita galh with a knife, to let the fuppurated and ripe matter our, afterward put in the hollow place eents wec in water, oyle, and falt, with bolfters layd vpon them and dipt in che fame. This difeafe crauecth a fpeedie remedie, for and if you fay till the Auilues be geten vp higher, it is paft hope of curing.
The Squinancie, otherwife called the difeafe of the throat, and fwelling of the Thefquinazacis tongue, requirech firth of all that the horfe fhould be let bloud vpon the veine vnder or inflamatithe tongue, or of the palate of the mouth : after that, a fomentation for the whole on af the throte. mouth, and for the tongue with warne water : then after that, a linimient of the gall of an Oxe, or of falt and cartar beaten togecher with frong vinegar. And as concerning a drinke, you muft take of Oyle two pound, of old wine a portle, amongft all this you fhall mix nine fat figges, with nipe leekes heads : temper them all well together, and afterward make a decoction; in the end whereof, but before it be ftrained, you fhall adde of Salt and Nitre well pouned, fo muchas you fhall fee neceffarie : of all well ftrained, you fhall make a drinke, which you thall caufe him to take with a horne twice a day, that is morning and cuening a quarter of a pint at a time. For his meat caufe him to eat greene Barley, or Fetchets, or the meale of Barley, a. monglt which you fhall mingle Nitre.

The Scrangles of a Horfe, or Glandules, wvhich happen vnder his throat, and The Stranglesic fall downe from the braine much cooled, are oftentimes cured by pricking him vnder the throat in the morning, aferward couer his head vvith fonic kind of Linnen cloth, and rubbe his chroas oftentimes with frefh Butter, but efpecially the place of his difeafe.

Thbe Baybcs.
The Barbes hindering the Horle from eating, by reafon of hauing the tongue fwolne, are healed by making him eat Peafe, Beanes, or the ftalkes of Peafe or Beans; becaufe that the bruifing and breaking of them caufeth thisfwelling to go away : and if the Barbes doe grow there againe, you mult cut them out with a veric tharpe yron, being likewife verie hot,for thus are they taken out of the hollow of the roofe of the mouth, and for the reft taken away by burning, you muft cut them away with a paire of theares enen to the quicke.

The foupe, or excrefocnce en. der the bellie.
Tochafe away fies.
The paines of the gums and teeth.

The foort win.
ded borfe.

For the excrefcence of fefh growing vnder the Horfes bodie, you muft thane the place, and make incifion with fome knife fit for the purpofe, and then afterward's annoint it morning and euening with the ointment called Dialthœea.
Flies are kept away from Horfes fores with pitch and oyle, or greafe mingled and powred vpon them, and then by ftrawing Fetch flowers vpon them againe.

The difeafe of the gums and teeth happenech of tentimes vnto colts when they are growing their teeth, temper of fullers earth (the beft you can come by is that of Reines) in verie ftrong vinegar, and therewith rubbe their jawes on the outfide, but more a great deale in the place where the paine or fwelled gums be.

The fhort winded Horfe, or he which cannot eafily draw hts breath, and which hath his flankes beating inceffantly, and which notwithtanding that he be pricked, haled, and whipped, will not Itirre, bur pant verie much, and blow exceedingly; yea and which eating of his meat cannot abflaine coughing : this fame Horfe wil hardly euer be cured. It is true that this difeafe being new, and caufed of dunt, duftie windes, forftie hay, or of hauing eaten fome kind of dung in his prouender, the temedie foritmay be, to drawbloud vpon him with a greene withic, and to powre hot vpon his breaft and backe the faid bloud mingled with wine and Oyle oliue: and hauing done this for the fpace offlue daies, then the next flue daies followiny to make him take downe Lee at his nolthrils, wherein there is mixt a portion of Oyle, to giue him this drinke after: Muftard-feed well fried, quicke Brimftone, graines of Paradife, of each alike much, makethem in powder, and make thereof a decoction in home and water, or elfe in fome compofition that is good and thicke, whereof you Thall giue him euerie morning the bigneffe of a bigge Wall-nut, with fage, and with thicke red wine, butfuch as is good and noble: or elfe make him a drinke vvith cloues, ginger, cummine, fennell-feed, and the roots Galanga, as much of the one as of the other; all thefe being powdred, mingle therewith fome egges, and a little fafron, make the Horfe to take it downe vvith Wine, holding his head high, to the end he may fwallow the more eafily, and not fuffering him to hold it downe, at the leaft for a good halfe houre, to the end that the drinke may paffe through his bowells: after this drinke, you fhall give him freih graffe, or the leaues of Rofes or vvillow eree, to temper the heat of the faid drinke : but the horfe mult not haue eaten any thing for the fpace of one halfe day before the taking of this, neither yet mutt he eat any thing for the like fpace after the taking of it. Let hin vvalke and lead him oently by the head-ftall, or elfe getting vpon him, let hum pace him veriefoftly, that fo he may not caft it vp againe: and thus much for the cure of the fhort vvinded horfe, if the difeafe be not growne roo old. Which norwithftanding that it thould te, yet you may relieue it for fome time, if you feare hima little vpon both the fides of the flanks, to the end that this heai may caufe to ceafe this great panting, wvich doth paine him in his flankes: and if vvithall you flit his nofthrils, that fo he may attract and draw in the aire and his breath, and as eafily let it goe: befides thee vvaies, I voould haue you alfo to glue him to eat, fome grapes ofrentimes, and to drinke fome fweet wine. Another fingular remedie there 1s, which confifteth in giuing him a drinke made vvith Agaricke and Fenugreeke tempered vvith red Wine: or elfe to raufe him to fwallow the bloud of a little dogge, vvhich yet is not abone ten daies old : or to take the roots of Gentian, of vvild cucumers, and bitter Almonds, and to poune therevvith Honie and Water, and to make a drinke thereof; or elfe to giue ottentimes to eat of filuer graffe.
The coughiin a boife.
cheft, as from the lungs and parts adjoyning, or elfe from fome other of the inward parts, which are noble and principall, and haue accordingly fome notable office in the bodie; hath not a more foueraigne remedie, than the flitting of the beafts nofthrils, and if afeer this the beaft doe not amend, then to caufe him to take downe a good pinte of the drinke following with a horne. Take Fchugreeke and Linfeed, of cach a quarter of a pecke, Gum_tragacanth, Olibanum,\& Myrrhe, of each an ounce; Sugar, the oatmeale of great vvild Tare, of each an ounce, all thefe being vvell pouned and ler run through a bagge, you fhall caufe it to be infufed all a whole night in hot vvater, and the day following you fhall giue it to the beaft, as hath beene layd; and this fhall be continued, adding thereto a bowle of oyle of Rufes, euen to the end of the cure. Some caufe fiue egges to be layed to fteepe one whole night in flrong Vinegar, and the next morning when they fee that the fhell is become verie tender and foff, they giue them to the horfe to take downe. Furthernore you muft neuer draw bloud from the horfe in what place foeuer that it be, bitt it fhall be good to giue ic vnto him, and to continue the Gum-tragacanth with fweet Oyle.
The ague of a horfe is cured by being let bloud vpon the veine, vvhich is found in The hore bids the middeft of the thigh, to the quantitie of fixe ounces, or about the place vwhich is fom what about the fundament: but if in neicher of thofe two places, or vyhere chey cannor be found, you muft take che necke veine toward the vvind-pipe : if you perceiue that there is need of a drinke, you fhall ftraine a handfull of Purlane, and mingle the juice vwith Gum -tragacanth, fine Frankincenf, and a few Prouence Rofes, you fhall make him take it all vvith honied vvarer, in foime prettie fmall quantirie: It is knownc amongft other markes that he hath an ague, if he haue the fopping of his vrine, and his eares become cold, withering and hanging downie.
In the faintnefle of the heart, it is good to keepe the horfe verie hot, and to giue Thefaint him this drinke; Myrrhe two ounces, Gum-tragacanth foure ounces, Saffon foure of the bearto drams, Meillor in powider an ounce, Mercurie a pound, and fine Frankincenfe fo much as fhall be fufficient and proportionable : all thefe mixs together and made into powder, ीhall be referued for your vfe, and that fhall be in giving two good fpion. fulls thcreof with one pinte of water, two fpoonefulls of Honic, and two bowles of Oyle of Rofes. This drinke vvill ferue for many daies, cuen till the horfe doe find himfelfe better. And further, know that this drinke is good for thofe that haue cheir backe or loynes broken, and members verie ftiffe.
For the horfe that is ouer heated, vou fhall

For the horfe that is ouer-heated, you fhall caufe him to fwallow with the horne The bore oukte in Winter three ounces of Oyle, vvith one pinte of red vvine, and in Sommer two berted. ounces of Oyle cnely, vvith the like quantitie of Wine that is aboue named.
In the paine of the bellie, vvhich fome call the Birth, you fhall take the feeds of vvild Rue, or of the garden Rue, you fhall poune is well, and vvith hot vvine you fhall make him a drinke : vnto this drinke you may adde Cummine and Fennel-leed in like quantitie, and afier keepe him hot in fome clofe and vvell couered place: beEore you give him this drinke, you muft get vpon his backe, and vvalke him a long time, and thatrather in high places, than in low and plaine fields: when you are comming homeward, if the feafen be cold, you fhall cloath him vvith a good vvoollen cloch, rubbing his flankes vvith Oyle, vnill fuch time as he be become cold, and doe breake wind. It vvould be good alfo to conuey into his fundament fome hollow ioynt of Reed or Rofe erree fufficient thicke, and halfe a foot long, annointed vvith common Oyle, and let this fame hollow Reed be in fucli fort taftened vnto his taile, as that it may not by any meanes come forth, and this doine then to get vpon the horfe, and to vvalke himi. But howfueuer things goè, you muft let him haue meat of hot qualitie, and to drinke vviater boyled with Cummine and Fennell-feed in equall quantitie, mingling vvith it Wheat meale, and keeping it verie vvarme in a verie clofe place.
For the difficulric of vrine, it is an approved thing to take fiue or nine of the flies Difficultie of called Cantharides, to lap them in a linnen clooth, and applie them ro the chigh, and howfoeuer it farech with him, yes to keepe them there for fome time: shis will pro-

## The first: Buoke of

cure vrine: but in anie cafe giue him them not in powder, clifter, or drinke. It is good alfo to rub his cods with the decoction of Crefles, Peilitorie, and rootes of Leekes.
For the fniuell, take Orpin and Brimftone, caft them vpon burning coales, and lee

## Hor the friuen.

 the fume goe vp inoo the Horfes nofthrils, that to the humors corgealed aboue in hisbrane may be refolued and catt forth.
The Fling
vorme.
For the Flying worme, take from him fome bloud $v$ pon the veines of the temples, applic a hot fearing yron verie deepe vnder the throat, and in the hole put tents and plegers vpon them, moyftened in the white of an egge, and after let him iland three dayes in the ftable.
For the Iauar, take Pepper, as alfo the leaues of Coleworts,old Swines greafe, and The Isuar. make an emplaifter to be layd vpon the place.

For the Figge, you mult pare the hoofe lo farre forward, as that you may make The Figge.

The weane.

For a galled
backe.

## A horleswaycd

 int the backe. quall weight: let the plaifter belayed fomewhat hot vpon the offended part, which you thall not take away vntill it ealily tortake the place when you touch it: for then the Horfe is healed.The backe. For the fwellings caufed on the Horfe backe by the Saddle, open if firft with a froubric.

Kuife, afterwardlay plegets vpon it wet in the whites of egges three dayestngether : and the place if it be fwolne and hard, it will be healed with Coleworts, Pcllitorie, Wormewood, and Beares.breech , bruifed rogether and ftamped and boyled rogether with fweet Scame: applie it vnto the place offinded and hurt.
For the difeafecalled Graps, which are moules and feabbes on the heeles, peele a-

It is a fingular good' remedie for the Iaundife vwhich followeth : take of Pa nicke Corne, and Smallage, of each a pound, boyle them all vvith Lupines and good Honie, and of the whole ftrayned, make him take a Pint, eight daies together.
If he be coftiue, he may be helped by drinke or clyfter; the drinke fhall be fuch: siue him ordinarily of the powder of vvild Rue, with the feed thereof feeped in good red wine : or elfe take the rootof yellow Flower-de-luce, with A nnifeeds, and Opopanax : and of all thefe beaten togecher verie fmall, you chall make three dofes
or draughts, vvith three ourices of good Red vvine, and as much Oyle oliue, and thofe on three feuerall dayes. In the clyfter you fhall put the juice of pale coloured Flower-de-luce in three pound of the decoetion of Mallows and Perrie, and into the vvhole you thall put of Sall-nitrum, and the dung of Pigeons, of each an ounce, of Oyle.de-bayes; and Rue, of each threc ounces. Aftex the clyfter giuen; he muft be vvalked a great wvhile, and verie foftly'. Some Farriers or Horle-leaches haue in this difeafe made triall of Hares dung, with nine fpoonefulls of Honie, and fiue grains of Pepper, to make a drinke to take with the broth of Cich Peafe, or Red Cole-. worts.
The Horfe oftentimes haiing eaten too much Barley or other prouender that is Thefiefling :hurffull, is sroubled vvith the fwelling of his flankes, and the reft of his bodie : to take the fame away, youmuft make a decoction of Mallowes, Pellirorie, Beares-breech, Mercurie, and other foluble hearbes, putring thereto, Bran, Salt, Honie, and Oyle: and hauing vvarmed this decotion, he fhall haue a clyfter giuen him with a clyfterpipe, hauing the flanke thereof proportionably great and long: this being well accomplifhed, annointhis bellie with Oyle, and afer caufe it to be rubbed vvith a round ftaffe by two men, beginning before, and fo going backward, ftopping vp his fundament: after chis, get vpon him, and vvalke him verie foftly,and a long time, intill that he haue voided, not onely this clyfter, buu vvithall fome part of the dung, which he had in his bodie, and he will be well by and by after.
For burfting, or rupture, fome are of opinion chat there is nothing fo foueraigne as For a horfe that to takefeuen ounices of the aftes of the vvood of vine braunches, or of Elme, with is burfen. three ounces of Oyle oliue, Scallions brayed, feuen in number, Honie three ounces, frefh Butter and Goats Sewer, of each an ounce, the juice of Plantaine three ounces, vvithuld white vvine, or the broth of Cych Peafe: this will ferue for thrice, to be taken three feuerall daies together.
To keepe your great Horfes that they may not be molefted and troubled in great The Ainging of heat, vvith the ftinging of Flies : you muft rub their haire vvith the juice of leaucs of Flies. gourdes.

For the fatcie of the legges, you mult fhaue the place, and after annoint it with The fircieo the Oyle of Iuniper for the fpace of foure daies cuening and morning, and let not the herfe goe forth to water all the whiles that his haire is not growne againe: or elfe let him hane a ftrake vvith an yron, long-waies, and ouerchwhart: otherwife, for the farcie of a horfe how hard to cure fo euer it be, you muft take the roots of common cotton thifle (which is che broad and white leaued thifle) and make him eat them in fhiues with his oats, it will heale him without all faile, in leffe than fifteene daies, or three weekes, if it be continually giuen him to eat: and the rentedie is verie eafie, feeing the horfe will willingly eat it.
For clefts which happen betwixt the joynt of the legge and the hoofe, fhauc away clefiso the haire, wafh the place with vvine, annoint it viith an ointment made of Soor, Verdegreafe, and Honie pouned and boyled together, mingling therewith in the end fome Lime: if the chiaps be verie deepein, feare them.
For the fabbe you munt let him bloud in conuenient places, according to that For the farbbe: place vwhere the difeafe is: for a conuenient purge, it vvill be good to vfe of the powder of the root of vvild Cucumber mingled vvith Sal-nitrum, and giuen in a horne vvith vvhite vvine: the medicine ofentimes giuen doth purge him of euill humours : for anoutward remedie, take quicke Brimftone, fat Pitch, Clay of Iudea, called Afphaltum, mingle all rogether, and diffolue is in new Butter falted, and with this oyntment you thall rub him all ouer his bodie in the greateft hea of the Sunne, and by many perfons, and a long time. If you loue nor rather to take of vinegar a quarcer of a pirte, of Perrofin fourc ounces, Pitch or Gum of the Cedar-tree foure ounces, and mixe them all vvell togecher in an oyntment, wvith mans vrine and vwarme vvater, putcing thereto of lweet Seame, and old Oyle, of each threc ounces, make a liniment or cerote, if it like you not, better to vvafh him all ouer, or elfe to foment him vvith vrine and warme vvater, and after to applic your lini$\because$.
ment vpon the places fo wafhed. The hearbe called Rofe-baie,or Oleander, boyled in Oyle (Imeane the leaues onely) is an exquifite remedie for this difeafe, putting thereto fat pitch, vinegar, and waxe: and remember alwaies in rubbing and annointings to rubbe the beaft againft the haire. It is alfo a foueraigne remedie to currie himfirft in the fcabbed place vntill it bleed, and after to wafh it with Lee made with one part of Lyme, two of Beane-meale, and three of the athes of Afherree, all thefe not boyled but fteeped onely in the Lee. After the walhing, you muft annoint the place with an oyntment made of quick-filuer, hellebor, brimftone, alum, colss-foot, and Swines-greale.

The Hors swolled.

The colicke in a Hurfe.

When che horle complainech himfelfe, and his flankes befwolne, as alfo the reft of his bodie, by hauing eaten fome bad Hay or Prouender, you fhall make him this drinke : take the thin skinnes that are in the fomach of three Hens, and drie them vvell in an ouen, afterward powder them vvith halfe an ounce of pepper, and foure fpoonefulls of Honie, and an ounce of the powder of fine Frankencenfe, makehim take this medicine vvith a pint of vvarme vvine, and to the end that it may loufen his bellie,giuc him at the fundament by a cly fter fufficient great and long, a clyfter of the decoetion of Mallowes, Mercurie, Pellitorie, and other loofening hearbes, putting thereto Bran, Salt, Honie, and Oyle.

Againlt the colicke : take A farum bacchar, the leaues and roots of Parfley and Fennell, of each one ounce, blacke Pepper two ounces, Horehound an ounce, Soothernwood halfe an ounce, fine Honie a pottle, boile it well, and fcumit altogether, and thereofmake truchiskes of the bignefle of Filberts, and with a quarter of a pint of good wine, you fhall make the horle to take is in manner of a drinke: and the day that the colicke doth paine him, you thall bruife three or foure fpoonefulls of Fennel. Feed, and caufe him to drinke it downe roundly with wine, and then couer him well to caufe him to fwear.
The fuellings of For the fwelling of the cods or ftones, make as it were a pap offtrong vinegar, fulthe coddes. lers clay and fale,to annome the cods withall twice or thrice a day.

For a Fiftula : make the hole wider, feare it, caft into it a falue made of vnquenche Lime, fo long as cill the core or dead flefh within doe fall out.
For a Carker.

The Jauar or
Scabin ibe
bams.
The itorse
ciojed. Fore thenker: wafh it with Itrong vinegar, afterward fprinkle vpon it the fine powder of the root Daffodils, Rats-bane, and Vnquencht-lime, put rogether into a pot, and burnt to afhes.

For the Iauar in the houghs or hams: feare the places along and ouerthwart with a hot yron, a fterward applie thereto a cataplafme made of verie new Oxe dung fried vpon the fire vvith Oyle.

If the horfe be cloyed, youmuft takeout the naile, and pare him to the quicke and till bloud come, then making verie cleane the pared place to drop into it melred Brimftone, or to fill it vp with an oyntment nade of Turpentine, Waxe, Oyle, Honie and Salt, all being made verie hot, and a little Cotton alfo dipped in the fame oyntment. Or elfe (which is an approued thing) to put vpon the hurt place on the infide of the hoofe of the horfe, the leaues of white female Mullein bruifed betwixe twoftones. And in cale the maladie be a day or two old, then you muft hold the horfe foot in warme water well falted, and lay and bind aloft vpon the foot a plaifter of Bran,Swines-greafe, and Salt-water: or with fmall Salt and frong Vinegar, or the powder of gals, or mirtles, or of the mafticke tree, and then to fearchimaboue, and to fill vp all the hollow of the foot with Porkes-greafe : and hauing thus dreffed it fo much, and fo oft as it fhall be needfull : let it be made vp, filling notwithftanding the hoofeon the infide with pitch, and annointing it oftentimes with fwines-greafe as is abouefaid. And to preferue the hoofe in his foundneffe and frength, apply vnto it aloft a cataplafme made of boyled mallows ftampt and mixt with hony and bran: pue in the hollow of the hoofe the fewet of a fheepe, and abouc the hoofe his owne dung,
istare herfe. horfe vpon his finews: hatee hecaufe of fome ftroake giuen hini by fome other horfe vpon his finews : take of the fewet ofa Male-goata pound, Molibdena halfea pound, Rofin a pound, and Copperas halfe a pound, make an oynoment. The finew
ftroken or wounded, or hauing receiued any other kind of wrench in the Knee or Ioynt, by the horfe his fetting of his foot in fome bad and inconuenient place, is healed by taking an ounce of Fenugreeke, as. much of Linfeed, foure ounces of Swinesgreafe, all this being boyled togecher fó long as till ie be thicke; and much diminifhed.

If the horfe interfering doe wound himfelfe vpon his hinder feet, you mult cuta- Theenterfe. way the haire verie fhore and bare from the place chat is hurr, and rub it with com. ring of chorfes mon falt, tying vpon it fome prettic plate of thin Lead, afierward taking that away to wafh it with Wine.

For the (pauin in the hammes : you nuff,raifing the thigh vp on high,tie the veine The [pakinzo called Foncanella, and giue it a wound with a fleinme to lé it bleed, and after to applie the a tuall cautcrie, or hot yron vpon the fpauin, and to burne it long wife and ouerthwart, and to heale vp the feared place, as in the Iauar.

The chaps are healed, if you burne chem ar cither end witha round hot yron: for chaps of difse this burne will keepe the chaps from going furrher, and then afterwàrd rubbe them with wafhed Lard in diuers waters,or with oyle of Bayes mixt with Mafticke, Frarikincerfe, Vinegar, and the yolke of an Egge.

The grapes would (when the haire is once taken away) be wafhed with the deco- The grapes or ctionof Mallows,of Brimflone, and Mutton-fewer, afterward applying the droffe facbbes. parts vino the place, which being taken away, there fhall an oynment be made of .... new Wax, Turpentine, and Gum-arabecke equally mingled.

For the hornie fivelling in the circle of the houghs or hams: you muff fhaue the For the horzy difeafe and put vpon it the droffic parts of the decoation of hollihocke roots ftam + fwelling. ped : and atter that a plaiftcr of Muftard-feed, the roots of Mallows, and Oxe dung, all boyled together with Vinegar.

Cut the head and the taile from a fnake, and deuide the reft of the bodie into gob- For the dijea/e bets, roaft themon a fpit, gather the fat which droppech, and applie it to the fore or wound.
Thedifeare of the hoofe or the corne : Aampe Colewors sha are oreene wid e die " Swines-greate, lay it vnto the difeafe, and get vpon the horfe, and ride him indiffe- the toooff, or the rently to the end that the medicine may pearce into it. froot. For the garrot: plucke away the fech that is dead with a fharpe inftrument, and The gerroo. wafh the place with warme Wine,afterward applie plegers thereto moiftened in the white of an Egge.
The difeafe of the necke: pearce the flefh in fuee places on both fides the necke, The difeafe of with an yron fharpe like a Naule, put a Seton through eurrie hole, and let them abide there fitteene daies.
For the palamie : take away the fiefh from the palate of his mourh with a very fine The Palamie or inftrument, and shat in fuch quantitie as that the humour may eafily come ferch, afo blouddie chops in terward cleanfe and rub his palate, wich honie of Rofes, juice of Chiboles, Scallions, and burned Wheas.

The courbe : cut the skin along? the haire, acording to the bignefle of the courbe, The scrurbe, or applie thereto a linnen cloth, wee in warme Wine, ftraw vpon it the powder of Ver-a long g benelling degreafe, and thus continue vnto the end of the cure.
For the Knee fwollen: take a pinte of ftrong vinegar, wherein you fhall temper bexug $f_{\text {. }}$ a little Sale, of burne Copperhalfe a pound, and of Sinople fo much as fhall be need- The wecling of full and neceffarie.
For the Knees that are broken and chapt: take common Oylc, Linfeed, athes of Broken and Rie-ftraw, and all being put togecher make an oyntment thereof,to annoint the fore chapt Knces. place euening and morning vntill it be whole.
For the chafings which moft cormmonly happen vnto the necke or backe of a Chafingso . horfe carrying Saddle-packs, or Saddle : lay vpon the place the leaues of wild blacke Vine.
In old and hard rumours make this cerote: Galbanumitwo ounces, Rofin, and oldtumourso Waxe, of each a pound, Gum-ammoniacke, and blacke Pitch, of each halfe a pound,
and of oyle fo much as fhall be needfull to incorporate and make vp all the reft in good forme. But if the tumor be broake and hollow, and hath beenc an old fore of verie lony continuance, then you fhall difflolue a quareer of a pound of Allome in a pinte of running water, and with if firlt wath the fore verie vvell, and then take $U_{n}$ guentum UEgyptiacum, and lay it vpon the fore vvich flax hurds; doe thus once or twice a day, and the cure will foone be made perfect.
wormes and oots.

The current.

Elux of bloud. vvine, Oyle of Rofes, and a little Salt.
For the flux of bloud paffing by vrine, you muft let him bloud of the veine of the breaft : afterward make a decoction of Whear with fweet Seame, and the powder of the rinds of drie Pomegranats, fraine them all to make a drinke for to giue him euerie morning, not pucting him to any crauell at all. Likewife you hall applie a catao plafme vnro his backe and reines, made vvith Knotgraffe, Bole-armoniacke, and the bloud of the beaft, mingled rogecher with ftrong vinegar or thicke red vvine, which may alfo ferue for them that haue their reines relaxed, or haue beene pricked vvith a Lance.
The efficherfe. A reftic horfe for to make him goe forward, mult haue a coarde tyed vnto his cods, and it muft befo long, as that reaching betwixt his forclegs it doe come vp fo high, as that the rider may hold it in his hands, and fo may pull it hard whenas the horfe fhould offer to goe backward: but if it be in a Gelding, you muft bumbalt his buttocks with a good lony flicke taken hot out of the fire, and burne at the end, for it will make him goe : and likewife if you vfe the fame courfe in his rearings, it will correct him, and makehim leaue them.

## Paygon eater.

pion,S hider, at any time vvith eating of his hay doe eat any venimous beaft, as Scorand then, or the venimous flie called Buprettis: he mult be coucred till he fweat, forch, fhall be giuen himm againe to drinke we of his mouth, which fo foone as it is run forth; for his meat, giue him leekes and whear boyled togeher quake more ame in the Chapter of the Neat-heard or Oxe-keeper.
For the flinging of Vipers, a liue Cocke flit through the middeff, and applied

The Jinnging of Vipers. warme vnto the vvound is much worth: and prefently after chis, a powder of the root of yeilow Daffodill, with ftrong vvine and Salt made all in a drinke for him :or elfe the roor, leaucs, and fruit of vvild vine made in afhes, and drunke with good Wine: or elfe take prefently that kind of bugloffe, called Echium, and draw outofit a good pint of juice, hauing firt watered it vvich vvhite vvine or vvater of Carduus benedin Ctus. If you perceiue that the leafe vvill not yeeld you juice ynough of it felfe, make the horle firft to drinke chat vvhich you haue, and after applie the fubflance of the hearbe vpon and about the fung place, and couer it.
The biting of the shrew.

The Shrew by her biting of the Horfe, maketh him oftentimes to dye, as vve haue ofentimes feene both in Horfe and Oxen : this is a beaft as bigge as a Moufe, of the colour of a Wefill, wvith a long fnout and a fhort tayle: fhe fatteneth vpoin and infectech moft chiefly the cods, and maketh foure fmall vvounds: for to heale chis venimous biting, you muft caufe him prefently to take downe through the nofe bayleaues flamped or powdred with vvater: and to applie vnto the place that is bitten;

Cum

Cummin and Garleeke flamped together: and in cafe there be any vlecr, you muft fomenthe place with Brine, or with the decoetion of the Mirtle--rree, and to fcatter and fprinkle thereupon the powder of birned Barley, or of a Pomegranat rinde. Looke more in the chapter of the $\mathbf{O x}$-keeper.
The biting of a madde dogge hath for a fingular remedie, ifit be wfed before is nine daies, the flowers of Medicke fodder burned and mixed with old Swinesgreafe, and applied vnto the wound, or elfe to ftampe it with old whise-Wine, and caufe him to drinke it. Alfo the root of the Eglantuc--tree made in powder, and pur vpon the wound, or giuen him to drinke with goodold. Wine. Likewife the Berries of Elder-tree, or the juice of the leanes thereof, or of A hie-tree.
Hens dung fivallowed by hap, bringech frets and wrings in the bellie: for which, Hens dung take of old Smallage and drie two ounces, and caufe him to drinke them wich Wine foxllowecdoy and Honic : afterward walke him vurill his bellie rumble, and that he begin to dung.
The leane horife may be made fat, if you giue him to cat Fafels or long Peafe boy- The leane horfe. Ied in vvarer, and mixt amonght his prouender: bur and if he fhould be fo weake as that he could nor fwallow thern downe, you muft ftrengthen and get him into courage againe, making him fup egge. yolkes with fugar in verie good quancitic : warme vvater, mist with Salt and meale of Millet, and giuen to the horfe, dorh grearly fat hims. Alfo Panicke, Rice, and Millet boyled, and mixt with Beane-meale and Salt, are excellent good, and it would be ginen him foure times a day, but not much at a time, leaft the horfe fhould caft it vp againe.
It commech to paffe fomecimes that Maresate troubled with a kind of rage, that is Tbe raging loie to fay, vvhen they fee their ownie pictures in the vvater they are taken with louc : and of ofares. hereupon they forgetto cat and drinke, and drie vp therr heat or fignc of defiring the horfe. The fignes of this madneffe are manifefted by their running through the paftures, as if they were fpurred, ofentimes looking roind abour them, as if they foughe and defired fomecthing. They are cured of this madnefle by being brought ynto the water; for when they fee by their fhadows how ill fauoured they be, they will forget the firft fhape which they had beheld before.
For a Horfe that is troubled weth the Yellowes, you fhall firt lec him bloud in the rellowes, necke veine and in the roofe of the mouth : then take a quart of Ale, a handfull of Celandine, five fpooncfuls of Honcy, three ounces of Cummin feed beaten to pouder, a litcle Saffron, and a handfull of Tyme, boile thife togecher, then ftraine it, and giue it the Horfe to drinke luke warme.
If your Horfe be troubled with the Staggers, you fhall firt Iet him bloud in the Staggero necke veine, and take from him great fore of bloud: then take V eriuice and Bay fale beaten togecher, with a good prettie quanciitic of Alfafectida, and dip in Flax hurds therein, top it hard into the Horfes cares, and then bind then vp fo as the medicine may by no meanes fall out; and doe thus diuers daies together: and if need require, Iet him bloud againe the fecond day on the other fide of the necke : ler him fland warme, lye foft, and by no meancs drinke anie cold water.
For the Gargyll or Peftilence anongft Hores, take Hernes dung, and mix it ve- Teflience. rie well with old vine, and then boyle thenn together, and being luke warme, giue the Horfe a pint,or a litele more, to drinke wwo or three mornings togecher : then, as was before faid, let him ftand warme, lye fofe, and by no meanes drinke anie cold water.

- If your Horfe be troubled willy the Cords, take a corved made of the brow-antler cordso of an old Stagges horne, and thruff it vnder the Cord, and ewynd it enne or twelue times about, till the Horfe be conftrained to lift vp his foor, then cut the Cord afunder, and put a lietle falt into the wound, and wafh him ateer with Beefe-broth, and the cure will be effected.
If your Horfe be troubled with a Rhewme defcending downe into his eyes, you Zhbeume inths Thall take Bole-armoniake, Terria figillata, Sanguis Draconis, of eacha like quanti- Ejeo cie, fcrape them, then adde the white of an egge and vineger, fo much as will. Lerue to moift hem, then fpread is vpon a piece of leather plafter-wife, and lay
it to the temples of the Horfes head, three or foure daies togecher, and it will both flay and drie vp the rheume.

Awarte.

Ifa vvarre, Pearle, or any other naughtie fubftance fhall grow vvithin the cye of your horfe, you fhall take burnt Allome, and vvhite Copperas, and grind them to a verie fine powder,and then vvith a Goofeor Swans quill blow fome of the powder into che horfes eye, and it vvill foone eat away the excreffion and clenfe the eyc, and make it faire and perfect.
For any fraine vvharfocuer, vvhecher it be in finew or in bone, you thalltake Bole-armoniack, Vinegar, vulhites of Egges, and Beane-flower, and mix them vvell together till it come to bea good thicke falue, then fpread it vpon a cloth, and lay it exceeding hot to the fraine, renewing it once in fiue and twentie houres, and it will cure it.
If your horfe be troubled vvith fpauens, you fhall take a good quantitie of Linfeed, and bruife it vvell in a Morter, then mixe it verie veell vvich Cow dung, and put in into a Frying-pan, and boyle it vvell therein vpon a quicke fire, then verie hot applie it to the Spauen, not forgetting to renew it once cuerie day till it haue brought the Spauen to a head, and breakert like an ordinarie impoftumation; then hauing run two or three daies, you fhall lay a plaitter of Pitch vpon it, and fo heale vp the fore as in cafe of other vlcers.
Now for as much as to know medicines for difeafes is to little or no purpofe, except a man know the difeale, I vvili here in a briefe suanner fhew you the fignes of all the moft generall and hidden infirmities that are in horfes, therefore firft to begin vvith the outward parts: that you may know where the griefe is vvhen at any time a horre halteth, you fhall note thefe few obferuations following, firft if he hale before, and fet but his Toe to the ground, $i t$ is moft certaine that the greiefe is in his hoote ; but if whhen he halteth, he bend not his pafterne, then be ycu vvell affured the griefe lyech in the joynt: If he hale mure vvhen you turne him than when he goeth right forward, or forbeareth his foot more in the turning than in going, then the griefe queflionleffe is in the fhoulder or the thigh; or if vvhen he flandeth fill he lectech one foot a good deale more forward than the other, the griefe is then in the Thoulder or vpper parts alfo, as in the Knce or Knuckle of the Elbow: If he goe bowing to the ground, and tread hisfeps verie chicke, the griefe is in the breft : If he halt behind, and in his gate fet but his Toe to the ground, the griefe is in the foot, or in the flifle; but if he refure to touch the ground atall, then the griefe is in the Buttocke. Now to know whereof thefe griefes doe proceed, you thall vndertand thatif the griefe proceed of a hot caufe, then he mof haleeth whicn he crauellecth, or is chafed, and the further he goes, the worfe and worfe he goes : but if it proceed of a cold caufe, then he haltech moft when herefts or flands fill, and at his firft going our out of a journey, but after a little chafing he goeth vprighe againe. Now ifthe horfes hale be fecree, and as it were halfe vnperceinable, infomuch that you are incertaine vvhecher he haltech yca or no, you fiall fuffer him to runne at the vttermoft length, of his halter, vvithout any flay or eafc of your hand, and then without doubt if he haue any hidden maladic or griefe whatfocuer, he will cafily difcouer it : and thus much for the fignes of griefes in the outward parts. Now for the fignes of griefe in the inward parts, you fhall obferue, that if your horfe be flower in labour, or duller of the fpurre, or fhorter breathed, or if his eares hang downe more than they were wont, f his haire flare, if his flanke be more hollow, if he burne or glow betwixt the eares, if he refule his meat, or if his mouth be drie and clammic in his trauell, all thefe are generall fignes of inward fickneffé : If a horfe hold his head downe in the Manger, be heauie and dimme fighred, it is a figne of a Feauer, headach, heartach, foun. dring inthe bodie, or the Staggers.
If a Horfe turne his head backe, and looke to his bodie as to the place grieued, it is fignie ofobftructions in the Liuer, efpecially when he looketh to the right fide, but it he lookefurcher, as to his bellie, then it is a figne of Wornes or Colicke; when thin vvater tunnech from his mouth, it is a figne of Staggers, or a wvee Cough.

Aftink

A flinking breath,and foule mattar at his nofe, is a figne of an VIcer in the nofe: but if the mattar be white, then the Glaunders; ;if blacke, then the mourning of the Chyne; if yellow, then the confumption of the Liuer: but if he call little lurves our of his mouth, then it fheweth roten Lungs. It the Hories bodie aind breath be hor, and withall he loath his meat, it is a fignce of a Feuer, furfet in the Stomacke, or the drie or muin Yellowes. A palpable fwelling on both fides the forehead, fheweth the Staggers, betweene the cares, the Poll-euill; vnder the cares, the Vines; in the inouth, the Flapps,or Lampas; vnder the throas, the Glaunders; in the tongue, the Strangles; on the lefifide, the Spleene; in the bellie and legges; the Dropfie; and in the flanke, the Collucke. To cough, or to offer to coligh, Miewes a Cold, or fome feather or fuch like thing in his wezand. To flagger, or goe reeling, fhewech the Staggers: yee if fuch faggering be behind onely, then it thewes Foundring in she bodie, or paine in the Kidneyes: Trembiing or Raking fhewes a Feuer, or the Foundring in the bodie: Hollownefle of the backe, fhewes the drie Maladie, or the Dropfie: illaing with paine, fhewes the Srone: leaneneffe and gaintnefle fhewes Hide-bound, Wormes, or a Confumption: loofenefle of bodie fhewes an inflamed Liuer, and coftiveneffe, the Yellowes and fickneffe of the Spleene: A Horfes dung much finking, fhewes a hor Liuer; nout fmelling, a cold Liuer; hardly difgefted, then 2 Confumption, or the drie Maladic: A defire eo lyedowne on the righic fide, hewes heat in the Liuer, on the leff, difeafe in the Spleene: to be of vp and downe, Bues, or Wormes: If he 'pread himfelfe when he lyes down, hewes the Drop fie :if he groane when he is downe, flewes a ficke Spleene: and not able to rife when he is downe, Ahewes Feeblenefle, Foundring in the bodie or legges, or eife Death: To be croubled with Wind, ficwes the Collicke; defire to eat, and not to be thirftie, fhewes a cold Liucr; defire to drinke, and not to cat, a Feuer,or ouex--trauelling; and greedic eating and dirinking, fhewes rotten Lungs. A further Difcourfe and more ample Treatife of the difeafes and curing of Horles, is to be looked for in the Workes of $P$. Vegetius, concerning the curing of the difeafes of Horfes; and which I haue tranflated, or rather paraphraftically runned oucr in French out of Latine. Loojke alfo into the Chapter of the Oxe-keeper aboue handled.

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& \text { Chap. XXIX: } \\
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(2xisOtwithfanding that the Affe is but a bafe and coritemptrible thing, yet he is verie neceffaric in eucric Countrey Houfe, becaufe he trauelleth and doth his neceffarie worke better than if he were greater and more corpulent: as to turne the Mill, to grind the Corne, to beare the Corne to the Mill, and divers other implements and commodities, as Butter, Cheefe, and Creame, to be fold at the Market, and to bring the fanie or annic other thing backe againe home vpon his backe:to toie the earth that is liglit, and noo fleorg and fliffet to draw Carts char are not too heauie laden: Befides the 'conmoditie of the milke of the fhec Affe, whith is a fouerraigne recinedie as well for rhein that be in a comfuniptis on, that be'weake, impoiloned; rheumatike, and fuch other like direafés' as alfo for to make next, to white; make tender and friooth che fact sof formen: "as wee read that Poppcai the wiff of Nero did, vfing bathes è keepe hê hew' and coloour miont faire, and her flef1 moff frooch and white. Tolet paffe and en fay nothing of the feff of the Aff, which whilcsiti is young is veric delicate, and fill of pleafatiot teft and fauour in eating, and for that caufeliath fometimes becne of great requeff in Rome; as ald . mourctime in great eftimation by a great noble and worthie man in France, whà caufed a flocke of Afics to be kept and inôt carefully lookied viro: :and innlike mànner to fay sothing of the Hide, whereof there are made' verie good fieues to ridale'
the corne,as alfo tabers to daunce by, and drums for the warres. Wherefore the good houfholder muft appoint him alfo one to order and gouerne him, vvho notwithiftanding thall not be much bufied in taking charge of and lonking to him, fecing he is vcric eafie and light to keepe: he is contented vvith a littie meat, and that of any fort euen fuch as one vvill giue him: for fome feed him only with leaucs, thornes, and thiftes: fome doe fat him with chaffe and ftraw, which are commonly found almoft in all councries : it is true that he muft not be let feed vponor haue giuen to eate any Hemlocke; for it caftech him into fuch a found flecpe, as that hefeemech to be not to much like a blocke, but rather farke dead. If you giue him now and then fome bran, bread, or millet, it pleaferh him as vvell as a grcar banker: he lookerh not worf, vehen he is ill handled and curried ot him, vvho hath the charge of him : he doth eafily endure ftrokes and hunger, and is not eafily tainted of any difeafe: notwithftanding the Afte-keeper hall haue care that the She-affe may be couered in due time, that is to fay, from mid March vntill I Iune, to the end that foaling about the end of the yeare, jt may happen to be in the fpring of new Graffe, and the ageof the Affe to be couered muft be from three yeares to ten: at which time you muft giue
leauc to the She-affe to run, in regard of the good ftore of fruit fhe hath broughs
Kefl maketh an Affe alwaies flet vnfit for labour.

The markes of a good Affe.

## $\because 4$

## The ATes-bide.

 forth: but on the contrarie, not to fuffer the male to continue out of labuur, feeng that much refpeit vvill bring him to an habite of fothfulneffe. He fhall fuffer the young Affe to fucke it damme vntill it be two yeares old: or elfe you hal !et it fucke a Mare, becaufe it is fomewhat better : he fhall not fet the young Ante to labour before it be threeyeares old, wvhich is the time voherein you muft accuftome it to beare buthens, to draw in the plough, and to ferne to ride vpon. The Affe that is not aboue ten yeres cld, nor younger than three, which is great, rvell fquared in his parts, hauing fifficient grofle eyes, vvide nolthrills, long necke, broad brealt, high fhoulders, great backe, a large chyne or crefl, great cods, a flat crupper, a Thort taile, his haire drawing toward the colour ofblacke, fleeke, and lifted, hauing a blacke marke inche furehead, or all along the bodic, fhall be well accounted of. Buc on the contrarie, there is no account to be made of fuch as hane an athic coloured hare, or fomewhat gray, as the molt in this countrie are, and leaft of all of fuch as are of a fmallfature, To be fhort, he fhall be carefull to healc them when they be ficke (although as hath beene fa:d, this beaft is not veriefubiect to difeafes) and that by ving fuch remedies as he dolh vnto horfes.The houlholder being a good husband, thall keepe the hide of his Affe, to tan and drefle to make thooes as vvell for himfelfe as for his familie, for as much as fhooes made of an Affes skin, and vpon the backe part, whereon the Affe doth carrie his buthens, are fo durable, as that one thall fearce fee any end of them, thongh you vweare them amongft fones, granell, thornes, or other fuch like places, notwiths ftanding with therr lafting they grow fo hard as that they cannot be worne any more.
The hoofegfan Affe burnt and made in powder doth heale the Falling-fickneffes and that of lie vvild Alte hanged about the necke, or fet in a ring, in fuch tort as that itmay touch the flefh, is fingular good againft the faid difeafe, as alfo agamnt the fwimming of the head, which commeth through a weakeneffe of the braine. Sone thinke that the vyild Ane is that vhich is called Ellend, and much feene in Polonia, Lituab nia, and Suecia, and that becaule that the Ellend hath cares like vnto an Afes: the Erenchmen which haue trauplled into. Polonia, fay, that the Ellend doth refemble Lhe Affingathing buein bereares; as otherwife in all points almof being like vnto the Hate hating a clouen fopt, but that he is a great deale bigger, and in hornes luke vato a dallory-Deerc.
2hthough the Ant be mocked of the mof becaufe of his long eares, yet notwithIfanding thofe eares hw greatfocuer they be, doc ferue him to fhew his vertue, and tompape to appeare his vnderfanding and ceraine knowledge which he hath of the chate of thetyeather fecing that ifir will turne to raine, he then lajeth them foflat vonlhisneckenthat one would lay they were glued to it.

# Cпар. XXX. <br> Of the crule.keeper. 

Good Houfe-holder muft not be vnfurnifhed of things neceffarie for his Houfe, whecher they ferue for food and fuffenance, or for eafe. Wherefore alchough in refpect of fome manner of worke he may be conterit to want Muls, hauing the benefit of Horf to carrie him to the Market and ocher places whicher his bufineffe fhall call him: yet norwithfanding the Mule is neceflarie for his eafemener, whecher ir be that he would rather ride vpon Mules than vpon Horfes, becaufe of their eafier pacing; or that, by reafon of age, or want of health of bodie, he cannot endure the trauell of a Horfe, but is conftrained to prouide a Horfe-liter to carric him in. I will further' fay, that in fome places, as in Auernia, The Suules of that for the fcarcitie and frnall number of Horfe and Oxen, the Mules are efteemed Auerria. of great value, and are vied to toile the earth, to trauaile, and doe cther neceflarie things tending tothe commoditie and maintenance of the Houfe; to fay nothing that Mules arc proper Beafts, ftrong and able to carric great and heauie burthens, as Trunkes, fackes of Corne and Meale, and fuch other burthens which Hores could not beare.
The ordering and charge of Mules is like vnto that of Horfes, as well in refpeet of their meat, pafture, feeding, and furniture, as in the euring of their difeafes, whereunto they are fubieat: and therefore wee will knit yp in fewer words what may be \{aid of them, both for the cuufes rehearfed, as alfo for that I willingly leaue the whole knowledge of their feeding and handling to thofe of Auernia, amongft whom they are in fuch high requeft. Notwithftanding, to f peake fummarly, the Mule-keeper muft nor onely be carefull of the well-feeding of his Mules, bur alfo of making of the mofl profit of them. The profit that may be raifed of them, confiftech in the veric fame commoditics that may be raifed of the Affe, and that is principally of goodly Herds and Flocks. Hence he fhall chufe a good and goodly beautifull male Mule, Alfe, or Horle, and likewife a female, Mare, or fhe Ance, for the faddle: for if buth of them happen not to fit the turne, and be well conditioned, yet that which doth, cannot be but valiant and couragious : And although that male and fermale Mules be engendred eirher of the male Affe and the Mare, or of the Horfe and fermale Affe, yer thofe are the beft which come of the Affe and the Mare : for thofe which come of the Horfe and the Affe, though their name beaccording to their fire, yet they refemble in conditions their damnes altoge echer. Wherefore it is bent, to the end you may haue goodly and beutifull The Mules, to make a Salion of an Affe, which is Themarkes of a faire and beautituit, of a good race, and that hath beene well tricd. You muft chufe good $A f f e$ tos $60-$ one that is shree yeares old and vpeward, great and corpulent, of a flrong neck, ftrong and large riberes, of an open arid noufculous or flenie breaft, flefhie thighes, welltruffed legres, of a blacke colour, or flea-bitren with red, tending to a bright, or of a gray filuer cotour, or of a darke murrey colour, for commonty Affes are of a Moufe colour: but they which are of this haire, are not fo linely and nirring as the other: and if there come forth either male or female Mule wearing this liuerie, they are not fogond and futable. The Mare muft be leffe chan tenne yeares oid, gieat and faire, and of good limbes, to the end fhe may take and keepe the nature of the Affe, difagreeing with her bodie, and berng of another kund than fhe her feife; and that fle beltow vpon her fruic not onely the gifis of the bodie, butalfo of (pirit and lielineffe. The young fayerh in the dammes bodic twelue moneths: wherefore the Mare would be couered fromi mid March unto mid Iune, to the end fhe may foale when graffe is in full force, thercby to be fure to get good flore of Milke. She hauing brought forth her young one, it mulf be vfed after the manner of young Colts, excepted onely, that after it hath fucked fixe moneths, the damme can giue it fucke no
longer,
longer, by reafon of the ach of her teats : bur it muft be made to fucke fome Mare, that fo it may grow more luflie: or you mult let it goe with the damme, that it may learne to eat, fo that fill it be prouided of milke to fucke.

The Horfe-mule well chofen, muft be of a grolle and round bodie, hauing fmall

Signes of a good Horfe-Mule.

Of a good Mare-Male.

The difeajes of the Horje and Mare-Mula
Aguc.
Difficultic of
breath.
Scabs in she
paffernes.
zeaneres.

Cough.
collicke.
Wearimefle and
ouer-heating.

The fmoake of
the boofe of $a$
Mare-Mule. fect, and thinne legges and drie, a full and large crupper, a broad and foft breaft, a long and compalled necke, a drie and fmall head. On the contrarie, the Mare-Mule haue her legges fomewhat grone and round, a fraight and folice bodie, and a crupper hanging towards the taile. The Mare-Mules are ftronger, mightier, nimbler, and longer liuers than the Horfe-Mules : but the Horfe-Mules are more tractable and more eafie to guide and learne than the Mate-Mules be. Both of them are fubiedt to lunacie: but to take this fault away, you muft make them drinke fome wine oftentimes. If they be froward, and vnwilling to be fadled, you may tie vp one of their fore-legges euen vnto their thighes, to the end that in the meane time they may not fall backward. If they be hard to fhooe on the right foot behind, you mult tie vp the left before.
The Mare-Mule is fubiect to the fame difeafes that the Horfe, as hath beene faid; notwithftanding there is fomething peculiar in them, for which the remedies doe follow: When he hath an Ague, you muft giue her raw Coleworts:when fhe bloweth and fighech much, and hath a fhort wind, you muft let her bloud, and afterward giue her to drinke three quarters of a pint of Wine, with halfe an ounce of Oyle, and as much Frankincenfe, and two pints of the iuice of Horehound. If fiee haue the moules and fcabs about her pafternes, called the Grapes, you muft put vpon them Barly meale, and open the impoltume, if anie thing be in ic. Their leaneneffe and languifhing is taken away, by giuing them of entemes drinkes made with halfe an ounce of Brimftone beaten, a raw egge, and a dramme of Myrrhe with Wine. The fame remedie is good for the paine of the Bellie, and the Cough. If he be wearic and ouer-heated, you muft calt Greale and Wine into his throat.
Let all women that defire to haue children, beware that they neuer take the fent of the vrine of a Horie or Mare-Mule: for the fmell of their vrine doth make women barren, becaufe that they themfelues are naturally barren.

The fume of the hoofe of a Mare-Mule put vpon hot coales, and feton fire, is fo odious vnto Rats and Mice that are in the houle, that they by and by feeling the fmell, runne away with giteat fwifeneffe: of which you may make triall.

## The end of the fir $/$ Booke.

Of Gardens.

## Chap. I.

> Of the Situation, Inclofure, Ground, and fafbions of Hedges requifite for Gardens, wobether they be for profit
> or for pleafure.
 T is requifite that we fhould now occupie our felues in deferi* bing the manner of husbanding and tilling of the Earth, hauing runne through all that belongech to the building and inclofing of a Farme, the office of the chiefe Lord, and of the Farmer and his people, and generally whatoeuer concerneth the raifing of profit by keeping of Cattell. Wee will begin therefore (following the order before propounded) to defribe Gardens: And firft with the Kitchin Garden; which hath beene deuiled and appointed to ioinc to the one fide of the Garden of pleafure, and yet feparated from it by the intercourfe of a great Alley of the breadth of three fathomes, hauing either a Well or Conduit from fome Fountaine in the middeft thereof (if you cannot conueniently haue a particular Well in the middeft of euerie Garden) and befides, with an Hedge of Quickfer verie thicke, in which there may be made three doores, one to the Houfe, another so the place of the Well or Fountaine, and the third opening vpon the Orchards inclofure. This Hedge fhall be planted likewife with Hafell rrees, Gnofe-berrie buthes white and red, Pepper trees, Curran trees, Eglancines, Brambles, Wood-bind, the wild Vines, both the Hollies, Elder trees, and intermingled now and then by the way with white Thornes, wild Apple crees, and Apples of Paradife, Ceruife trees, Medlar trees, and Oliue trees: for it muff be more thicke, and a greater defence than anie other, to preuent danger of Cattell getting loofe, which might a great deale more endammage the good and profit of their Mafter, than they could anie way pleafure him. Yet in the planting of your Quick-fers, according to the opinion of Serres, you fhall haue great confideration to the nature of the ground on which you plant them: as, which are apt for Quick-fes, which not apt; and which Quick-fect is apt for which ground, as thus: Your clayne and ntiffe clayes which are without anie mixture of fand, are flow in bringing forch Quick-fer, yee hauing once taken root, they preferue and maintaine their Quick-fers longeft, and therefore the blacke and white Thorne, mingled wish wild Apple treces. Ceruife trees, Medlar trees, Oliue trees, or anie ocher which carriech bodie and fuiftance. Your mixt Hafell foyles, which are Clay and Sand of an squal
equall temper, or your faft and clofe Sands, which doe not diuide orrunne to a generall duft, are the kindlieft of all other to bring forth Quick-fets, and do preterue aind maintaine them for a conuenient time (though nor fo long as the Clayes) and are verie fpeedie in bringing forth; therefore anie Quick-fet is meet to be planted on fuch Soyles, whether they be Trees, Shrubs, or Bufnes, as thofe before fpoken of, togerber with anie thing elfe that will take root: Bur your grauellie, fintie, or loofe Sands, which fall away, and neuer faften vnto the root, are the moll barren of all other, and feldome, or with great difficultie, bring forth anie good Quick-fet at all : yer InduItrie (which is the Mother of all profits) hath found our by experience, that the beft Quick-fet which can grow vpon thefe Soyles, is the common Bramble or wild Brier, cut to the length of two foot, or thereabouts, and fo planted in the earth, and amongft them mingled, three or foure foot afunder, here and there diuers blacke Thomes: then when the Brambles begin to thoot forth, to interlace them and twynd them bought-wife about the blacke Thornes, making one bought runne into another, and plafhing them both vpward and downe-ward fo clofe one within another, that they may feeme like a Latrice-window; and euer and anon to vphold and maineaine the earth to their roots, till they be well faftened within the ground, and then they will hold vp the earth afterwards themfelues. By this experiment onely hath beene feene, in diuers of thefe molt barren Soyles, as ftrong, as ihicke, and as defenfible Quickfets, as in anie other Soyle whatfoeuer: as is daily apparent to mens eyes both in France, England, and the Low Countries.

The fituation of the faid Gardens mult be (as we haue faid before) necre vnto she Houfe, placed vpon the North rather than vpon the South quarter, to the end that the chiefe Lord and owner of the Farme may out of the windowes of his lodying enioy the pleafure and beautie of his Gardens: in fome plaine plor of ground, which is as it were a little hanging; and thereby at the foot thereof receiuing the ftreame of fome pleafant running water, either from fome Spring and Fountaine, or from fome Well, or elfe from the falling of the Rame: but farre remoued from the Threfhingfloore and Barne, to the end that the hearbes may not be hurt by the dutt, dyrt, fmall ftraw, or chaffe, which might be conueyed along from the Threfhing-floore vnto the Garden by the wind when the Corne is in threfhing: for fuch chaffe hauing raken hold vpon the leaues, doth pierce shem and fres them through, and being thus pierced, they burne and parch away prefently. Likewife, for the benefit of their labour, it mult be iuftly lined out and caft into a Square verie equally and vniformally, but yet fomewhat floping, for the conueyance of the fall of Raine water, and of the moifture of the dunghill, which continually will be thereby running downeward along the allies by meanes of the Raine, and fo will mend the idle and vntniled ground: And by the fide of either of thofe two Gardens, within the wall and inclofure of the Houfe, there thall be kept two other Gardens (if poffibly it may be) feuered and feparated by other Hedges, and a great parh betwixt them, containing in lreadth no leffe than three fathomes or eighteene foot, euerie one fincly paued with good Pir fones, or burned Tyles, or made with Steeres, or filled with Sand;that is to fay, by the fide of the Kitchin Garden 2 particular Garden for Hempe, Line,Saffron, Parfneps, and other things of profit and good Husbandrie; and this requireth a proper \& peciall kind of ordering: and by the fide of the Garden of pleafure, another Garden with Pulfe, as Peafon, Beanes, Fetches, Rice, Panicke, Millet, and fuch other things, for they ferue greatly for the keeping of your familie. Yet you fhall vnderfland, that albeit I thus particularly appoint you thefe two Xeuerall Gardens, the one for Hempe and Flax, the orher for haftie Peafe, Beanes, and fuch like, being right neceffarie tor your houfehold vfe; yet notwithftanding you may fow anie of thote feeds abroad in your Fields, or in anie other remote Croft or Clofe well tilled for the purpofe, with fully as much profit \& conueniencie, efpecially your Hempe and Flax: for you thall vnderftand, that there be fome Soyles fo rich and fat, that after you haue fowne Wheat, Barly, and Peafe,fucceffucly yeare after yeare, that then in ftead of fallowing and giving your land reft, you may that yeare fow a full crop of Hempe, which E. !
defroying
defroying the weeds and fuperfluous growths which fpring from the fertileneffe of the Soyles, makes your land apt and readie to receiue erther Wheat or Barly againe; and fo you neuer loofe anie Crop at all, but haue cuerie yeare fomeching to reape from your ground: whereas, fhould you let it reft, and beftow meanure vpon it as in cale of more barren carth, you would fo much oucr-rich it, that it would either mildewe and fpoyle your Graine, or elfe choake and flay it with the aboundance of Weeds which the earth would vter forth of it owne accord. Againe, if your land lye with your neighbours in common amongft the generall Fields, here a land, and there a land, or here two and three, and there two and three, as it is a generall cuftome in diuers places, and that fuch lands doe bute vpon greene Swarthe, or Graffegrounds,which are likewife common, and on which both your felfe and your neigh bours muft neceffarily teather your Catell; which Cattell if at anic time they breake loofe, or by the negligence of their Keepers be ftalld too neere the Corne, may doe you much hurt on your Graine : in this cafe, and to prenent this euill, you fhall fow the ends of all fuch lands as butt on the graffe, tenne or twelue foor in length, as your land may conueniently (pare, with Hempe, for vpon it no Cattell will bite : fo that in either of thefe cales aforefaid you Auall not need much to refpect the preferuation of your Hempe or Flax Garden.
The Inclofures of the Gardens muft be fuch as the commoditie and necefficie Tbe 1nclofatit. of the place doth require, that is to fay, of Walls, if the reuenues of the Hourc will beare it, or of a ftrong and thicke Quick- Cet Hedge, if there want either Pitftone or reuenues to build the wall withall. Notwithfanding, it is leaft coft (to (peake the truth ) and more profit to inclofe and compaffe them in with a Quickfet Hedge than with a Wall : for the Quick-Fet Hedge doch endure a longer time, and askech not fo great charges neither to crimme ir, nor to repaire it, as the Wall doth. Such a one is that which is made of Brambles and Thornes, as white Thorne, or with the plants of Elder tree, or other plants, with tufeed flowers mingled and fee amongft the Brambles, the fame being cut by the taile and made plaine and euen when the time of the yeare ferueth, as wee fee hete in manie places of France. Some there be that compaffe ard inclofe their Gardens with Ditches and Banks; but fmall to their profit, feeing the moifture of theiei Gardens, which fhould ferue them, is thereby conueyed away and taken from them : and this holdeth in all other cales, but where the ground is of the nature of Marifhes. The common inclofing vfed by Countrey men, is of Thornes, Ofiers, and Reedes: but fuch Hedges doe require almoft euerie yeare newv repaire, reliefe, and making, in putting new flakes therein; whereas if it had an abiding and liuing root, it would free the Gardeners of a great dealc of trouble, coff, and trauell.

The ground of the Gardens mult bee good, of his owne nature free from Grommdo Stones, Duis, and hurffull Hearbes, well broken and dunged a yeare before is be digged to be fowne : and after it hath beene digged and dunged againe, or marled, you mult let it reft, and drinke in his dung and marle. And as concerning the nature and goodneffe of it, the Clayie, Stiffe, or Sandie ground is nothing worth, but it muft be fat in handling, blacke in colour, and which crumbleth cafily in the breaking, or ftirring of it with your fingers, or which hath his greene: Turfes or Clods breaking cafily vnder the Pick-axe, and becommech frall with labouring, as the fmall Sand; and generally, all grounds that are good for Wheas, are good for Gardens. It is requifite alfo, to the end it may bring forth greene Hearbes in aboundance, that it be a reffonable moift ground : for neyther the ground that is much drie, nor that whicli is much fubiect to water, is good for Gardens. Notwithftanding, if the Grounds belonging vnto the Farme happen: not to haue this commoditie of idle and vnimployed ground to make Gardens, you muft remedie that foare as wel! as polfibly you may. The Clayie, Stiffe, and Sandie places muft bee amended by Dung and Marle; and would bee caft three foor deepe. The Watrie place fhall bee made better, if there bee mixt with it fome Sandie or Grauellie Ground, and therewith caft it round
abous
abour with ditches, thercby to draine and draw out the water annoy ing the Garden. And thus the good Husband fhall doe his endeuour to amend and make in fome fort his ground more fruirfull. Let the dung which he layech vpon it, be either of Sheepe, or of Swine, or of Horle,or Pigeons, or Afles, according as the nature of the ground hall require; or of Oxe or Cow : for albeit fome Gardness thinke it of too coole a nature, and not fo nourinuing vito render hearbs as the other which are more hot, yee they are greatly miflaken therein : for it mellowech the carch, and enrichech it more than anic of the other, and makech it more apt to fprout and put forth his encreafe: befides, it doth naturally affect no weeds, if it haue better feed to worke vpon: Whence it commeth, that the Garden fo manured keepeth his hearbes euer the cieaneff, fulleft, and largeft. Alfo Afhes are a verie good meanure for Gardens, efpecially if the ground be apt to chap or breake into great rifts, as diuers Clay grounds are: ncicher, if the foyle be anfwerable thereunto, fhall you omit Marle, Sand, Chalke, Lyme, or fuch like. And the elder it is, the better alfo, in as much as in time it looferh his filchie flinke, and wharfocuer ocher euill qualitie, and gettech a new kind of rottenneffe, which is more foft and more cafie to be conuerted into the fubftance of the earth, wherchy good earth is made better, and the naughtie. amended. This is the caufe why fuch as haue written of Husbandrie in Latine, haue called dung Letamen, and Frenchmen Litiere, becaufe it makech the ground merrie, fuppofed when it is once mingled and incorporated with the fame: For dung that is pure, and of ie felfe, muft not'be laid vntu the roots of trees, but firft (where chere is need) of the fhorteft earth; and afterward of dung.
The Hedge of Quick-fet, parting the Kicchin Garden and that other for delight, would be planted and furnillied with the Planss before fpoken of, in the monech of Nouember, and in the beginning of October, planting there alfo, at the end of cucrie eight feet, fome Elmes, wild Plumme trees, and Cherrie trees, by the fupport whereof, as of farthfull. props and faies, it will wind and bind it felfe more firmely. This Hedge fhall be veriewell digged and helped with dung for a foot depth, cut neere vnto the root fome ewo yeares after, and pruned cuerie yeare, to keepe it round and euen, as alfo to make ir grow thicke: and you muft fuffer to grow in height and thickneffe fuch Trees as fhall be planted therein, to ferue for Stakes and as Poles for your Arbors; and the moe Elmes you can put in this your Hedge, and the reft which fhall part your Garden of Hufwiterie and Pulfe, the better it will be, cither for the making of Faggots euerie yeare, and that fo they may themfelues fpread more in thickneffe, as allo for Timber-wood for your Ploughes, and other Implements: as alfo that they may ouer-grow fuch Ar bors as you fhal plant at their feet, and wherewith they doe in chat place mutually and naturally beare and fuffer.
If furthermore you would know the ordering of fuch great and fmall Trees as whereof the Hedge is to confift, you fhall find it in the third and fixt Booke.

## Cнар. II.

## Of the Arbors of the Kischin Garden.

 Ven as the Garden of Pleafure is to be fet about with Arbors, couered with Iefamin,Maries feale, Muske Rofes, Mirtle trees,Bay trees, Woodbind, Vines, Gourds,Cucumbers,Muske Melons, Prympe,fweet Bryer, and other rare things: euen fo hall the Kitchin Garden be fee with Turrets of Lattice fafhion, couered ouer with Burdeaux Vines, or with the beft fets of Vines that are to be got in the Countrey, for to make Veriuice on, for prouifion and commoditie of the Hourehold.
The fifbion of ax Aríor.

The fafhion of the Arbor fhall be in manner of a fhadowie place (for Arbors are coflly to maintaine) to the end you may draw certaine Beds vnderneath, or fome 2:.5L. 3
floore
floore of hearbes, which craue no great cherifhing and refrefling, leauing notwithfanding an alley of three foot breadeh both on the one fide and on theother, for the difpatching of fuch worke as is to be beftowed vpon the Arbor. And you mult plane the beft and greateff fets of Vines vpon the South fide, not curting them fo long as che wood may grow chicker: for it is nothing bur a good foot and a thicke shat makech a faire and a beaurifull fruit. The Lattice-worke may nor be too thicke fet or wrought : and it muft rife and grow higher for the fpace of fiue whole yeares, and be renewed and new tied euerie yeare about the end of the monech of Ianuarie with che ewigges of your Willowes and Ofiers, or of the Broome of your Warren: alchough if you make your poles of Iuniper wood, you flall not need to trouble your hand with shem for tenne or twelue yeares, efpecially if you frengthen your poles with piles of Oake halfe burnt. Alfo if your poles be of dead wood, and of no focks growing or encreafing, ifthen you bind them with frong wyre, if fhall be beft of all, for that fhall laft the longeft, and keepe your poles, by their faftneffe of knitting, longer found than anie ocher binding wharfocurer. Tie not the poles of your the biading of Lattice-worke ftrait, nor the flocks againft the erres of your hedge which fhall ferve the Arbor. for ftakes, for fo in time che band would eat it felfe into the rinde as they fhould grow chicker, and doe them great harme. And I would not haue you to forgee to dung and vncouer the roors of your focks in Winter, and to marke the young wood for to make fets to fell, or to fore your felfe withall euerie day more and more : $\mathrm{G}_{\mathrm{a}}-$ ther not their Grapes verie ripe, or verie greene, nor yet when it ranneth. Finally, the ordering of the Arbor is like the ordering of the Vine, and would be buta fue perfluous thing to fand anie longer vpon in this place. Wherefore you muf have recourfe to the place, fetting downe the manner of the ordering of the Vine, as it flall be hereafter declared.

## Cват. III.

## Of the digging and cufting of the Kitchin Garden.


concerning the dreffing of the Kitchin or Houfehold Garden, in as much as there are two feafons in che yeare for to fow hearbes; fo there are two cimes for to bring into order and dreffe Gardens, that is to fay, Autumne, and the Spring: there muff fuch confideration be had, as that the firft workmanhhip and tilth be beflowed about the beginning of Nouember vpon that ground which we intend to fow in the Spring, and to digge in the monect of May fuch other grounds as we intend to fow in Autumne, to the intent that by the cold of Winter, or by the heat of Summer, the clods may be apt to turne to duff; becomming thort and brietle, and all vnprofitable weeds may be killed. But in the meane time, before this firft rilth and workmanfluip, it will be good that the ground for one whole or halfe yeare be manured withold manure, and made good and fat; for the beft liking earth that is, in time becommeth leane and wafted by long and continuall occupation. Wherefore it behouech, that the vnimployed, or tallow grnund, which you fhall appoint for your Gardens, be firt well cleanfed from fones, and afterward caft yp and digged into new and frefh earch, and the bad weedes rooted our, euen by the end of the rootes; whereof the good hufwife fhall make good a hess and afterward amended with fome fmall quantitie of Cowes dung and Horfe dung well mixt together, and well rotted, and hauing laid a long time $;$ or elfe of Affes dung, which is the beft of all for Gardens, becaule the Afle doth chew his meat with leefure, and breakech his meat throughly, and fo by that meanes doth make his dung better digefted, and better ground hhan other beafts doe, and which alfo for that caule doth beget almoft no weeds. In ftead of dung, the chaffe and troden ftraw of Corne, hauing roted in the high waies for the fpace of a yeare,
may ferue, which being by nature veric hot, doth fo greatly fat the earth, as that the Hearbes, Trees, Citrons, Limons, Oranges, Cucumbers, Citruls, and all other plants planted in that ground, or fowne, doe come vp verie faire, and beare fruir verie quickly and in great aboundance. For the fecond tilth, it fhall be wrought and laiboured as a man would worke Mortar, from the one end to the other: and in thus labouring it, you thall mix the dung or marle verie well with the earth. For the third tilth it fhall be clotted, layd clofe, and raked inco a flat forme, and with the backe of the Rake, in going ouer it, you fhall marke our your Beds and Floores, and the Pathes running along betwixt them, and thofe fo long and fo broad as you can make them, according to the contents and largeneffe of the place. And you muft obferue, that you make your Floores of fuch widenelfe, as that you may flride and reach your armes from one fide to another, according to that their fard breadeh, to the end, that fuch as are to weed them, or to rake them, may from out of the faid little Paches be able to reach into the middelt of the Bed, and not to tread with their feet vpon that which is or fhall be fowne. Wherefore, if your faid little Pathes be two foot wide, is will be ynough : for to make them anie broader, is but walte, and loffe of ground.

## Chap. IIII. <br> Of the dippoing or appointing of the Eloores of the Ratchin Garden.

Little Turnefs or Naucts. Colezoorts. Great Turneps of both forts. Spresch. Leepes and cyues. onions. chiboles. carrets.

Sage and Hysope.

ALabyinth. Ou fhall difpofe of your Beds in fuch fort, as that they may be in the middeft of your Garden, giving and allowing vnto your Turneps the largeft roome, and next to them the Coleworts: and vnto them yous Thall ioyne the fpace for great Turneps of both forts, and that of to much ground as would make two of the former : After thefe floores, you thall make a path of three foor breadth, after which, you flhall prepare other floores by themfelues, for Spinach, Beetes, Arrach, Rocket, Parfley, and Sorrell. Againe, you thall make another path of other three feet: and on the further fide you Thall quarter our a Bed for Leekes and Cyues, and ioyne thereunto two other for O. nions and Chiboles, and for Garlicke, Scallions, and Carrets. By the fide of there floores you fhall make out a path of three feet and a halfe, and after it,you fhall make manie floores for flips to be fer vpon, as well for the maintaining of a Plat for fweet flowers, as alfo for your Borders: and yet further, for your Winter pot hearbs. And it will be good to this end to prepare a Bed for Sage, and anotlier for Hylope; one for Thyme, and another for Marierome, and another for Lauander, and another for Rofemarie, and another for Suthernwood, and another for fmall Cyprefle: againe, one for Sauorie, for Hyfope, Coftmarie, Bafill, Spike, Balme, Pennyryall, and one of Camomill, for to make Seats and a Labyrinth.
It fhall be good allo for neceffitie fake (for it concerneth the good Hufwife to know manie remedies for difeafes, and yous mult not doubt but that I my felfe haue learned manie remedies from the experiments and obferuation of thofe forts of women) to thape out below, or in the further end of the Kitchin Garden, neere to the inclofed ground for Fruits, certaine Beds for Phyfick hearbes, as for Valerian, Milfoile, Afparagus, Mugwort, Afarum Bacchar, Houfeleeke, Patience, Mercurie, Pcllitorie, Nicoiana, and other fuch like, whereof we will make fome thore mention hereafter.

## Chap。 V.

## Of the fituation of the Beds of the Kitchin Garden.

园N fuch place as the Sunne Chineth vpon at noone, you fhall prouide your Beds fomewhat raifed, and well mingled with Earth and Horfe dung, and you fhall let them reft fometime before they be fowne. In one of which floores you fhall fow; in the encreafe of the Moone of March, your leed of Lettuce and Purcelane (for they will be growne as foone being fowed Lettucefeed. in March as in Aprill) for to (et them againe in their floores, when they be (prung: vp halfe a finger. In this fame Bed you may put the feed of Pimpernell, Harts horne, Prick-madame, and Sorrell of England, and ocher forts for Salades, all thicke, and hand ouer head, one among another, to feparate and iet at large by themfelues when they be growne. Looke verie well to your teeds, that they be not too old, that they To chuse feeds. be winnowed and cleane, that they be noilt and oylie, but not mouldie; and by the edges of this Bed, the breadth of two hands, you fhall fow Artichokes. You fhall Fine bearbso alfo make a Bed for fine hearbes, which in Winier lerue for the Por, being kept drie, and for flips for the Garden of flowers, as are Garden Balme, Bafil, Coftmarie, Thyme, Hyfope, Sauorie, Marierome, and Sage. Againe it will be good to make one to fow the feeds and kernels of Citrons, Oranges, Limons, Pomegranats, Myrtle trees, Bay trees, and Date trees in: and feeing they are hard to grow in this Countrey, becaufe it yeeldeth no aire either from the Sea, or fit tor them, it muft be well and aduifedly confidered, that in planting or fowing of them you fee the fmaller end vpward, and that they be not tumbled on the fide: and when the Citrons and fuch like feeds thall be growne vp and fprung, you muft tranfplant and remone them into fome Caske,or fuch like thing, that may be remoued hither and thither, to the end to keepe them from verie much heat and exceffue cold, and to couer \& vee them dainuly according to the times and as thall be fand hereatter. In another Bed, which fhall be a verie long one, and toward the Quick-fet Hedge and the Arbors, you fhall fow Cucumbers, Cirruls, long and round Gourds. In a plot long and narrow like the former (becaufe they munt be oft watred, and water powred at their roots) you may fow Melons of diuers forts.

And for feare of flying Fowle and Birds, caft Thornes verie thicke vpon your Bedss and, if they be fowne in the encreafe of the Moone in Februarie, for to haue them the fooner to grow, yea though it be in March, yet fpread vpon the Thornes ftraw, and that fuch as is bright, and let it be thicke, that fo it may the better defend them from the danger of the Frolts: which if you perceiue to be great, as it falleth out fome yeares, f pread ouer them, in ftead of flraw, old or whole Mats, and yet in fuch manner, as that they may not lye prefing of the carth, thereby to oppreffe and keepe downe that which would fpring and grow vp. Or for a more perfect furetie, both en preferue your feeds in growing, and to maintaine fuch as are growne, how tender foewer their natures be, from all manner of Frofts, Stormes, or Colds, which cither the Winter or Spring can anie way produce, you fhall rak e halfe-rotten Horfe. litter, and with it lighsly couer all your Hearbes, Seeds, or whatoeuer elfe you feare the fharpeneffe of the Winter may annoy: for befides that it is a defence and couering againft the bitterneffe of all weathers, it hath alfo in it a certaine warme qualitic, which nourifheth and firengthenceh the Plants, and makes them more forward than otherwife they would be by diuers weekes : befides, it keepeth your hearbes from running into the ground, and hiding their heads in the Winter feafon, and as if they were comforted with a continuall fpring, keepes them frefh and greene, and fit for your vfe at all times. And what you would haue to continue fill vpon their firt Beds; as the Cucumber, Melon, and other Fruites, make fome finall Ceparation betwixt them and the other, and water them of with water
warmed

Farmed in the Sunne, and drawne a long time before, hauing flood in the Trough or Caske placed neere vnto the Well. Notwithltanding, all hearbes and fruits reaped from out of this Garden are much better by remouing: in doing whereof, they are alfo not onely more freely beftowed, but become of a better taft and verdure.

## Снар. VI.

## Of the time of fowing the Kitchin Garden.

The power of the encreafe of the Moone.
 Ll feeds which are for the fore of the Kitchin Garden, mult be fowne and remoued in the encreafe of the Moone, as namely, from the firft day vnto the fixt: for thofe that are fowne in the decreafe, they cither come vp flowly, or elfe they be nothing worth. Befides that, although you fow in the encreafe of the Moone, it fometime falleth our, that notwithftanding your feed be far, full, make a white flower, and be nothing corrupted or hurt, yet fome euill conftcliation (which the Gardiners doe call the courfe of the Heauens) doe hinder them that they profit not, nor yet thriue anie thing at all. Although that $P$ alladius the Husbandinan Cay, That the Earth, which hath the fauour and benefir of a fweet and mild ayre, and is watered with fome running ftreame, is in all points and refpects free, and not tyed or bound to anic lawes of fowing: but hee cannot denie, that whatfouer groweth, whether it be Plant or Seed, hath two ends, that is to fay, the Roor, which hath altogether to doc with the Earth, and the Branches, or vppermoft part thereof, which hath alrogether to doe with the Ayre and the Heauens: and that the obferuations drawne from fuperior bodies, as from the proceeding and difpofition of the Moone, doe fhew and proue the ouerthwarts and crofle incumbrances wrought againft the creatures of the earth, both in their putcing forth of the earth, and drawing to ftalke, as alfo in the gouernment of them at-

To fow jeeds in the Spring.

To fow seeds in Summer.

At robat time
feed muft be
Sowne in cold and hos places.

The age of reeds.
terward.

In moift places, and fuch as are ferued with fome fmall currant of water, it is beft to fow in the Spring: for then the mildneffe and genteneffe of the yeare following doth entertaine in verie good fort the growing feeds; and the drinefle of the Summer cannot hurt them, becaufe of the water preft and at hand. But when as the fituation of the place hath no naturall fupply of running water, or elfe fuch as is verie hardly come by in refpect of the bringing thither, there is no other refuge but the referuing of the Winter raine : wherefore in fuch places it is more fure to fow in Autumne; and yet one may well fow there in the Spring, fo that you caft your earth three foot deepe.
If a man be difpofed to low Seeds in Summer, it mult be in the encreafe of the Moone of Iuly and Auguft; and in Autumne, in the encreafe of the Moone of September and October; as alfo for the Spring, in Februarie and in March. In places naturally cold, or which receiue no great heat from the Sunne beames, the fowing in the Spring time muft be toward the later end thereof; and that in Autumne,muft be haftened and early performed. On the contrarie, the fowing of Seeds in the Spring time in a hot place muft be early performed : and the Sowing or Seed-time of Autumne mult be fomewhat deferred. Seeds doe grow the better when they be fowne vpon warme daies, or daies that are neither hot nor cold, than and if they be fowne vpon hot, cold, or drie daies. The Seed that is to be fowne, mult not be aboue a yeare old: otherwife, if they be verie old, drie, wrinkled, leane, foft, falfe or vntimeIy gathered, they will neuer grow nor thriue. Wherefore, by how much the newer the feeds of Cucumers, Melons, Leekes, and Gourds be, fo much the fooner they grow : On the contrarie, by how much the elder the feeds of Parfely, Beets, Organie, Creffes, and Coriander be, fo much the more haftily doe they put out of the earth; fuppofed alwaies that age hath not corrupred them. Coleworts and Spinach
of all forts, white Succorie, Garlicke, Leekes, and Onions, are fowne in Autumne, and liue all Winter. Coleworts, Rocket, Creffes, Coriander, Cheruill, Naucts, Turnsps, Radifhes, Parfnces, Carrets, Parfely, Fenneli, and other hearbes, whole roots are good in pottage, are fowne in Autumne and in the Spring, notwithftanding they grow better being fowne in Iuly in hot Countries, and in Auguft in Countries indifferent hot, and in September in cold Countries. Lettuce, Sorrell, Purcelanc, Cucumbers, Gourds, Sauorie, Harts-horne, Trick-madame, Beers, and other tender hearbes, as alfo Artichokes, are fowne in the Spring: and for the moft part alfo thofe of March and Aprill grow more early than thofe of Februarie, according to the diuerfitie of the time.

A boue all, the Seeds which are to be fowne muft be well-conditioned, full, heauie, corpulent, grofe, hauing a good colour, yeelding a white flower when they be broken, not dultie: for duft falling from them when they be broken, thewerh, that they are corrupted and nothing worth.

## С. нар. VII.

## Witbin what pace Seeds are wont to grew, afier they be fowne.

arOtwithfanding that the nature of the Ground, the mildneffe of the Aire, fauourable furtherance of the Heauens, and the age of the Seed, doe caufe Seeds to haften the more, or to be the flower in fpringing ouk which is fowne in faire weather, and an open aire, in a hot place, and open vpon the Sunne, and of new Seed, doth fiew it felfe fooner than that which is fowne in a contrarie time and place) yet eucrie Seed hath a certaine time to manifeft it felfe in: whereto we mult haue due regard, to the end that there may be prefixed times to fow, and looke for the growth of euerie Seed: Spinach, Bafill, Nauets, and Rocket, grow within three daies after they be fowne ; Lettuce, the fourth day; Cucumbers and Citruls, the fifth; Purcelane a little later; Annife, the fourth; Crefles and Muftard-feed, the fifth; Beets in Summer, on the fixt; and in Winter, on the tenth; Arach, the eight; Coleworts, the tenth; Leckes, the nineteenth, or ofter the twentieth; Coriander abour the flue and ewentieth, or elfe more late, if the Seed be new; Organie and Sauorie, after the thirtieth; Parfely in the fortieth, for the moft part, and ofo tentimes in the fiftieth. It is true, that in this place the age of the Seed, and ftate of the Aire, when the Gardiner doth fow them, is of great moment : for (as I have faid) the Leeke, Cucumber, and Citrull, grow fooner if the Seed be new : And on the contrarie, Parfely, Spinach, Organic, Sauorie, Coriander, and Creffes, when their Seed is fold: likewife the Seed of Cucumbers, fleept in milke, or in warme water, putteth the fooner out of the earth: after the fame fort you may make reckoning of Artichokes, and manic other hearbes, as you thall knows hereater in their particular Treatiles.

> C н a p. V I I I.
> Of watcring, woceding, /weeping, and custing of Pothearbes.

foone as the ground is full of Seeds in all places, you muft be carefull matring: to water it, if by hap the place be drie of his owne nature, that fo the Seed may not be hindered of his frouting by the too much drineffe, or that the hearbe alreadie fprung may not dic. The beft water to water the what wasee is pot-hearbs wichall, is raine water, if it fall in the night, or in fuch a time as that it may good for Sectfi
not heat the hearbes, for it watheth and cleanfeth them from the duft and vermine that eateth them, efpecially if the Raine come driuing with a Northerne wind: for want of this, the River or Brooke water is beft next, being a little warme : in place of this, Well water drawne in the morning, and put in a barrell, or in fome other thing of receit, that fo it may take the heat of the Sunne beames, may ferue: for cold and fait water is encmic to a!l forts of hearbes, alchough that Theophraftus (ay, that falt water is more conuenient than anie other to water cettaine plants. Befides, you fhall vnderftand, that for the fpeedie growing of hearbes, or for comforting them after they are once fprouted and rifen aboue the earth, there is nothing m the world better, or more comfortable, than Sope fuds, after they haue beerie waflet in, and are verie well cooled. The dregges of Ale, or lees of Wine, are verie good to water Rolemaric with, or anic other tender Hearbe, Flower, or Plant
What time is whatfoeuer. The time to water them, is the euening and morning, not the mid-

After that the hearbes haue begun to put forth, you mult weed the bad from the good, whofe nourifhment they would confume and ouer-fhadow them withall: this muft be done with a forked trowell whiles they be verie fmall, and with the hand (which Gardiners call by the name of making cleane) when the pot-hearbes are growne ftrong and great. Some doe alfo weed them thus, as well for the weight of the earth, and heauie falling of the water vpon them, as alfo becaufe of the trampling of folkes feet, whereby the earth becommeth hard: Wherefore if the earth be foft, you need not to rake it but verie flightly. And you mult know, that weeding is neceffarie for Gardens at all times, except in the height of Winter, that is to fay, from Nouembertill March : in all which time it is not good to weed, becaufe thofe weeds which doe then grow doe not offend or choake the hearbes, but rather keepe them warme and comfort them : whereas, thould they be taken away, you would leaue the ftemme and roots of your hearbes fo naked to all the bitterneffe of Winter, that euerie fmall Rinde or Froft would endanger the vtter killing and deftroying of them, as you may find by proofe, if you pleafe not to giue credit to uur relation.
clipping or cut- Cutting of hearbes is alfo profitable for them at what time as they be fomewhat
ting of bearbes. growne, thereby to make them to keepe their greeneneffe the longer, and to make them the more beautifull and tufted, to keepe them from feeding, as alfo to giue them fomewhat a more pleafant fmell than they had in their firft ftalke. By this meanes Lettuces and Coleworts are made better, and of a more pleafant tafte, if their firft leaues bee pluckt from them. In like manner, Turneps and Nauets grow more beautifull, and tufted, if theirleaues be cut. But all hearbes muft not be cut at all times: for fuch as haue a hollow ftalke, as Onions, and others, if they be cut when it rayneth, the blade or ftalke of the Onion is filled full of water, and rotteth. And this is the caufe why hearbes of fuch nature are not to be cut but in a faire and drie time : Or if not cut at all, it is better, except it be to keepe them from feeding, or to make the head a little the fairer $\xi$ which, frefls moulding will better doe, and with leffe labour . As for your Scallions, Chyues, or Leekes, to cut them it is not amifle, becaufe they are hearbes continually to be vfed for the Pot; and in that refpeet, the oftener cut , fo much the better.

# С нар. IX. <br> <br> of fotting and rensouing of Pothearbes. 

 <br> <br> of fotting and rensouing of Pothearbes.} O giuc the greater fcope and libertie to hearbes, and to make them greater, men vie to remoue them: and this is done either by remouing of thern from one bed to another, or from one floore to another, vvhen they haue foure or fiue leaues out of the ground: and this may be done at any time, but feccially fee chat the feafon be inclining to moiftneffe and raine: and they muft be fet in ground chat is vvell furnifhed vvith fat, vvithout any amending of it vvith dung. If the time fall not out rainie, you muft vvater them after they be new fec in good and due time, not flaying too long, and from fome of them you muft cut off the ends of their roors, and fet them thinne, that fo they may be vvet, and haue their earth lightened vvhen need requirech, and that thcreby they may grow better and faircr. And of thefe hearbes vwhich are thus to be remoued, none is more necef. farie than the Lettuce, becaure being very fwift of growth, and naturally apt to mount if it be not corrected and flayed by remouing, it will prefently runne to feed, and loofe that vertuc for which it is principally preferued: Therefore the fooner you remoue your Lettuce (prouided that you haue a fhower to doe it in) the better it is, and the fooner it will Cabbage and gather in his leaues, growing hard, firme, and thick: Alfo, if after their remouing you lay fome heauic Tyle or Slate fones vpon them, which may a little preffe downe their leaues, it will be fo much the better, and they will Cabbage fo much the fooncr: Generally, what hearbes foeuer you would keepe from feed, that you may thereby take the profit of the leafe, and keepe the full ftrength of the hearbe in the fame, you fhall, as foone as you percciue fome leaues to be fprung aboue the ground, forthwith remoue them into fome other new-digged Beds of good and perfect Mould well broken and manured for the purpofe: and in this remouing of your hearbes, you fhall obferue to fet them rather deeper than fhallower than they were before, and to fixe the carth clofe and faft about them, and not to forget to water them, as aforefaid, till you fee they haue taken faft root, and begin to thoot vp.

Slips for the Garden, of fwcet and fragrant hearbes, are gathered at all times, and Slipso they would be of young fprigges of a yeare old, taking part of the old wood; and wrything that, to pur it into the carth: or elfe cleauing it below, and putting in the cleft an Oat, and round about it fome other graines of Oates rather chan dung; for hearbes that are remoued, doe not require dung at their roots, but rather they haue need that the loweft parts of their roots fhould be a little fteeped in water, as I will fhew hereafter.

Сняр. X.

## of gatbering and keceing the feea's, roots, and flowers

 of Pothearbes.thenthey muft be let alone longer, and afterward kept in conuenient place untill it betime to fow them, and they mult be gathered in a brightweather, and in the decreafe of the Moone. Seeds are gathered when the hearbe is all hayd and drie. And The time to ga- it mult generally beobferued in all manner of gathering as well of hearbes, flowers, ther Seeds. roors, as of fruits and feeds, that it be done in a lame and cleare weather, and in the decreafe of the Moone.

## The waty to

 keepe hearbes. Ihadow, which is the belt meanes to kcepechem the flrongeft in ther vertues and qualities : or elfe in the Sunne, and after to put them $v$ p in bagges of Leather, not of vvollen ftuffe, nor in vvoodden boxes, that fo they may not loofe heir vertue, as we fee it put in practife by fine hearbes which are kept to be vfed in Winter. Wherefore me thinkes that the A pothecaries faile mach in their doings, which hang their phyficke hearbes in the roofe of their houfe, for by this meanes they doe notenely fpend their force, bur becone laden with duft, cobwebs, the dung of flies, and a thoufand other filthie chings.The raty to
Flowers mult not be dried in the Sunne, nor in the fladow that is made by the theppe flowets. Sourh-Sunme, nor yet in any high roome, becaufe of their tenderneffe and delicateneffe, which would caufe their force to vanifh away, either in the burning hear of the

To keepe Pro. zence Ropes. Sunne, or in the more moderne heat of the verie ayre. If it be not the Pronence-rofe, which (that it may be kept long) requirech to be dried in an high place, open to the South-Sunne, where the beames of the Sunne doe enter, but touch not the Rofes. The beft way to drie flowers will be in a remperate place, and to turne thern oft, to the end that they may not corrupe, haning alfo this continuall care, that they may neither loofe their colour nor their fmell. And when they are dried, they muft be put into an earthen velfell.

Seeds mult be kept in bagges or veffells of earth which haue narrow mouthes; or in boxes, or elfe in bottles of the rindes of gourds well fope and fet in verie drie places, and where there is no water thed; for feeds doe mightily fpuyle with moifture. The feeds of chibols, Onions, and Leekes, as alfo of Poppie, are kept in their rindes or heads.
To keepe root:- For to kecpe Roots, you muft obferue two waies : for either they are to be kepe new, and asthey are yet greene, as Nauets, Turneps, Carets, and fuch like; or elfe they are to bekept drie : For to keepe them new, you mult lay them vpon fand or grauell verie thin, in fome place vnder the earth, and a little coucred, or elfe to buric them vnder the earth in the garden, as we fee it done in Turneps and Naucts, to keepe them the greaieft part of Winter. To keepe roots drie after they be gathered, you mult walh them diligently with cleare water, and after take from them all the fmall Eibres or hairie threeds that hang about them, and then to drie them either in the fhadow of the Sunne-rifing, if they be but frall and thin, as are the roots of Fonnell, Succorie, Parlley, Sperage, and fuch hike : or in the South-Sunne, if they be grofle and thicke, as thofe of Daffodils, Gentian, Sowbread, Water-lilly, Brionie, and fuch like. After that they are dried and thus prepared, you mult hang them in fome high and vpper roome, open vpon the Sun when it is in the South, or elfe vpon the North quarter; and in which notwithttanding neither the fmoake, nor duff, nor Sunnebeames may any thinghurt them, notwithftanding that the counfell of Hippocrates, the prince of Plyfitians, is, that hearbes, flowers, and roots, as well greene as drie, fhould nor be put to kecpe in any place wherethe wind fhould come, but rather fhut vp in veftells or fome other fuch like meanes of keeping of them, to the end that they fhould not loofe their force, which indeed they might moft eafly loole, being kept open and fubieCt to the wind.

## Спар. XI.

## Por-hearbes, and particularly of Colemorts.

(aresIrft of all we are to fpeake of Coleworts, both becaufe they are moft common, and alfo molt aboundant of all orher forts of hearbs : all kinds of Coleworts doe loue a cleane ground, fat, and well tilled, not confifting of clay or fand. And although they grow indifferently in any ayre, bur efpecially in a temperate, yet they become greater and more mafie, found and fafe from vermine in cold places, as are chofe in Germanie, than in hot places, and for that caufe they delight a great deale more in the tops of hills than in plaine grounds; and yee in thofe plane grounds more in the raifed parts of borders than in the flat and middle parts thereof, and they be more pleafant, more wholefome for the fomach, and better in Autumne, Spring-time, and during great frofts, than they be in Sommer. They craue much dung, and that efpecially which is of Affes, as being the beft of all for ocher men : and to beraked in \& couered ouer with good earth : not to be watered in any cafe; notwithflandıng that water doth make them looke faire and flourihing, but then not fo fweet to the taft, nor fo wholefome for the fomach. When they haue got fixe leaues vpon their ftalkes, you muft remour them, butlet it be in a mild and calme time whether Winter or Sommer. And to feeake patticu- Commoz cofis: larly the conimon Coleworts, called long or greene Coleworts, muft be fowen in worrs. mid Augult or September, if you defire to haue the leaues in Lent and in Winter. Someplant them in October, and remoue them in December, to haue the leaues in Winter, and the feed in Iune and Iulie, and that to make them the more tuffed; though there may be as much accomplifhed that way at other times of the yeare; but not fo commodioully.
And looke well to it, that your feed be nut too old, for if it be three yeares old, it The feed 800 will bring forth Radi hhes. And that is the caufe why fome fay, Sow Coleworts, and old. there will grow vp Radifhes or Nauers: notwithfanding it continueth fixe yeares in his nature, if it be well kept.

Cabage-colewort, which are called white or apple Coleworts, are fowen vpon cabage-coitso beds, and remoued to fand a foot one from another, well couered at the root with a free and enriched earth, when they begin to rife vp into a grear ftemme; and loue the cold ayre, for in a hot aire chey cannot liue : and you malt couer them with ftraw to make them cabage the better, and become the whiter. The curled and Romane Tbe curled colle Coleworts being more tender by nature, are fowen in March, and are planted farre within the yeare, and couet to be oft watered.
When you fee the leaucs of Coleworts waxe bleake and pale, or yellow, it is a figne that it needech water : and you muft ofencimes take from them their yellow leaues, as alfo thofe which are eaten thorouigh, or rotten, or dried; for this would make them die.

If you would haue Coleworts of a good taft and pleafant, take away cheir firft coleworss ofa leaues; for thofe which come after will haue a better taft, and more pleafant fauour good safo. than the firt.

Red Coleworts grow inaturally of the aboundance of dung, or for that they are Red Colwornt watered with the Lees ofWine : or by being planted in a place where they are heated concinually with the heat and burning of the Sunne.
Doe not at any time gather, or ar the leaft vfe the tops and edges of the curled Romane Colewort, neither yet of any other, but the reft of the leafe downe toward the ftalke.

All forts of Coleworts may be planted at any times ; prouided it be not too hot or The planting of too cold: and when you plant them, breake their root,for feare it be not doubled a- colewortso
gaine or turned vpfide-downe in the earth, and that you pur it not fo farre in, as that there be norhing of the top leff aboue.

The manering of colewourts.

The enmrtic
betwixt wane,
the wne, and the Colevport.

Coleworts doe keepe one from being druinke.

Coleworts enemie unto Organic and Rue.

## Ratten Cole-

ports.

The zerthes of Golemorts.
der: and fome doe caft and fow Salt-peter arongtt them vpon the vpper fare tesearth: or elle fmall afhes fifted to keepe them from Locufts, Palmar-vvormes, Caterpillars, and other vermine. Aboue all things the Colewort may not be planted neere vinto the Vine, nor the Vine neere vnto the Colewort: for there is fuch great enmitie betwist thefe two plants, that being both of them planted in one ground, af. ter they beconeto fome growth, they turne and grow one from another, neither w.ll they prolper and beare fruit fo well. And admit it to be true which is reporred, namely, that if a man doe mingle vvine, be it neuer fo little, in the por where Coleworts are boyling, that then the Coleworts will leaue boyling by and by, and not boyle any more, bur loofe their colour. Likewife fuch as are difpofed to drink much wine and not to be drunke with it, muft eat fome raw Coleworts aforchand, as the Almaignes are wont to doe, when they meane to quaffe you off a whole por toge. ther, and to ouercome luch as with whom they frime in drinking. The Coleworts alfo may not be planted neere vinto Organy, Rue, and Sow-bread: for being fet or bours neere vino thefe hearbes, it thriueth not at all, and againe it infeeteth his neigho The carefull Garcill qualitics.
rotten cole, nor yer water his l neuer abide to haue in his Garden fo much as one Ateept or b, nor yet water his hearbes with the water wherein Coleworts haure beene haue an ill raft and fauour.
A good hufwife will have Coleworts in her garden at all times, for the reliefe of her familie: for befides food, She may comfort her people with them in the time of fickneffe: As thus, the firft decoction efpecially of red Coleworts, with Butter or Oyle,without Salt, doth lonfen the bellie, ripen the cough, and maketh the voice bete ter: and if vnto this broarh you put fome Sugar, it will be fingular for fuch as are fhort winded : the juice alfo of Coleworts is good for thefe difeales, if you put Sugar to it : the feed of Coleworts in broath or in cowder, is good againft the Wormes of litele children : Coleworts boyled in two or three waters doe ftay the laske: Coleworts boyled and fprinkled with Long-pepper and eaten with the broth, caufeth great fore of milke in nurfes : the juice of Coleworts drunke, doth expell and kill the poyfon of Toad-ftooles : the pith of the Colewort boyled with fat and fcummed honie, is firgular for fuch as are fhort breathed to vee in manner of a lotion. To be fhort, the Colewort is good for all things, whereof the Romans when time was, made fuch account, as that hauing expelled all other phyficke out of Rome for the fpace of an hundred and fiftie yeares, they ved no other phyficke but Coleworts in all manner of difeales. The Lee made with the afhes of Coleworts is good to wath the head. The breafts fomented with the decoction of Coleworts increateth the milke of nurfes. The afhes of Coleworts mixt with the white of an egge doth heale burnings. Cataplafmes made of boyled Coleworts and mingled with the lees of vinegar, two yolkes of raw egges, and a little cleere vinegar of Rofes, all well beaten and mingled together, is a fingular medicine prefently to take away the paines comming of rheume.
There is nothing better to make cleane a por all ouergrowne with foulenefe yron pot, braffe pot, or fuch like, and which cannot by any other meanes be fufficiently (coured) than to boyle Coleworts in it.

## Снар. XII.

## Of Lettuce.

(ayeOw your Lettuce as chicke as the Colewort, in a moift ground, welh dunged, fat, light, and eafie to turne ouer: it muft be fpecially in March, for it cannot well endure much lieat, or much cold. Norwithflanding if you will fow it in September, yea at all cimes make choyce of funnie and warme places, and fuch as are well fored of dung well rotted, notwithflanding that it will wax hard with Winter, and may continue fome time being planted again. It mult be watered once in euerie two or three daies, it the weather be not dfopping and moift. And in the fowing of it, you mult water it, for feare that the heat of the dung Thould calt out the feed: it putteth forth of the earth the fiftiech day after it is fowen. Being growne aboue che bed, the height of foure or fiue leaues, you mufl gather it with your hand (but nevier with any rake) and fet itagaine in a fat ground, and a good diftance one from anothier; and couer the roors and fhankes with cows, goats, or fheepes dung, for fo they will be of a better taft, and water them at the foor, bur is mult not be when it is either verie hot or verie cold.
Some doe nourifh foure forts of Lettuces here vivih vs in France, not differing The curted and one from another in vertue, but in taft fomewhat more or leffe pleafant, , hat is to fay; cabbagsed Lets, the curled; the headed; cabbaged or vahite; thie common; and the litele anid friball tuce. Lettuce : Men ve not to plant the fmall or common letuce, but the great one, which The Tomene will be curled, and that which will cabbage, otherwife called the Romane Lettuce, Lettuce. wvhich hath a vvhite feed, and a greater than the other, and is of a Iweeter relifh, cfpecially if his firt thalke be cut away, which it putceth forth after it hath beene planted the fecond time, for the firt ftalke hauing in it verie much milke, doth eafily become bitter by the heat of the Sunne. If you defire that it thould hauegreat leaucs, when as it beginnech to purf forch a ftalke, cut off the fame in the halfe, then pur vpon it a clod of earth, or fome fimall tyle. If you couet to haue it faire añd vviste, bind to gether the tops of fit wwo daies before you take it from the firt bed, and fet it in another place, and f prinkle it ouer with fand.
The cabbaged Lettuce being leaved and curled, and not growing highier thana cabaaged lefe hand for the moft part, is made by being troden downe : After that it is planted twcso the fecond time, put vnio the root fome cowes dung that is verie new, afterward tread it downe againe, and vvater it, and vvfien ic beginnech to gather ftrength and grow, cleaue the branch wyhich it putteth forth, and couer it with a new earthen pot in fuch fore, as that the top thereof by it may be beaten and kept downe; and by this mearics it vvill become cufted, cabbaged and vvhite: or elfe if you vvould haue beautifalk and faire letuces, two daies before you take them vp by the roots, you muft tie together the tops of them, and then couer them wich eat th vp to the very faid tops fo tied: for fo they will become white and faire. In like manner, fand caft vpon them ma- white and fire keth them to become white. If you feare that it will not grow hard ynough,by rea- Lettuctud fon of fome fauls in the place, or in the time, or feed, take it vp and fet it in fome other place.
To caufe Lettuces to haue a fweet fmell more than ordinaric, fow them with the To canfe Leti kernels of Citrons, or elie fleepe the feeds in Damaske, or other fweet water, three tuce to fmelh whole daies togecher.
To mingle Lettuce with other Salad hearbes, as Rocket, Sorrell, and fuch like, and salad hearbs that in fuch fort, as that they may all grow vp together from one and the fame root, wixt togethere. pur all your forts of Seeds into a Sheepes trotele, made good and hollow for the purpofe; afterward fet it verie deepe, as namely about the depth of eighteene ynches in the ground, and water it off, and by little and lietle, and haue great care and regard vato it whein it puttech forth of the earth. Others do crumble \& breake threc or foure
srottles
trottles of a Goat or Sheepe, and puttheir feeds in the middeft thereof, and then couer them with a linnen cloth falt bound in manner of a knot, and doe plant them as it were in the vppermoft part of the earth, verie diligently regarding and looking to them when they come vp. Some plucke away the leaues of the Leetufe, which are next vitu the roots, and in ftead of the leaues fo pluckt away; they put one graine or feed of rocket, creffes, or forrell, and other fuch like, by which meanes there grow ma. ny and diuers forts of branches.
The Lettuce is not without good phyficke helpes, for it cooleth the heart, loofeth The vertues of bue Lettuce. the bellie, caufeth aboundance of good bloud. The juice thereof mixt with Oyle of Rofes, affwageth the paine of the head, and caufech the ficke of agues to fleepe beo ing rubbed vponthe brows and temples: it ferueth for a Gargarifne with the juyce of Pomegranats, for the Inflammation of the throat : being rubbed ypon the Cods, it ftaieth the night pollutions or Gonorrhea, efpecially if thereunto be added a little Camphire : the feed thereof beaten with the feed of white Poppie in forme of a milk or extratt doth effect the fame, and alfo cureth the fcalding and burning of the vrine: the feed thereoffteept in water, wherein hath beene quenched fteele, with fome fmall quantitic of Iuorie powdred, is verie foueraigne againft the white flowres of women. The leaues of Lettuce boyled and moyfned in broth, or falades of them in like manner after fupper, doch prouoke fleepe : the feed thercof powdred, and mixt with the milke of woman that hath brought forth a daughter, and the white of an egge, fer. weth to make frontale for the verie fame purpofe. The decoction of the leaues of letcuce boyled in Barley water and drunke, cauferh great quantitic of milke in Nurfes, if afterwards the dugges be well rubbed with the hand: fluch as haue a thore breath, \{pit bloud, or hane weake lungs, as alfo fuch as defire to haue children, mult not eat Lettuces.

## Caдp. XIII. Of Endiuc, Sowthistle, and Succoric.

589Ndiue hauing narrow leaues (otherwife called Scariole, or fowre, or wild Lettuce, and of the Latines Intybus or Seris) is more feruiceable in Phyficke than any other wayes, and is not planted in Gardens, becaufe it is alwaies bitter, notwithftanding that ic be of the forts of Lettuce, or rather of Succorie. It is truc, that in often planting and tranfplanting of it, and in remouing if from one place to another, and by binding and couering it with fand during the Winter time, the nature thereof may be changed and become tender and white, and without any great paines to the Gardiner may be keptall Winter: which thingour Gardiners haue practifed, fecing by experience that wild Succorie be. conmech faire and flourifhing after it hath beene ouerflowen with water, and couered with fand or earth.

## sowthiflie.

Sowthiftle, called in Latine Sonchus, or Cieerbita, was of old time in requeft for falades, but now there is no fuch account made thereof, faue onely that it is vfed for to feed Conies and Hares: in like fort it is not planted in gardens, becaufe it groweth plentifully amongft the vines: notwithftanding the Italians doe vfe the roots of it in Salades in Winter, finding them fweet and of a plealant talt : his ftalke is full of milke, fometimes drawing neere vnto a yellow : this milke taken in drinke, is fingu. lar for them which have a fhort breath, and are ftopt in their lungs: it aftwagech the paines of the eares, if you drop certaine drops thercof into them, efpecially if you caufe it to boyle with fome Oyle in the rind of a Pomegranat: it healeth thorowly the ftrangurie and paines in makiny water, if it be drunke to the quantitic of a portle, The leaues of Sowthiftle chewed, doe take away the It inking of the mouth.
Succoris, Succorici is of the maure of Endiuc, hauing large lecaucs, and without husban-
ding
ding and good handling doth alwaies continue bitter. Ic lunech a moift place, and well laboured ground. When it hath put forth foure leaues, you muft traniflate it to a well dunged loyle. And to the end it may haue faire, large, and well-fpread leaues, after it beginnech once to come to any growth, in the middeft of his leaues you mult putfome prectie little cyle; for by this meanes it will tpread forth his leaues, and will haue them a great deale thicker fanding and tuffed. By this good husbanding it loofeth his bitterneffe, and then there is vic to be had of it in fallades in Winter, and it is called whire Succorie ; and to this end it 15 wont to be planted againe in the end of Auguft: after that in the beginning of September, to the end that the leaues thereof may be the greater, it muft be taken vp without the breaking of any thung, and with a fmal blade of a ftraw have the leatues tied togecher very eafily and gendly, without wringing or brufing of them : afcerward it muft be layed in a well manured foyle, the leaues downeward into the ground, and the root vpward toward the rop of the carth,and aboue it there muft be made fomething to couer it in manner of a houfe, vnder vvhich there muft ftraw be caft to keepe it from froft and bad winds: the like is done with Endiue, and it is found white when it is pulled vp againe; and it is verie delicate in eating. Some for the fame end, vvhen Succorie hath pur forth his leaues, tye them all together with a verie fmall threed, and afeer couer them wirh a pot of earth, to the end that it may continually draw by his root nourithment out of the earch, and by this meanes it becommeth white and tender, and loofeth a greas part of his bieternefle.
Euerie man knoweth that the decoction of Succoric drunke in manner of an A - The vertues of pozeme, is good for them which haue che jaundife or heat of the liuer. The juice of Succorie. Succoric drunke euerie fecond day tafting, flayech the fpitting of bloud. Succorie Spitting of flamped and put vnder the left dugge doch heale the hearr-ache. Some fay that the bloudo decoction of vvild Succorie often drunke, maketh the vifages and countenances of women more cleare and pleafant.

Снар. XIIII.

## Of Cartichokes.

He Artichoke plant isa diuers thing from Endiue and Succoric: for as for Arcichokes to plart them in Autumne , which is about the monerh of OZtober, they are fo fruiffull and forward to thriue, as that you need not to take any more but the great leaues with their branches, of fuch as bring forth the faireft and greateft fruic, and in like maniner of the thicke falkes inche middeft, feruing for no manner of vee after that the heads of them be gathered : and to plant them againe. Alfo fome haue otherwife vfed to caft downe the faid ftalkcs, and burie them a foor deepe in good manured ground, the leaues at the top bound aethe end with a lietle ftraw, and the falke layed downe and well conered, and they keepe them chus, watering them now and then, if the time be not meili ynough of fit felfe, for to make frootes and young fers of in Winter, or at other rimes: and lome there be that pricke the heads in a well manured earth, and being well planted,doe couer them in Winter with the chaffe or duft of Line or Hempe to keepethem from the froft, and that in the yeare following they may bring forth new fruit.

Moreouer, che Artichoke is fowen in the increafe of the Moone of March, vp- To forw Artio on beds well dunged and fatted, bur you muft nor looke to hatie any whole and beder vpon on beds well dunged and fatted, bur you mult not lioke to halic any whole and beds.
perfear fruit ofthern, vntill the next yeare after. And, if your would haue the feed to thriue, make little fimall pits vpon your bed a good foot one from another, and halfe a foor deepe,and as much broad, and thefe fill with old dung that is verie frmall, and blacke carth that is verie fine, mixt together, and aboue the fame place prick or thruft
inthe feed of your Artichoke two tnches within the earth, the fmall cnd vpward, and putting fiue or fixe feeds in one pit together, and making many pits ncere together in a round compaffe, that fo they may make a faire knot and plant, and that you may coner it againe eafily without much flamping or treading for it. And as foone as the Artichoke hath leaues bigge ynough, it muft be watered; and this watering continued in fuch places as are verie drie, that fo it may bring forch a tender and great fruit. Aboue allthings care muft be had that che fmall end be not cleane contrarie put downeward, for then it would bring forth writhen, weake, fmall, and hard Artichokes. You muft alfo make choice of the faireft and greateft teed that may be found, and that the fmall pits be made a good fatheme the one from the other, that fo one plant may not hinder another. Ie is true, that it is better to plant the flips and branches than the feed, becaufe there commeth fuit the fooner of the one than of the other, and becaufe that in fo planting of them, you may be occupied and well imployed cuerie moneth, and fo reape your fruit in diucrs feafons of the yeare, according as the earth is fat or leane, hot or cold, moilt or drie, or as the ground is hardly agreeing wish and vufit for this plant. And in anie cafe plant of thofe that beare the fairelf fruit, according as there are diuers fouts, in refpect of their thickneffe, length, roundneffe, diuers colours, and taft, fome calfo being prickly, and fome withour pricks. For of Artichokes there be diuers kinds;as the round and the long,
Choice of Arti-
chokes. the red and the greene: the round, which is greene, is a good Artichoke, to is the red, although it be long, yet the foale is but thinne, nerther is the leafe verie fubftantiall, onely it is exceeding pleafant in taft: the greene, which is long, is of all forts the wort, for it neither beareth good foale nor good leafe, but is a loofe openleaued Artichoke, cuer wallowifh and vnpleafant : bur the round large Artichoke, whofe tops of leaues are red, being hard, firme, and as it were all of one piece, is of all other the beft Artichoke, hath the deepeff foale, the thickeft leafe, and is the apteft. to grow in anie foyle whatfocuer: And therefore I would wifh cuerie man, as neere as he can,to make choice of thefe before anie other kind.
If you would that the Artichoke fhould grow without prickes, you muif rub it againft a fone, and breake the end of the feed whish is lharpe : or elfe put the feed after the manner of a graft in the root of a Lettuce which hath no rinde, and cit in frall pieces, in fuch fort as that euerie piece may be grafted with a feed, and fo plan-

Artichokes of a good jmell.

Artichokes
finellong iike
Bayes.
Sweet Arti-
chopers. ted. You fhall haue Artichokes of good taft, if you lee the feed feepe three daycs before ynu plant it, in the iuice of Rofes or Lillies, or oyle of Bay, or of Lauander, or fome other fweet and fragrant iuice, and then afterward drie if, and fo plant or fee it: Although, that as concerning the former oyles, there be fome which are of a contrarie opinion, and doe thinke that the oyle doch fpoyle the feed. You fhall haue an Artichoke of the fmell of the Bay tree, if you cleaue or make a hole in a Bay berrie, and putting therein the feed of an Arrichoke, doe fet it fo. Artichokes will be fweet in taft, if before you fet the feed, you fteepe them in milke; which mult be renewed and changed twice or thrice before that it fowre; or in honey: and then afterward to drie and fer them.
Two forss of beafts doe annoy the roots of Artichokes, Mice and Moules. The dung of $S$ wine, or the ahes of the Fig-tree fpread about the roots of the Artichoke, doe chafe away Mice: and the like will fall out, if you wrap their roots about with wooll. Some, to driue away Rass that deftroy the roors of Artichokes vnder the earth, pricke downe, halfe a foor deepe in the earth,cerraine fickes of Eldcr tree,cluerie one fome foure ynches from the other; the fuell of which Elder is fo odions vnto thole beafts, that they haue no defire to come neere it, either vnder or aboue the ground, fo long as it is greene : and therefore when thefe firft flickes fhall be dric, youl mult renew them. Otherfome put Thornes that are verie fharpe and pricking, or the pillings of Chefnuts vider the earth, round about the plants of the Artichokes, and that one neere vnto another, to the end, that the Rats, comming neere vnto the Thornes, may prefently be driuen backe againe. Others caule Beanes to be boyled in fome poyfoned water_ and doe put them in the holes of this wicked catell , for they taking

## the Countrie Farme.

the fent thereof, they run thither prefently. As concerning Moules, we will fpeake of the manner of killing them hereafter.
The root of Artichoke fodden in Winc and drunke, is foucraigne againft the dif. The vertucs of ficultie of making water, for the flinking and fltong fincll of the arme-pics, and of the artictorke. the vrine alfo, for the hot and fcalding fretting of ones vrine, whecher it come of the pockes, or of fome other caure, and fo alfo for the dropfic: the pulpe boyled in flefh broth,and eaten with Salt,Pepper, and Galanga made in powder, helpeth the weakneffe of the generatiue parts. The Italians cat chem in the norning raw with bread and falt, whiles they be yet young and tender.

## Снар. XV. <br> Of Sorrell and Burnet.

(9)Orrel and Burnet notwithflanding that they grow vntild in great aboundance, yet they may be fowen in fine ground, and well manured in the Spring time, épecially the Sorrell : for as for Burnet, it growerh likewife, and as well in drie grounds, nothing tilled or flirred: both of them being plauted in gardens, muff from the beginning be well watered : and he that defirech to gather the feed, muft take chem vp and plant them againe, fuffering them to grow to their perfection, and then to drie and wither. They feare not cold or froft, neither yetaboundance of water: but they looke (efpecially the Sorrell) that they may become the fairer, to be cuit three or foure times a yeare.

All the forts of Sorrell, as well thofe of the field as thofe of the gar den, haue this The eertues of vertue, that being boyled with flefh how old and hard foeuer it be, yet they make it Sorrell. tender and luofe the bodie.
The leaues of Sorrell rofted in hot afhes, hauc a fingular force to refolue or to caule to Apoftumate che fwelings of the cyes : or as fome Surgeons vfe, if you take the leaues of Sorrell, and lap them vp clofe in a Burre-docke leafe, then lay it in the hot embers, and roft it as you would roft a Warde, then open it and applie it as hot as the patient is able to endure it to any impoftumation or byle whatfoeuer about any part of a mans bodie, it will not onely in fhore fpace ripen and breake it, but alfo draw and heale it verie fufficiently : it is alfo, being boyled in Poffec-ale, a verie good cooler of the bloud, and a great comferter againft inflamations which come by burning Feauers. A Cataplafme made of the leaues of Sorrell, with wice as much old Swines-greale, all beaten and mingled togecher, and afterward put in the leafe of a Colewort vnder the hot afhes, is foueraigne againft cold Apoftumes. The feed of Sorrel powdred and drunke with water or wine, doth affwage the paine of the blou- The bloudic die flux. Sorrell fteept in vinegar and eaten in themorning fafting, is a preferuatiue ghux: againft the plague, as alfo the Syrope or Iuleb made with the juice thereof. The The plagues leaues of Sorrell well ftamped, and applied vnto the wreft,doth tame chefierceneffe of the ague.

Burnet of the garden being an herbe that fome vic to put in their falades, whereof The vertues of we haue here fpoken, and which is alfo the fame which the Latinifts call Sanguifor- Buraeto $b a$, taken in drinke is good to reftraine the monethly termes of women, and all other flux of the belly, but efpecially fuch as are of bloud : it is good alfo to dry vp wounds and vicers if it be applied vnto them in forme of a Cataplafine. Some doe much efteeme it in the Plaguie time: and fome fay, that the often vfe of Burnet, efpecially the juice thercof, is a verie fourraigne preferuariue againf dangerous difeafes, becaufe it hath a propertie verie much flrengthening the Liuer, the Heart, and the Spirits. The leaues of Burnet put into the wine, make it more pleafant, more frong, and Comewhat Aromaticall, and of the tafte of Millions : they are verie good to be put
infallades made with Oyle, Salt, and Vinegar, according as we fee chem vfed cuerie day.

## Cняр. XVI. Of Harts-horne, Trickmadame, ard Pearcestone.

Hartshorre. To canse hartsborne to thrive.
 Sor Harts-horne and Trickmadame they haue no need of any great fetting or planting : for borh of them will come in any ground that one would haue them, whether it be husbanded or not. True it is, that if you would haue Harts-horne flourifh and faire liking, you muft cut it oft, lcad it along vpon fome roller, or caufe it to go vpon foot by it elife: for it d clightech to be fo intreated, and vtererly refufing to grow otherwife thian againft the ground. Trickemadame dorh nothing feare the cold, and doth grow principally vpon the old walls of vines, in a fonie and grauelly earth. Thefe are pur in Summer-fallades, though neither of thern hauc either taft or fmell fit for the fame. The Harts-hornc is goodro
The verlues of barts-borne. ftay the flux of the bellie.
Trickmadame flamped with Lettuce,and applied vnto the pulfes, doth delay the

The vertues of
Trickmadame.

Pearceflone or Sampier.

The preforuing
of sampier. Janndife. Stenc. heat of an ague. The diftilled water thereof being ofen times drunken, doth thoroughly heale burning and tertian agues.
Pearceftone is fowen in a drie and fandie foile, and crauech to be much watered euen from the beginning : he chat defireth the feed, muft let the hearbe grow to hér perfection, and afterward to drie the feed as corne is dried.
It may be preferued in falt and vinegar after the manner of purcelane, and then it is foueraignc for the difficultie of vrine, for the jaundife, and to breake the fone, to prouoke vvomens termes, and to ftirre vp ones appecite, if it be vfed in the beginning of meat. For want offich as is pickled in vinegar, you may make the decoetion ot the leaues, roots, and feeds in Wine, for to vfe in the lame difeafe.

## Снар。 XVII.

## of Clarargolds.

 Arigolds have not need of any great ordering, for they grow in vntilled fields, and in any ground that a man will, neither doe they craue to be fowen eucrie yeare: for being once fowen, they afterward grow of themfelues, and beare flowers in the Calends of cuery moneth of the yere, afwel in Sommer as in Winter, for which caure the Iralians call them the flower of all the mionechs: Tu be fhor,, the place where they haue once beene fowen can hardly be rid of them. If they be neuer fo litelle husbanded, and cut many times, they wil beare moft Tuffed and woli. faire flowers and verie great, but yet euer more in Autumne than in the Spring.
thriwing Mari. golds. The juice of the flowers of Mariyolds drunke fafting, haue great force to proThe vertucs of Marigoclds. into the fecret parts doth the like, and caufeth the after-birth to come torth, and cafteth young maides out of the Greene-fickncfle. The conlierue of the fame flowers haue the faine vertue. The women of Italie as well to provoke the termes, as to flay them, doe frie the juice and tender crops of this heatbe with the yolkes of Egges, and doe eat them. The verie fame juice ningled with a little Wine or warme Vinegar, is a foucraigne remed ie to aff wage the exteeame paines of the head and teech, if one ver it in manner of lotion. This juice drunke to the quantitie of an ounce, with the weight of a French-crowne of the powder of Earth-womes rightly prepared,
doth helpe greatly a gainft the jaundife. Some fay that to eat of of Marigold leaues doth indide a good countenance : the diflilled vvacer of Marigold leaules being dropt into his eyes, or linnen clothes wee therein and applied vnto them, doth heale the redneffe of the eyes. The powder of the leaues thereof dried, and put in che hollow of the tooth doth cure the aking of the fame. The juice of the flowers of Marigolds drunke to she quantitic of two ounices in the begiming of a peffilentiall ague, doth heale the plague, fo that the ficke after he hath drunke this iuice, doe prefently lye downe, and be made fiweat, being rhroughly coucred in his bed : is doth cure allo the jaundife, and beating of the heart. The conferue of the flowers of Marigolds doch the like. To drinke halfe an houre before the comming of the fir of a quartaine aguie about threc ounces of vvhite vvine, vvherein hane becrie flecpef fuen feeds of Marigolds, snd to go ourer this drinke for diuers mornings tog ether, is a fouicraigne medicine againfta quartaine ague.

## Снир. XVIII. of Ecets and Blites, 2 phitc and red.

厤Eets, as well the vwhite as the blacke and red, wwhich is called Bette and Iotre of the inhabitants of Tourraine, or Romanc of the Picardes, are fowen not onely in Lenr, but at all times, efpecially after December vatill March, and in Auguft, to the end that there nuay alwaies be ina readmetle bothold and young, and for to gacher feed which may endure good three yeares. And for this caure you muft take chem vp and plant thenagaine, when they haue pur forch fue leaues, and put vito the roots a litele new dung, and afterward lighten and raife their certh, and free them quice from vveeds: they are apt and eafic ynough to grow, and though they be cut, yecthey will fring againe ifthey be planred in a fatand well mariurcd ground. They haue this fpecrall and as it were admi- perrie of be be rable qual irie inchem, niame ly, thar they never come to their full perfection, voril the oeftes for third yeare afer chey be fowen: in refpeet whereof, I could advife the gardiner not to gather any feeds of the beers te fow, bur fuch as the beet fhall brigg forth che chird yeare: for of fuch feed there grow veric faire and goodly beers.

If you would make choyce of faire bects, chufe rather the whise chan cither the blacke or red, as being the fairef and endereft: but to hatue fuch iss ihall be verie great and vhlite, you muft coure the root with the new dung of $O \times$ enj ajd cleauc in finder their fprout, as is done with Leckes, and to lay vpon them atarge and broad ftone or a bricke. If you would haue your beets red, water thans with the Lees of Redbeets. red Wine : or elfe plant them in fuch a place, as wherein they may bane great heat from the Sunne.
Beets raten in pottage doe loofe the bellic: the juicc ol beets drawne vp into the Tbe vertues off nole, doth purge the braine: the fanne juice rubled vpon the head, caufech Lice and; the beetso Nits sodie. The roots of bects roaifed in the anhes and eaten, do otake away the ill
fmell that commerthof cating Gaveeke. fmell chat commeth of eating Gariecke. The root of beets ftamped and caft in wine, For so make zi. doth turne the fame widhinthree houres after into vinegar.
Blites are fowne in March, and are not long in comming out of the carth. If hey be fowen in a well tilled ground, they will allo grow the next yeare following with-- our any new fowing, in fich manner as chat the ground will hardly be rid of them: they craue no weeding or fweeping.
Blites coe loofe che bellie: ther decoetion wherein hath boyled the rooss and leaues, killech lice and nits : theirl leaues roafted anotig? a ahes or boylded, doe heale burnings : the firt boyling of Blites with the gall of an Oxe, and the Oylcof cartar, doth take away all f pots out of garments without doing any harme: bat prefensly afo. ter you mult wafh the place with warme water. ground. Bucthey are fowne in Februarie,-March, and Aprill: and whey dunged lowne thin and not chicks, and oftentimes watered. Some Sow them in December to gather them in Winter. They will not be removed, but rather wed, watered, dunged with good dung, often cut and pruned, and that with an yon tools, that fo they may not fend cheinflues in turning all their fubitanice into leaves. But fpecially after the time that the feed is fratered upon the earth, it muff prefently be consred with earth, and they reft be fowne as clare as may be, that fo they may grow and come fare and goodly ones. In lefle than fifteens dais they be readie to ear. The Italians vf to make a kind of Tare of Arraches: They chop fall the leaves and frame them with cheefe, free butter, and the yokes cf Egges: afterward they put chem in pate, and bake them in che ouch:
Spixagge Sponge. (fo called becaure his Feed is prickly ) is of two forts, the male and the fenile: the female bearech no feed. Both of them are owen in Auguft, September, and October, for to be vie in Lentrimé, and in December, Ianuaric, and Februarie,for Somitier: they beare out the roughnefle of all feafons verie well and fufficiv curtly; whether it be front, cold, or frow : 'they grow alto in any ground, fo that ic be well dreffed and fomewhat mint; hey require (to the end they may proffer well and firing quit icky ) to be watered every evening, and to be coucred cither with flaw or fribble: they fad not in ied to be wed, but if they be cut off they grow the fatret. And he that would hate them to continue long and flourifh, molt at one time Ans cut off the one halle of the ftalke, and at another time, the other halite. Likewise he that would have them to continue fomécime without being fowne curie yeare, muff at the fief when the foweth them, fee that the feed be a good, full, and well fed feed; for then for forme yeares following, they will grow without being fowne againe, although the feed of the fecond yeare will be fomewhat wake : for to keeper them from the'fioft, your inuit courser them with Walnue-trec-leates, and that before milts of fogged doe fatllit any manner of orr. The inhabitants' of Parisiknow well ynough how profitable Spinage is for to make meat of in Lent, which vie to make divers forts of difhes thereof for their banFees; as fonietinies they free them with butter in pots of earth : fomecimes they proferuechem at a fall fire with butter in pots of earth: fometimes they make vureathes of chem, as alford diners other fashions : efpecially they make a moot excellent boyled falladde thereof, by taking the greene leaves thereof, and boy ling it in fair vvater till it be fort as pap, then take it from the fire and ffraine it, and with the backs of your chopping-kninites, chop ir for fritall as poffibly you can, then put it into a verie cleane wet pipkin or skeller, with a good quantitie of wet butter and currants verie clean vivatht, and föboýle it our agraine a good face, then with vinegar and fugar, feafon it accord ing to the taft vvhich pleafech you bent, and fo ferne it $p$ pons fyppers with hard edges, or otherwife as you" please, for et is of all fallers the belt. The vie of Spimage is good for them which havre forme impediment in breathing or speaking, or which are muchitroubled with the cough, especially iffuch a one in the morning do fop the brothofSpinage bôyled wraith frefli butter, or ogle of feet Almonds, they lob fen the bettie? their juice is good again nt the flinging of Scorpions and Spiders, whether you drinker it, or laỵzito outwardly
the Countrie Farme.


18Orage and Bugloffe being hearbes much differing in leaues and flowers, are alike notwithftanding in their rocts, feeds, and vertues, feruing to put in the pottage whiles their leaues are cender, and the flowers are vied in Salades. They are fowne in Auguft or Scptember for Winter vfe, and in Aprill for Summer: they may be remoued ar anie cime: And as for the leed, it muft be gathered halfe ripe, that fo it may not leape out of his coat. And of this Borage and Bugloffe you fhall fow but a verie fimall quantitie: for it is to apt and eafie of growth, the feed fo foone ripe, and fo apt to fied, that albeit your vigilance be verie great, yet you fhall find it will in fhort fpace foone fpread and ouer-runne much ground: neither, where it is once fowne, can it, but with great difficultic, euer after be rooted out.
Bugloffe, but efpecially clic flower, doth minifter pleafantneffe vnto men that vfe The vertue of it oft times, becaufe it cheareth vp the heart, purgech the bloud, and comfortech the Buglofeo vitall fpirits. The broth wherein Bugloffe fhall haue beene boyled, doth loole the bellie. The root that beareth chree ftalkes, ftamped with the feed and boyled in wine, doth ferue to be taken againft tertian Agues. The wine wherein the leaues of Bugloffe fhall haue beene fteept, taketh away all fadneffe. The inice of Bugloffe, Leekes, and Parfley, mixt with Wine, or oyle of fweet Almonds, is a foueraignemedicine to caufe the after-birth of women to fall away. The juice of Borage and Bugloffe drunken, is a preferuatiue againft poyfon, if a man have drunke it; as alfo againft the biting of venimous beafts. Bugloffe hauing three leaues, being flamped with his feed and root, and drunke, doth helpe to pur away the fhakings of a rertian Ague: and that which hath foure, againft the fhitesing colds of quartaines. The water diftilled is fingular againtt the dotages happening in Feauers, as alfo againft the inflamation of che cyes.

## С н а р. XXI.

## Of Leekes both great and fmall.

$\left[\begin{array}{l}20 \\ 0 \\ 0 \\ 0\end{array}\right.$Eekes, as well thofe that are long headed, as thofe liat are round, doe not Leetere. require fo rich and fat a ground as the hearbes going before, and they may be fowne at all times, if it were not for the gathering of the feed: for which caufe they muft be fowne in December, Ianuaric, and Februarie, and there it will be ripe after March and mid Augult, and that if from the sime that they are fowne, you goe and tread vpon the Beds, and water them not but foure daies after.

- They are wont to be remoued when they grow of feed, and that either into ridges; eueric one being fer foure ynches from another, and then there is nothing taken from them but the ends and rops of the leaues, or into a hole made with a fticke, and then the roots mut be made cleane and cropped off, as alfo manie of the leaues, mingling fand with the earth : or you fhall plant them to make them grear, if you lay a bricke vpon the head of them after you hauc planted them. This mult be in Aprill', May, or all Iune, to haue for Summervie; and in Auguft, September, and Octuber, for the Winter vfe: in anie cafe you muft weed, water, and dung them ma: nie times, efpecially the round headed ones. Furthermore, to make them verie thiclie, put the feed of a Cucumber and of Nauets in a Reed, or in Boxe boared to
through ${ }_{3}$
through, and graft chis seed into the head of the Leeke, when you plant it the fecond time : or elfe if you will haue great and groffe Leekes, you muft pur fo much of their feed as you can hold in threefingers in an old Linnen Cloth that is foule, and put it into the earth, couering it with dung, and watering it by and by : for all this litele heape of Seed, thus put together, will make one great and thicke, Lecke.
Nero vfed euerie morning the leaues of Leekes with oyle, to haue a good voice:

The vertwes of Lockes.

Poypon.
Blieding at the
nofe.
Difficultie of
mathime water. For deliserance in clicid-birch. spitting of. blous. although that Leekes be noyfome to the fomacke, as being verie windre, exceps they be boyled in a fecond water. If you car Cummin before you cat Leekes, your breath will not fmell afectward of Leekes. The leaues of Leekes boiled and applyed vnto the fwolne Hemorrhoids, doth verie wuch good boch againf the fwelling and paine of them. The leaures of Leekes flamped with Honey, and applyed in forme of a Cataplafme vnto the ftingings of Spiders, or vpon the biting of venimous Beafts, are foueraigne remedies for the fame. The iuice of Leekes mixt widh vineger and rubbed vpon the browes, flayech bleeding at the nofe. The feed of Leekes flamped and drunke with white or fweet Wine, doth heale the difficultic of making Water. The iuice of Leekes drunke with whice Wine, helpeth to bring Women a bed which trauell' in child-birth. The feed of Leekes fampt with Myrrhe and the iuice of Plantaine, is good to flay the fpitting of bloud, and bleeding at the nofe. The feed of Leekes calt in a velfell of Wine, doth keepe the Wine from fowring: and if it thould be fowre alreadie, it reneweth it, and recurneth it to his former goodneffe. The iuice of Leekes, or Leekes themfelues boyled in oyle, take away the paine and wormes in the eares. Leekes roafted vnder embers, and eacen, is fingular good againft the poyfon of Toad-ftooles, and to preferue from drunkenncffe, or elle to driue ix away, bcing alreadie poffeffed. If you boyle Leekes with Earth-wormes in Oyle vnto the confumption of the third part, and aferward ffraine out this Oyle, it will be fingular good for the vlcers and noife in the eares.
small Leeks. Small Leekes muft be fowne in the Spring, at fuch teime as other hearbs are fowne: they make a faire fiewbeccule of their thinne and little leaues, and becaufe alfo they keepe greene all the yeare long: they may feeme to be the fame with Chibols and Cyues, which are wont to be vied in Salads to helpe to emper the cooleneffe of other hearbes vfed in Salads, becaule the Chibols and Cyues haue no head, but onely a long falke like wnoo Leekes.

## Снар. XXII.

## of Psircelanc.

Vrcelane loueth to be fowne in Februarie, March, Aprill, May, and Iune, but not at anie orher time, for it cannot abide the cold. It commeth in grear aboundance vpon Beds mixt well with old dung, or in a głound that is verie fat of is felfe, efpecially if it be fowne amongt Coleworts, Onions, and Leckes: and after it hath once taken with the ground, it will not taile anie yeare afterward, though you take no paines with the fowing of it: norwithfanding it crauech ro be oft watered, that it rife not upright like the flocke of a tree. It roult be placed in the hadowes of trees, and amonglt clods full of hearbes, but noe thicke, for then it could not well fpread it felfe abroad.
The versues of
Purcelane.
Purcelane eaten doth cure the roughnefle and afonifhment of the tecth, ftayech fipiting of bloud, and quencheth the heat of the reines, notw ithfanding that this hearbe is hard to digeff, and nourihech bue a litelc: being applyed vnoo the browes, it appeafeth the head-ach, and being layd vpon the naueli, it killech the wormes in children. The decoftion of the leaues thercof, or the feed, or the water diffilled, isa foueraigne remedie againft the Bloudic flux and the Wormes in chuldren. A leafe
of Purcelane put vpon the tonguc, affuageth thirf. A Cataplafme made of Purce- bane and Barly meale,applyed vnto the liuer and fianke, workech a maruellous efteet againft burning A gues. A Linimentmade wihh Honey, and the powder of the root of Purcelane dried, healech the chaps of the lips and hands.
This Purcelane is an excellent Salad, and bra cooking operation which it hash To preferric: keepech the bloud in a moft excellent temper. You preferue it all the yeare, by boy: Purcelane. ling it firft in faire water, then drayning the water from it, Ipread it vpon a taike table $e_{2}$ and caft good fore of fale amonght it: then when it is chroughly cold, por it vp in cleane fweet pors of Earth, and poure vpon it either a good flong Brine, or Vineger and Salt mixt rogether, till the Purcelane be cicane couered : or if you feare the ouer-falteffe of it, then you need but onely make a well- tafted pickle,fuch as you put to Oliues, and with is couer the Purcelane, then clofe the pot vp clofe till you haue caufe to ve it : And if at anie ume you find the pickle or brine to fhrinke away from the hearbes, and leave them drie, you muft immediately renew it, and couer it all ouer againe, for it is apt to putrifie, and nothing bringech it more fooner thereunto than the want of moiflure: Therefore you mult haue care culer once in three or foure dayes to open your pors, and to mend what you fhall find amiffe in them : and if you find anie hoarineffe cleauing vnto the pors fides, you muit cleanfe that away alfo.

## C н а р. XXIII.

## Of Onions, Chibols, and Chyues.

(4. FeOr the moft part, Onions (fo called of the French, becaufe they haue but onely one white root, like to a pearle; which the Latines call Vuio) whecher they be whire, red, or round, would be fowne in Innuarie, Februarie, and March, in a fat ground, well dunged, blacke, well turned, as alfo well cleanfed from fones, and enriched : or elfe in a red earth, which is fhore and murlie; for in it they grow excellently. They would be remoued in Aprill all along, well weeded, and often laboured, to caufe them to grow greas and thicke: and chey muft be kept from cold and freezing winds. In them we muft oblerue a nature contrarie vnto that of other Hearbes and Plants, being of greater force and vertue in the encreafe of the Moone than in the decreafe, quite contrarie to that of Onions, which in the wane of the Moone is more effe quall, and in the growth of the Moone more drie and weake. Such as are intended to be kept for feed, when they begin te put forth their flalke, and to rife aloft, muft haue fmall fickes or poles to fet by them and keepe them vpright, that the wind doe not bow or breake them downe. They munt be gathered in the old of the Moone, in faire and drie weather, when the leanes begin to drie, and the feed to grow blacke, for then you mufl pull vp the whole falkes, and drie them in the Sunne : And it is faid, that if they be fowne and planted when the Moone is vider the earth, they taf the fronger, but are fmaller and leffe: Furthermore, they mult be ordered as Leekes. But it mult be obferued, that they loue and delight in a red earth, and to be fowne in faire weather, in the decreafe of the Moone, tn be taken vp againe, and by and by watered: and for to make them grow great, they muft haue their top taken away when shey are planred, and their heads vncoucred, and their carth mult be digged tweitie daies before they be remoued againe, that fo it may drie, and not haue anie imoifture in i.. And to keepe Onions from rotting, you mult caft them into warme Tokepe Onims water, and drie them in the Sunne, and afeer that they are drie, to lay them ypon frompoetingo Barly ftraw, fo as they may not touch one another. Who fo would make choice of Onions, mult know, that the round and white ones are a great deale better than Tomake sboics thofe of onims.
thofe of a ruffecifi or reddinh colour, and not to be fo hot and fharpe as the other. The beft in France are thofe which grow at Fertonion, a fmall village necre vino Eftamps, for it hath his name vpon that occafion.

The Onion, though it be the Countrey mans meat, is better to vfe than to taft: for he that eatech euerie day tender Onions, with Honey, to his breakfaft, fhall liue the more healchfull, fo that they be not too new: for the drie are more healthfull than the greene s the boyled, than the raws the preferucd, than the drie : wherefore the drie muft be chofen to vfe in Salads, fried Meats, Gallymawfries, baked Meats,Sawces, Beane portage, and orher vies.

- The iuice of Onions cauferh haire to grow againe, cleanfeth filthie eares, and fuch as runne with mattar; taketh away white fpors, as well out of the face, as from the reft the bodie: It curethehe Dropie with the iuice of Fennell, if it be but beginning: it purgeth the braine through the nofthrils: mingled with Hennes greafe it dryeth vp the Kibes: applyed with a linnen cloth vnto burnings, it eafeth and taketh away the paine: being mixt with ftrong vineger, it flayeth bleeding at the nofe, if it be dropt and put into the nofe with a feather.
An Onion rofted vpon hot coales, and eaten with Sugar, Oyle, and a little Vineger, doth cure the Cough, and is good for them that are flopped or Ituffed in their Lungs, and fuch as are fhort breathed. Take away the heart of an Onion, fill it with Cummin feed powdred, ftop the hole, and roft the Onion thus prepared vnder hot afhes, when it is rofted, ftrayne it out, this iuice is fingular grood for the noyles and deafencfle of the eares, being dropped into them. The thicke rinde of the Onion burned or rofted vnder hot afhes, affuageth old Head-ach and Megrams, if you put a little morfell, moiftened or befprinkled with Oyle of Rofes and Bayes, within the eare of that fide of the head that aketh.

An Onion ftamped with freth Butter, eafeth the paines of the Hemorrhoids:
The biting of a ftamped with Honey and Salt, it is a foueraigne remedie for the biting of a mad. nad dogge. dogge, and other fuch like beafts: mingled with Hennes greafe, it taketh away
Red Boots. the red and blew fpots of the face : boyled in Wine, or in Water, and afterward ftamped and fried in common Oyle, and applyed in forme of a Cataplafme vnto the Nauell, it affuageth the throwes of Women newly brought in bed: rofted vpon hot coales, and mixed with Leauen and Oyle of Lillies, ic ripeneth Impoftumes. Take away the heart of the Onion, fill the hollow place with Treacle or Mithridate, diffolued and beat with the iuice of Citrons, Itopps vp the hole againe with the Cap or vpper Cruft which you cut off, roft all together vnder the hot afhes, and that fo long, as vntill all be well incorporated and drencht in, afterward ftrayne the Onion fo rofted, and giue that which fhall be ftrayned to drinke to him that is infected with the Plague, and caule him by and by to lye downe, and to be well couered, to the end that he may fweat. This Medicine hath not his match againft the Plague, prouided that the fweat breake forth by and by.

As for Chibols and Chyues, they come more neere vnto the nature of Onions (as by the fmell one may well perceiue) than vnto the nature of Leekes, which they nothing refemble, faue onely in the blade or ftalke, and in that they haue no head. 'They muft be fowne in the Spring, as other hearbes, in the fame ground with the Onion: They are verie pleafant in Salads, to temper the coldnefle of other cold hearbes.

## Cmap. XXIIII.

## Of Garlicke.

(2x)Arlicke (as is well knowne vnto the inhabitants of Gafcoine, Aqui- Garliche. taine, Limofin, and thofe abour Burdeaux) would be planted at the fame time that Onions are, and in the new of the Moone, that fo they may be great: and it muft not be fet in whole heads, but in thofe little cloues and parts which may be diuided and taken off from the head. They fhall be fet all along vpon beds diuided by ridges, like vnto ridged grounds of the Countrey of Beaux, to the end that the water may not deftroy then in Winter: For this hearbe defiieth a drie ground, and but a little moift, verie white, and not much dunged, or verie far. When they fhall haue put forth three leaues, you muft weed them as of as you can, for fo they will become fairer, and their feed will be the greater. Who fo is defirous to haue it great headed, mult take away the tops of it, or elfe tread it downe with his feer before it put forth his falke: for by this meanes the iuice will recturne into the head. It groweth likewife of Seed, but more flowly, for it hath no better a head for the firft yeare than a Leeke, the fecond yeare in beginnech to be better headed and more like it felfe, but is not perfect and abfolure vnill the third yeare. If you fow it in the wane of the Moone, and take them vp in like manner when the Moone is vnder the earth, you thall haue Garlicke that will not fmell fo frong: but contratiwife, if you fow in the new or growth of the Moone. Likewife it will haue a fweet fauour, if when you fow it you fer in the middeft theroof the kernels of Oliues: as likewife, if in planting it you fet by the fide thereof a Cloue, ioyned verie clofe thereunto, it will retaine the finell and tafte thereof. In like manner it will be of a better tafte, if you fleepe it in good fweet Wine a day before that you fow it : And if you fleepe it in Milke two dayes before you fowe it, it will become both greater and better.

The fit and conucnient time to gather and take it $v p$, is in the wane of the How topecese. Moone, and in dric and faire weather, when the ftalke will no longer ftand vp- Garicheo right. It is kept well vpon ftraw lying bare, or hung vp in the fmoake of the chimney, or bcing fleept a litele in falt water. And to keepe it long, you muft let it ripe well, and when it is gathered, to lay it in the Sunne, that it may drie throughly, and afterward to lay it vp in a place that is not moin, and whereas notwithfanding the Sunne commeth not, for fo it would continue but a while. It is true, that it you mean to fow and fet it afierward, that then you muf not hang it vp in the fmoake, nor fteepe it in falt water, for fuch kind of keeping doth make it barren and not fic to grow anic more.

Garlicke eaten, bringeth a veric vnpleafant friell vnto the mouth : and for the The errime of taking away of the fame, you mutt eat a raw Beane by and by after, or the ribbe Garicheo of a Beet rofted in afhes, or fome. Srmallage or greene Parfley : or which is better, if you loue Garlicke, and hate the ftinking breath that it yeeldeth, then vie vine- The taf of ge: wherein it hath beene fleepēd : or elle caufe the Dithes and Veffels whereon Garticko your meas is to be ferued, to be rubbed therewith : for by this meanes you fhall haue the tafle thereof in your mouth, and yet your breath hall not frmell anie thing ill.

- Garlicke eaten fafting, is the Countrey mans Treacle in the time of the Plague, The Plagum and other dangcrous difeafes, as allo againft all manner of Venime and Poyfon. Is is truc that it cauleth shirft and heat throughout the bodie, and head-ach when it is oft vedi: but all thefe inconueniences will be cafily corrected, if you cate fome Smallage or Parfley prefently after. Verie manie men, but efpecially the people
of Aquitaine, in the beginning of the Spring time, namely, the firft day of May, doe eat cuerie morning Garlicke with frefh butcer: by this meanes they hope to con-
tinue found and ftrong all the yeare.

The biting of a
mad Dogge.
Nits.
Lice.
colicke.
Cough,
yoothach. Garlicke applyed in forme of a Cataplafme vnto the ftingings of Serpents, or biting of a mad Dogye, is a foueraigne medicine againft the fame. A Liniment made of Garlicke, Salt, and Vineger, killech Nits and Lice.
The decoथtion of Garlicke not bruifed, given in Clyfters, or applyed vnto the bellie in manner of a fomentation, afluageth the paine of the Colicke, and expelleth wind.
Againft an old Cough, comming of a cold caufe, it is verie good to rub the foles of the feet, the backe bone, and wrifts of the hands with an Oynement or Linimene made of three Garlicke heads, well powned and beaten in Swines Seame.
Againft the paine of the Teech, comming of a cold caufe, there is nothing better than to hold in the mouch Vineger, or the decoction of Garlicke, or to apply vnto the aking tooth three cloues of Garlicke famped in Vineger. For the wormes. Kiilling of Wormes in children, it is good to giue them to eat Garlicke, with freh Buter, or elfe to make a Cataplafme thereof, to lay vpon the Stomacke. They which can fcarce or hardly make their Water, or are fubiect vnoo the

RenCalions are like vnto Garlicke in taft and fmell, but in ftalke and fathion the leaues refermble Onions, faue onely that out of their head there grow manic hulles or huskes, which bring forth manie round lietle leaues. They thriue and grow better when they be fet than when they be fowne: for when they be fowne, there is no greas hope of their comming to any faireneffe before the fecond yeare. They may be planted from the firlt day of Nouember vnto the monech of Februarie, to haue the fruit thereof the next Spring: and they are planted as Garlicke : But in the meane time you mult gather them before the March Violets doe flower : for if one vfe them not before that they be flowred, they will fall away, and become but fillie ones. They are knowne to be ripe, if their leautes begin to dric away below. For to caufe them to haue great and thicke heads, you muft pur brickes round about their rootes, as hath beene faid of Leekes.
As concerning the vfe of Scalions, there is no great helpe or profit to be hoped healch : for the Scalion feruech for no other thing but to prouoke and firre folke to the act of carnall copulation, and to haue a good appetite. They haue the fame vereues that Garlicke, faue onely that they be fomewhat troublefome to the flomacke becaufe of their more fharpe and fubtle taft.

## Сняp. XXVI.

of Parfley.

(2x)Arfley crauech no great labour, but louech a ftonie and fandie ground, Parfey. for which caufe it is called Parfley: agane, it craueth not anic fore of manure; wherefore it will be good to low it vnder Pirbors. It defirech abouc all things to be well watred: and if it to fall our, as that it be fowne or planted necre vnro anie Fountaine or Riuer, it growech verie faire, and in great quanticie. And if anie be defirous chat it fhouid have large leaues, hee mutt put into a faire Linnen Cloch fo much feed as he can hold in his three fingers, and fo caft it among the fones in the ground: or elfe he mult put in a Goats srostle a quantitie of Parfley feed, and fo fer or fow it. .A.nd he that will haue it curled, muift bruife the feed with a peftle of Willow, to the end that the huske may breake and fall off, and aferward wrap ic in a Linnen Cloth, and fo pur it in the ground. Otherwife, without thus much to doe, it may be made to curle howfocuer it be fowne, if you draw a Rowler vpon it fo foone as it beginneth to grow. It is a good time to fow it from mid May vntill the Sunne be rifen to his higheft point in the Heauens, for it fomewhat craueth the heat. The feed thereof that is bur a yeare old, is nothing worth: for looke how much elder che feed is, by fo much it is the better, and endurech a long time vnfowne: in fuch fort, as that it will norbe needfull to fow or plant it of fue yeares; alchough, when it is fowne, it growerh not vnder the fpace of threcfcore daies. Notwrifflanding, to caufe it to grow, and put more fpeedily out of the earth, it behouech that the feed be fteeped in vineger fome certaine cime, and after fowne in a well toyled ground, and filled or mixed with one halfe of the afhes of Beane falkes : and after it is fowne, it muft be oft watered, and fleighty, with a litele Aqua vitx : and by and by after the watering, to lay aloft it a piece of Cloth, that the heat thereof may not be fpent, and breath away, and by this meanes it will grow vp within a few houres: and then you muft take off the Clorh couering it, and water it oft; and by this meanes it will haue both a high ftalke and great leaues.

A Catap!afme made of the leaues of Parlley, with the crummes of White bread, The verrues of doth heale a Tettar or Ringworme, doth refolue the fwellings of the Breaffs, and Parfey. makech Women that are brought in bed to loofe their Milke. The iuice of Parfley, Deliuerie of drawne out with vineger, and mixt with a litelle falt, helpech Women that are in tra- poemen is bbiin uell to be deliuered. The offen vfe of Parfley takech away the finking of the breath, trawell. efpecially from fuch as haue drunke much Wine, or eaten Garlicke: And cherefore A finking fuch as vfe to keepe companie much, and haule an ill breath, muft uot goe vnproui. breath. ded of good fore of frefh Parfey to chewy or hold in their mouthes. The decoetion of the roots or leaues of Parfley, helpech downe Womens sermes, oroubkech Vrine, To make watrest caftech out Gratell contained in the Vrinarie veffels, takech away the paine of the Colicke and of the Reines, applyed in manner of a fomencation vpon the pained Tbe colicke parts: Ie feruech alfo for the obftructions of the Liuer; but beter for fuch as are Paine of the flegmaticke, than for the cholericke, or thofe that are of fanguine complexion. The reines, leaues of Parfley caft vpon the water of Fifh-ponds, doe recreate and reioyce the ficke and difeafed Fifh.

Cнир. XXVII.<br>Of Rocket and Tarragon.

Rocker.
 Ocket being an hearbe verie vfuall in Salads, and good to temper the coldnefle of Lettuces, may be fowne as well in Winter as in Summer: for it feareth not cold, nor other iniurie of the ayre; neither doth it require anie great labour: it loueth notwithftanding to be wed and ma-

The force of Rocket.
lamndife and bardneffe of the pleene.

Tarragon. nured in a grauellie ground. Rocker muft not be eaten by it telfe, by reafon of the great heat that it maketh in them that eat it; and for that caufe it hath commonly for his companion in Salads the leaues of Lettuce, feeing that the one of thefe doth notably temper the other. It is good notwithflanding to prouoke vrine, applyed in forme of a Cataplafme vpon the fhare bone: And fome fay, that three leaues of Rocket gathered with the left hand, and bruifed in honied water, and taken in drinke, are fouraigne againft the Iaundife, and hardneffe of the Spleenc: Alfo Rocket being boyled and mixed with Sugar, doth take away the Cough in little children.

Tarragon is made of Linfeed prickt in manie places of the head of a red Onion, the ftrongeft and fharpelt that may be found, and put into well manured earth : And after it hath hot vp the height of a foot, or fomewhat more, you muft take the flippes or branches and fer them againe in the fame earth, and water them often.
Tarragon hath the fame force and vertue thar Rocket hath, and is not to be eaten alone, but with Lettuces and fuch like hearbes,

> С н a р. X X V III. of Smallage, Cheruile, Cofmarie, and Auens.
smallage. for euer: and is from it hath not anie great need of being weeded. The good time to fow it, thar Puey that Parfley hath, not to eat, but for Phyficke. It is good alfo for all blew ftroakes, and bloud that is fetled by realon of anie kind of blow. The oyle thereof is likewife good for manie difeafes, and efpecially for the rawnefle that commeth in the throat, if the place that is fore be oft annointed therewith. It is true, that Smallage firreth vp the Falling fickneffe, if we may belecue Plinie; although that Galen, in the curing of the Falling fickneffe, dne preferibe the roots of Smallage and Parfley. I haue tried by experience oftentimes, that the leaues of Smallage, chewed raw, doe prouoke the termes of women.
Cheruile, called in Latine Cerefolium, loueth to be fowne in a ground that is well manured, and in the time of Februarie, March, and Aprill, and fometimes in Augult and September, for to haue it in Winter : and it would be often watered.

The vertues of Cheruile.
cofmarie and Awens. Cheruile dorh ftirre vp the ftomacke, and is verie good to prouoke vrine, and purge the bloud.

Coftmarie and Auens are verie pleafant hearbes to giuc a fauour like Spice in Pottage and Salads: They would be fowne in May and Aprill, and remoued in Nouember. Both of them haue the tafte of Pepper and Cloues, and therefore
cannot
cannot but be good to comfort the ftomacke. Some, to prouoke appetite, make a greene fawce of Sorrell for to eat with meat. Phylicions doe greatly efteeme of the decottion of Cofmarieagainft the Swimming difcafe, Aftoniflments, falling Sicknefle, obffructions of the Lungs, Dropfies, and Iaundife; as allo for the Colicke, Stone, difficultie to make Water, ftaying of the Termes, for quicke-deliuerie in Child-birth, and to bring downe the after-birth.

## Chap. XXIX. Of Afparagus.

He hearbe Afparagus doth grow bigge in a fat and fpongie ground that is free from flones, well dreffed, plaine, and fmooth, demanding no helpe of watering, except a lietle in Autunne. Some fow them in the Spring at the new of the Moone: but it is better to fet the rootes, which fpread and encreafe better and fooner than the feeds: whether they be fowne of feedes, or fet of rootes, it mult be done in furrowes three ynches deepe, and a fathome oucr on euerie fide, flanding one from another a good long foot : pur into euerie furrow two or three feeds, eucrie onc off from anocher fome nine ynches, about fortie dales after the feeds doe gather together, and ioyne one with another, becomming one: after you haue fet them thus low, you muft caft vpon them the third pare of the earth shat you haue taken out of the furrowes, which muft be fifted, before you pur it there, with an yron Sieue, that fo the Sunne may pierce the deeper, and draw the Alpàagus vnto it: after this, you muft weed them oft, and helpe them in October with fome well rotted manure of Horfe, Sheepe, or Birds, or, which is better, with the filth and ordure of Sinkes and Priuies, and the duft which fallecth out of Wooll when it is beaten: and againe, vpon this the feeds and droffe of the Vine-preffe and Grapes. You muft renew their ground oftentimes in Februarie, and caft new dung vpon it : you muft doe the like allo the fecond yeare in Februar : cor March, and likewife euerie yeare in October. It is true that they mult be remourd the fecond or third yeare, and neuer to cur them vnill the third yeare, and then in the monech ot May. In ftead of remouing them, it were better to vncouer their roots, and to take away thofe that are fuperfluous, for to fet in fome other place, and then to purge them of withered and rotten or corrupied branches, (in as much as Afparagus would neuer be remoued out of their place, exceprit be "when they grow too thicke together:) For doing fo" wwo or three yeares one after another, it will fall our, that all the intangled and folded one within another will be taken away ; and then you may prune and trimpe thofe which you leaue flanding, which you muft souer from foot to foot, or from root to root, with well feafoned manure, being rotted and mixed with as much fiffed mould, fifting moreoucr the fame which was aboue before, and putting it into his old place from whence 12 , was taken, and in fuch manner as it was found there. Howfoeuer it be, the yeare after they be planited there may well be taken from them fome one of theis Ralkes, and the ocher let fland to feed. The ftalke fo taken away, muif be cut away, not plucke away, for feare of doing hiurt to the root. For to haue Afparagus to grow The way so faire and aboundantly, you muft couer the earth of the trenches with beafts hornes; bawe god fore or elfe fow in the furrowes where you fiall fet them, the powder of the hornes of of $\mathcal{A}$ Bargem Weathers, or wild Rammes, or fome others, and afterward you fhall water them. And this is the caufe that makech them grow naturally in the Medowes. Others there are which fyy (though it be a wonderfuli thing) that there mult nothing be man grow of cionc to the hornes, but onely bored through, and ro hide them in good ground, and Sbecpes borns. that of them will breed and grow Afparagus. And to caufe Alparagus to fprout and bring foorth often, you muft rake and weed and digge abour them often,

[^2]opening
opening their roots, after that you haue gathered the fruit, and ftraw vpon them the powder of bealts hornes : for the plant being thus handled, will beare his fruit otherwife.

The versues of Afarcigus.

Afparagus is a delicare fruit, and wholefome for euerie bodie, and efpecially when it is thicke, tender, fweet, and not verie much boyled: it giueth a good fomacke vnto the ficke, if it be vfed before meat : it prouoketh vrine: it openeth the obftructions of the reines and the liuer. The root thereof applyed to the tooth-ach, afluageth the paine: being drie, and thruft into the teeth, it rooterh them out : put into a decoction, and drunke oftentimes, it breaketh the fone, it maketh a good colour in the face, and a fweet fmell in all the bodic, excepted onely that it maketh the vrine ftrong and Itinking.

Снар. XXX.

## of Garden and Water-Creffes.

Garden water.
Crefes.
 Arden-Creffes, fo called becaufe they grow at all times, and are of great nourifhment, as allo Water-Crefles, doe loue moint places, and the little Brookes rifing from Springs and other little Riuers: wherefore they aske no other labour in Gardens, but to be planted neere to Lettuces, that they may grow well, and to be watered euerie day, hauing water aluaies at their foot.
Both of them are verie good in Salads of Lettuce, and haue great force againft the Stone and difficultie of Vrine : And furthermore, Crefles of the Garden, made in a Cataplafme, doth relolue Carbuncles, the Sciatica, Cat-haires, and all other forts of Inpoftumes ; efpecially if it be mixed with Leauen, it killeth the Wormes. The iuice thereaf, drunke with the juice of Mints and Wine, doth the like. The iuice of Water-Creffes dropped into the eare, doth heale the paine of the teeth, coniming of a cold caufe. The feed of Creftes chewed and held in the mouth, is good againft the palfie of the Tongue. In the palfies of other parts, there muft be applyed vnto the faid parts bagges full of the feed of the faid Creffes, hauing boyled it firft in Wine. The fame remedie is good alio for the Colicke.

Water-Creffes in a fomentation comfort a cold fonacke, prouoke the termes, mundifie and cleanfe the mother, and prepare it to conceiue. They diffolue the colicke of the mother, if you frie them with Mugwort vpon a hot fire-panne, fprinkling them with red wine, and applying them vnto the bellie. They are verie fingular againft the paines of the mother after Child-birth, if with the flowers of Camomill, and the leaues of Mugwort, all chopped fmall and incorporated with foure yolkes of egges, you frie them all in a frying-panne with the oyle of Lile lies, and applie it hot vnto the bellie and nauell. The iuice thereof rubbed about the cods, flayeth the flux of the feed in the night time. A Cataplatme made of the leaucs of Water-Creffes, of the leaues and rootes of Turneps, and of the rootes of Parfley, all chopped fmall, and fried with pure wine and butter, and applyed vnto the ftomacke and the groine, caufeth the vrine that hath beene long kept, to paffe way and auoid.

## Сияр. XXXI.

of Saffron.

57xSconcerning Saffron (as fhall be faid hereafier) it louech an indifferenit foyle, not ftrong, nor dunged, bur yee well eared, lying vpon the Sunne, and well digged : and it commeth verie well in the place where Onions haue growne. It loueth not water, and flandeth in awe of the Moule and Mice: It groweth better, the head being fer, than the feed being fowne: for indeed it is not vled to be fowne, bur the heads of it onely to be let, as the heads of Lillics, Leekes, or Sea Oaions are. They are planted and fer by ridges in Aprill and May. The heads are let ripen on heapes in the fhadow of the Sunne, Iome eight daies before they be fee a and this muft be in fuch a place as is not moift. They are fet in a well-digged earth with their roots, and a good diflance one from another, as namely, about halfe a fpanne, and chree ynches deepe. It growerh the better, if if be a little foored vpon. It flowreth euerie yeare in Autumne, for one whole moneth together, and then leeteth the flower fall: bur it keepech his leaues greene all Winter long vnto the Spring, and then it beginnech to wither, and nakcih no thew at all in Summer. Ie may continue good, being fet and planted, for nine yeares: and ther if it be remotied into fome other place, it will be able to doe furcher grod. It is true that it (pringech forth manie cloues and kernels, which mun be taken away eueric three yeare, or elfe the root would be choaked and fmothered. Somia doe ict it (as being the befl time) from after mid Auguf vnoo mid September, and caft at the roots of it the droffe of Grapes as it commeth from the Preffe, and leaue it in the
$\qquad$ earth two or threc yeares: and euerie ycare, in Aprill and May, the dried part of the hearbe is tyed vp and troden irto the earth fonic two ynches deepe, without hurting of the root: and after you liave cleanfed the graffie part and leaues thereof, and thas the flower fhall be tipe, as in Auguft, and toward Autumne, it hall be gathered in the morning at Sunne-rife, and referued in a clofe and drie place. Furchermore, the Saffron is knowne to be good, if it be fat: if bring holden in your hand, it make a noyle : and if being put into anie liquor, it diflolue: it being hondled and held vp to che face, it procure a certaine kind of biting or pricking vnto the ejes: if it be of a golden colour: it it dye the hand with his colour, and haue fomewhat a tharpe finell and pricking: and it it be not brutele and verie readic so breake.

Suffron taken in a verie frmall quantitie, is good for the weakencffe of the flomacke, and fainting of the heart: ic keepech from being drunke, and healeth ihe bitings of Serpents and Spiders: if ir be taken inwardly, or applyed outwardly, in great quantitie, it procurech fwinming and paine in the head, and bringech a foggis mift ouer the cyes.

## Снар. XXXII.

## Of Nauets great and fmall.

 Apes and Nauets (called of the Latines Napi) are two diuers forts of one kind, bur notwithflanding, differing in tafte, colour, and greatneffe: for the Napes are greater and drawing toward a yellow colour, lefle pieafing the tafte: Nauets are leffe, whire, and a great deale more fauorie: borh of them are fowne atter one fafhion in a well-digged ground, and withall well enriched, and made verie good, that fo they may gee downe a good way, and
worke chemfelues deepe into the ground, or elfe in a ground which is intended to be made fertue, or vpon Stubbles which haue beene newly plowed, or betwixt Miller and Pannicke : The feed is vfed to be mingled with earth broken into fmall powder, that fo it may fow the more clearely, not falling manie together: it muft not be abouc three yeares old; for if it be elder, it bringeth forth Coleworts. And if the feed have beene fteeped and moiftened in milke or fweet wine, or honied water, two or three daies before it be fowne, it will be verie much the better. And if they come vp too thicke, there is fome part of them to be taken vp and fer in orher places. They muft be well wed and digged, and the faireft and greatelt kept to haue the feed of them: They are fowne in Augult: When you goe about to low them, you muft looke that the earth haue beene newly watered with raine, for fo they will grow better. And aboue all things it mult be looked vnto, that they be not fowne in a fladowed ground, for the flaade is altogether contrarie unto them, though the earth be good

The gathering and keeping of Napes.

The vertues of Napes. and fertile. They are gathered in Nouember, \& kept in Winter vpon fand in roomes vnder the earth, for to eat in Winter and Lent time. I report my felfe unto them of Meafon and Vau-Girard neere vnto Paris, which gather great flore of them euerie yeare to fell at Paris.
This fruit is windie, and begettech wormes in young children by their fweetneffe, but they muft be eaten with Muftard. It is true that their feed doth refift venime, and there it is put into Treacle : it likewife killeth the Wormes, being mingled with the inice of Oranges or Limons : and it driueth forth the fmall Pocks and Meafels with the decoction of Maiden-haire or of Lentils. It prouoketh vrine mixt in equall quantitie with Linfeed, and giuen to drinke in wine : it bringeth vp the crudities of the ftomackoby vomit, being taken with honied vineger and warme water. The Egyptrans make a veric good Oyle of it.

## Chap. XXXIII.

## Of Turneps.

 Vrneps(called in Latine Rapa) are of two forts, the round and the long; and they differ not much from Napes and Nauets, faue onely in grearneffe and taft : For Turneps are a great deale bigger, and of a more pleafant tafte, than the Napes: for the truth whereof, I rcport my felfe to the inhabitants of Limofin in Aquitaine, and the people of Sauoy, who hauing no fore of Corne, haue no more excellent a meat than Turneps: and for the fame caufe they are fo induftrious in fowing and dreffing of them, as being that commoditie and encreafe of the earth vnto them, which is as well, yea better beloued, and more neceffarie, than anie Corne or Graine : for they feed themfelues and their Cattell with the leaues, great and fmall ftalkes, tops and roots of Turneps; infomuch, as that they complaine of a Famine, when in their Countrey their Turneps are frozen in the ground, or have receiued fome ouerthrow by the iniurie of the heauens,

The manner of ordering and dreffing of them to make them grow, is (as itwere) like vnro that of the Napes. Ir is true, that they would be fowne verie thicke, and not thinue, for elfe they will proue but veriefmall and little, and it would be rather in September than at anie other time, in a moift ground, well manured, and diligently corrected of fuch faults as it may haue, becaufe they reioyce and proue a great deale the fairer, and of a better taft, in cold, fnowie, and foggie weather, than they doe in faire : which is the onely caufe that in the Countrey of Savoy and Limo fin they doe grow more fweet, tender, faire, and great, becaule of the Fogs, Snowes, and cold Seafons that they fuffer much in thole places. If they be fowne in the Spring time, there mult care be had, that their leaues be not eaten with wormes
and fuch other vermine : and the better to free them from this plague, it will be good to mingle of the duft that is to be found vpon floores with the feed fome day before it be fowen, or elfe of the foot of the furnace or chimney : or elfe to fleepe it in the juice of houllecke, and afterward to fprinkle it ouer well with water, that fo it may receive fome moifture : and then tofow it the day after it hath beene fo fteeped.
It is one of the wonders of nature, that of formall a feed chere fiould grow fo great Turn'p feed is a fruit, as fhould fonmetime weigh thirtie or forcic pound. There muft 'pecial care be had that the feed be not aboue three yeares old: for if it be it will bring forth coleworts in feed of turneps. To haue them faire and great, after they become onsefo great as a finger, they nuff be remoued a good diftance one from another: aferward they mult be coucred with earth, and troden downe verie hard : for by this courfe He Tle hepeping turne to the making of the roor great. They muft be gathered in Nouember, and for to keepe them all the Winter, they mult be buried in holes, or couered with leaues, or feed of Muffard.
The vfe of turneps is not verie good for health, notwithflanding their decoction The vertues of is verie excellent good for to wafh the feet of fuch as haue the gout withall. The Cut- turraeps. lers and Armorers doe conftantly affirme, that kniues, daggers, and fwords, quenched three or foure times, when they are in forging, in the juite of turneps, mixt with equall quantitie of the water or juice preffed out of earth wormes bruifed, doth make their edgefo hard, as that therewith you may cut yron as eafily as any Lead.

Chap. XXXIIII.

## of Radifbes.

(ar)Adifhes areproperly the fame which is called in Lacine Raphanus, in Redjfbeso Italie Raunacls, and at Paris Raues, they are vfed in manner of a falade with meat for to firre vp the appecite. They grow better when they are planted, than when they are fowen, and there are two feafons to fet or Tow them in, that is to fay', in Februarie in the waine of the Moone, if we intend to haue ehe benefic of them in the Spring: and in Auguf or September, 'it we would vfe them fooner: and this feafon withour doubt is the better, beraufe the Radifh in a cold and moift cime growech in the root, and is more tender, but in a hot and drie time it groweth in falkes and leaues. So foone as they are fowne they take root, the leaues whereof you muft tread and trample downe, that fo the roor may grow the greater, which otherwife would runne vp all into leaues : likewife they mult be gatherrd within two or three moneths (otherwife they wil quickly go to feed) and put thern in the ground vnder fand or grauell after you haue cut off their leaves. The manner of ordring of them is to fer them good and deepe in earch which is well hufbanded, ftirred vp euen from the bottome and dunged, and after they be pretty great ones, to couler them againe with earth, and to take iff their leaues from them, for fo they will become more fweet and pleafant. You mult not plant or fow them about vines or arbours : for they are great enemies vnto vines, as making them to run oue their juice, when they are neighbours to it, by reafon of their acrimonie and fnarpeneffe. Some likewife fay, that radifhes doe keepe away drunkenneffe, becaure they greatly weaken the force of Wine. To haue fweet radifhes, their feed muft be watered oftentimes with falt water, to haue them the more tender, and nor fo fharpe : for the falt water dorh greatly diminifh their bitterneffe : likewife we ordinarily fee that they are eaten with falt and vinegar. Their goodneffe is knowne by their leaues, which by how much they are the gentler in handling, by fo much is the roor the tenderer and more pleafant to ear. The rinde doth likewile fhew the fame: for the thinner it is, fo much the more delightfome are the radifhes.

Phyfitio

Phyfirians dec hold，that among other difommodities，the radifh is an enemie vna to the reeth ：and they make hard and fonie places in the mouthes of fuch as vfe them ：but chis inconuenience may be amended，if prefently afrer you cat fome cer－ taine flips of Hyflope or Thyme，or Organie ：or it they be eaten with oyle：and a－ gaine，in Itead of this one difcommoditie，they bring a thoufand profits for the health of mankind．The roots of radifhes being new，chope fmall，and fprinkled with white wine that is neat and warmed in a frying－panne，and applied vno the ftomach，cau－ feth a man to pifle aboundantly the water which he could not auoid of a long time： the juice of the fame root drunke to the quantity of two ounces with Malnefley，wor－ keth the like effect ：take an ounce of the rindes of radifhes，as much of the leanes of Mercurie，foure graines of faffron，one dram of fweer Caflia，and two drams of the juice offauin，poune them all together in a mortar，and put shem in a linnen cloth，

Tramell of child birth．

The ill taße
ol Wine． Spots．

## Grauelland

 she fione．stere of mila解 Nurfss． which being put vp into the matrix is a fingular remedie so helpe them that trauell of child－birth．The juice of the root of radifhes，mixt with oyle of fweet or bitter al－ monds，a little white wine，and a little coloquintida，all heated at the fire and ftrained， and afterward dropt into the eares，doth take away the windinefle and noife of the eares ：being drunke with honied water，it cureth the jaundife．The leaues boyled in portage inftead of coleworts，do take away the c bftructions of the liucr \＆fpleene． Theirfeed bruifed and ftrayned with white Wine，is foveraigne againft all ferts of poyfons and other dangerous difeafes．The roots caten fafting do prefenue and keepe a man from venime and poyion．Some hold it for a certaine cruth，that curneps ficept inftinking and ill－fauouring wine，doth take away altogecher the ill taft thereof． They wipe away the foots of the face，heale the places of the bodie raced with the twigs of rods，and couer the places with haire which are bare and fhould nor．Blit a－ boue all the reft，there is no more certaine a remedic for the griefe of the reines，the fone，grauell，or difficultie to make water，than so drinke enening and morning go－ ing intu bed，or comming our of it，a fmall draught of white Wine warme，wherein haue beene fleeped the pace of cight houres，the rindes of radifhes，with the fourth part of the kernels of medlars made in powder．For the fame matter there may be prouided a Wine to vfe a long time，wherein hath beene infufed a certaine time the powder of the rooss of radifh dried．I cannot forger to fee downe，that the often v－ fing of radilhes bringeth vnto nurfes great flore of milke．And that water how fin－ king foever it be，wherein radifhes haue beene boyled，will become better，and thae they may not be eaten in the later end but at the beginning of meat，whatfocuer ie pleafeth Dio／corides to fay，that fo they nay goe prefently out of the ftomach，and no． thing hinder the digeftion of the reft of the meat．

## Снар。 $\mathrm{XXXV}_{\text {。 }}$

Of Parfneps，Mypes，Carrets，and Skirworts．

Parfineps． Mypes． Carrets． Skirmots： dric，once a weeke，fo long as till they be well fprung vp．They are fit alfo after ene and the farne fafhion：The time to fow or plant thim，is in Autume，and inthe Spring：but Autumne is the better，that fo you may have thim in Lent cime．He that defireth to haue their roots great，faire，and thicke，muft often plucke away their leaues：they muft be gathered halfe a yeare after they be fowen，and then their leaues taken from them，and they kepevnder fandie grauell，efpecially in Winter：for froft caufeth them to corrupt．

Parfneps

naíiiceps may be kept a whole yeare or two in the earth, fo as that one may know by the falling of the flowers, both the old and the new, and which are good in Wınter and Lent, whether they be fried or otherwife.
All of them haue vertue to expell vrine, to affwage the paine of the colicke, and to The vertues. prouoke womens termes : their leanes ftamped and layed vpon wounds which happen in the legges, are verie profitable for them.

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\begin{aligned}
& \text { Снар. XXXVI. } \\
& \text { Of } M M_{j} \text { Tard and Poppic. }
\end{aligned}
$$

 EnciicorMuflard delightech in a fat ground, and is fowen with moulds, The coodnefla before and after Winter, and it mult be often weeded and watered, but it would not be fowen too thicke : for it fpreadeth very eafily, infomuch as it is hard to deftroy it where it hath beene once fowen: the feed will keepe fiue yeare, but the newer that it is, fo much the better it is, either to fow or eat. It is difcerned to be good, when being broken or crackt with the teeth, it appeareth greene within, but not white : for and if it be white, it is old and not worth any thing, either to fow or ear. That which is intended to be kept to eat, fhall be good to be remoued when it is growing : for fo it will yeeld a greater and fairer top: but that which is intended to vef for feed, mult not be remoued or haue his place and habication changed.

Thefeed of Muftard chawed, and holden vnder the tongue, is of great force againlt the palfey of the tongue, as alío againft all other manner of palfey, if ypon the grieued part there be applied a bagge full of the faid feed, hauing beene fult boyled in Wine. The powder thereof calt into the nofthrils cauieth neefing, and purgech the braine from fuperfluities. The decoetion of Senuie or Muftard doth aflwage the tooth-ach comming of a cold caufe, and being drunke breaketh the fone, and provoketh the termes of women. It keepeth the haire cleane, and from falling. The oyle of Muftard is foueraigne againt the ach of the hips, and weakneffe of the finews. Muftard-feed brayed and put into fweet wine, preferueth the fame in his fweetneffe, fo that it fhal not loofe it, the reafon is, becaufe it kecpeth it from taking of a heat : the fame made in powder and mixt with vinegar, doth heale the ftingings offerpents and fcorpions : being drunke, it ouercommeth the venime of Mufhromes that hatie beene eaten: mingled with the vrine of a young child, and rubbed vpon the bellies of fuch as haue the droplie, it caufeth them to auoid water: if you temper it with water, and rubbe your hand or any other part that hath need to be made cleane therewith : you fhall perceine the benefir thereof. The white poppie, which is fometimes vfed in pettage and clenfed barly, tartes, and other contections for to quench the thirft, prouokefleepe, and coole the great heat of a gues, neuer groweth of his cld root, but will be fowen everie yeare in September, in hot and drie countries: and in other places from Ianuarie vnill March, and it is fowen commonly with coleworts. It profperech beft when it is fowen in places where the crops of vines haue beene burned. I haue feene at Vandeuer, a fmall village in Burgundie, young children and other folke te ear the feed of white poppie,for lickorifhnes, without being any thing moued to heauinefle of fleepe, but inade more ftirring and liuely, which hath made me to chinke that the feed of Poppie is norfo much to be feared, as fome would beare in hand.

Chap.

## Chap. XXXVII。

## Of Cucumbers.

(20)Vcumbers are fowen vpon a bed, in the moneth of March : and for feare of frof they are couered with fraw vncill mid-May, which is the rime when they would be remoued vnoo fuch ground as is well manured and thicke layed with dung, fat, and foft, to the end they may be fuffered to creepe and ripen vpon the ground : or elfe vpon beds, filled with fat and well manured earch, being a foot high. For to fow them there mult be planted foure or fiue feeds, theone from the ocher fome two foot, they muf not be weeded at all, becaufe they thriue che better when they be ourr-growne with weeds. Notwihhtanding in Spaine they wfe to weed them as carefully as they can, as aifo lighten and raife their earth, and there grow verie faire Cucumbers thereupon. It is good to water them off, vntill they put forth their buds, and bring forth fruit, yea and after alfo, if the time fall out fomewhat drie : for the Cucumber of his owne nature doch loue moifture, infomurh as if there be fet a veffell full of water vnder a Cucumber, it will be found the next day to be fhrunke three fingers, and it muft be prouided that the water goe direClly downe vnto the root of the Cucumber, withour touching the fruit, becaule oherwife it would make it worle. It is irue, that when it beginneth to ripen, the raine, and eueric ocher manner of watering is encmie vnto it, for chereby it becommech but more withered, without any taft, and altogecher difconcenting. It fearech the thunder and lightning, and for that caufe you muft nor plant them in any fuch time, neicher yet hope for any great increafe thercof, in fuch yeares, as wherein fuch formes and tempefts fall out : for thereupon they wither and fall quite away to nothing. If man defire to haue them faire ones, he muft gather them in the full of the Moone,for at chis time they grow bigge,and at ocher times they fade Oile ent enemie and yrow leffe. Furthermore, there may not come necre vnto their bed, any veffell he which doch till them, haue handled oyle.

The vertues of the cusumber.'

The vfe of Cucumbers is altogether hurffull, becaufe the nourifhment and juice comming of them is eafily corrupted in the veines, whereupon there grow in our bodies Burning-Agues, and fuch as are verie hard to cure : wherefore it is better to appoint them for meat for Mules and Affes, to which kind of beafts this fruit is veriepleafant and profitable, than to ordaine them for mens food and fuftenance. It is verie true that their feed boyled with Barley-water doth prowoke vrine, affwage the heat of the reines, and alfo diminifh the heat and thirft that is in Agues. A decoction made with the feed of Cucumbers, Winter-Cherries, Mallowes, and the feeds of vvhite Poppie, adding thereto the juice of Licorice, a little Mummia, Gum-arabecke, and Tragacanth, is a fingular remedie for them which are in confumptions, which cough continually, and haue their vrine burning them. Some likewife fay, that a Cucumber placed long-wife, neere vnto a child which hath an Ague, being of the fame greatneffe that the child is, doth deliuer it alogether from the Ague.

## Cняр. XXXVIII.

## Of Gourdes.

货 (2)Ourdes doe craue the like earth, and ordering, or tillage that Cucum- Gourides: bers doc, forefeene that they haue the Sunne at commaund : itis strue, that they muft be fowne with greater diffances, and in fuch fore as they may climbe flakes, heapes of flone, and arbours, thereby to giue fome pleafure in the beholding of the fruit hanging, rather than che lying vpon beds: for they delight not fo much in creeping vpon the earch as the Cucumber doth, but rather to climbeon high.
Before you fet them, you mult ftecpe their feeds one night in water, that fo you The goodnefe may learne to make the better choice of them, and to know which are good. And in of the feed that refpeet it will be good to take thofe which finke downe to the botrome, and let alonethofe which fhall fwim vpon the top ofthe water, as being vnprofitable and worth nothing to fow. The feeds fhall be pur into the earth two together, the fharpe end vpward, in holes wide and deepe, to the quancitie of two foot, and three or foure foot eueric one from another, filled with old dung, that is verie fmall : or elfe to make them fpring out of the earth the fooner, with horfe dung as it commeth all hot from the fajle: for other matters they crave nu great attendance, prouided that they be ferued with water to their contentment: and yet thofe which are leaft warered, will haue the noft pleafant fauour and taft : wherefore if they be fowne in a drie ground, you muft fet hard by them, pots of water with liffs of cloth or fraw bang. ing at them, which will be continually dropping of water vpon them, which thing will be great aduantage to them during the great heat'. It is certaine that the goodneffe and faireneffe of Gourds dorh confift altogether in the good choice and well fetting of the feed: for rhe feeds which are next to the ntcke of the gourd, doe bring forth long ones, thole which are in the middeft, round ones: and thole which are by the fides, fhort and thicke ones : in which confideration if you would haue groffe and thicke gourds, which may ferue to make veffells and bottles of, when they fhall be drie, you muft take the feed that is in the middeft of the gourd, and fet it with the head downward : but when you defire to haue them to fell and to ear, you muft take of the feed next vnto the necke, and fee them after the right and common manner: for fo the fruit will grow long, and more tender, and of a greater price. The gourds intended to gather feed of for tofow, mult not be gathered before Winter:and when they are gathered, they muff be put in the Sun to drie, or elfe hung vp iut the fmoake, or elfe hung (as che manner is in France) vnder fome chamber-floore, or elfe fee them in rows voon boards, for ocherwife the feeds would rot : or elfe to put them in heaps of corne, which will not onely keepe them from rotting, but will alfo ripen them if they be gathered being yet vnripe : but thofe which are intended to be eaten, muft be gathered at their due eime when as they be ripe.
The vie of Gourds is not fo dang crous as thofe of Cucumbers: fo that their ware- The vertus ef rifhneffe be tempered with things mieet and fif for the fame, as with faffron, pepper, Gourdes and other fuch aromaticall powders: and for the difh, thofe which are long and white are better, and to be preferred before either of the other two forts. Phyfitians are of opinion, that there is nothing better to affwage the heat of hot burning agues, to take away the thirft, and to loolen the bellie, then to vee oftentimes the ftrayned juice of Gourdsftewed withourt liquor, in a new earthen por, fet in an ouen. There is nothing better for the drineffe of the tongue, for fharpe and burning humours, and for leane agueifh perfons, than the vfe of the pulpe of Gourds, or the Syrope made of their juice.

## Cняp. XXXIX.

## Of Melons and Pompions.

OMelons and. pompions.

4Elons and Pompions doe not fo eafily grow in this Countrey, becaufe they delight in a Countrey and Ayre that is hot : but by force of labour, and cunning skill, they are drawne vnto it, by ordering their beds, and remouing of them, where they may be fhielded from the Cold, and receiue the benefit of the South Sunne,and reflexe of the heat of the fame from fome wall. And againe, it is a fpeciall furtherance and helping of them forward, to fore.caft, that they may grow in fuch feafons as are verie hot: for now and then Summer fallech out to variable, and mixt with cold or drought, or moifture, as that thereupon thcy be not ripe till Autumne, and towards the cime of Vintage. Wherefore it flandech you vpon to haften them and helpe them forward with dung, and with the heat of their beds; though this courfe, in the meane time, fland not fo well with the healch of the parties that fhall eat them, or with the goodnefle and pleafant fmell of the Pempions: and thereupon it commeth, that there are noe grounds planted with Crefles than with Melons amongft vs. Wherefore it were better to referue for fuch vfe a quarter of ground, or thereabouts, in fome place of your Garden where the South Sunne lyeth, and is beaten backe by fome wall, the fame alfo keeping away the North wind, hauing tio fhadow eicher of Trees, or of anie ocher thing, to keepe backe the Sunne from it, but being withall a good, fat, and fubftantiall ground, well weeded, well tilled, and the greene fwarth well broken, ard withall made verie leucll and euen. And this your quarter would be againe diuided into foure fmall quarters: and to fer your Melon feeds which you intend to plant that yeare but in one of the fald litetc quarters, letting the other three reft, and fo fucciffucly, in fucceeding yeares, to fow the faid lietle quarcers one after another : for then the Melons will grow in their naturall goodnefle and perfection; it berng their nature to crave a new, refled, and well manured ground. And if it be requifie to helpe fuch ground with fome fweernefle; you mult burne vpon it in Winter fome Straw, or drie Dung, or Fome Elder tree amongft other wood, and mixe the a hhes wich the earth, to the end, that during the time of Winter it may grow in feafon. And it the faid ground haue need of more helpe, it mult be dunged with Shecpes dung, or elfe with Goats dung well rotted ; and this to be done a long time before you intend to fow your Melon feed: for as for Horfe or Cow dung, it mult not be vfed, except it be when no other thing can be gotten; and when it is vfed, it muft be fpread and mixt with the earth long before Seed-time, as hath beene faid : whereby wee may iudge, how vnfis the beds, now adaics vfed, are for to yeeld good Melons: and they that would have them grow vpon beds, as leffe damnifying, muft make their beds in the faid place of the Garden, compaffed abour and hemmed in with a Mat : and vpon the bed mult be caft a layer of the beft and fatteft earth that you can find, or of earth the thickneffe of three fingers, and in this earth to fet your feeds; for the Melon will not be fo much fpotred with the dung, when there is a mixture of the one and the orher; You mult take che feed of the Melon, which hath a thicke and hard huske, and looking verie greene within, which is of the firt growne, and of thofe which grow neereft vnto the root, which you fhall haue referued in your Melon plot, vntill the full ripeneffe therenf, that fo you might haue others grow of it; for the feed is better when it is new taken out of the Melon, hauing beene all that while,from the gathering time, kept in the bodie and fubftance thereof. And if you would haue it to grow verie quickly, fleepe it in warme water fixe or feuen houres: afterward, about the ennch day of March, make your pits ypon your beds, fome three or foure foot one trom another, and two foot in depth and wideneffe : and if you may make your choicc of dung, then fill them vp with Sheepe or Guats dung that is old, well rotted,
and crumbly, and with veric fine blacke earth together, and herewith to fill them vp withun two fingers. Some put therein the dung of horfes comming hot from the ftable, to make them purforth the fooner, but the fauour and goodnefle of the Mclon is greatly hindered chereby: and thereupon pricke fix or ten feeds of your pompions, the fharpe end downeward (although lome put not in aboue foure or flue) and coure them againe gencly without much beating or treading of the earth downe vpon them. Afterward, for to anoid daunger of frofts, couer them with flaw or. mars borne vp with flickes prickt vp one way : or if you haue the benefit ef great boards, or tables of buards, borne vp with fones or rubbinh by the way, that fo they may not prefle vpon them, and that fo you may take them vp when the Sunne fhineth hor, and lay then do wine againe when the cold wind blowech and when frofts come. And as loone eas the Mclons fhall haue put forth leaues bigge ynough, you mulf water them with a fhred of cloch hanging continually in a pot of water, withours wetting of the Melon any whit at all, and chis watering mult be continued in a verie drie ground, though you haue remoued your Meions, till the fruit become of the bigneffeof Uranges : and if you vfe beds, you fhall remoue them after mid-May in this councrie, our of the danger of frofts, about fiue or fixe foot one from anocher, vpon a border well cilled and manured. And from that time forward, you fhall weed our duligently all the weeds from about them, and Thall lighten their earch at the trunk ot the root, without doing any hurr to it : and when the flower fhall peepe our, you muft cut off the ends ot the armes of the hearbe, to the end that the flower and the fruit may come forth in greater flore \& aboundance. And for your better choice of the faid feed, take that which is of the Melons firt put forth (as I haue alreadie faid) if fo be that your melon plot doe bring forth the fruit fomewhat late, for otherwife it will be sood to take them that come torth laft a as allo that which growerh betwixt the middle and head, or crowne of the melon, and out of it, not chat which is on that fide whereupon the. Melon lieth, the beff feeded, and moff rifing from the earth, beng heauie andd full; and you may nake triall of it in water, becaufe that fuch feed will finke downe to the botrome : and it muft net be abouc one yeare old, for if it be, it foone growech ficke, and caffech his fruit in vntimely fort.
Pompions and Melons mufl be gathered in the morning before Sunne rife, and The eatherings they muft be gathered when as they begin to caft their tail.c,and yeeld a pleafant fmel of opeconso at their ends, and then you muf beware of and looke to Cats that goe a catererwauling: and if you would carrie or fend them farre, you muft gather them a litte before they be ripe, and with che hand onely withour any edge-toole, for they will come to their juf and perfeat ripeneffe by this courfe, which the cutcing with an yron would keepe chen from :cliere mult notwiffanding care be had that thofe which ərecalled Wineer Pompions, be neuler fuffered to ripen vpon their beds, but for to ripen them they muft be gathered and hung vp vnder the floore of fome higher roome, and when they are once curned yellow to eat them.
Furchermore, that I may fay fomething of their goodneffe, vou muft vnderftand The godnefe. thatethere are diuers forts of Pompions, for there are fome temale, and are called of oxelons. pompionecs, and they are more long than the other, and hane not their wrinkles ftanding vp fo high : the other be more thick \&e greater bellied, and haue the ir wrinkles more high and fretched out from the taile vnto the eye. Some of them are called Turquins, as shofe which have a verie greene colour, and drawing fomewhatoward a blacke: Fome other of them haue the Thape ofa Quince, and they are properly called Melons, and haue a more faft and folide flefh than the pompions haue, which Jikevile haue not fo many wrinkles in their fides, nor fo much moiflure in their nollow parts, neither yet are they fo thicke, but haue a whitifh flefh, and a grear deale more feed than the pompions. The ocher fort nay be called citruls, as haung the faShion and cclour ofa cirron, and their leaues diuer fly drawne with many fmall lines, like vnro the feathers or wings of birds. The echer are Winter pompions, and thefe are not fo thick or great as she common pompions: and yeef furthermore the one hath a white mear, and the other a yellow, whereupon the firf doe craue more water than
the later, and the later are better in a frange Countrie. But the Melons are beft of all, Oushomeloys, as alfo the blacke coated Pompion, and the Muske Melon, which become fo by hauing their feed fteeped in water that is well fweetned with fugar or honie. The fizne of a good Melon is the bitterneffc of the taile, the hardnefle of the crowne, the heauineffe and good fmell of the whole.

The vertues of getoms.

## Melons caule

 Bifh 10 fecth.As concerning their $\forall \mathrm{fe}$, they are fomewhat more delicate and pleafant than Cu cur bers, fo that they haue a faft mear, and their hollownefle drie: tor orherwife chey arefitter to make meat for Cats that goe a cauterwauling, or for Mules and Aifes to make them fat, than for to feed men withall: notwithftanding this is a thing wel and fufficiently proued, that a flice of a melon or pompion pur in a por with flefl, caufeth itto boyle the fooner. Phyfitians likewife giue it out for a truth, that the feed as well ofmelons as of Pompions, couered with fugar or without fugar, is a foueraigne remedie to prouoke vrine, to aflwage the heat of the reines, and to breake the flone.

> Снар. XL.
> Of certaine /peciallobferuations for and about Cacumbers, Citrous, Gourds, Curelons, arid fach
> like frusts.

Pompions,
Gourdr, avd
cucumbers witbous seed.
 F the border whereonyou fee your Melons be not fo fat nor well dunged as that of the Cucumber and Gourd, and if it be not watered fo foone as it is put forth and fprung, it becommeth the fafter meat, and more fauo. rie, and fooner ripe.
To caule Pompions, Cucumbers, and Gourds to grow without feed, you muft fteepe your feeds in the oile of Sefamum, otherwife called Turkie millet, three dayes before you fow them.
To hatue Cucumbers offuch forme and faflion as one would wifh, they muft be put whiles they be yet young and fimall, together with their ftalke, into veffells or bottles that haue fome figure or thape drawne withinthem, and tie them abour them, for in time they will fil vp the draughts and prints within the fame : likewife to make them long ${ }^{\text {you mult put their flowers into reeds, throughly emptied of their pith, }}$ for then the Curcumber will grow all along: or elfe to fee neere vnto them fome veffell full of water, as namely about halfe a foot off: for (as I haue faid) cucumbers loue moifture fo well, as that vpon the onely ftanding by of water, they will grow the more, and become longer : in like fort fandech the cafe with the Gourd.

For their better and greater growth, you mult fow them in cafes or pots, or other
For the helping
forward of their great veffels full of fifted and well manured earth, which may be carried and rolled or drawne from one place to another into the Sun, that fo it may haue both the prefence of the Sun-fhine and abfence of the cold winds and frotts, and when they begin to grow, breake off their ends.
To free them of vermine and lice, fow Organie round about them, or elfe pricke fome boughs amongft their plants.

## Acucumber

To make that a Cucumber or Melon fhall haue no water, fill the pit that you
haue digged to plant your feeds, halfe full of ftraw, or the fhutes of vines cut verie fmall and put vpon the earth, and afterward your feed : and doe not water them at all, or elfe verie little.
To make melons or cucumbers lasatiue, (prinkle them fiue dayes together, and fiue times euerie day with water, wherein hath beene fleeped and in fufed the root of wild Cucumber for the fpace of three dayes. Otherwife, vrcouer them fofoone as they haue putforth any budd, and dung them at the foot with about swo ounces of blacke Hellebor fteept in water, and afterward couer them againe. Otherwife, fteepe the feed before you fow it three dajes inthe infufion of fcammonie, or rubarbe,
or Agaricke, or fome other purging médicine.
:T amake Pompions fweet and finell well, fo foone as you haue taken out the core Sweet Poma. and wiped and dried the feed, pur it amongtt drie Rofes, or fome graines of Muske, pionso and there keepe it vncill you muff fow it, and if it fo like you, fow them together : or elfe fteepethe feed foure daies before you fow it in damaske or fweet water: by fuch meanes you may giue them fuch taft and fmell as you pleate, if you fteepe their feed before you fow it in any fuch liquoreas in Honied vvater, in Rofe-vvater, or in fome other kind of water fweetned with Sugar or Muske ; notwishltanding waterung of them doth take from them a grear deale of that finell, as alfo of their favour and tafte.
To make Cucumbers or Pompions figred, you muff feepe the feed in water that Sugar-Meloario is well fwectned with Sugar or tionie, and to make thein fweet m Sheepes milke, or Honied water, and fo fow them: and when they be growne,you inuft tprinkle them ouer with the duft of fome drie earth, and water them a lictle.
To make Pompions to keepe long, and not to be fpuyled or rosted, you muft Lasiing Potio: fprinkle them with the juice of Houfleeke.
A woman hauing hertermes, and walking by the borders of Pompions, Gourds; and Cucumbers, caufech them to drie and die : but and if any of the fruit efcape it wil be bitter.
Cucumbers indure frefh a long time, if they be put in the fweet lees of wine, or elfe inbrine, or if.chey hang in a veffell wherein there is a litele vinegar.
Pompions will haue the fmell of Rofes, if their feed be mingled with drie Rofes, and afterward fowne together: and then alfo they are excellent good to quench che thirft in burning agues.

## CHAP. XLI. <br> of sirawbervies.

(3)Trawberries have no need of great toyle or tilling, fo that they be planted in fome good ground not manured, notwithfanding, but well thaded howfoeure : becaufe they delight greatly in the fhadow of other hearbes, fo alfo they are found growing amongft great tall trees, without any manner of husbanding or tillage. It is true that they grow well in the open Sun, fo that they be watered once or twice a weeke, efpecially when they begin to looke red : they muft be remoued everie three yeares, to make chem beare faire berries, and their carth raifed about thenn once eueric yeart, anid that about. Chrift-ride, and to weed them by hand when as weeds doe ouergrow shem : in the ground whither you remoue ehem, you muff firft put horfe-dung well rotted, or cowes dung, a fcurtle full to euerie border that is three foot broad: drefle chis ground in a drie time, and le it lye afterward; and in a monft time, but not rainie, you fhall fet the Strawberries halfe a foot cuerie way, thrufting the earth clofeto the roor with a dibble. In thele you may obferue a certaine kind of wonderfull harmelefineffe and innocencie: which alchough they creepe vpon che earth, and be continually troden vpon by Adders;Lizards,Snakes, and ocher venimous beafts, are notwithfanding neuer intected with them; neitherget they any venimous fauour, which thewech that they haue 110 affnitere with venime or poyfon.
Amiongt other pleafures or commodities that they afford, the juice or wine that is ffrained from ftrawberries, is good to take away the red pimples, \&x itching knobs, which grow in the face by the heat of the liuer, as allo to take away the rednefle of the eyes, and to wipe out the fpors and knobs of the Leprofic. Likewife the decoCtion of the roots and leaues of Strawberries mide with wine, is fingular good for the jaundife; if it be drunke for fome cime in the morning, as alfo to prouoke the sermes
in women; and this neuertheleffe doth ftay the white termes and bloudie flux : alfo ved in forme of a Gargarifme, is comfortech the gums and reeth, and driucth backe sheumes.

## Of Pbyficke Hearbes.

Сяat. XLII. of cirallowes.

Borders for phyjuche n, rbes.

(5)E haue heretofore dedic ted and appointed certaine borders downe below the Kitchin garden, neere unto the wall of the orchard for Phyfick hearbes, whereof we defire and with that the hufwife may hauc the knowledge, thereby to helpe the neceffites of her people. And in this refpeet $s$ thall not be chought ftrange, if we rouch in a word the drefing and ulling of foine few, fuch as are moit vfuall and familiar amongft women, leauing the more ample and exact defiription of them vnto fuch as make profeffion thereof : for the drift of my purpofe is, to inftrue the Farmer and his wife, or her that is the hufwife and Dairie-woir an, fo much as is needfull for the maintenance of their houfe and familie. But we will begin with Mallowes, as thofe that are moft in vfe.

Mallowes notwithftanding that they grow euerie where, yet if you be difpofed to fow them youmay doe it moft commodioufly in Aurumne, rather than at any other time, to the end their growth on height may be reprefled by the cumming ot Winter : for by how much the Mallow is the lefle, by fo much it is the better. They lone a fat and moift earth, and craue to be remoued after they haue put forth foure or fue leaues: though indeed it would be much the better nor to remoue them at all, for to they will keepea better rellifh: but to the end they fhould not grow vp into high and great ftalkes, ateer that they be come forth of the earth, you mift put fome litsle bricke in the mid deft of their leaues. They would be oft wed, and when they are remoued, it their leaues be cied together at the end, they will bring forth a well liking and thicke fet roet.
The root of Mallowes fteept in Wine a whole day, and afterward wrapr in a paper,and roafted vnder she alhes and dried, is a fine niedicine to rub the teeth withall, and to cleanfeand fcowre off from them the filth gathered thicke about them : the juice drunke to the quantitie of halfe a pound, or the decoction of the rootes and leaues comming to a certaine rhick coniftence, is exceeding good for women which are in trauell of child-birth. It is fingular alfo for many other things,and therefore it is called of fome Omnimorbia.
Hollabocks. uusbanding and village that the Mallowes doe, becaufe they are of the fame kind, and in both ot them, efpecially in the Mallowes, we muft obferue as a miraculous thing, that their leaues and flower doe open at the approach and comming of the Sunne, and fhut vp themfelues to goe to bed when it fetech, as doe the Marigolds.
Both thefe haue verie great power and vertue to mollifie, they ferue alfo to loofen

## The veriues of

 Mallows and Hollibeskes. the bellie, efpecially the young and render crops of Mallowes haue vertue to afo fwage the paine of the reines, and doe caufe a man to make water. The juice mint gled with oyle doe heale the ftinging of Wafpes. The juice mingled with Wine doth helpe wrmen traualing of child birth. Their leaues flamped with the leaves of willows doe ftay inflammations. A cataplafme made of cheir leanes, doth takezo way the hardneffe of the mother andother parts, efpecially it it be made of Mallows wirtio oy le of Rofes.Gentias
and formwhat ouerfhadowed. This hearb chrough his bitterneffe drawect downe the, termes and the ftayed vrine: The water thereot, elpecially of the root; being diftilled through a Limbecke in Maries-bath, doth maruailouly heale the Agues caufed of the obftruitions of any noble part : and which is more, it killeth the wormes, and wipeth away all the fpots of the face, it they be ofen wafhed therewith. It is exceeding good againft the inflarnmation of the cyes. It is verie foucraigne againft any infection or mortall fickneffe, if it be drunke with Water and Honie it abated? the fwelling of the bodie, and eafeely the colicke; whecher it be in the flomachior inf the bowels, italfo curech the biting or flinging of venimous beafts; and it caufech a woman to be deliuered of her dead birth.
The root is a prefenc remedie againft the Plague; not onely in men, but alfo in all forts of cartell : it is a fecciall preferuatiue againit all poyfon, and a meanes to with-ftand all putrefaction : in regard whereof, the Switzets mingle it amonget their owne meat, and the fodder or prouender of their catrell, that fo they may continue in good health.

Arfmart (fo called becaufe the leauies applied to the fundament for to wipe it, doe caule great paine, and of the Latines Hydropiper) doth require a marthie ground full of water, or at theleaft verie moift, or often watered, and it groweth rather being planted of a root then fowne of feed.

It is veric fingular in ointments for old vicers and fiftulaes; as alfo in clyfters for bloudie fluxes : the leaues thereof wa hed in cold water, and applied vnto wounds and vicers either of man or beaft, doe take away by and by the paine thereof, and doth throughly heale them, as the fwellings or gaules vnder the faddles of horfes that are hurt, ifthey be renewed euerie day, and the horfe needs not to be forborne for all thiar. O: elfe take the hearbe new, fteepe it in water, and wafh it, then rub therewith the fwolne or gauled place; then put the hearbe in fome place where it may quickly rot, or elfe burie it in lome far ground, and couer it with a great fone; fo foone as the hearbe is rotted, fo foone wili the fore be healed.

If you fpread itall greene in the bed, it killeth fleas, you fhall keep powdred porke from wormes, if you wrap it in the leaues of this hearbe: the juice thereof dropped into wormie eares, doth kill the wormes that is in them. ..

Eye-bri ght delightech in a leane ground, and fhadowed place, and yet where moi- Eje-bright. fture is not altogether wanting, fuch as are the meadows and little mountaines; it groweth of roots, not of feed. It is fingular good againft the dimneffe, waterifhneffe, cataract, rheume, and weakneffe of the eyes, being either applied and layd thereto,or taken inwardly by the mouth : there is a powder made of the dried leaues, which be ing oft taken by the mouth with the yolke of an egge, or alone, or mixt with aloes, and fwallowed downe with Fennell-water, or with water of veruaine, doch comfort and ftrengrhen mightily the weake and difeafed eyes : fome vee nuch to take. Wine wherein eye-bright hath beene infured and fteept a long time for the fame purpofe, or the powder vled' with wine, but the powder alone, or the decoction withour wine; is a remedie far more certaine, than the wine of cye-bright, as I my felfe haue proued by experience, in as much as the Wine by his vapours doth fill the braine, and procurech sheumes: and therefore if you would auoid thefe inconueniences, youmurt delay your Wine vvith the vvater of Fennell, or mixe Sugar therewith.' Arnoldus de Uilla-noura aifrmeth, that by the continuall vee of this he healed an old man which had alrcadie wholly lof his fight; by the often vfe of che leaues of this hearbe as, well greene as drie, as well in his drinke as in his meat.
Veruaine, as well the male as tho female, muft be planted of rooss in a moiff foile

- Befides the helpes that chis hearbe affordeth vnoo vveake eyes, it is alfo good iv gainft the paincof the head, teech, and vicers of the mouth, 'and principally in the infeations of the skinne; as sthe itch, the tetter, the flying - fire, the ring-worme, the leprofic, the Gangrena, sadd Sphacelus, if it be vfed in manner of a bath, or in manner
ofa fomentation made wish Fumitoric in Water and Vinegar. that in a verie well tilled ground, and which hath beene manured, not verie moift. bue yet ouer hhadowed. It is good to plant it in the beginnng of Februarie, leauing three froi diftance betwixt plant and plant, for it hath great leaucs, and the roots do fipread verie much, as doe the young fprouts or ronts of Reed.
The vertuse of The Wine wherein the root of Elicampane hath fteept for the fpaceof foure and firf booke : the juice of the roor is fingular good to continue and keepe the fare and beautifull hew of women. The decoction of the roor is likewife good to rejoyce the heart, and to prouoke vrine, and the termes of women, as alfo to caule one to fpit out, but then it muft be ved inwardly, and whiles it is new and greene : for when it is old and drie, it is fit to be vited outwardly, and not to be taken into the bodie.
Dittander which harh the eaft of pepper and muftard (for which caufe it is called
Ditcarder. of the Latines Pipertis) muft be planted before the firf of March, cut as the Vineleeke, but nut to ofs, tor feare 14 fhould die with cold. It will continue two yeares, prouided that it be carefully weeddd and dunged: it continueth in many places whote ten yeares, and at cannot eafily be deftroyed.
The root of Dittander flamped with Hogs-g.eafe, or with the root of Elicam-

The vertues of Distander. pane, and applied in forme of a cataplafme vnto the Sciatica, doth cure it throughly. It taketh away the gr eat fors, treckles, and fcales, or pilling of the face by raifing of the thin skin wherein thefe are fixed, and as for the rawneffe left after the taking away of this skin, it is healed eafily with ointment of Rofes.
celandine great Great Celandine groweth in euerie groind, fo that there be any fhadow for it, andjmall. and it-would be fowne in Februarie, and may fo continue ten yeares, fo that alwaies after it hath calt his feed, the ftalkes thercof be cut downe within foure fingers of the root.
The vertues of The juice of the flowers mixt with honic or womans milke, or fome other thing to celandine. affwage the fhatpenefle of it, doth take away the fpots in the eyes, dris th vp their fcarres and vicers, healeth the ring-wormes and itch of the head, and the falling of the fiaire of litte children. The Alchymiftes doe make great account of it about ther extrattions of mettalls. Some fay, that the old Swallows doe recouer the fight of their young ones being pore.blind, by applying vnto their eyes the leaues of Ce dandine: fome fay likewife, that the leafe of this hearbe carried in the fhooes next wato the bare fole of the feet, doth heale the jaundile: being applied vnto the paps, jetaketh away the aboundance of Milke : ftamped rogether with the root in the oile of Cámmomile, and being warmed or fried, and applied vnto the nauell or fomach, italliwageth the frettings of the bellie, and paines of the mother: the whole hearbe being dried and made in powder, doth heale wounds and vleers: the juice thereof Hroptinto a rotten or hollow tooth, mortifieth it, and caufeth it to fall out : it caufeth alforthe tumor called Porrum, to fall away.

Little Cclandine. Hie fmall Celandine,otherwife called Pilewort, or the hearbe for the Kings-euil, becaufe it headeth the fame, doth grow well in watrie, moift, and fhadowie places, it groweth likewife in drie places, but not fo well, though there it get a more fharpe qualitie: it hath as wel in his leaues as in his root vertueto heale the Kings-euil come to exulceration, as alfo other virulent vicers, hemorrhoides, cankers, hard tumours,
whether fcirrousor porracious and other cold tumors, by a mollifying and dicuffing qualiete that they haue.
Afarum bacchar craueth a leane ground and drie, and where there is much thadowasalfo tather to be fee than fowne. The root of $\mathcal{A}$ farum being dried and made in powder, isigood to be taken the weight of a French Crownein white Wine to erine to vomit, and by this it cureth the quartane and tercian ague: and this is the cmurewhy fome in ternan and quartane agues, giue to drinke euerie day, or euerie two $30^{\circ}$
daies,
daies, the quanticie of a good goblet full of the decoction of this root, made in wine with honey, putting thereto fome Cinnamon, Mace, and other fuch Spices, by which they purge verie much, as well vpward as downeward: Likewife when they teele the fic comming, they chafe the backe and foles of the feet with oyle, wherein they haue caufed to be infuted this root in the hot Sunne-fhue, and after lying downe in bed, the fhiuerings and fhakings of the Ague is caken away, and a great fweat procured. The decontion of $A$ farum is good againft the Sciatica: the intufion thereof in wine doth cure the Dropfie and Iaundife : the inice dropt into the corner of the cyes, doth heale che Web in the eye, and dazeling of the eyes. Manie good women doe apply Afarum vnto the wrifts of the hands, to driue away the heat of an Ague. You mult oblerue (as it were) diuers parss in this hearbe: For the root is a prowor ker of Vomit, and the leaues thereof are Aromaticall, and agree verie well with the ft macke.
Valcrian growech verie well in a moif and well manured ground, and would be often watered, that fo it may put forth a tall ftalke.
The good wiuss are wont to apply to the wrifts, in burning Agues, the leaues of Valerian, but withour reafon: for the Valerian doth rather encreate the Ague by his hear, than diminifh it. It will be better to vee it in the paines of the fides, and in the prouoking of verne, and womens termes. If you wee line in the iuice of Valerian, and put ic into anie wound, made either with Arrow, or Sword, or otherwife, and the droffe or groffe part thereof layd vpon it, you fhall caufe the yron to come forth, if anie fuch be flayed behind, and to alfo heale the wound. Cats doe delight much to eat this hearbe. The decoction is good againt Venime, and the Plague: It is good alfo againft fhorneffe of breath, if there be mixed therewith Licorice and Damaske Raifins.
Angelica would be fowne in a well tilled ground, oftentimes wed, and reafonably watered.
The roor is foueraigne againft the Plague, and all forts of Poyfon: Whofocucr the vertues of fhall keepe a litele piece of it in his mouth, or which flall drinke onely in. Winter Angelica. morning a lietle draieght of Wine and Rofewater, wherein it hath beene fleept; hee Tbe Plagus is cannot be infected ot anie ewill ayre of all that day. Englifhimen vee the leaues and roots of this hearbe in fawce with their meats, becaufe it correctecth groffe humours, and a finking breach, and furchereth digeftion verie mich. The leaues of Angelica ftamped with ocher leaues of Rue and Honey, and applyed in forme of a Catàplafme, doe heale the bitings of mad Dugges, and the ftinging of Serpents: Being layd vpon the head of one that hath an Ague, it drawecth vnot it all the burning hear of the Ague; and it is good againf Sorceric and. Inchanment. The diftilled water of Angelica is fingular good againft the fainting of the Heart, the bitings of mad Bealts, the ftingings of venimous creatures s efpecially agajainf the Plague, it with this diftilled waterchere be drunke halfe a dramme of the roor in powder, and a dramme of Treacle, and chat atterward the pacient giue himfelfe to fweating, for by this means manie haue beene faued. The root put into a hollow tooth, afluagech the paine:being chewed, it maketh the breath fwect, and concealeth che fmell of Garlick; ;or anicother fuch meat which caufech an ill breath.
Bleffed thifle would be ordered arid dreffed with fuch manner of tillage as An- beffed Thisle. gelica. It is true, that it would be fowne in che encreafe of the Moone; and not aboue three fingers depth in the earch. It loieth the companie of Wheat veric well. It will not be prickly, if before that you fow it you put the Seed in the roor ofia Lettuce, the leanes broken off: or it you breake the harpe poinited end of the Seed againft a fone, atter the manner Ipoken of before in the Chapter of Airrichakes.
5: Blefled thiftie harth no leffe veruc againt the Plague, or anic other fors of Poy- The vertues of fon; than hath Angelica, whecher you ve it inward or outward. This vertue is it Blefed mijlteg which driuech away Moules anid ocher kinds of fuch Cateell, , being hurfull vato Gairdens, from the place where ei groweth. Such as are troubled wish a: Quartane chart

Ague,

Ague, or ocher Agues, which haue their fits comming with a Cold, are cured if they take in the morning three ounces of Bleffed thiftes water, or of the decoction, or the weight of a French crowne of the feed in powder. The fame remedie is good for Pleurifies, and for children that haue the Falling fickneffe. If it be boyled in Wine, the decoction is good ro affuage the paines of the reines, and colicke, to kill wormes, and to prouoke fiveat. Bleffed thiftle, as well drie as greene, taken inwardly, or applyed outwardly, doth heale maligne vicers. Phyfitions likewife commaund it to be mingled in decoctions and drinkes for the Pocks.
Sother-zuort.
Mother-wort groweth in vntilled and rough places, and ftandeth not in reed of anie tilling : notwithftanding, it is fingular againft the beating and fainting of the heart; for which reafon it is called of tome Cardiaca. Is prouoketh alfo Womens termes: it taketh away obftructions, and prouoketh vrine: it raffeth flegme, delivering the Lungs thereof, by making it eafie to be fper foorth: It killeth Wormes : dryed and made in powder, and the quantitie of a foonefull taken in Wine, doth mightily helpe forward the deliuerie of Women labouring of Child-birth.

Golden-rod would be fowne in a fat ground, which is not open vnto the heat of the Sunne, but hath the fhadowes of fome Trees, the top of a Mountaine, or fome
n-rod other fuch like thing. It hath a verie aftringent power, as alfo it is verie deficcatiue,

The vertues of Golden-rod. by which (after the manner of Comfrey) it healeth wounds, vicers, and filtulaes, as well inward as ourward: it fayeth rheumes and bloudie fluxes, healech the vlcers of the mouth, and the inflamation thereof: Which is more, it is verie fingular to prouoke vrine, and to breake the ftone.

Saxifrage: Saxifrage, as well the great as the fmall, delighteth in a drie ground, chalkie, clayie, fandie, ftonie, and altogether barren: And it is fowne of fmall feedes, which are found hanging to the rootes thereof. It prouoketh vrine, and fo driueth foorth the grauell of the reines and bladder. If you boyle the root and feed thereof in. Wine, it procureth Women alfo their termes, and bringeth out the after-birth.
The great and fmall Burre (otherwife called Bardsna, and of the Greekes Per:

The ereat and: fmall Burre. fonata) hath not need of anie great tilling : for it will grow either of feed or root in a leane ground; that is drie and vneilled ; as wee may well fee in ditches, where it groweth withour anie labour at all, and in the high wayes and by-pathes in the fields.
₹. The rootes, feedes, and iuice of the great and fmall Burre, are verie fingular to prouoke vrine, to breake the flone of the reines and bladder, and to ftay the bloudie flux. The iuice is drunke with white Wine, or alone,and the feed in like maniner, which is fometimes, for the more pleafantneffe fake, confeeted or cousered with Su* gar. The leaues ftampi with a little falt, and applyed vnto the bitings or ftingings of Adders, mad Dögges, or other venimous Beafts, aré verie foneraigne. The rootes or feedes of frmall Burre, ftarnipe and layd on cold fwellings and rebellious ftrumaies,are verie profitable and good.
Star-bhiflle. 2Star-thifte, fo called, becaufe it hath little heads at the tops of his ftalkes (as other Thiftles haue) (ee round about with fharpe prickes, after the manner of Starres: It growerh in vnhusbanded grounds, as well of his root as of his feed. Some doe greatIy eftecmè of the feed, made into powder, and drunke in wine, for to prouoke vrine, and to auoid grauell: and herein it is offo great vertue, as that the much vee of it doth caufe one to piffe bloud fometimes. The decoction of the root with honey, after the manner of a honied water, doth the like, but more gently, and without caufing the partic for to piffe bloud.
cMaries Thiftle (otherwife called Spina alba, or white and filuer Thiftle, or wild Artichoke, or Affe-Thiftie, becaufe that Affes delight much to eat it) doth louea fat and well tilled ground, and other ordering, like to that of Beets : and it is as rrue, that it lettech not to grow in vntilled and vnhusbanided grounds. The feed and roots haue (as it were) the like power to take away obftruCtions, to procioke vrine, and to (Wirf
breake
breake the ftone, that Star-thifte hath. The Italians vfe the roors thereof in Salads, after the manner of Artichokes; and good wines, to gather the milke of it,forto eat. Sume make a Ptifane with the root ot this Thiftle made in powder, the feed of Fennell, and a litele long Pepper,to giue to Nurles to vée which haue fmall fore of milke. The diftilled water of the leaues is good againft paine in the fides, being drunke with halfe a dramme of the feed of the fame hearbe.

Siluer-graffe (fo called, becaufe the leaues doe refemble filuer on the backe-fide) doth delight in a moift and grafie ground, howfoeuer vnhusbanded is be. It hath one excellent propertie aboue all ocher hearbes, for to breake the flone, to heale vlcers and malignant wounds within the bodie, to flay the bloudie flux, and to diffolue cluttered bloud, being taken in drinke. Some fay, that if you pur it in halfe a bafin full of cold water, and couer chat bafin with another bafin, or veffell, or orher couering, that there will gather great fore of vapours in the hollow of the thing couering 14 , and will turne into the forme of diftilled water, and that this water thus gathered, is verie good to take away the fpors, freckles, flaines, and dye of the Sunne out of the face.
Patience doth willingly grow in coole and moift grounds: and we fee it ordinarily to grow neere ynto Riuers and little Brookes. The root, by reafon of the great bitterneffe and deficcatiue power, hath fingular commendation againft the Plagie: for being dried and powdred, and afterward drunke with wine, it driuech away all venime froni the heart, by the aboundance of weat which it procurech. Some for this purpofe take away the rinde and core of this roor, flampling it in vineger, and after making a drinke of the vineger, che iuice of Rue, and Treacie, for to take in peftilent Agues. The powder of this roor drunke with wine, is excellent fur the fuffocations of the Marrix, and the wringing throwes of the bellie. This powder alfo killeth the Wormes, healeth maligne Vicers, the talling of the haire, called Tinea, and the Kibes; the Farcie in Horfes, whecher it be taken inwardly, or applyed outwardly, cither in iuice, or in the decoation thereof.
Scabious growech in the fame ground that Pacience doth, that is to fay, in woods, Scabiowere. vnitled places; and efpecially in landie places.
It is verie proper and appropriate vnev the Cough, and difeafes of the Lungs: for the fame purpofe alfo the iuice is fometime excracted, fometime the hearbe it felfe made into powder, and fometime the decoction of it is made to endure for a long sime. Likewife there is fometime conferue made of the flowers. His leaves or rootes applyed to itchic places, and the places bare of haire, or mixed with oyles and ointmencs, doe great good vnto the fame, as alfo vnto plaguie carbuncles: for they being rubbed with the iuice of Scabious, will be found to vanih away within three houres. The iuice of Scabious drunke in the quantitie of foure ounces, with a dramme of Treacle not yet one day old, is a fingular remedie againft the Plague, fo that afterward the partie fweat in his bed, and withall, continue the drinke for manie times. The fame remedie ferueth for the bitings of venimous beafts, if, befides the drinke, you apply ouiwardly vnto the foare the leaues of the fame hearbe bruifed. A Liniment made of thic iuice of Scabious, the powder of Borace, and a litete Camphire, is fingular againft tettars, irch, freckles. and other infeations or defilements of the skin. Abour all other things, the decotion of Scabious being drunke the fpace of forrie daies, doth heale the teterar throughly, yea, though it came of the Pecks, as I my felfe haue ofentimes proued by experience.
Scolopendrium, or rough Spleene-wors, called alfo Harts-tongue, wculd be plan- Kough Spleme: red in a fonie and grauellie ground, which is moiftened with fome running Brooke; and for wantoof this, it muft be offen watered. The rootes shereof muff neuer be putled vp, but oncly the leaues cur: for it cannor be fowne, feeing ir bringeth for th nafeed. The decoction chereof made in white wine, is verie good for fuch as have a hard Spleene, and are fubiect to a quartiane Ague.

Patience, or Montes Rbewo barbe.

The roos hath contrarie properties to the leaucs and flowers: for the roor dilquieteth the ftomacke, and is verie vnfauourie vnto the mouth; his leaues and flowers are of a verie good fmell, and a taft correlpondent and anfwerable.

The decoction of Betonie made in white wine, affuageth the paines of the reines,

The properties of Betanic.

Bugula, or
Bugle.
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Zyoms-раш.
comfrey.

Goutd

Rupture.

Self-beale.

Water Germ
mander.

The vertues of Germander.

Fole-foots is

 breakerh the fone, and healeth the Iaundife. The leaues ftamped and applyed in forme of a Cataplafne, doe quickly ioyne togerher the wounds of the head. A Cataplafme made of the leaues with Porkes greate, doth ripen the tumors called Cathaires, and all other forts of Impoftumes. The leaues ftamped with a little falt, doe heale hollow and cancrous vicers. To be briefe, this hearb hath fo manie and lo great vertues, as that the lalian, when he would highly commend a man tor his gitts, will fay, that he hath moe vertues than Betonie.

Bugle would be planted in a fonie, drie, and hillie ground s in refpect whereof, the Latines call ir Confolida petrofa: It craueth no great paines to be taken with it. The leaues thereof are good ro conglutinate and foulder together both outward and inward wounds : is is likewife.put in drinkes for wounds: and that is the caule why fome doe commonly fay, That he that hath Bugle and Sanicle, will fatce vouchfate the Chirurgion a Bugle.

Lions-paw groweth in a clayifh ground . being withall fat, red, and fomewhat moift, con monly in medowes, fituared in fome high place. It hath like properties with Bugle and Sancle: but morevner, it taketh away all the paine and heat of inflammations and vicers. The fame hearb ftamped and applyed vato the teats of women and young maids maketh them hard and firme.

Great Comfrey groweth in moilt places, and hath the fame propertie that Bugle hath, that is tolay, to foulder wounds: and this is fo great in both of them, as if that you put Bugle or Comfrey into a por wherein flefh is boylrng, the pieces of fleft will become no more manie, but one. The root of great Comfiey, whiles it is yet greene, and newly pluckt out of the earth, being fpread ypon Leather, or vpon Linnen, and applyed in forme of a Cataplafme vpon goutie or rheumatike pla. ces; doth prefently appeafe the paine of the gout, being a thing often proved and tried. The fame root dried and made into powder, is good to put in childrens pappe, which haue their rimme broken; as alfo to flay the flux of the bellie. A Cataplafme made of the root of great Comfrey with Beane flower, and applyed vnto the place where the childs guts fall downe, is a foucraigne remedie to cure the fame.

Self-heale craueth a fat ground, and where the Sunne beatech not much : it groweth of feedes, and not of rootes, and hath like properties that Bugle and Comfrey. haue, efpecially to flay the fitting of bloud's the bloudie flux, and so conglutinate wounds within the bodie (where no man can come to apply tent or oyntment) if there be made a drinke of the iuice of the rootes and leaues thereof, which being chafed in your fingers, or put vnder your tongue, duth fmell and calt like Myrrhe.
VVater Germander (called of the Latines Scordium ) groweth verie eafily, and without great paine or toile, fo that it be planted by little flippes taken from the old ftalke, and fer in a moif ground: for it (pecially requireth (ro grow well) to be planted in a moift ground, and to be often watered. It hath the like qualities that AngeJica hach againf Poyfon and the Plague : and furthermore, the decoction thereof taiken as a drinke for certaine daies, doth heale the tertian Agues, and putteeh away the obftruct ions of the Spleene, and prouoketh vrine.
Fole-foot muft be planted in a verie moilt place, and craueth to be often watered: for fo it appearerh, when as it is feene to flourifh and like beft in marifh grounds, and about currents of waters. There groweth a whitifi moffe about the root of it, which if you gather and picke verie cleane, and afterward wrap is in a Linnen Cloth with a little Sal nitrum; and fo boyle it a litele in Lee, and afterward lay it,to drie in the Sunne, you'fhall haue an excellent match to take'fire at a flint and fre-fteele; for it takech fire fo cafily, that it will lightatthefirt ftroke of the ftected

Amonglt

Amongit other vertues, it is fingular good to comfort the lungs and parts aboue the breift, wherher you take it in a decoction, or in a fyrrup, or in manner of a fume at the mouth, or ortherwife, elpecially if you mingle forne flippes of Hyfope, and fome figges, or fyrrup, with the faid decoction. The great Colss-foot, elpecially the root thereof, dried, powdred, and taken in the weight of ewo drammes with wine, is fingular againft the Plague, if fo the partie fweat prefently after. It is yood alfo to giue vnto Horfes which haue the bots, or are fhort-winded.

The great and fnal! Carline (fo called, as though it were Caroline, becaufe this Cariine thinitis. Thiftle was in a diuine manner made knowne vnto Charlemargne by an Angell, for the deliuering of his hoant from the Plague, which did miferably annoy them) doth require to be fowne and planted in a drie ground, and ftonie, and where the Moone and Sunue doth fhine pleafandy,
The root of the greas Carline made into powder, and taken the weight of a French crowne, is fingular good againft the Plague, the feebleneffe and fantneffe of the Heart, for the keeping of the Vrine, the breaking of the Stone; the paines of the Sides, and Conuulfions: applyed ourwardly after it hath beene fteept in vineger, it helpech the Sciatica.

Eringium groweth in an vniilled, rough, and drie ground. The wine wherein the Hundred heas rootes of Ering gium haue beene boyled, prouokech the Termes and reftrained Vrinc, ded inflefe. breakech the strone, and caffech out it, and Grauell. It is good for fuch as haue the fal- Ereamgiumily. ling Sicknefle, Dropfie, or Iaindife. The decoation of the roor is fingular good to refift Drunkenneffe. The diftilled water of the young buds of the leaues being drunke euerie day, and that fo of as one cañ, is maruellous good for them which haue their bodies troubled with vlcers caufed of the French Pocks, in as much as it comfortech the Liuer. The fame water is verie profitable for the quartane and quotidian Agues. The root thercof taken either in powder, or in a decoation, with the broth of thofe Frogges which are vfed to be eaten, or for lacke of Frogges, in the decoation of a Goflin or greene Goofe, is a preferuatius againft the poyton of che Toad, Hedgefrogge, and other venimous hearbes. It doth good alfo in the difeafes of the heare, being drunke with the decoction of Bugloffe or Balme.

Beares-breech, called of the Latines Acanthus, groweth in fonie and moift pla= Beures-brucchs cts, although it loue to be diligendly tended, or otherwife not to yeeld anie profit.
The root and leaues are verie mollifying : taken in drinke, they prouoke vrine: and applyed in forme of a Cataplafme, they are good againft conuulions, wrenches, and concractions of the ligaments : They are to good effect veed in the Clyfters of them which haue the Dropfie.
Diuels-bit (fo called, becaufe it fheweth as though the middle, or the heart of the Divels-hisi root,were gnawed or bitten by fome Diuell,fo foone as it is planted, or hath put vp in anieplace; as thoughthe Dinell did enuie the good which it bringech vnoo men by theincredible vertues that are thercin) craucth no great husbandrie, neither yet anie facearth,or veric moif: for, as we fee, it growerh vpon mountaines, in bufhes, and places aloogether barren. It is rrue, that if growech alfo in medowes, but yet fuch as arc not verie moift. It is fou:d in great aboundance in the medowes of Verriere, a borough neere vito Paris.
The root and greene leaues being flamped together, and applyed vnto Carbuncles and peftilent Buboes, doe heale them : The Wine wherein they haue boyled, is drunke with good fluccefle againft the Plague, and againft the griefes and inffocation of the Mother. The powder of the root thereof is verie good againft Wormes.

Cinquefoile (fo called, becaufe of the fine leaues which it beareth) crauech a low, cinguuffitec waterini, and fhadowed ground: it growech alfo in drie and gravellie places.

The decoation of the root vfed tor a Gargle, doch affuage the tooth-ach, and heale the vicers of the mouth: in a Cly fer, it flay ech all manner of flux of the bellie, as well the bloudie flux as others: taken as a drinke, it is fingular againft the Iaundre, the ftopping of the Liver, and againft a peftilent ayre, and poyfon.

Tormentill.

Perzoincle.
siffort.

Pionic.

Paules Betonic. Paules Betome, both male and female, would be either fowne or planted in the verie fame ground with Pionie.

This hearbe, efpecially the female, is verie much commended for his vertues: for the iuice that is preffed out of his leauss, and the water that is diftilled thereof, doth heale all forts of wounds, as well new as old ; all forts of vicers, whether maligne or cancrous; (wellings, and hot tumors; itch, and all the difeafes of the skin: and which is more, the often vfe, as well of the juice, as of the diftilled water of Parles Betonie, doth perfectiy cure the Leprofie : whereof we haue a notable and tamous teftımonie of a French King, who thereby was throughly cured thereof: A nd this is the caufe why this hearbe is called the I.eapers hearbe. Some doe make a balme thereof (as we will further (peake in the Chapter of Balmes in the third Booke) which is finguJar aboue all others for all forts of wounds and maligne vlecrs, as allo for the Leprofie: and that it is fo good, is protied; for that a certaine perfon, well know ne vnto me, hauing a virulent vlcer, in manner of a Polypus in his neffhrils, of the cure whereof, manie, as well Phyfitions as Surgions, being excellent men, and dwelling in this

Towne,

Towne, did altogether defpaire, was notwithftanding wonderfully cured by the application of this Balme, and often vfe of potions made of the decoction of the leaues of the female Paules Betonie. This hearbe is fingular alfo in Clyfters for bloudie Fluxes; and in drinkes, for peftilent Fcauers, vicers of the Lungs, and obftructions of the Liuer and Spleene.

Gromell is the fame which we call in Latine Milium folis; and it groweth better Gromell. being fowne than pianted: it delightech in a drie and vntilled ground, being withall ftonie, and hauing a good ayre.

The iuice of the leaues and powder of the feed being drunke with Wine, hath a fingular vertue againft the Grauell and Stone, and procuriny of the Vrine to patle away. There is nothing more fingular for the burning of the Vrine, than to drinke manie mornings the feed of Gromell, to the quansitie of two drammes, Ceterach halfe a dramme, and Amber two fcruples, all being powdred with the iuice of Plantaine, or Purcelane, or Lettuce. In like manner, two drammes of the feed of Gromell, with womens milke, doth much comfort and ftrengthen a woman in her child-birth.

Hyporicum loueth the like entreatie that Gromell loueth: and yet withall it doth Saint Iobns, refufe a far and well tilled foyle. The inice of the leaues and flowers healeth cuts wort. and wounds. The feed drunke with white wine, taketh away the tertian Ague. The flowers and crops are principally in vfe to make Balnes of for the curing of wounds, The Balimej. fuch like as chis is: Take of the fruit of the Elme tree, the flowers of Hypericum, and she bus's of Rofes, put them all together in a Glafle-bottle, and fet them in the Sunne fo long, as vnill you fee them all fo altered and changed, as that they may feeme to be rotted, then ftraine them all through a linnen cloth, and referue it for your vfe. See furthei in the chird Booke of the oyle of Hypericum.

Ground-pine loueth a drie, fandie, and fonie foyle, and groweth better planted Gronnd-pinsi, than fowne. The whole hearbe boyled in honied water, doth heale the laundife, prouoke the termes in Women, pruuoke Vrine, and is fourraigne againft the Sciatica, sither taken in drinke,or applyed vpon the hippe in forme of a Cataplafme : for the whole hearbe, with the flowers and roots, made into powder, and taken at the mouth fortie daies with halfe an ounce of Turpertine, doth throughly heale the Sciatica. The conferue made of the flowers is good for fuch as are fubieet vnto the Palfie. The whole hearbe boyled in vineger, and taken at the mouth, doth minifter infinit helpe to a tranailing women, when the child is dead in her bodie.

Agrimonie would be planted in a ftonic and drie place : and further, crauech no great helpe of hand, or husbandrie. The decoAtion openeth the obftructions of the Liuer, and ftrengtheneth it : and it being boyled and drunke, doth helpe againft the bitings of venimous beafts. The iuice of Agrimonie mixt with vineger and ialt in a Liniment, doth cure the Itch. Agrimonie is good againft the cough of Sheepe, and for broken-winded Horfes. The liquor of the deccation of Agrimonie, with fumitorie made like Whay, doth prouoke Vrine, expell the Termes, heale the Itch and Scab of the whole bodie; whereupon it is fingular in the beginning of the Leprofie. The feed mixt with the inice of Agrimonie, and takeni in manner of pilles, doth kill the Wormes. The Stagge being fhot and wounded, is healed fo foone as he hath eaten of this hearbe. If you gather good ftore of this hearbe, and fteepe it in faire Spring water, in a large earthen pot, till the water purrifie, and then eueric morning wanh the face therein, it will take away all manner of Morphew, Sunneburning, Farn-freckles, and other fpots or dunneffe of the skinne whatfoeuer, making the fame alfo cleare and fmooth, and filling vp euerie manner of wrinckle. Some likewife vfe in this cafe to vfe with Agrimonie the like quantitie of Goofe-gratie: and fure it is not amiffe; for they haue both one manner of forceand working.

White Mullein groweth euerie where : but beft, in a fonie and fandie ground. whise Mulleino The white Mullein, both leaues, flowers, rootes, and feed, is fingular good againt all manner of venime : as alfo to containe in his place the talling Fundament.

Good wines, in like manner, for this confideration doe make a fume of the feed and flowers of Mullein, the flowers of Camomill and Mafticke, all made ineo powder. The iuice preffed from the root before it put forth his ftalke, and drunke foure cimes in the quantitic of an ounce, with Hippocras or Malmefey, in the beginning of a fic of a quartane Feauer, doth driue it quire away. The iuice prefled out of the flowers or leaues, applyed to Warts, doth take chem cleane away.. Likewife, Gentlewomen find no beter remedie than the iuice of white Mullein flowers, to take away the wrinckles and other blemifhes in their face. The leaues bruifed betwixt two ftones, and applyed in forme of a Cataplafme vpon the foot of a Horfe that hath beene cloyed, doth affoord him a fingular and prefent reliefe. The water diftilled of the flowers, quencheth the firinefle of the face, if there be a little Camphire added thereunto. It doth in like manner with the tumor called Erifipelas, the itch, burnings, and other difeafes of the skin. The flowers of white Mullein, with the yolke of an egge, crummes of bread, and the leaues of Leeks, applyed vnto the Hemorrhoids, doe Itay them altogether. There groweth about the leaues of white Mullein a whitifh moffe, which is good to make match or tinder to take fire.

- Mercurie craueth one and the fame ground with the Vine, there to be fowne, and grow in greataboundance; without anie great care of husbanding: and yet there mult care and regard be had, not to fow it among Vines, becaufe the wine which the Vines flould yeeld, amonglt whom Mercurie hath beene fowne, would retaine the taft of Mercurie, and become verie vnpleafant to drinke.
The vertues of ... The iuice of Mercuric being drunke, helpeth conception, prouoketh womens termes, and deliuerech them of their after-birth. The decoction of Mercurie doth loofe the bellie, being drunke or taken in a Clyfter. Some make a honey of the iuice of Mercurie, with a halfe quantitie of honey, and this is good for laxatiue Clyfters. The iuice of Mercurie taketh away Warts : the feed of Mercurie in a decoction with Wormewood doth cure the Iaundife : and the iuice thereof, with vineger, doth ripe vp the fcab'and fcurffe.
arow doth grow in a ground that is indifferent fat and moif. The decoetion thereof doth ftay all manner of fluxes, and efpecially the red termes of women, as alfo that which commeth of a wound, efpecially the leaues dried, made in powder, and drunke with the iuice or water of Comfrey or Plantaine. The leafe put into the nofe, flayeth the bleeding: and put into a Clyfter, it fayeth the bloudie flux. Milfoile bearing a white flower, being powned with his flower, and drunke with water diftilled from the fame, and Goats milke, doth cure the burning of the vrine in men, and the whites in women.
Danewort groweth better planted than fowne, and craueth a fat ground, well manured, and fomewhat moift.
The iuice preffed from the roots of Danewort, being drunke for a certaine time, preferueth a man from the Gout. The feed of Danewort being well wahed and drunke in powder to the quantitie of a dramme, hauing beene firft fteeped a whole night in Wine, doth helpe the Dropfie, becaufe it procureth ftooles downward, and vomit vpward, to the voiding of great flore of water. Being drunke alfo with the decoction of ground Pine, it afluageth the paine of the Gout and Pocks. There is alfo made a foueraigne Oyntment of the fame for the appeafing of the faid paines: Take the iuice of the roots of Danewort, the flowers of Rye,and fref butter, of ech alike, mixe all, and let them worke togecher in an earthen pot fet in the Ouen; with this Oyntmene rub the aking parts: or elfe infufe the flowers in oyle, with mans greate, fet in the heat of the Sunne. Some alfo make an Oyle of the leedes, preffing it forth of them.
Orpin. Orpin groweth for the noft part in moift and fhadowie places. The Countrey people doe, by their good wills, plant it vpon Saint Iohns night in difhes, or vpon trenchers of wood, in fome cleft of a wall, the foor being thruft into clay, and there they fee it, where it abideth a long time greene, growing and flourifhing, if it be now and then watered. The liquor of the decoetion of the leaues is a foueraigne $\mathrm{b}_{2}$.


## remedic

remedie to healt wounds, and flay fluxes of bloud, for mward wounds and vicers, and $t r$ burtings and ruprures.

Goats-beard groweth verie well in a moift ground and fhadowed, and craueth to. Goats-bearda be of watered. The Latines call it $V 1$ marna, becaule the leaues are like to the leaues of Elme. The root and leaues made in powder, doe cure the thux of the bellie, and bleeding. The diftulled water being drunke, is fingular good for wounds both inward and outward.

Ground-Iuie groweth likewife in a moift and fhadowed place. The decoction Ground-Luie. of the leaues hath great power to take away the obflructions of the liucr and fpleene, to prouoke vrine, and the termes in women. There is made of it an excellent balme for new cuts and wounds: alfo for the Colicke, miniftred in Clyfters, or taken in drinke, putting the fmall chope leaues into a Glafte violl well Itopt with gummie wax, and ftrong parchment, and fetting the faia violl in Horfe dung for the fpace of fortie daies. The juice thercof, with the ruft of Brafle is a fit medicine for fiftulaes and hollow vicers: the decoction thereof, with Betonic, Pimpernell, Moufe-eare, $\mathrm{Bi}-$ ftort, Horfe-taile, Tormentill, red Coleworts, and Dittander, is fingular for wounds in the principall and inward parts, if is be oft vfed. This ground- Iuie is otherwife called of fome, Ale-hoofe, and it hath a moft fingular vertue for the curing of all manner of tore eyes, either in man or beaft, if you take it and beat it well in a mortar, and drop into it three or foure drops either of white Role-water, or the water of Eyc-bright, and then ftraine it into a cleane Glaffe-bottle, and keepe it clofe, then wafh the fore eye therewith, when occafion is miniftred, and the oftener in the day that you doe wafh the fore eye therein, the better it is, and the fooner recouered.

Hounds-tongue groweth eafily in peblie and vntilled ground. The leaues pow- Hounds-torigues. ned and applyed vinto burnings, the wild-fire, old vlcers, wounds, and inflammations, aches, fluxes, and hemorrhoids, doe verie much good. There is made a fingular Oynment for wourds of the iuice thereof, mixed with honey of Rofes, and Turpentine. There are alfo made thereof pilles, to ftay vehement and violent shewmes.

Adders-tongue doth require aboue all orher things a fat place, well tilled, and Addersosongue. moift : it growech alfo in medowes, but it is deftroyed by and by and fpoyled. The leaues ftamped and applyed vinto burnings, inflammations, burfings, and principally vinto wounds and maligne vicers, are of a mannellous effect. There is a balme made of the leaues thereof for the fame effects, whereunto fonse pur Turpentine: Red wine, wherein this whole hearbe hath beene fteeped, is good to flay rhewmes falling downe vpon the eyes.

Goofe-grafle doth grow in anie kind of ground, and hath no need of great til- Goofeggraffo: lage. Some doe diftill the water of it, which is fingular geod againft the Pieurifie, and other paines of the fide, being taken in the beginning of the difeafe, as alfo againtt the bitings and ftingings of venimous beafts, and to coole the heat of Cankers. Corne-rníe craueth a fat ground, and well tilled, fuch as are Corne-grounds,
of corne-rofes, wherein we may fee them grow faire and verie well blowne. The flowers of Corne- or widd Poppie. rofe, as well the great as the fmall, either in decoctions, or the diftilled water, or in fyrrups, or in powder, the weight of halfe a French crowne, are fingularmeanes to. prouoke fpitting in Pleurlies, and to cure the fame.

Baftard Dittanie in like manner requireth a fat ground, and well tilled, and there- Baffard Dite :.. with a diligent care to water it, and to keepe it from the coldneffe of the ayre. The ${ }^{\text {tanito }}$ feed, root, leaues, and flowers, as well in powder as in a decoetion, doe pronoke vrine, breake the flone, prouoke the monetily termes, caft out the dead conception: and after-birth: being eaten wath Rubarbe, they kill and calt out the wormes: The juice applyed outwardly, doth draw forth thornes and thiftles; and fumpes of fplints.

Knot-grafle is called in Latine Polygonum, it groweth by the edges of Vincyards Knot-grafei
, and fields that are badly tilled, efpecially when it is a moift yeare. Antongt the principall vertues thereof, the diftilled water is foueraigne againft the difficultic of vrine,
as I hauc oft proued by experience.
Salomons-/eale. new, being pole mult be lee ma drie ground, and raifed high. The root whiles it is of blowes, falls, or other fuch like thing, whether they be in the face, or in anie orther part of the bodie. Some diftill the water, which is verie good for the paintings of women.
Great andsimall Dragors.
singing and derad Netile.

Dead Nettle.
$\qquad$ fend the parts of the bodie from all cold and Ataruing, how great foeuer it mighe proue to be, if fo be that you rub the ridge of the backe, the foles of the feet, and the wrints of the hands therewith. Likewife the iuice of this Nettle mixt with a little Populeon, and applyed vnto the wrills, appeafeth the great heat of A gues. The leaues beaten and mixed with oyle of Violets and Poppies, and applyed vnto the wrifts, beaten and mixed with oyle of Violets and Poppies, and applyed vnto the wrifts,
doe alike. The vapour of the decoction of Nette feed doth take away the fuffing of the nofthrils. Such as haue the Cough, with a great ratling in the throat, cannot meet with a better medicine to make them fpit out luftily, than to take with fome pectorall fyrrop, or decoction, the weight of halfe a French crowne of Nettle leed finely powdred. You muft furthermore obferue this vertue in Nettles, as that if it Lafin in boyling be put into a pot wherein is fefh boyling, it will caufe the flefh to be the fooner of fiffor boyled.
Stauefacre mult be fowne in a place reafonably drie and thadowed. The feed
stainefirre. Stauefacre mult be fowne in a place reafore and held in the mouth, draweth vnto by his heat, great quantitic of moifture: ftamped and mingled with oyle, it driueth vermine our of the head and other parts of the bodie; jt curech fcuruinefle and itch: ftesped in vineger, and held in the mouth, it afluageth the tooth-ach:
Thlatraine,
Great Dragons muft be planted in a fhadowed place, and gond earth. The fmall Dragons loue a moift ground and waterifh, as neere vnto the Fountaine in the GarEclegme, doe profit greatly for fhortneffe of breath, difficult and hard coushas an painefull getting vp of the fpittle : in fuch fort, as that they cut, ripen, and wiof the groffe humors and flimie. Being powdred and mixt with honey, they heale malione and corroding vicers, efpecially the Polypus. Their leaues fpread vpon Cheefe, doe keepe them from foyling and rotting. If the juice thereof be mixed with honey, and pur into the eyes, they take away all manner of paine and aking thercof: Alco who fo batheth his hands in the juice thercof, nay handle anie venime without danger: Alfo it is a great cooler of iuft, and maruclloully abateth all lecherous cogitations.

As concerning the Nettle, it hath no need either of fowing or ferting, for it commeth vp in Gardens more than one would haue it : yet norwithftanding is is nos without his great vertues, as well the Greeke Nettle, as the Hungarian or dead Nettle.

The leaues, and efpecially the rootes of dead Nette, ftamped and put vpon the nothrils, doe flay the bleeding of the nofe : and their iuice rubbed vpon the brow, doth as much. The leaues of the ftinging Nette ftampt with a litele Myrrhe, and applyed vito the naueil in forme of a Cataplafme, haue great power to prouoke the termes of women. Their iuice drunke a certaine time, prouoketh vrine, and breaketh the flone. A Liniment prepared with the leaues of Nettles, Salt, and Oyle, doth deThere is not anie need of great care to be taken in fowing the great, fmall, or middle Plantaine, for they grow euerie where; and yet they mult be efteemed by rea- fon of their vertues. The juice of Platitaine leaues or rootes preffed out, and drunke two houres before the fir, to the quantitie of two ounces, doth afluage the tertian Eeauer. The leaues of Plantaine, flamped with the whites of egges, doe heale burnings. An emplaifter made of the iuice of Plantaine, the white of an egge, and Bole-Armoniacke, and applyed vito the brewrs, deth flay the bleeding of the nofe.

Horfe-taile, as well the great as the fmall, requireth a verie moift ground, as neere Horfe-sailc. to fome poole or fhadowed place. The decoction thereof in wine or water doch flanch bleeding, and all other fluxes, whether it be the bloudie, or anie other fuch. The iuice pur into the nofthrils, doth flay the bleeding of them: and with a Peffarie put vp into the necke of the Matrix, it flayeth the flux thereof.
Pellitorie craueth no great care or tillage, for it growech maturally neere vnto Pelliteric of walls. A Cataplafme made of Pellitorie and the greafe of a male or female Goat, the malls, is a fingular remedie for the gowt, and flidings or falls. The leaues of Pellitorie fried with fref2 Butter or Capons greafe, and laid in formc of a Cataplafme vnto the bèllie, doth afluage the paine of the Colicke. The iuice mingled in like quantitie with white Wine and oyle of fweet Almonds newly drawne, doth affuage the paine and torment of the fone. A Caraplafme made of greene Pelliforie, ftamped with crums of Bread, and oylc of Lillies, Rofes, or Camomile, doth refolue Apoftemes happening in the breafts. It is good allo for mollifying Clyfters and Bathes that are deterging.
Shepheards Powch groweth in all ground, but principally vpon the ruines ofold shepheards walls, and neere vnto walls. The decoction of this hearbe in raine water with Plan- powich. taine and Bole Armoniacke, being drunke certaine mornings, or taken in Clyfters, doth fay the bloudie flux, and the fpitting of bloud. A bath prepared with the decontion of the leaues, ftayech the exceffiue flux of the termes. But if you take it and boyle it in red wine, with a little Cinnamon and Tanners barke, and fo giue it the patiens to drinke, it will ftay the moft dangerous bloudie flux that can be polfible. It is verie good alfo for the fame difeafe, if it be giuen in milke. The iuice doth heale greene wounds, and being dropped into the eares, doth drie vp the vlcers of the fame. The leaues ftamped and applyed in forme of a Cataplafme, doth kill inflammations, and the wild fire. The leaues eaten doe fay all forts of bleeding, being put into the nofthrils, as alfo holden in the hand, they flay the nofe from bleeding.
Sow-bread defirech a fhadowed ground, as vnder fome tree or bufh, which mult sowv-breade notwithflanding be fat and well tilled to feed the root thereof, which is full, groffe, folide, and as it were like vnno the Turnep. The Foreft of Orleance is well ftored and repil tnifhed wich this hearbe.
This is a thing to be maruelled at, that the iuice of the root of Sow-bread fnuffed vp into the nofe, purgech the head: and the diftilled water thereof fruffed vp alfo into the noflhrils, doth prefently flay their bleeding. The fame water drunke to the quantitie of fix ounces, with an ounce of Sugar, doth prefently flay the bloud running downe from the breaft, flomacke, or liuer, and knitteth together the veffels therein, if anie be broken : which I my felfe haue proued and tried. Two drammes of the iuice drunke with honied water, doe loofen the bellie, and free the liver from oibfruftions, as alfo the fpleene; in refpect whereof, it is fingular good for the Dropfic and Iaundife, but you muft mixe with it a litele Malticke, or Nutmeg, or Rhubarbe, for to correct the vehemencie thereof. It is incredible what eafe the iuice thereof worketh in the Colicke, and other fuch like griping pangs, if it be put into Clyfters : how greatly alfo it profiteh in Oynements, Liniments, and Catao plafmes, appointed for the hardneffe and fwellings of the fpleene and liuer. If you infure the roots chopped finall in the oyle of Rofes, or Camomill, or fweet Almonds, and afterward boyle them to ether, putting thereto a little wine, in the end you fhall preffe them out : This oyle dropped by two or three droppes into the eares, doth driue away the noyfe and deafeneffe of the eares, efpecially if vpon the eares you apply the droffe of thefe rootes at night at the parties going to bed : or eife chop frmall the rootes, ftampe them with Peaches and bitter Almonds, feepe them all in Aqua vita, afterward fraine them, and drop certaine drops of that which fhall be preffed out, into the cares: this is verie foueraigne for deafeneffe and the noyfe of the eares.
Crowfoot, although there be fix kinds of it, yet they all loue a moift and marifh crousfosse
ground, and whereas the frogges delight to liue, which alfo take pleafure in and tumble themfelues about this hearbe. It is true, that fome of the forts doe loue thefe more places more than other fome: for the Crowfoot that hath a double flower, not verie yellow, but fomewhat red, and which appearerh onely in Aurumne, cannot grow in a verie moift place, (o as it doth in the drie medowes, and in places a littic moift: contrariwife, that which beareth a fingle flower, of a yellow and golden colour, cannot grow but in fome watrie medow-plot, and neere vnto flanding water. The other, which beareth a double flower, not verie yellow, hath a bulbous and whitifh roor, of a fharpe taft. This fame (as well the leaues, but efpecially the root) being applyed vnto anie part, is as caufticke as Pigeons dung, or the Caufticke ftone, or anie orher the moft violent cauterie that may be found : for though you put betwixt the flelh and the hearbe a Linnen cloth fiue or fixe double, yet it will not leaue to cauterize and pierce deepe euen vntn the flefh. This is the hearbe, which being fteept in Dragons bloud, the curfed rogues and wicked rouers vp and downe doe rub their armes, legges, and thighes withall, thereby to exulcerate them, that fo they may moue the people with remorfe, and fo get the larger almes. This is the hearbe which Siluius calleth Crowfoot, and which is fo much efteemed for the Plague, and Plague-fore, called a Carbuncle. Take, faith he, Crowfoot (hauing a root like vnto a Inall flat Onion: ) this root, either alone, if it be bigge ynough, or two or three of them ftamped and laid vnto the thombe of the hand that is on that fide in the arme, whereof the Plague is broken our, or vnto the great toe of that foot that is on the fame fide that the groine is that hath the Plague-fore, and there leaue it foure and twentie houres, and it will make blifters, which breaking of themfelues, doe let runne out the matter of the Plague drawne thither by a veine common vnto both parts: but becaufe that this root is verie ftrong, you muft put betwixt it and the thombe foure or fille doubles of new and frong cloth, or fix or feuen of thinne and worne cloth, and fo couer it and bind it vp; and afterward you thall heale the vicer of the thombe with the yolkes of egges and frefh butter beat together, with a little of the middle Comfrey flamped with them, or a little watht Aloes: and if you cannot haue it new, the drie is alfo good for the fame purpofe; but then you need not to manie doubles of cloth beitwixt them. This operation and worke is quickly done, and certainely, without bloud-letting, or other euacuation.

Pettie-whin groweth in cuerie ground, whether it be medow, plowed land, drie, fcorched, moift, tilled, or not tilled. The Husbandman doth greatly abhorre this hearbe, whereof he cannot by anie meanes rid his grounds. The roor is fingular, as well in powder, as in a decoction, or in the water diftlled from it (fo that before it be diftilled, the root be fteeped in Malmeley twice fo much as it weigheth) for to prouoke Vrine, Womens termes, and to procure the opening of the obfructions of the Spleene and Liuer: but aboue all, to breake into powder, and driue forth the Stone, as alfo to waft fuch carnofities as may be begotten in the bladder and conduit of the yard. The powder mult be taken with white Wine. There is alfo made a kind of Wine of this root during the Vintage time, with new Wine and white Grapes put into a Veffell, adding thereto a certaine quantitie of Winter Cherries.
Dittanie.
:The Dittanie of this Countrey groweth in a drie ground, being alfo ftonie, and open vpon the Sunne. The root is much commended againf Poifons and Venimes, Wormes in children, and cold difeafes of the Matrix. Being taken inwardly by decoction, or in powder with Wine the weight of two drammes, or applyed or minifred in a fume, it moueth the termes in women: it bringeth forth the atter-birth and dead child: it alfo driueth out the fone from the reines: but principally it is good for the Pocks, taking it euerie morning a long time the weight of a drammie with the decoction of Guaiacum. It is profitable alfo againft the Plague cuerre way that one can vfe it.
Germander (called of the Latines Chamadrys, that is to fay, a fmall Oake, becaufe the leaues are like to thofe of the Oake) requireth no other ground or manner of . $\cdot$.... :
ordering than Dittanie. This hearbe is called the Feauers fcourge, becaufe the decoAtion thereof being drunke in the merning for a certaine fpace, doth driue away and make an end of the rertian agues: the leaues caten in a fallade in the morning fafting, it preferueth from the ayre and peflilent contagion, no leffe effectually than water Germander, of which we haue fpoken before. The decoction thereot is fingular good againft the jaundife, and being vfed a long rime, for the Falling fickneffe, head-ach, and other difeafes of the brane, and for the wormes.

Rupture-wort groweth in a grauelly or fandie ground which is drie and vnhuf- Ruptericemorto banded: there is likewse great fore of ic fuund in the wood of Bolson, neere vnto Daris. This hearbe made in powder and drunke with wine; prouaketh vrine that hath beene long detained, and breaketh the ftone of the reines and of the bladder, if for fome long time the partie take the weight of a dramme. Fallopius, \& great and famons Chirurgion in Italie, affirmeth, That he had cured an infinite number of perfons of the rupture therewith, giuing it them in drinke for a verie long time togecher.

Moufe-eare will grow in the fame ground that Rupture-wort doth: it hath a ve- Moufe care. rie ftrong aftringent qualitie : and that is the caufe why Shepheards haue no great affection to diaw their fheepe into fuch fields as haue ftore of Moufe-eare in them, becaufe it bindeth them in their bodies, which for the moft part worketh in them ynto death : likewife Phyfitians are wont to make their benefir of this. hearbe in the bloudie flux, and aboundance of termes: as alfo to heale vp both inward and outward wounds, the fpitting of bloud, and falling downe of the fundament.

Dogges-gralle, without fetting or fowing, groweth more than one would wifh, Dogs-graffos both in gardens, and alfo in come grounds that are fat. Ir ferueth in phyficke to coole and drue indifferently: and withall (notwithftanding this) to open and take away obftructions, and to expell and breake the ftone : it is true that thefeed drieth more, but it bindeth fomewhat.

Water-Beronie groweth in moift, waterie, and marfhic places. Of the re ot there- water betonion of gathered in Aurumne, and made verie cleane, and ftamped with frefh Butter, all being clofed vp in an earthen veffell well leaded and Itopt, and the fame veffell fer in fome moift place, and let ftay there fome fifteene or ewentie daies; after let the butter be melted vpon a foft fire, and in the end Itrained : is made an oyntment that is fingular good to annoint the Kings-euill withall, and the Hemorrhoides : this root is fer about with many fmall knots, hauing the refemblance of Hemorrhoids, or the fwelling of the Kingṣ euill.
It groweth withour any great painc in gardens, and being fowne, groweth more a- Palma chrigiso boundantly than one would haue it. The feed purgeth thofe that haue the dropfie verie much, if they be giuen in Whay: it is true thet they may be vied without annoyance done to the fomack, if it be parched and dried, as alfo mixt with Annife and Fennell-feed : furthermore it is verie good to fet in yardens, to kill and drive away Moules.

This hearbe is of two forts, male and female : both of then will grow in all man- Ferne. ner of earth, but principally in that which is moint.
Neither the one nor yet the other doth beare any feed, as Writers record: not- Tbe vertues. withftanding it hath beenetried, that the male bearech feed, and that it cleaucth to the hindermoft part of the leaues, but yet fo little, that hardly can a man fee it, and which cannot be acknowledged, or gathered, but in the end of Iulie, which is the time when it is ripe : for to garher it, you mult cut the leafe neere vnro the root, and then hang them vp in your houfe, fpreading a linnen cloth vnder them, or elfe fome faire cleane white paper. I know well that the common fort doe verily thinke and auerre, that this feed cannot be gathered but on the night of the wakes of S. Iobn in Sommer, and that more is, not without great ceremonies and mumbling and muttering of many words betweene the tecth, which haue power to driue away Deuills, which hatee.the cultodic of the fame feed : but all this is nothing but fables.
The decostion thercof is good to prouoke womens termes, to caft out the dead
child, to kill wormes, and fome doe vee it to heale the frectings or hurts that may be in the fundament fallen downe; but efpecially the female.

Hearbe Troon pence.

Fleasorser
Eleabane. Hearbe I wo-pence (fo called becaufe the leaues refemble fmall peeces of filuer) requireth no great peece of husbandrie about it, faue onely that it would haue a moift ground. The whole hearbe either in decoction or powder, but efpecially the water thereof diftilled in a limbecke, is verie fingular good for the falling downe of the fundament.
Fleawort (being called of the Latines $P$ ylliums) craueth a verie fat, well manured and batled ground, for elfe there will no good come of it. The feed preparedin forme of a Mucilage, and applied in vinegar doth kill the wild fire and tetter : applied vnto the head or brows it taketh away the paine thereof: it taketh away alfo the redneffe of the eyes being applyed thereunto. The diftilled water is of infinite goodneffe feruing in the paynes of the eyes, two or three drops thereofonely being dropt intothem.

This hearbe requireth a verie fat place, well manured and tilled: likewife we fee it grow aboundantly in vineyards and grounds for Wheat and Barlie. The leaues are verie fingular good for the opening of the liuer, and cleanfing away of aduft humours, and this alfo is the caufe why phyfitians prefcribe it with whay, in fcuruie, fcabbie, and itchie cafes, and where the leprofic is, The juice thereof is good to cleere bleared eyes.
Ground-fwell greweth in euerie ground, and without any great care : we fee it grow likewife neere ynto walls, and vpon the townes walls : ir is greene all the yere, and flouriheth as it were in euerie moneth, and this is the caufe why the Iralians call it euerie moneths flower. Some thinke that Ground-fwell diftilled is verie fingulas good for the Whites in women: but beleene in not before you find it true by proofe, for I haue obferued by often ve, that this hearbe whether in decoction or otherwife, prouoketh the termesthat areftayed.
Birt-wort, as well the long as the round, muft be planted in a fat and fertile foyle,
Birt-wort, as well the long as the round, murt be planted in a fat and fertile foyle,
fuch as that where Wheat is fowne, and Oliuetrees planted. Their roots (amonget other alr:oft infinite vertues) caufe womens courfes, purge the lungs, caufefpitting, cure the cough, and prouoke vrine : which more is, if either of them be taken in drinke, efpecially the round onemade in powder with Pepper and Myrrhe, it driueth forth the after-birth, the dead conception, and all other fuperfluities gathered in the Matrix : it doth the like being applied in forme of a Morher fuppofitorie. It purgeth all obitructions of the liuer, and eafeth all manner of colicke or other griefes which proceed from windie caufes, it is foucraigne againft all manner of poyfon or any other infection; it cleanfeth the bloud, and by rubbing the gummes therewith it preferueth the teeth from rotting.

Centaurie, or the gall of the earth, afwel the great as the fmal, defireth a fat ground that is fruitfull and well tilled, and yet in fuch a ground they thriue not well without the great care and induftrie of the Gardener. Their root in decoction, juice, or powder, moueth womens termes, and prouoketh vrine, expelleth the dead child, purgech flegmaticke humors which caufe the fciatica, openeth the obftructions of the liver and fpleene, killeth the wormes, profiteth and hel peth palfies, convulfions, and difeafes of the finews, it cleareth the fight, and taketh away all miftineffe from them, efpecially the juice dropt into the eyes doth heale their frefi and new wounds, and ficcatricethold and maligne vicers.

## Foodbind or

bonie-Juckles:
Woodbind craueth no great tilling or husbanding, for it groweth euerie where and in what place foeuer it lifteth. It is true that ir defireth greatly to be neere broome hedges, and allo the borders of fields. The fruit of Woodbind drunke with Wine the fpace of fortie daies, taketh away the obftructions of a hard and indurat fpleene, it purgeth out vrine with fuch force, as that the tenth day the vrine becommeth all bloudie: it helpeth women in their child-birth: the leaues in decoction or diftilled doe heale wounds and filthie vlcers: wipe away the fpots and fcarres of the bodic and of the face.

Pimpernel hath red and blew flowers, and crauech a moilt and thadowed ground, Pimpernell. fo likewife wefee it grow in the fladows of hedges and bufhes. Pimpernell with the red flowers, ftampt and applied vnto the eyes, or the juice thereof drope within them, taketh away the inflammations, dimnelle, and vleers of the eyes: and healeth the inflatnmations of the fecret parts: Pimpernell with the blew flower boyled with ialt and water, is a verie good and proper medicine to cure the itch or Icurfe, and the lice, or wormes in the hands, if you wath them ot theretvith.

Buckwhent is a verie common bearbe, and yer bue littie knowne by his name : it is Buckwheat or verie ordinare in corne and tilled grounds about harueft time. The Peafants of binacorne. Champaigne doe commonly call it Velunte, becaule (in my judgemenr) the leaues are hairie: which name I mind not to change, but rather to keepe for the eafier knowing of the hearbe. They make vleofit by applying it, if at any time in thearing they happen to cut themfelues with their fickles. For to know it bettertheretore (than onely by the name) it putteth forth from the root, fiue, fixe, feuen, or cight fmall branches, for the moft part layed along vpon the earth, of the length of a hand, and fomerime of a foot, bearing leaues fomewhat ike vnto the little bindweed, bue indeed they be leffe and more round, verie hairie, and a littie fattic. The flower is Imall and of diuers colours, drawing verie neere viro a pale yellow, bur in greatneffe ir commeth neere vnto the flower of eye-bright, but in hape and fafhion vnto the nectle flower.
The water of the leáues and branches diftilled (whiles it is in force) in a Limbeck in Maries-bath, is fingular and Inaruailous good to flay the fpreading of the canker in the breafts, and the creeping. Polypus, howfocucr fome hold them as incur : ble. The fame applyed to the brows takech away the hear, and affiwagech the paine of the head. In an injection it mundifiech firft, and a ferward conglutinateth wounds, and drieth vp fiftulaes verie rcadily, and maligne vicers which are eafily prouoked, and become worfe by other remedies : being dropt into weeping eyes it healech them, and flayech fuch rheumes as fall downe vpon them, and caure inflammation and dazeling of the fame: being applied with a linnen cloth vpon itchings, wheales, fcabbes, poukes, the wild fire, S. Anthonies fire or fhingles, it cureth and healeth them in a verie frall time, as alfo all other burning inflammations. Being drunke for certaine dayes, ir flaycth all rheumes, vomitings, and flexes of the bellic, it drict vp the water in thofe that have che dropfie, appeafech the paines of the colicke : itçurech tertian and quartan agues, and I am verily of mind that it may be giuen to good and profitabie purpofe to other agues, the remperature thereof conflidered and his infinite other fecret qualities, which euerie day are more and miore manifefted : being drunke and applied a certaine time, it re unterth the rupture and falling downe of the bowels, the falling downe of the mother, and the exceffiue courfes of women by fuppreffing then and wharfocuer orher fluxes of Eloud. Taken in a gargarifme with a lietle Wine, it driueth the vicers of the mouth : and being vfed for a gargarifme is felfe alone, it is fingular againft the diftillations, caufing the fwelling of the vuula or the inflammation of the throat called the fquinancie: : ikewife taken in the fame manner it is good againft the blackneffe and roughneffe of the tongue caufed of a continuall aguc. The juice and decoction of the leaues worke the verie fame effects, if they be taken whiles as yet the herbe is not too much dried by the heat of the Sunne.
Ofthis Buckwheatethere is madc a compound water to make the face faire and Tbe compounsbeautifull, and vndoubeedly to take away the freckles, and it is thus made: Take of ditag of fine wnthe leauesthereofbruifed in a morrar two good handfulls, of the roots of Salomons eerof fuctfeale made cleane with a linmen cloth, and after brayed a quarter of a pound, mingle all together, and infufe them for the fpacc of twelue houres in wine, this being done, putallinto a limbecke, adding therero the juice of three Lymons or Oranges, then diftill and draw out the water in Maries-bath, which you thall keepe verie carefully for your vfe : butit is requifite chat before chis you have made prouifion of the liquor of the Brionie root, which muft be gathered about the end of Aprill, or in the begin-
ning of May, whiles the dews continue, and that in this manner. The head of this root mult be cut a little, vncouering the rop, and not pulling it vp by the root, ater it is chus pared at the top, you mult cut a hollow hole in it lome two or three fingers deepe, and then couer it againe with the cap you haue cus off from the head, and fome few of the leaves thereot, and fo to leaue it to the next morning before Sunne rife, nót taking off this cap or couering : then there will be found in this hole a liquor which muft be gachered with a (poone, an $\pm$ put vp and kept in a violl glafle, after which the couering mult be puron againe as it was the day before, and this to be continued eucrie day vntill mid-May, and longer if fo be that one be difpofed. Now when you would vee it, take an ounce of this liquor, and mixe it in a violl with two ounces of the abouenamed compounded water; and at night when you goe to bed, you muft wet a linnen cloth in this mixture, and fpread it all ouer the face, there letting it reft a good pat of the night, but in the morning you muft auoid the burning heat of the Sunne : and this courfe fhall be continued for certaine nights together.
But although the hearbe alone applied, his juice, water, and decostion hauing great and exceliemt qualities, as it is eafie to judge by that which hath beene faid before, yet forafmuch as that one fimple, or one drugge, or many joyned togerher, and to good purpofe and effect in that thing for which it was compounded and made, is of much more efficacic by the helpe and affiftance afforded vino it, I am willing for that caufe to impart vnto you a maruailous oyntment made of the fame BuckeAn ointment of wheat, and the defcription of it, is in manner as followeth. Take ot che juice of the leaues of Buck wheat, layed in fleepe in a lietle white wine the fpace of foureand twentic houres, one pound of the juice of Veruaine (which is as yee but a liecle fhot vp into branches) in like manner fteeped as before, and chat by it felfe a quarter of a pound of the juice of the leaues of yellow Henbane (commonly called fmall Nicocian, or the Queenes-herbe) halfe a pound, Oyle-Oliue a pound : mix all thefe together in a skellet, and lioyle them vpon a fmall fire, flirring it often with a fpatule of wood, vntill the juises be almoft confumed : then adde thereto of new waxe, broken into peeces, and of Perrofine, of each a quarter of a pound, and melt the whole by litele and little, ftill firring it with a parule, and keeping a low fire without increafing of it : which being done, take the skellet from the fire, and put into it at that prefent inflant of Venice Turpentine a quarter of a pound by litele threeds as it were, and ftirring it contmually witha fpatule: then when the oyntment fhall begin ro wax cold, put in Maiticke and Frankincenfe mixe cogecher in powder, of each che weighe two French Crownes, and ceafe not to firre ic as before, vnoll it be all well incorporated. The marke to know when the oynement is well made and fully finifhed, is, if a drop thereof being pur vpon your naile doe congeale and clutter together, or that it eleaueth vito the fatule firmog ir. Then put you vp this compofition or mixture in Gallipors, for to ferve you as mall be declared hereafter.

This oyntment aboue all other remedies is fingular good in the curing of the canker, as well of the dugs as of other parts, in the curing alfo of the Polypus, Noli me tangere, the Kings-ewill, bruifed or fquar nules, wounds old and new, fiffulaes, and maligne vicers, be they neuer forebellious. It quenchethall flarpe inflammations, the fhingles, and burnings either of water or fire. It rooteth out all forts of ringwormes, fcabs, itches, pallules, the wild fab, and the wild fire. It is good for curs of finews if there be added to it pouned wormes. It cureth the moth, or falling of the haire, if before you annoint the head, the haire be pulled and taken away. It taketh away the fwelling and paines of the Hemorrhoides. Being applied with mans greafe and a litele oyle of Rofes, it likewife taketh away the paines of the gout It mundifieth and draweth out mightily the gunfhot out of the bodie, and healeth the wounds vp without any orher thing applied : it taketh away the blewnefle of drie blows. To be briefe, it is a meft fure and infallible remedie by reafon of histemperature in all impoltumes either hot or cold, and refolueth and difcuffeth all tumours
that need not to be fuppurated and ripened. But this muft be obferued, that before you apply it, you mult difcerne of the offending humor, to the end, that you may vfe fome either generall or particular cuacuation, according to good order, and that by the aduice of fome Phylitian.

## Chap. XLIIII. A difcour $\int$ e of $\lambda$ icotian, or the male Petum.

 Icotiana, though it haue beene but a while knowne in France, yet it Nicotima the holdeth the firft and principall place amongft Phyficke hearbes, by chiefe of Phyreafon of his fingular and almoft diuine vertues, fuch as you fhall heare fiche hearbes. of hereafer: whereof (becaure none, either of the old or new Writers that haue written of the nature of Plants, haue faid anie ching ) I am willing to lay open the whole Hiftorie, as I haue come by it through a deere friend of mine, the firft Author, Inuentor, and Bringer of this hearbe into France: as alfo of manie, both Spaniards, Porrugals, and others, whigh haue trauelled into Florida, a Countrey of the Indians, from whence this hearbe came, to put the fame in writing, to quite fuch of griefe and trauell, as haue heard of this hearbe, but neither know it, nor the properties thereof.
This hearbe is called Nicotiana, of the name of an Embaffadour, which brought why it wass cah the firft knowledge of it into this Realme, in like manner as manie Plants doe as led Nicotranno yet retaine the names of certaine Greekes and Romans, who being frangers in diuers Countreyes for their Common-weaiths feruice, haue from thence indowed their owne Countrey with manie forts of Plants, whereof there was no knowledge before.
Some call it the hearbe of Queene-mother, becaufe the faid Embafladour, Lord The hearbe of Nicot, did firt fend the fame vnto the Queene Mother (as you fhall viderftand 2uene-moby and by) and for being afterward by her giuen to diuiers others to plant and make ${ }^{\text {tber. }}$ to grow in this Countrey. Others call it by the name of the hearbe of the great The bearbe of Prior, becaufe the faid Lord a while after fayling into thefe Wefterne Seas, and the Great happening to lodge neere vinto the faid Lord Embaffadour of Lisbone, gathered diuers Plants thereof out of his Garden, and fet them to encreafe here in France, and that in greater quantitie, and with more care, than̂anie other befides him, hee did fo highly efteeme thereof for the exceeding good qualities fake. The Spaniards call it Tabacco. Some call it the Holy hearbe; becaule (as I thinke) of his Tabecte. holy and maruellous effects. Verie manie haue giuen it the name of Male Petum, The Holie to know is from the Female Petum; which is (in truth) the proper name of the beatbe. hearbe, vfed by them of the Countrey from whence it was brought : Notwithftanding, it were better to call it Nicotiana, after the name of the Lord which firlt fent the fame into France, to the end, that wee may giue him the honour which hee hath deferued of vs; for hauing furnified our Land with fo rare and fingular an hearbe. And thus much for the name: Now liften vnto the whole Hifturie.
Mafter Yobn Nicöt, one of the Kings Councell, being Embaffadour for his Maieftie in the Realme of Portuigall in the yeares of our Lord God, 1559,1560 , cot Emberfeden and is 6 T , went on a day to fee the Monuments and worthie Places of the faid for the Kimg King of Portugall : at which time, a Gentleman, keeper of the faid Monuments, prefented him with this hearbe, as a flrange Plant, brought from Florida. The Noble man, Sir Nicot, hauing procured it to grow in his Garden, where it had put forth and multiplied veric greatly, was aduerifed on a day by one of his Pages, that a young boy, kinfman of the faid Page, had layd (for tryall fake) the faid hearbe
hearbe ftampt, the fubftance and juice and altogether, vpon an vlcer which he had vpon hischeeke, neere vnto his nofe, next neighbour to a Noli me tangere, as haung alreadıe feifed vpon the cartilages, and that by the vee thereof it was become marual-

CAmatter of experience in the sale of a Noli we tangere.
lous well: vpon this occafion the noble man Nicot called the boy to him, and making him to continue the applying of this hearbe for eight or tenne daies, the Noli me tangere became throughly killed. Now they had fent of entimes vnto one of the Kings moft famous Phyfitions the faid boy, during the time of this worke and operation, to marke and fee the proceeding and working of the faid Nicotiana : and hauing in charge to continue the fame vntill the end of tenne dayes, the fayd Phyfitian then beholding him, aflured him certainely, that the Noli me tangere was dead: as indeed the boy neuer felt anie thing of it at anie time afterward.
Proofe of it in wourds.

The Embafaio dors bearbe.

Proofe for Ringwormes.

Some certaine time after, one of the Cookes of the faid Embaffadour hauing almoft all his thombe cut off from his hand with a great Kirchin knife, the Steward running vnto the faid Nicotiana, made him to vie of it fue or fix drofings, by the end of which, the wound was healed. From that time for ward this hearbe began to become famous in Lisbone, where the King of Portugats Ceurt was at that tinie, and the vertues thereof much fpoken of, and the conmon people began to call it the Embaffadours hearbe.

Now, vpon this occafion, there came certaine daies after a Gentleman out of the fields, being father vnto one of the Pages of the faid Lord Emballadour, who was troubled with an vlcer in his legge of two yeares continuance, and craned of the faid Lord Embafladour fome of his hearbe, and vfing it in manner afore mentioned, he was healed by the end of tenne or twelue daies.

After this yet the hearbe grew ftill in greater reputation: infomuch, as that manie And of all comers to get fome this harbe. And anongtt the reft, there was one woman which had a grear Ringworme, couering all her fare like a maske, and hauing taken deepe root, vato whome the faid Lord Embaffadour caufed this Petum to be giuen, and withall, the manner of ving of it to be told her: and at the end of eight or tenne dates this woman being throughly cured thereby, same to fhew her felfe vnto the fard Lord Emballadour, and how that fhee was cured.

There came likewife a Captaine, bringing with him his fonne, difeafed with the Kings euill, vnto the faid L.ord Embafladour, for to fend him into Frarice; vpon whome there was fome triall made of the faid hearbe: whereupon, within few daies, he began to fhew great fignes and tukens of healing, and in the end was throughly cured of his Kings euill.
The faid Lord Embaffador feeing fo great proofe and triall of the faid hearbe, and

Modame of Montrgny dead of a Noli me tongere in her breafls. hauing heard fay, that the late deceafed Madame of Montigny died at S. Ger mans in Lay of an vicer grown in her brefts, which was turned to a Noli me tangere, forwhich neuer anie bodie could find anie remedie : and likewife, that the Counteffe of Ruffe had foughr for all the famous Phyfitians of the Realme to cure her of a Ringworme which fhe had in her face, and that they could not all heale it, he refolued with himfelfe to fend of it into France, and thereupon accordingly fent it vnto king Franncis

How Nicotiana was firf brought inso France.

The difilled water of Nuca
tiarra good for - Ghert breath. the fecond, and vno Queene mother, and many other Lords of the Courr, together with the manner to order it and applie it to the abouenamed difeafes, as he himfelfe had found by experience: as alfo vnto the Lord of Iarnac, gonernour of Rochell, with whom the faid Embafladour had intercourfe of letters by reafon of the king his affaires: which Lord Iarnac allo told him one diay fitting at table with the Queene mother, that he had caufed of the faid Nicotiana to be diftilled, and had caufed the water thereof to be drunke being mixt with the water of eye-bright by one that was ftuffed in his lungs, and that he was cured thereby.


This hearbe refembleth in figure, fafhion, and qualities, the great Comfrey, in The figure of fuch fort, as that a man would deeme it to be a kind of great Comfrey, rather than a Nicotianna. yellow Henbane, as fome haue thought. It hath an vpright flalke, not bending anie Tbe falles. way, thicke, bearded or hairic, and flimic. The leaues are broad and long, greene, Leaues. drawing fomewhat toward a yellow, not bearded or hoarie, but fmooth and flimie, hauing as it were tallons, but not either notched or cut in the edges, a grear deale bigger downeward toward the root than aboute: as you fee the fmoort Docke leafe is, which bearech frmall red feedes, and not burres; and the finer and clearer that fuch leaues are, the better the Tabacco is efteemed. Whiles it is young, it is leaued, and as it were lying vpon the ground: bur rifing to a falke, and growing furrher, it ceafeth to haue fuch a number of leaues below, and puttecth forth branches from halfe foot Branches. to halfe, and foreth it felfe by that meanes with leaues, and ftill rifeth higher, from the height of foure or fiue foot, vato three or foure or fiue cubits, according as it is founc in a hot and fat ground, and carefully tilled. The boughes and branches thereof put our at ioints, and divide che ftalke by diftances of halfe a foot: the higheft of which branches are bigger than an arme. At the tops and ends of his branches and boughs, it putteth forth flowers almoft like vnto thofe of Nigella, of a whi- Elower. tih and incarnate colour, having the fafhion of a little bell, comming out of a fwad or huske, being of the fafhon of a fmall goblet, which huske becommeth round, hauing the fafhion of a little apple, or fwords pummell: affoone as the flower is gone and vanifhed away, it is filled with verie fmall feeds like vnto thofe of yellow Hen- Seed. bane, and they are blacke when they be ripe, or yreene, whiles they are not yet ripe.

In a hot countrie it beareth leaues, fiowers, and íeeds at the fame cime, in the ninth or tenth monech of the yere, it puttech forth young fciences at the rout, and reneweth it relfe by chis fore and number of fciences, and great quantitie of fprouts, and yet notwithftanding the roots are lirtle, fmall fine, threddie frings, or if orher wife they grow a litele thicke, yet remaine they ftlll verie fhore, in refpect of the heighe of the piant. The roots and leaues do yeeld a glewinh and rofinim kind of juice, fomewhat yellow, of a rofinlike fmel, not vnpleafant, and of a tharpe, eager, and biting taft, which fhewo eth thatit is by nature hot, more than in the fecond degiee, and drie in the firlt, wher. upon we mult gather that it is no kind of yellow Henbane as fome haue thought.

Nicotiana craueth a fas ground wellftirred, and well mannred alfo in this cold countrie, thrat is to (ay an earth, wherein the manure is fo well mingled and incorporated, as that it becommeth earthie, that is to fay, all curned into earth, and not making any fhew any more of dung: which is likewife moift and fhadowie, wide and toomic, tor in a narrow and Arate place, it would not grow high, ftrcight, grtat, and $H$ tow to refrefh well brauched. It defircth the South Sunne before if, and a wall behind it, which and chere vp may ftand in ftead of a broad paire of Thoulders to keepe away the Northerne wind, Nisotiana. and to beat backe againe the heat of the Sunne ; it would alfo be defended from the tofling and force of the wind, by reafon of his weakenefle and height: it is true that it will be out of the daunger of the wind, if the root be deepely taken in the ground. It groweth the better if it be oft watered, and maketh it felfe fport and jols
To mater Nicotiana.
How to liandle Nic:tiana in Winter. ly good cheere with water when the time becommeth a hatele drie. It hateth the cold, and therfore ro keepeit from dying in Winer, it mult enther be kept in cellars where gard haue free benefic of aire, or elfe in fome caue made of purpole within the fame garden, or elfe to couer it as with a cloake verie well with a doubie riat, making a penthoufe of wicker wor ke from the wall to couer the head chereof with fraw layed thereupon: and when the Sontherne Sunne fhineth, to open the doore of the coues made for the faid hearbe right vpon the faid South Sunne.

For to fow it, you mult make a hole in the earth with your finger, and thar as ma. deepe as your finger is long, then you muft calt into the fame hole ten or inelue feeds of the fayd Nicotiana together, and fill vp the hole againe: for it is fo firmall, as that if you thould put in but fourc or fue leeds, the earth would choake it: and, if the time be drie, you mult water the place eafly fome fiue caies after: it may be fowen alfo aftertise manner of Lettufes, and fuch other hearbes, mingling the mould verie well with the feed, and aterward couering it inoft carefully. Some mixe with thefaid earth verie cleane afhes, being well fitted and made frall, but in a fmall quantitie. It is a long tinue in fpringing and putting forth, and after that it is put

The zay to remone Nicotia$\alpha a_{0}$ forth, you mult keepe it both from the cold and froft, couering it in the night time, euen whiles it is young and fmall : and fo it will be preferued and kept continually greene and beautifull. And when the hearbe is growen out of the earth, in as tinuch as euerie feed will have put vp his fprout and ftalke, and that the fmall threddie roots are intangled the one within the other, you mult with a great knife make a great circle or compaffe within the earth in the places about this plot where they grow, and take vp the earth and all together, and caft them into a bucket full of water, to the end that the earth may be feperated, and the fmall and tender impes fwim aboue the water, and fo you thall funder them one afrer another without breaking of them: and thus hauing freed them one of another, you thall plant them along the fayd wall fome three foot from it, and foure foot cueric one from another : and if the earth necre vnto the wall be not fo good as it ought, you fhall helpe it by fuch manner of batteling as hath beene fpoken c $f$, and fhall clofe vp all your care about the plants fo remoued with wateriny them oft. The time to fow them is about mide biting and fharpe kind of talt doch declare : we cannot doube but that it is goodeo cleanfe
cleanfe and refolue, as alto good for the effecting of the things which it hath been tried to laue wrought, that is to fay, for the healing of the Nolime tang ere, all old wounds, and inuectrate and cancred vicars, hurts, ring wormes, and exulcerated fcabs, what maligne qualitie focuer is in then,, Kings. evil, clouds of the eyes, conlufrons, importunes, ftugings of lying creatures, reduefle of the face, and many other accidents which we will rune our hereafter paticillarly. But in reflect of the yerrues thereof, the bet and moft to be effected para are the leaves, and for want of them, the feed, though it have no furl vertus as the leaves : the le sues thereof are $v$ fed, either as they are grecneat the time of their ripeneffe, or being kept drive in the time of Winter, or in powder, when they are dried and made in powder: as for the way to keeper them, we will feeake thereof hereafter:
And to lpeake particularly of the eff e COs of Nicotiana. The cold and wind dep pine of the head, ares, and legges will be holpen, if you lay upon the griffe oftentimes the greene leaves of Petum lome hat dried our e the fire . the tooth-ach is flayed by rubbing the teeth with a linen cloth that hath benne dips in the juice of the fard hearbe, and by putting into the tooth a pill of the leases of the fame hearbe: The wounds of the armes, leges, and ocher parts of the bodied how old focuer they be; will be thoroughly ficcarrized, if you waft then firft with white wine or vine, and afterward wipe then erie cleave withal lirinen clothiand by and by after pwithercupon one or two greene leaves well tamped with the juice, or the juice alone, and upon it forme fine white Lint, or white linen cloth, continuing the fame daily voto the end of the cure: and, if you have no greene leaves, take die ones, and powder them, and put of this powder into the wounds, aficr you have wafhe them as hath been fid, and wiped them with cleane linen!. The Indians vie it to comfort the feeble \& not digefting flomach, frt rubbing it with or le olive, and then applying thereupon one or two leaves fornewhar dried and made pale outer the fire: it is in veealfo among the Indian Cannibals againfl poyfon, wherewith they wee to annoint their arrows when they go to foot, and this poyfon will kill by and by if bloud be but drawne: for when they go to ware, they carrie in one Harts foot of that poyfon, and in another of the juice of Petum to remedie the mifchiefe : and if they have no greene, they carrie drie with them : and fo cone as they have applied it to the wound, they account themfelues out of all danger of death, how great four the wound be. This remedie was tried by the Indian Canibals, by reafon of a battell where they were hurt in a province called Sauinam, and as their cuftome was to cure their poyfoned wounds with sublimate, fo they not find ing fore thereof fufficiint, were made to apple neo their wounds, the juice draw ne our of the léaue es of this hearbe, which flhortly after soke away the paine and venime thereof, and fo they became whole: the proof of this thing hath alto beene made in Spaine foridrie times; and among ft others, by the Catholicke King himelfe, who to make trill of chis hearbe, caufed the wound of a doge to be rubbed with fublumate, and then prefencly after to be applied the juice of Perm, to ether with the fubftance and all. This fane reniedie may ferne against the bitings of mad doges, fo that it be vied within a quarter of an hour after. The decoction of the leaves boyle in water, and made into a Trope with fugar, or into a mule or A pozeine, and taking curie moring the quantitie of two or three ounces, remedjech the dufficultie of breath', 'ld cough, and canifech to fit out groffe and mimic humours; fo that the pattie beforche vf this decoction, have benne vniucrally purged, by tome purgative medicine: the juice and droffe of the fid leaves tamped in a mortar', doth open the obstructions of thc Plecenie, and fofterithe hardneffe of the fame, applied vito the region of the The pliene fpleene in the morning: tor want of the leagues the powder may be applied, being inixt with formeoyntmentappropriat unto foch difeafies. The fame remedie feruech for the paine of the ftomach, the paine of the belie, and the colicke, as allot fuck other griefs coming of coldriefle and windinefle, being applied warmed; and vide oftentimes, till at length the paine be afliwaged. It is not of the leaf ferrite for the payne of the matrix, the fad leaucs applied vito the navel in manner aforefayd:

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gifu iffecultie of breathing. $A$ A od coughs fop and bard. Paine of the Almach. cliche. (inked , Pane of the matrix.

## The fecond Booke of

as alfo if the fume thereof be put into the nofe of a woman grieued with the fuffocation of the Mother. This is the reafon why the women that are fubject vito the difeafe of the Mother, fhould haue the fame alwaies readie. Some hold it for a firsgular remedie againft the gowt, to chaw cuerie morning faning the leaues of Perum, becaufe it voydeth great quantitic of flegme out at the mouth, hindering the fame from falling vpon the joynts, which is the verie caufc of the gowe. It you puthe leaues among th hot embers for fome fpace, and afterward taking thein forth, applic, them (without fhaking off the afhes from them) vnto his bellie that hath eat and drunke much, you fhall affwage his fwelling fulnelle, and keepe him from fuifetting. The juice of the leaues of Nicutiana flamped, clarified, and mixt with melted fugar of the forme of a fyrope, beiny taken in the morning killech and caltech out
To kill the wormes.

Swellings.
Rbeumes.
cold impoo-
fiames.
Carbuncle.

Ficers of the
nofe.

Grecne wornds
$\therefore:$
dried leaues of
Nicotiana are
good
To drie Nicolicma. wormes : but therewithall you mult lay vpon the parties naueli fome of the leaues bruifed, ftamped in a mortar, and wrapped in a linnen cloth, and let it be prefently after he hath taken a clyfter of milke and fugar. All aches of the joynts comming of a cold caufe, all fwellings, tumours, and impoftumes comming likewife of cold and windie caufes, all kibes on childrens heeles, as alfo exceeding greatitches are healed by applying the leates of Petum. The juice of Petum layed vpon a carbuncle how peftilent or venimous foeuer, doth heale and cure the fame prefently: it doth the like in old vicers, though they pierce vnto the bone, if you continue the vfe of it folong as there fhall be any need: for it maketh the flefh to grow againe, and confumeth the filthineffe of the vicers: which I my felfe haue proued in two vlcers of the nofe, caufed of the French difeafe, out of which the juice of this hearbe caufed greatfore of vvormesto come. Greene vvounds (proulided that they be not verie deepe) are healed in a day, by putting into them ot this juice, and applying of the droffe vpon them : and if it happen that they fhould be deepe, then it is but the further wafhing of them with wine, and then to put this juice into them, and the diofic thereof aboue and vpon them with a linnen cloth dipt intothe juice: alfo for the more briefe and fpeedier curing of them, it were good that they were wathed within and without with the fame juice.

Nicotiana dried hath the like operation in the difeafes and accidents aboue fpo. ken of: the way to drie them is this: You mutt take the faireft leaues and thofealfo that are indifferent faire, and put them vpon a file, and afterward drie them in the fhadow, hanging vnder fome chamber doore, not in the Sunne, Wind, or Firc, and fo you may keepethem whole, to vfe them afterward thus dried or elfe in powder. And that I may particularly touch the difeafes which the dried leaucs are good for. If you take of the beft Tabacco or Nicotiana, I doe net meane fuch as groweth and is frequene with vs, but that which is naturally good, as hauing all his rights both of Sunne and foyle, and is brought from the Indians, of which there are fundrie kinds according to the natures of the countries, and the plantation of the herbe, fome inleafe, fome in roll, and fome in ball, and twine it verie hard as you cantogether, then with a knife fhred it verie fmall, and fpreading it vpon a cleane fheet of paper, drie it ouer a gentle fire made of charcoale or other fuell that hath no ftinke nor fmoake, then when it is cold, you fhall put it into a Tabacco plpe that is verie cleane or new burnt (the figure whercof is needleffe to relate, becaufe the world is fo much inchaunted therew ith, that not any thing whatfocuer is halfe fo common as this is now a daies) and haning flopt it hard into the pipe, you fhall with a Waxcandle, or other fweet flame, fet it on fire, and then fucking and drawing the fmoake into your mouth, you fhall force the fume forth at your nothrills, which fume will(if the head be well couered) make that you fhall auoid at the mouth fuch quantitie of nimie and flegmaticke water, as that your bodie thereby will become leane, as it you had fafted long : by which one may conjecture that the dropfie not confirmed may beholpen by taking the fame fume : the fame fume taken at the mouth is fingular good for them that haue a Thort breath, old cough or rheumes, in which caleth it The fuffication maketh them to auoyd infinite quantitic of thicke and flimie flegme. The difeafe of the motber. of the Mother, otherwife called the Suffocation of the Mother, is healed by taking
chis fume into the fecret parts. For the head-ach comming of a cold or windie caufe, Head-ach. if you cannor come by the grecne leaucs, then take the drie, moiftening them frft with a little wine, and affer drying them at liue afhes, then aftei ward fprinkle vpon them fweet water, and fo, applie them vneo your head, or any other fuch place where you feele any paine: you may doe as much with the powder of the leaues dried mingling therewithall things appropriat vnto the difealc. Such as are fubiét vnto fwounings are by and by brought againe, by taking at the mouth or nofthrills thic fume of the faid leaues burne, in refpeet whereof Indian women keepe this heab be verie carefully, becaufe they be fubiect to fwounings. Which is more, the mhabis tance of Florida doe feed themfelues a certaine fpace with the fume of this hearbe (whatfoeuer a certaine new Cofmographer fay to the contrarie, who feekech by his lyes to triumph ouer vs in this refpect) which they take at the mouth, by the meanes of certaine fmall hornes, the picture whereof you may fee by the figure of the hearbe. And the erruch hereof we gather from them which hatue beene in the counrries of Florida, and by mariners comming daily from the Indies, which hanging about their neckes lerte pipes or hornes made of the leanes of the Date-cree, or of reeds, or of ru: fles, at the ends of which litete hornes there are put and packe many dric leaues of this plant, writhen togerher and broken. They put fire to this end of the pipe; receiung and drawing in with their breath at their mouth wide open, fo much of this fume as poffibly they can, and affime thercucon that they find their hinger and thirf facisfied, their frength recouered, their fpirits rejoyced, and therr braine drencht with a delightfome drunkenneffe : as alfo to auoyd out of the mouth an ino finite quantitie of flegmaticke water. But in that the fume of this hearbe maketh men fonewhat drunke, fome men haue thought it to be verrie cold, and by that reafon a kind of yellow Henbane, which it refemblech much in his ftalkes, leaues, cups, and feed, as we haue faid before: but we mult know that the fume of this hearbe That Nictotice doth not make drunken fo quickly, and withall, that this kind of drunkenneffe na doth not doth not proceed of exceffiue cold, fuch as is found in Henbanc, but rather in a cers make drunker eaine aromaticall vapour which doth fill the ventricles. of the braine. All which vertues and properries, befides that we haue proued and tried them in many difeafes here in the councries of France, to the gieat comfort of the ficke: they alfo which come fromithe Indies, and new world of Florida, haue confidently auouched vnto vs to haue proued and tried the fame in chemfelues, hauing beene wounded and hurt, when they made warre in the countrie againft the rebellious and trecherous $\mathbf{I n}$ dians: who likewife affirme, that much good is fpoken of this hearbe, everrof all the priefts of thefe barbarous nations, whereof they make vfe in their Magicall practifes and diuinations, imagining that by the vertue thereof the things which they defire to know are reuealed vntoshem. And that it is fo, the fauage and bruitifh Indians being accuftomed to aske of their Driefts the fucceffe and euents of things to come, is proued by the Priefts: for then they to fuifill the defires and requefts of the Indians, take the leaues of this plant and put them in a pipe, or hollow end of a cane, and being mixt with Wine, they fup in and receiue it all at the mouth, and by and by after they fall in a trance, and become as men without life fo long as vntill the hearbe haue cnded his operation : and then they rife vp halfe giddic, and fo make anfwer vnto whatfocuer any man hach demaunded of them: but we muft thinke that it is more probable, that fuch like diuination doth proceed of fome diveliff art, rather than by vertue of this plant, fecing withall, that this barbarous and heathenifh nation is ordinarily giuen to call ypon the wicked feend in all their neceffities, and he againe doch fodazle cheir eyes, that he maketh them to conceiue an infinite number of ambiguous and doubefull things, and falfe fuperfticions : reprefenting vnto them a thoufand diuclifh and dreadfull vifions and apparitions: thus is the fimplicitic of this poore people deluded, by the companie of the faid Priefls, holding for a true and certaine oracle their verrue proceeding from this planr. Furthermore when they are throughly difpofed to fee frange and fantafticall vifions, they burn the leaues of the faid plant and take the fume a their mouth and nofthrils,
(A.:3:- and verie prefently after they become as it were depriued of fence, falling to the ground in a trance. It is certaine that many Philofophers doe deliuer that there are certaine plants which haue che like force and properties, making men to dreame of an infinit fort of things, and thofe well pleafing to the fpirit and vinderftanding of man: furchermore they affure vs that if a man take of the juice of it in any quancitie ; he thall becomebecide himfelfe for the fpace of three daies. Diof corides likewilc faith; That there are diuérs plants which haue che fame vertue as Mad night-fhade, a dram of the root whereof, as he faith, drunke with Wine, dech bring dreames of vaine things; bur not alcogecher vnpleafant: but taken the double quantitie it makerh , Furche and troublefome dreames.
in powdernore, the vfe of the leaues of Nicotiana, as well greene as drie and made than the juice are diftilled ina glaffe lembecke, the water whereof is not leffe fingular gers, ifyou powreof wis warer vponthe clothes dipt in the fame.
Some likewife draw an oyle out of it by defenfion (to. fpeake after the manner of Chymilts) in a glaffe retort: fome alfo doe make thereofa chymicall falt : both the one and the other, are a great deale more excellent in the forefaid difeafes, than the leaues, juice, powder, or diffilled warer of Nicotiana, forafmuch as quintefferices drawne out of fimples, are the fubrile fpirits thereof, wherein lyeth the pure force and fincere qualities of the matter from whence it is drawne : we will not féake here of the manner of diffilling of the Chymicall oile, and falt of Nicoriana, bur referue the fame for our booke of fecret remedies.
Theonntments of Nicotiana are made diuers waies, notwithflanding that this onIy fimple taken and appliod as we haue alreadie fpoken at large, be of greater vertue and efficacie: I will onely make mention of two which feeme to me the moft artificially deicribed. The firftis: take of the faireft, greateft, greeneft, and moft rofinifh leaues of Nicociana that can be chofen, a pound, wipe them as cleane as is polfibie with a linnen cloth from all dulf, carth, and whatfocuer cther filth, not weeting them any thing at all, bray them in a mortar of wood or marble, with a woodden peftell : afterward melt halfe a pound of fweet feame prepared (that is freed from all manner of filmes and skinnes) in a brafen veffell, putting to the faid feame the droffe and juice of Nicotiana flampe, as hath beene faid, let it all boyle together in a brafen veffell at a fmall and foft fire, fet vpon a triuce, or in Maries-bath (that is to fay, a cauldron full ofboyling water) vntill you fee all the watrie part of

What is meant
by Maries-
bath.
The recond oyntment. the juice euaporated, and that the reft haue got the confiftence or juft thickneffe of the forme of an vnguent. The fecond ointment is fuch : melt and bayle together perrofin, new wax, and curpentine vpon a coole fire in a braffe skellet, of each three ounces, and when it is all melted and Thall begin to froth, take a pound of the droffe and juice of the leaues of Nicotiana, fo purged, chofen, and ftamped, as hath beene Gaid: fet them to boyle with the wax, perrofin, and turpentine, the fpace of fiue or fixe hourcs more or leffe, at a fmall and gentle fire of coales, vpon a treuet, or in a double vefiell (that is to fay, in a cauldron full of boyling water) ftirre the fame continually vnill the watrie parts of the juice be confumed and fpent, and the ref boyled thicke like an oynement : after that, fraine it through a thicke canuaffe, and pue it againe into the skellet, with halfe a pound of V enice turpentine, not fuffering it to boile, but firring it verie well: let it coole, and put it into pors for your vfe. Some in difpenfing the firft and fecond ointmens, pur not in the droffe of the famped herb, but flayning it through a thicke Afrainer, referue onely the juice, which feemeth to me to be the better. As concerning the properties of thefe two oyntments, the firft is better for wounds. onely, cancrous .vicers, ringwormes, skurfes, and fire faces, becaufe it hath more force to clenfe and refoluc,which is the principall and chiefepropertie of Nicotiana, not being hindered or reftrained by the mixture of other ingre-
dients.
dients. The other Ointment is better to incarnate and confolidate all forts of wounds, to refolue impoftumes and fwellings, to mitigate paines, and other effects.
Befides thefe two forts of Ointments, there may bemade a verie excellent Balme of Nicotiana: Diftill the leaues of Nicoriara with the iuice prefled out (the drofle being caft away) put it into a Glaffe-violl, wish like quanticie of common Oyle: fet this Violl, well fopt with gummic Wax, in the Sume a long time, and tye vpon the top of it a ftrong parchment; or elfe fer his Violl in a Cauldron full of lioyling water, or burie it in Horfe dung, and let if fland there fuil fortie daies, changing the dung fometimes : the fortie daies expired, you fhall find a Balme in the Violl, which is of noleffe efficacie than the quinteffence of Nicotiana aboue mentioned, as concerning all the properties that may be defired in this Plant.
Lafly, you fhall vnderftand that the a fhes of this Nicotiana is of no leffe foueraigntie and medicinall vfe than the leafe before rehearfed : for after you haue taken the fume of the Tabacco, and that the powder is burnt into a fhes, you flatl faue thofe athes in a clofe boxe, for they will cure anie greene wound whatrocuer. They are alfo moft excellent for the skinning of ante foare or vlcer : and if you fteepe them in white IVine or Vrine, and make a lee thereof, (bur Vrine is the better,becaufe it hath a certaine feewt oylie fubftance in it, which comfortech and fuppleth foares ) and with this lee if you bath anic old and inueterate vlcer, it will take away the itch; cleanfe it,and heale it. If with thefe a hes alfo you rub your teeth, it will make thens white, fmooth, and preferue them a long time from rotting.
See here (friendly Reader) the Hiftorie of Nicotiana, euerie where fo much fpoken of and effeemed, and that according vnto the verie truth, fo farre as poffibly I could find it out, following the report and intelligences which I hane receiued of the Portugals, Spaniards, and our owne Countreymen, which haue come hither thefe laft yeares palt from out of Florida (which is the naturall foyle of the fame) as alfo fuch experiments as haue beene made here in France of the faculties and vertues thereof, altogether like vnto thofe which that Plant which Florida (as the naturall Countrey thereof) doth bring forth and nourifh: Which if you haue not alwayes found in euerie point correfpondent and anfwering vnto fuch effects as we attribute and giue vnto it, yet you nuft not therefore condemne the Plant, as though thofe were but fained and counterfeited properties and vertues which wee have deliuered and reported of it; but rather accufe the fmall care which is had in the planting of is here amongft vs : afliuring your felues, that if you prouide for it fuch a foile, and ocher comfors, as it hath where it naturally growech, or fomewhat neere thereunto (for fuch in all refpects cannot poffibly be procured here in France, by reafon of the coldneffe and inequalitic of the ayre) and that you husband it likewife as carefully as the Indians doe, that then you fhall perceiue, that what I haue herc fer downe of it, is verie faichfull and true.

An excellent Balme made of Nicotiana. !

## С нар. XLV. <br> of female Petum.

 He experience (which is the Miffreffe of Arts and Sciences) which hath beene had of the faculcies and vertues of this hearbe, which are almoft like vnot thofe of male Perums the fhape of the root, flatke, leaues, flowers, and fred of the lame, which is buta verie lietle one, and in litteneffe onely differing from the figure and colour of male Petum, doe giue vs fome light and reafon why wee fhould call this hearbe by the name of female Petum; and yee the more boldy, for that of the feed of the male Perum this female doth ofentime fpring and grow: For if when the male Petum is in feed, it happen to fhed the
yeare following will not faile to bring forth the female Petum. And which more is, if you fow the leed of male Petum in a ground that is not hot, fat, well turned; and well manured, but rather which is leane and fandie, in ftead of bringing forth male Petum, it will bring forth the female Peeum, and that in fuch aboundance, as that you thall hardly rid che ground of it, but that it will grow cuerse yeare without being eicher fowne or planted. Which mult be an argument vnto vs, that there is in Petum two fexes, a male and a female: like as wee are accuftomed to doe in manie other Hearbes and Plants, hauing betwixt them fome refemblance and affinitie, as well in their vertues, as in their figure, proportion, and colour. It is true, that the female Perum hath a leffe fterime, and lower; the leaues not fo great, and fherter, not fo rofinie, nor fo manie; the flowers nor fo much vpon carnation, nor fo large lpreads the feed more red; the branches nor fo long, nor fo high, neither yet fo manie, as the male Petum putteth forth. And to vttermy iudgement, and make a particular defcription, this fmall female Nicotiana hath his ftemme or ftalke of two foot height, or thereabout, cornered, fimie, and woollie, fer by diftances with long leaues, large, pointed, and fharpe, foft, vnctuous, hoarie, not norched, and of a browne colour. It bringeth forth, as it were, a nofegay at the top of the flalke, and vpon the branche's, frombetwixt the leaues, two flowers of a pale yellow, which are like vnto the Cowflip flowers: and when they be fallen, there remaine and Ray behind cups, and, as it were, greene pots, inclofed in fmall hoarie skinnes, open aboue, and hauing fue or fixe points, but fuch as pricke not. Within the cup is contained a feed, which is verie little, of a browne tawnie colour : the root is tender and fibrous. Where the feed hath beene once fowne, ir foweth it felfe againe, and encreaferh and multiplieth mightily. This fheweth manifeftly, how greatly they are deceiued, which call this hearbe Pria-
Pemate Petum peia, as though it were a kind of Satyrion, which commeth neere to that which is called male royall Satyrion : for this hearbe, which we call female Petum, doth nothing relemble Satyrion, neither in root, colour, figure, difpofition, nor properties. For female Petum hath manie fmall rootes, a iointed falke, manie branches, manie long and large leaues, being hot and drie, as is the male Petum : but Satyrion hath fewer rootes, but groffer, a ftalke without anie ioint, no branches, fewer leaues, flowers onely at the top of the ftalke, without cods and feed, hot and moift in the third degree, and good for nothing but to firre vp carnall heat. Monfieur Goupill and Dodonaus haue fpoken more wifely, faying, that it is a kind of Henbane, bearing a yellow flower.
The oertues of As concerning the vfe and remedies which female Petum affoordeth, they are; fixale Petum. as it were, like vnto the vertues of male Petum: for it ferueth in ftead of the other when the other cannor be gotten, and that in fuch fort as we haue declared; that is to fay, in his leaues, greene or drie, powder, feed, iuice, droffe, and diftilled water, in oyntments and balme, prepared after the manner that wee have fpoken of. Bue you mult obferue, that the female Petum harh his particular properties; as that the

The leaves of
female Petum
for the bloudie fux. jeaues put in a decoction for Clyfters, are fingular for bloudie Fluxes; and that the balme made thereof, according to the manner aforefaid, is a remedie not fecond to anie other in the curing of the Cankers of the breafts, and other parts; and that the juice thereof applyed, is fingular againft the falling of the haire, called Tinea, the head being firtt fhauen; and that the iuice, mingled with mans greafe, and applyed, affuageth the paine and inflammation of the Gout; and that taken inwardly, it purgeth vehemently: and that therefore it is to bee auoided and fhunned, vntill fuch time as his correctiue be knowne, and the vie thereof in Purgations rem cejued.

Chap. XLVI. Abriefe dif coury of the root calechoacar.

Ithin certainc yeares paft,the Indians, Portugals, and Spaniards haue fent vs the root of an hearbe, which they call Mechoacan, which hath vertue to purge the humors in the fame fort that our vfuall purging medicines. Our Councrey men, giuen to admit of and eafily recenue new chings, doe greatly efteeme of it, euen vintill this prefent : We will lay downe the hiftorie thereof in briefe, and as truly as poffibly we could come by it, to the end it may the beter be difcerned whether it deferue to be had in fuch eftimation as we haue it in,orno.
The root is called Mechoacan, of the name of the Region or Countrey where it The refon why groweth, which is a Prouince of New Spaine (firvate in the Wefl Indies, or New is isf called. World) called by the inhabitants Chincicila, and by the commandement of the Ca tholike King, Mechoacan: Which Prouince aboundeth with Gold, Siluer, Cattell, Corne, Fruits, exquifite Plants, mynes of Mettall and Stones, and all forts of good things; where alfo the people are well coloured, full of vigour, ftrong of bodie, and of a perfea health, and that by reafon of the Ayre, which is more wholefome there than in anie other place of the Indies. The occafion of the name rofe thus:The Spaniards, Lords of this $P_{\text {rouince }}$, and being defirous to plant it with Chriftians, did erect and fet vpa Couent of Friers Cordeliers, liuing Monanically ; whofe Prouinciall Father being extrearne ficke, was quickly cured by an Indian Phyfitian, who caufed him to vle oftentimes the powder of this well-profpering and happily-fucceeding medicine: when as therefore they fell ficke, they tooke, with good fucceffc, of this powder. And thus shis root came in great requeft throughour the whole Prouince: and from thence the prayfes thereof were carried and publifhed throughout all Spaine and Portugall; and thereupon it hath kept the name of the Prouince of Mechoacan. The fame thereof is likewife come into France by the meanes of Merchants, defirous of gaine, who haue brought it vs hither from thence. Some call it Rhamindick,becaufe ir femeeth that it hath the like propertic of attracting and pur- Rhanisdickes ging flegmaticke and ferous humors, which the Eaft Rhubarbe hath to attract and purge cholericke humours.
This roor is nor broughi vnto vs whole, but in pieces and round flices, whereinto the markes of it is diuided with kniues, or with hands, fo foone as it is drawne our of the earth, that Dinechoacean. fo it may the better drie in the fladow (alchough in drying it grow but little leffe) and that it may keepe better in thefe round flices, than either whole, or in powder: Bur the powder which is brought from the Indies, is of leffe operation than that which is made into powder amongft vs: it is thicke and of a weightie fubftance, and the rinde thereof of an Ahh-like colour : che inward fubftance white, and nuarked with manie circles, without anie taft, excepr fuch as meale is wont to haue : for it is neither Charpe, nor (weet, nor bitter; and fmell it hath none, neither is it anie thing pithic.
The beft is that which is whireft, moft clofe in if felfe, well fet and ioyned toge- To chwe the ther, fomewhat heauie, not full of holes, or rcten: it becommeth, in time, of white, bef Rechoos. fomewhat grayifh or blackih, and thus by his colour is difcerned whether it be new or old: for the new is white, but the old grayih, or blackihh, and as it were, wrought with diuers colours.
This is the root of a Plane, which is a kind of great Bindweed, called in French Eizeron, which windech it felfe abouc Reedes or Stakes along vp to the top of them, heiping it feife, in this compaffing fort, to climbe without anie manner of aid: it liath a falke or rrunke mixr of diuers colours, as deepe yellow; greenifh, reddifh, fomewhat of the colour of A hes and Medlay, commonly called the Lyons colour: the leaues are fomewhat moift (there being within the flowers; as it were, clappers,
with round knots at the vpper end, the fharpe-pointed end being toward the flalke of the foot) round, and of a darke greenifh colour. It bearech a fruit like a Grape, as bigge as a Coriander feed, and it is ripe in the moneth of September, and in the Spring following. It puteth forth neere vnto the rootes fmall fiences and fprouss, which fall to creeping vpon the earth, if they be not borne vp with fome pole, about which they may wrythe and caft themfelues round. The feed is like vinto that of Bindweed. For your better affurance in all this that hath beene faid, you may vifit and fee the Phyficke-Gardens of Mafter Nicholas Rafe, that learned and wellexperimented Chirurgion, and of Mafter Peter Cuth, a skilfull and painefull Apothecaric, both which dwelling at Paris, haue enriched our Countrey of France with an infinite number of rare, exquifite, and verie fingularly qualified Simples. This root is verie like to the root of wild Vine, as well in colour, rinde, and wrinckles, as inthicknefte; in confideration whereof, fome haue called this Plant white Vine: but and if you taft the one and the other root, you fhall find them fomewhat differing: for Mechoacan, if you chew it, is found without anie talt, excepe it haue a mealie taft, for it is nothing fharpe, but hath fome fmall aftringent and binding qualitie. Brionie, greene ordrie, is biting, and leaueth behind it, in the palate and roofe of the mouth, a fharpe and difpleafing taft : it agreeth much better with the blacke Vine, or with Turbith, at the leaft in facultie, and becaure they are both of them gummie.

The vertues of Mrechoacan.

And concerning the vertues and faculties thereof, they are of two forts : the one proceedeth of his manifeft qualities, as for that it is hor about the fecond degree, and drie about the third degree, compounded of ayrie, fubtle, and fomewhat earthie parts: and by this laft, it hath fome binding and aftringent qualitie, from whence it the inward parts, chiefely when it is taken in infufion. The other vertues that it hath come of a fecret and hidden propertie, by reafon whereof it purgeth fpeciall and choice humors: that is, it purgeth; by fome fimilitude and familiaritic of fubftance, flegmatike and ferous humors, but flegmatike efpecially; then fecondly, cholericke; and laft, aduft and melancholike humours: and thofe not onely from the formacke, liuer, fpleene, and guts, but alfo from the head, parts atcrit the breaft, and ioynts: in regard whereof, $1 t$ is good againft old Agues, and long difeafes, but efpecially the Iaundife, Dropfie, Gout, Kings cuill, Wolues, flegmatike tumours, head-ach, obftruction of the Lungs, fhortneffe of breath, the fuffocation of the Mother, Colicke, paine in the Flankes, retention of Vrine, Coftiucneffe, Agues of diuers huithy
mours,
mours, that is to fay, procceding of flegmaticke and cholericke caufes mixt together, quocidian, tertian, and baffard Agues: to be fhort, againft all difeafes comming of a cold humour. Wherefore it is not meet to be vfed in hot burning Agues, nor yee in .cholericke Agues, nor yet in anie other fuch fickneffes, as are ioyned with grear heat and inflammation, nor yet where adult humours doe offend: for although it not nothoasan is purge them, yet it leaueth behind it fome notable heat : but it is verie true, that in ribsee dfeefese continuance thereof it would doe feruice, as namely, when the chinneft part is purged, and nothing remaineth but the thicke and grofle behind. This is the caule why this root is not fit for the beginning of cholericke difeafes, if it be not firf fteept a night in Endiue or Succorie water with a verie litele white wine, and in the morning ftraining of it, to drinke the liquor ftrained from it.

The way to prepare it is on this manner: You mult take the weight of a dramme, The preparing or a dramme and a halfe, or two drammes, more or Ieffe, according to the díppofition of the bodie, the aptneffe of it to purge, and the age and frength of him to whome you giuc it: and afterward beat it in a mortar, and make it into powder, neither too grofle nor too fine: then afterward put this powder in three ounces of white Wine, (when there is no Ague) or water, or the decuation, or broth of Endiue, or Succorie, or of a Chicken, or fome ocher fuch liquor, which is meet and fit for the prefent difeafe: as in the water of Betonic, for the head-ach; or in the water of Mother-wort; for the difeafes of the Marrix, and fo forth of orhers: afterward, the next morning, you muft drinke it, the liquor and powder all rogether : there may further, at your pleafure, anie fyrrup that you will, be mixed therewith, if fo be you know it meet and conuenient for the difeafe in hand. It is true, chat we have often proued, namely, that it endurech no mixture of fyrrups,or fuch other things, no, nor of Cinnamon (if the ill difpofedneffe of the formacke doe not require it) for in fuch mixtures it maketh no operation, and therefore it is beter to take it altogether fimple. It may be The insfifon of giuen alfo in infufion, when we defire to take away the obftructions of the fpleene or Mucchoscain. liuer, in feeping all night the powder thereof groffely beat (as we commaund to be done with Rubarbe) in fome wine or liquor fitand appropriate : afterward ftraining it the next day in the morning, and giuing the liquor onely (wherein it was infufed) to drinke : but in this cafe the quantitie of the powder mult be encreafed, vntill it come to three or foure drammes, for orherwife it will worke no cffect; in as much as experience hath taught vs, hat the purging qualitie of this roor lyech not fo much in the fubtle parts thereof, as in the fubftance. Which thing $M e f u e s$ may feeme to haue found likewife in Rubarbe of the Eaft, when he wifhech vs to take two drammes onely of Rubarbe in fubftance, and the double in infufion. This thing may happen vnto this root, and to that Rubarbe of che Eaft, vpon their longer ftaying in the flomacke, being taken in fubftance, than in infufion, and thereupon make a flronger and a longer continuance of their purging. This powder may be alfo prepared in anocher manner: as namely, by making Marchpanes of the faid powder with ftamped Almonds and Sugar, which will be verie fit to purge young children after a gencle manner. There may pilles allo be made of this powder, which may be as frmall as Coriander feedes, to the end they may be the fooner diffolued within the ftomacke, and not fay long there to heat it : or elfe they may be made greater, when chere is anie purpofe that the faid powder fhould draw from the ioints and outward places.
The commodities and benefirs that rife of the vfe of this root, are, that it may be The commodio caken at all times. It is not loathfome to the taft, nor horrible to the frmell, neither yee ties of the eve hath it anie difpleafing colour; vnto all which the orher purgatiues, for the moff part, of Mechooscario are more or leffe fubiect. It procurcch not anie loathing viro the ftomacke: it caufech not anie wringings in the bellie; neither prouokech it anie vomit: It purgech fo gene$1 y$, as that it workech not anie weakneffe or relaxation, or anic other fuch paffion vnto the fomack: it refolueth not or loofeneth the naturall powers neither doth it trouble or put the bodie to paine: bur contrariwife, it maketh if ffrong \& luftie, asthough indeed is were no purgatiue or medicine, but a familiar \&acceptable thing to our natures
whict
which thing fallech not out ordinarily in other medicines : fo that young children, old folke,and all fuch as haue taken anie great checke and diflike at osher medicines, may fately, pleafantly, and profitably take and vfe this.
It is true, that before it betaken, it will be needfull to prepare and digeft the hue-

That the bodie and bumours must be prepar red before the taking of OMe choacan.

The day of the taking of it.

The day after the taking of it.
cofiveneffe.
Symptomes happering upon the ve of Mechoacan. mour that is to be euacuated, attenuating and making thinne and fmall the fame, becaufe it is cold and clammic: and opening the paffages, after the counfell of Hippocrates, with Clyfters and other conueniene meanes; for otherwife the powder profiteth nothing: as we fee it fall out euerie day in fuch as vfe it rafhly, and without preparation: and foalfo, with them, the thing chat of it felfe is verie good, doth get an ill name, but againft all right and equitie, feeing it worketh good and laudable effects, being taken the bodie firft prepared. When it is taken, the partie muft keepe himifelfe from cold, wind, much eating or drinking, and other excefie: he may fleepe an houre prefently after he hath taken it, but not after that it beginneth to worke: there is no need for him to take anie broth two or three houres after he hath taken it: for is is fo worthie a medicine, that it caufeth not anie paine in the guts. The day following, if the bellie be bound, you muft procure it to foole by Clyfters, or otherwife: and put cafe it hath not fufficiently purged, you muft then goe ouer it againe fo oft, as till it hath wrought your wifhed intent. As concerning the fymptomes o: accidents which may follow the taking of it, they are eafly reformed; although indeed the greater part-of them grow rather of the qualities of the humours, or of the euill difpofitions of the bodies of them that take it, than of anie maligne qualitic in the root it felfe. For as for vomiting, that may come by reafon of the fomacke, being eafie and inclined to vomit, as hauing a verie fenfible orifice, or of the aboundance of fuperfluities and fretring humors contained in the fame, rather than of the powder which doth ftrengthen and comfort the ftomacke by his afringencie: notwithfanding, it Mall not be amiffe to meet with this vomiting, to put into the infufion of this powder a little Cinnamon. It is held for certaine, that if anie be defirous to flay the working exceffiue or not excefflue of this powder, that he needeth but take fome fmall quantitie of broth, and the eating of it will fay the attraction of the medicines although I haue proued this not to be alwaies true. I further confeffe, that it leaueth fome heat and drineffe behind it when it hath wrought, which appeareth by the great alteration that is remaining: but this is no other ching, than that which other purging medicines likewife haue; for they being all of them hot, doe fhew themfelues therein: but this heat may eafily be corrected by the mingling of cold things. Suppofe likewife, that fuch heat may as foone come of the hot and drie humor: as is happeneth in hot burning Agues and true Tertians, efpecially if the ficke partie be of youthfull and flourifhing yeares; of a hot and drie temperature, in Summer, in a hor Region, and when the prefent conftitution of the ayre is hot, and being fuch a one as hath a leane and thinne bodic: and then, in this cale, I ccu!d wifh fuch a partie not to vfe this powder without the deuife of a learned and wife Phyfitian,for feare of running into a greater mulchiefe. I confeffe further, that it leaucth a coftiueneffe behind it, in fuch fort, as that fome are fix daies before they can goe to ftoole after: but herein it deferueth no more blame than other like purging medicines, and efpecially Rhubarbe: Notwithftanding, to meet with this, you muft take a Clyfter the day following, or eat fome Broth, or Plumme pottage, which may loofen the bellic.

Loe here (friendly Reader) what thou art to iudge of the root of Mechnacan, and what opinion thou art to haue of the properties thereof, and how thou canft not faile therein, if firt thou knowing the good by his tokens and markes, doeft prouide thy felfe for thy vfe accordingly: as namely, if thou buy that which is new,fliced into round pieces, white, duftie, and which, quantitie for quantitie, doth ouer-weigh other roots: And if thou findeft anie one to be fomewhat blacke and worme-eaten, by that thou mayeft know that it is old, and that therefore thou oughteft not to vfe it. It is fomewhat hard, and quickly rotteth, for it will hard and feant endure three yeares, if it be not hidden in Millet, or wrapt in a Linnen Sere-cloth, or couered
ouer with Pitch or Rofin. Diucrs and fundrie ocher hearbes there are of rare and fo. ueraigne qualitie, for the vfe of man, in medicines ;, but cheir order, fowing, nouriThing, and planting, differech nothing from them alreadie rehearled : onely, according vnto the opinion of Serres, there is another (peciall regard to be taken to thefe medicinall hearbes; which is, to plant them in thofe coafts and corners of your Garden which is moft proper to theirnatures, gining them that Sunne, that Shade, and that Wind, which is moft proper and behoofefuli for them: for fome take delight in the Eafterly quarters, fome in the Weft, fome in the North, and fome in the South: as was moft curioufly obferued by Mafter Richard de Belevall, Phyfitian to the laft King of France; who,ach his Maiefties commandement, planting a Phyfick-Garden in Montpelier, gaue vnto eueric hearbe his due place fo rarely and artificially, that neuer anie was feene to flourifh or encreafe in more rare and aboundant manner, neither to haue greater flrength or operation in their working, to the great admiration of the learned, and his high renowme in the workmanhhip. To proceed then to the naturall Clymars in which manie of thefe Phyficike hearbes naturally delight, you Hearbbes of the fhall vnderftand, that thofe hearbes which delight in the Eaft, and loue to behold Eafl. the Sunne at his firft arifing, is firlt Angelica, of which there are two kinds, the one called Garden Angelica, the other Wild Angelica : both may be fowne either bsfore or immediately after Winter. It is foueraigne againft all Infection, and therefore much fought atter in the time of Peftilence and Mortalitie : it alfo healeth the biting of Serpents, or mad Dngges, and dryech vp thofe naughtie humours which offend the ftomacke. Then Valerian, of which wee haue written before: and alfo Argentine. Then Dogges toovh, which muft be fowne on good earth almoft in anie monech : the decoction whereof taken, with great reafon helpech Feauers, and kill the W ormes in children. Then Sophya, otherwife called Talierrum, which may be cither fowne or planted in the Spring, or in Autumne : The feeds of it being beateri to powder, and drunke in Wine, is excellent for all euacuations and clearings of the bloud: alfo it helpech women in Child-bearing. Then Oxe-eye, which would be Cowne at the Spring vnder the eauings of houfes, for it louss fhelter. The hearbe is good to be drunke for the Iaundife: and being made into a Cataplafme, it diffolwech all manner of hardneffe: and the decoction thereof will occafion Vrine. Then Centaurie, which firft tooke his name from Chiron the Centaure, when he was wounded with a poyfoned fhafe. It requirech a well-laboured earth, and verie fruitfull, according to fome opinions : yet it is ofteft found in Wood-land Countreyes and barren places; whence it feemeth, that a reafonable earch will beare it : and it may be fowne or planted either in the Spring, or in Autunne : it is a great purifier of the Bloud, and verie foueraigne againf Wormes: it healeth old Vlcers, efpecially the powder thereof: and the deco tion thereof is excellent againft Rheumes and Fluxcs. Then Millefoile, which defirech rather a moift than a dric earth, and muft be planted thinne, for it fpreadech much : it is foueraigne againft the Diffenterra, and againft all excefliue euacuacion of bloud, in what part foeuer it be. Then Braffula Maior, or Minor, which is an hearbe of quicke and eafie growth, efpecially if it be planted againft a wall or houre fide, and may be fowne in the Spring, or planted in Autumne: it is good for the flanching of Bloud, and it curech mof inward VIcers. Then Bedegaris, or white Thoine, which defireth a good earth, and may be fowne in the Spring: the decoction of it is excellent for the Tooth-ach, or for a weake Stomacke, for the Collicke, or Flux of the bellie. Then Crefpinet, or Poligonon, which euer groweth beft in'a moift ground. It is good for the Stone, the Gout, Flux of the bellie, or paine in the Eares. Then Ebulus, which may be fowne in the Spring, or in Autumne : it purgech Choler and Flegme, being eaten in pottage: and the decoetion thereof taketh away the paine of the Gout, and helpeth the French fickneffe. Mercurie is of two forts, male, and female: ic defireth a ground that is well cilled : it may be. fowne in the Spring time : the decoction thercof purgeth Choler and all fuperfluous humours: ir alfo loofeneth the bellie, chiefly if it be minifted in Glyfter, and prouokech the cermes in Women. Then Cardures

Stellatus, which is a verie delicate. Plant, and groweth verie cafily, either from the roor, or from the feed, in the Springuime, or in Autumne: The chiceft vertue of this Plant confifteth in the feed, which being beaten to powder, and drunke with Wine, prouoketh Vrine, and expelleth Grauell. Laftly, Venus haire, which groweth beft neere vnto Fountaines and Springs in Countries that are rather hot than cold, for it loueth neither formes nor wind: it is beft to be planted in the Spring. This hearbe purgeth well : it breaketh the Stone, and auoideth Grauell: it is good againft the bitings of venimous Beafts, and prouoketh the termes in Women : ir ftauncheth Bloud: and the decoction thereof is excellent for the yellow Iaundife.

Hearbes of the We

Thofe hearbes which delight in the Weft, and loue the declining of the Surine, are firft the hearbe Scabious, which delightech in a reafonable tilled earth, rather moift than drie, and hauing his feat according to his nature, profpereth verie aboundanely. The beft feafon either to fow or plant it, is in the Spring time, and it endureth manic yeares without aid or replanting : all parts of it is verie medicinall, both the root, ftalke, leaues, and flowers : The water diftilled of this hearbe, is good againft all Venimes or Poyfon taken into the flomacke, and allo againft all inward Infection, Itch, Byles, or Vlcers. Then is Agrimonie, of which we haue fpoken before。 Then Serpentar, which is fo called through the likelyhood it beareth of a Serpent: and of it there are two kinds; one great, the other fmall. It defireth a verie good earth, and fomewhat moilt, and may be fowne or planted in the Spring time. The roots of this hearbe is excellent for all malignant Vlcers : a decoetion of the leaues thereof is good for Womens termes, and the leaues thereof keepeth Cheefe long from roting. Then Onos, which will grow in anic earth, and rather in a barrenthan a fertile, and is beft to be fet of the root, either in the Spring time, or in Autumne. It is foueraigne againft the Stone, and prowoketh Vrine fpeedily: and a decoction of the roots thereof taketh away the paine in the teeth. Then Cinquefoile, which groweth almoft in euerie place, and may be planted in anie feafon: the decoation of it being gargled, or held long in the mouth, taketh away the paine of the teeth, and heales anie VIcer in the mouth : it is allo good againft anie Infection; or peftilene Ayre. Then Sellodnie, of which wee haue fpoken before. Then Staphifagria, which defireth a good ground, yet euer to be planted in the fhadow, and that principally about the Spring time: It is good againft paine in the Teeth, Rheumes, and other Obftructions, which grow from cold caules. Then Goats leafe, which will grow euerie where, if it be not annoyed with wind, and may be fowne or planted either in the Spring, or in Autumne, and is exceeding good for theftone. Then ground Iuie, of which we haue (poken before. Then Tuffilago, or Coles foot, which groweth beft in watrie or moift places, and would euer be planted in the Spring time, or in Autumne: it is verie good againft infection, and againft all fraitneffe of breath: alfo the fmoake or fume thereof being taken through a fmall tunnell in at the mouth, it cureth all infirmities of the lungs. Then Salicaria, or Lifimachus, which receiued the name from the King Liimachus, who firft made vfe of that hearbe : it loueth to be planted neere vnto Riuers, either in the Spring time, or in Winter: it is good againft the Diffenteria, or to ftaunch bloud, either being vfed in the leafe, or in powder. Laftly, VImaria, which louech to be planted in low and fhadowie valleyes, a great deale more moift than drie, and would be planted chiefely in Autumne: The decotion of it purgeth and cleanfeth the bodie of all flegme, whether it be fharpe or groffe: it helpeth the Falling fickneffe: the powder either of the roots, or the leaues, flayeth the flux of the bellie, or the iffue of bloud: and the diftilled water eafethall paines, both inward and outward.
mearbes of the Werth.

Thofe hearbes which affect the North, and delight to endure the blafts and nip: pings of thofe colder ayres, are firt Gentiana, of which we haue fpoken before. Then Cabaret, or Afarum, which neuer groweth fo well from the feed, as from the plant: it asketh litete coft in tillage, and bearech flowers wice a yeare, that is to fay, both in the Spring, and in Autumne: it cureth the paine in the head, and afluagech the
inflammation and anguifh of fore eies : it is good againft Fiftulaes, the Gour, and Sciaticaes. The powder of the root prouoketh Vrine, and flayeth the menffruall Flux: it helpeth the Dropfie, and putteth away both the Feauer tertian and quartanc. Then the Golden rod, which onely groweth from the feed, and would be planted in a good Ooyle in the Spring time: it is good againft the Stone or Serranguric: it bindech vp VIcers, and healech Fiftulaes. Then the hearbe which is called Deuils-bii, it defirech but an indifferenc earth, rather moilt than drie, and where the Seed often fayleth, there the Plant neuer doth, if it be fet in the Spring time. It is good againft bitter griefes, as thofe which proceed from choler, and againft peftilent tumors: againft Lice in childrens heads, and fuch like. Then Beronie, of which we haule fpoken before. Then Harss- tongue, which onely groweth beft from the root : it is to be planted in the monechs of March and A prill, in a fat earth, yet the moifter, the better: it helpeth all oppilations, and curech thore which are troubled with a quartane Feauer. Then the hearbe Dogges-tongue, which defirecth a light blacke mould, yet but reafonably tilled : it may be fowne or planted in the Spring cime : it is good to cure the Hemorrhoids, and eafech all Ach in the limbes. Then Serpenes-tongue, which muft euer be placed in a rich earth, coole and moift, for it can by no means endure the heat of the Summer: it is beft to be planted from the root in the firt beginning of the Spring: there is in it much vertue for the refoluing of Tumors, and helping of Scaldings or Burnings, or other malignant VIcers, or anie inflammations in the Eyes. Then water Germander, which delightech moft in cold grounds, enclining more to moifture than drineffe, and rather fat than leane: is flourifheth moft in the moneths of Iune and Iuly, yer in fuch fort, that the flowers continue not aboue a day at moft; for as one falls away, another rifes: it is beft to be planted from the root or flippe in the moneths of Februaric or March : it is foueraigne againft all manner of PoySons, as Peftilence, or the Diffenteria : it prouoketh Vrine, and the cermes of Women : it cleanferh VIcers, and reuiuech all bentummed members. Then Tormentill, or Septifolium, which louech a darke, warerifh, and fhadowed earch, yee that which is verie fat and fertile : it is alwaies to be fowne from the feed, either in the Spring time, or in Autumne : it is foueraigne againft the Stone, but chiefely it curech Fiftulaes and old Vicers : it withflandeth Poyfon, and eafeth the paine of the Teech. Then Enula Campane, of which we haue fpoken before. Then Perficaria, which is ofeft planted from the root, in the Spring time, in grounds which are rather moift than drie. The decoction of this hearbe curech all manner of bruifes in Beafts, where the bone is not broken,onely by bathing them therein. Alfo the flefh of Muttons, Beeues, V eales, and fuch like, is kept frefh manie daies by the vertue of chis herbe onely, being wrapped about the fame. Then Lyons foot, which will not liue but in a good earth, fat, and fercile, yec fomewhat moift, and is beft to be fowne in the moneths of March or Aprill: it hath an excellent vertue for the healing of ruptures in young children. Then Eringo, which crauech a good and well tilled ground, and may be fowne or planted either in the Spring or in Autumne: it is good againft the Collicke, againn Grauell, or the diffculcie of Vrine: it ftrengchenech the Reines, and healech the bitings of venimous beafts. The difililed water thereof is good againft both quotidiais and quartane Feauers : it helperh the French difeafe, and ftoppeth falt humors. Then laftly Feniculus Porcinus, which delightech a grear deale more in the fhade than in the Sunne-flhine : it would be fowne or planted either in the Spring time, or in Autumne : it comfortech much the finewes, and ftrengtheneth weake backes.

To conclude, thofe hearbes which affect the South, is firt the bleffed Thifle, of Hearbes of zhe which we haue fpoke before. Then Veruaine, of which there be two forts, the male, Soutbo and the female:both defire to be planted from the roots in good ground, either in the Spring, or in Autumne. This hearbe is of great reputation, efpecially amongft the Romanes, who vfe it continually amongft their Inchantments: it takerh away the paine of the Teech, and it healech anie old Vlcer : it is good againft anic Fcauer, eafech the paine of the Collicke, and expellech Grauell. Then Saxifrage,
which is of two forts, the great and the leffe: they may be fowne or planted in anie good ground which is fat and light, in the moneth of March. The chiefeft vertire of this hearbe is, to breake the Stone, prouoke Vrine, helpe womens Termes, and to driue away all cuill humours out of the Stomacke. Then Pionie, of which wee haue fpoken before. Then Hermole, or the Turkes hearbe, which loueth a tat, blacke, and drie mould : it may be either planted or fowne. The vertue of this hearbe is, to make one to hold his Vrine, the powder of it being taken either in Broth, or in whire Wine. Then Acanthus, or Brankvrfine, is an hearbe which che auncient Architeês were wont to carue, infolding and imbracing their Columnes or Pyllafters of the Corinthian fafhion. Whence it came, that the Romanes of auncient time did call it CMarmoralia, becaufe fuch Pillars commonly were of Marble. It is to be fowne in the monechs of March, or Aprill, in a well tilled Garden : his leaues are good againft the Stone, and flay the flux of the bellie. Then Ariftolochia of both kinds, of which wee haue fpoken before. Then Perforatio, which is fo called from the affection that it bearech to the Sunne: it may be fowne in the Spring time in anie light earth. The feed of this hearbe beaten to powder, and drunke in white Wine, curech a tertian Feauer, and eafech thofe which are troubled with the Gout, or Sciatica: if the powder of it be caft vpon Vleers, it alfo healech them : and the decoetion of the leaues thereof prouokech Vrine exceedngly. Then Arum, which alfo delighteth in a good Soyle, rather moift than drie: it flourifheth moft in Iune, and the leaues thereof are like the leaucs of Millet; and when it is in the prime, it hath a yellow colour, like vinto $S$ affron : it is to be fowne onely in the moneth of March. This hearbe is verie foueraigne egainft the Gout, and driueth away all flegmaticke humours : if it be bruiled, it curech old Vicers, and all wounds or bitings giuen by the Wolfe: the leaues boyled in Wine, helpeth bruifes and difplaced members or bones our of ioint : it helpech the Hemorrhoids alfo. Then Bugloffe, of which we haue fpoke before. Then Carline, which tooke the name from Charles the great, King of Firance, who by the vfe of it onely cured himfelfe of the Plague: it loueth a drie ftonie ground, and where it may haue the ftrength of the Sunnes beames: it muft be fowne in the Spring time, or elfe planted from the root. The powder of this hearbe being drunke; chafech away all infection, and prouoketh Vrine : it is good againft all Conuulfions: and being made into a Caraplafme, forcifieth and ftrengthenech the heart: if it be feeped or mixed well wich vineger, it eafeth either the Gout, or the Sciacica, being applyed vnto the place grieued. Then lietle Germander, which differeth not much from water Germander, onely it craueth a drie and ftonie earth, and rather a hot than a cold : it loueth the Sunnes beames, and is ratier to be planted from the root, than fowne from the feed, either in the Spring time, or in Autumne: it is good againft infection, and helpeth tertian Feauers: it helpeth the Epilepfis, paine in the head, and anie orher griefes of the braine: it curech Conuulfions, the Gout, and warmeth the entrailes. Then Nicotiana, or Tabacco, of which wee haue Ipoken before. Then Peper, which mult be planted immediatelly after Winter, in a well tilled earth, and endureth long in Gardenis, without anie lhelpe of tranfplanting. Then Camomill, which is of three forts, differing onely in the colours of their flowers: for the one is white, the other yellow, and the third purple : It louech an earth cold and drie: it is beft planted from the rout or flippe, either in Autumne, or the Spring time : it louech to be of troden on, or preffed downe, and therefore is moft placed in Alleyes, Bankes, or Seats in the Garden. It is good againft a tertian Feaner : and the bath which is made thereof ftrengtheneth much weake members, and comfortech the finewes both of the armes : and legges: it comfortech alfo the reines: The water thereof alfo diftilled is verie good for the fame purpofes: and the ivice thereof mixed with womans milke, Rofewater, and the iuice of Houflecke warmed, and a Rofe-cake fteeped therein, with a Nutmeg grated on it, and fo applyed vnto the cemples of the head, taketh away all paine therein, how violent foeuer it be. Diuers other hearbes there $b e$, which are of like natures to thefe alreadie rehearfed: but from the experience of
thefe, a reafonable iudgement may find how to plant, nourifh, and vefe anie whatfoeuer. There be alfo diuers purgatiue Simples, as Rhubarbe, A garicke, and fuch like, which for as much as our Soyles will not endure or beare thein, I will here omit to fpeake of them ; onely a word or two of the hearbe Sene, which is fomewhat more frequent with vs, and is of that delicate, holefome, and harmelefle nature in his working and operation, that it may be cearmed the Prince, or Head of Simples. Then touching Sene, you thall vnderftand, that it beareth litele Imall thicke leaues vpon a high large ftalke : it hath flowers of the colour of gold, with diuers purple veines running vpon them. Some take the Hearbe which TheophraStus syritech of, called Colutea, to be Sene : but chey are deceiued therein; for the one is a Tree, and no Hearbe, and the other is an Hearbe, and no Tree: befides diuers other differences, niedleffe here to repeat; all which are at large fet downe by e Anthonie (Mirauld, Doctor of Phy ficke, and a Bourbonois, in his booke intituled CNaijon Champeftre. It may be planted either from the ftalke or roor, like Rofemaric, in anie good, fertile, and dric foyle, where it may haue the full reflection of the Sunne: and the feafon beft and fiteft for the fame plantation, is at the later end of Autumne. As touching the choice of the beft Sene, thas hath cuer the beft reputation, which is brought from Alexandria in Syria, as the beft of our moderne Phyfitians doe report: but Iagues Siluius faith, Thar the Sene which commech out of India is not at all inferiour to it ; neither that which groweth in Tufcanie. True it is, that there is not anice of them bur is paffing good. As for the vertues of Sene, according to the opinion of $\mathcal{E}$ tuarius, one of the beft reputed Phyfitians amonyft all the Gorecians, hee writech, That Sene is verie excellent for the purging and auoiding of choler and flegme; withour anie danger or difturbance vnto the bodic and firits : it alfo purgech moft fweerly all melancholie and aduft humours, being taken in the broth of a Capon : it alfo taketh away all inueterate and uld paines in the head, and eafech all inward obftructions. According to the opinion of Mafter Iobn of Damafcus, an excellent Arabian Phyfitian, Sene being abfterfiue and binding, purgeth excellently the braine, the fenfitiue parts, and organs of che heart, from all aduft and melancholic humours: it allo helpeth all long and redious Feaucrs: it alfo reioy ceth the fpirits, and taketh away all fadneffe from the heart. A decoction made of the leaues thereof, togecher with.Camomill, ftrengtheneth the braine wonderfully, and comfortech the finewes, being bathed therein : alfo being taken anie way, it confirmeth both the fight and hearing. And if you find that the purgation be weake, you may then ftrengthen it, with mingling therewich Simples of ftronyer nature, as Sal Gemma, Sal India, and fuch like : bus if you vfe if for anie griefe in the ftomacke, then you fhall mix ftrong cordials cherewith, and adminifter it either in che broth of Veale, Chickens, or Capons, or anie other flefh. And Serapion, another Arabian Phyfitian, writech; That Sene is excellent for thofe which are dull of vnderfanding, for thofe which are fubiect to frenzie or madneffe, or anie decrepitneffeof bodic, proceeding from inward weakeneffe. And to ail chefe former opinions, Iohn Fernell, Iaques Siluius, Manard Ferrarois, and Andrem Mathiol, the moft excellent reputed Phyfritians of their times, are fully and cruely confenting, as may be found in each of their Writings.

Chapo:

# The Garden of Pleafure, or Flower Garden. 

Снар. XLVII.<br>Of the profit, pleafure, fituation, working, or tilling, and difpofing of your Garder of Pleafure.

The Elower
Garden.

IHe moft pleafant and delectable thing for recreacion, belonging vnto our French Farmes, is our Flower Gardens, as well in refpedt that is feructh for the chiefe Lord, whofe the inheritance is, to folace himfelfe therein, as alfo in refpect of their feruice, for to fer Bee-hiues in. It is a commendable and feemely thing to behold our at a window manie acres of ground well tilled and husbanded, whether it be Medow, a Plot for planting of Willowes, or arable Ground, as we haue food vpon heretofore: but yst it is much more to behold faire and comely Proportions, handfome and pleafant Arbors, and, as it were, Clnfers, delightfull borders of Lauender, Rotemarie, Boxe, and orher fuch like: to heare the rawifhing muficke of an infinite number of precie fmall Birds, which continually, day and night, doe chatter and chane their proper and naturall branch-fongs vpon the Hedges and Trees of the Gardens; and to fmell fo tweet a Nofe-gay fo neere at hand: fecing that this fo fragrant a fmell cannot but refrefh the Lord of the Farme exceedingly, when going our of his bed chamber in the morning after the Sunne-rife, and whiles as yet the cleare and pearle-like dew deth pearch vnto the graffe, he giueth himfelfe to heare the melodious muficke of the Bees; which bulying themfelues in gathering of the fame, doe alfo fill the ayre with a moft acceptable, fweet; and pleafant harmonie: befides, the Borders and continued Rowes of foueraigne Thyme, Balme, Rofemarie, Marierome, Cypers, Soothernwood, and ocher fragrant hearbes, the fight and view wher cof cannot but giue great contentment vnto the beholder.

And in this Garden of Pleafure you are verie much to refpect the forme and proportion of the fame: wherein, according to the opinion of Serres and Uniett, you mult be much ruled by the nature of the Soyle: which albeit you may, in part, by your induftrie and coft helpe, as touching the leuelling, rayling, abating, or enriching of the fame; yet,for the moft part, and efpecially rouching the ayre, temperature; and clyme, you muft be gouerned by the Soyle in which you liue. Now for the generall proportions of Gardens, they may at your pleafure carrie anic of thefe foure fhapes, that is to fay, either Square, Round, Ouall, or Diamond. As for that which is more long than broad, or more broad than long ( neither of which are vncomely) they are contained vnder the titles of Squares. This is but the outward proportion, or the Verge and Girdle of your Garden. As for the inward proportions and ihapes of the Quarters, Beds, Bankes, Mounts, and fuch like, they are to be diuided by Alleyes, Hedges, Borders, Rayles, Pıllars, and fuch like, and by thefe you may draw your Garden into what forme foeuer you pleafe, not refpecting what fhape focuer the outward Verge carriech : for you may make that Garden which is fquare without, to be round within; and thar which is round, either fquare, or ouall; that which is oull, either of the former; and that which is diamond, anie Onape at all: and yer all exceeding comely. You may alfo, if your ground be naturally fofeated, or if your induftrie pleafe fo to bring it to paffe, make your Garden rife \& mount by feuerall degrees, one leuell afcending aboue another, in fuch fort, as if you had diuers gardens onc aboue another, which is exceeding beautifull to the eie, and very beneficiall to your flowers \& fruit-trees, efpecially iffuch afcents haue the benefit of the Sun-rifing vponthem: and thus, if you pleafe, you may haue in one leuell a fquareplor,
inanother a round, in a third a diamond, and in the fourth an ouall, then alongft the afcending bankes which are on cither fide the flaires, you mount into your feuerall gardens, you fhall make your phyficke garden or places to plane your phyficke hearbes vpon, according as the modell is moft brauely fet forth by oliner de Serres, and as the late king of France caufed his phyficke garden to be made in the Vniuerfitie of Montpellier, being all railed vpon bankes or heights one aboue another,fome round, fome fquare in the manner of a goodly, large, and well erimmed Theatre, as may be feene at this day to the great admiration thereot.
-The Garden of Pleafure (as hath beenc faid) muft be caft and contriued clofe to the one fide of the Kicchin Garden, bue yee fo, as chat they be fundred by the intercourfe of a great large alley, as alfo a hedge of quickfet, hauing three doores, whofe ground mult be of a like goodneffe, and vouchiffed the like labour, tilling and hufbanding, that the Kırchin Garden harh beflowed vpon jt: and as the Kitchin Garden is to be compaffed and fet about with Lattife worke, and young common bordering fluffe to be made vp afterward and continued into arbours, or a s it were into fmall chappells, or oratories and places to make' a fpeech our of, that many ftanding about and below may heare : in like fort fhall the Garden of Pledure be fee abour and compaffed in with arbours made of Ieframin ; Rufemarie, Box, Iuniper,Cypres trees, Sauin, Cedars, Rofectrees, and other dainties firft planted and pruned according as the nature of eureric one doch require, but affer brought into fome forme and order with Willow or Iuniper poles, fuch as may ferue for che making of arbours. The waies and alleys muft be couered and fowen with fine fand well bet, or with the The alless of powder of the fawing of Marble, or with he fine duft of flate flone and other hewen the Gerdero ftone: or elfe paued handfomely with good pit-ftone, and cyles chat are well burnt : or wich faire peeces of fones, fuch as faires be made of, the whole laying of them being leuelled and made euen with a beater or mall made for the purpofe : or where thefe are not to be gotten, you fhall take of fine yellow grauell well mixt with pyble or other fuch like binding earth, and with it trim your alleys; others ve to take coale duff,or the a hhes of Sea-coale well beaten and fifted, and with ir frow che alleys, and alchough it be not fillly fo fightfull, yet it is profitable in this refpeet, that it keepes them from graffe and weeds, and other greenes, becaule nothing will fprout through the fame, albeit be not troden or walked vpon of a long fpace.
This Garden, by meanes of a large path of the bredth of fix foot, fhall be diuided into two equall parss : the one fhall containe the hearbes and flowers vfed to make nofegaies and garlands of, as March Violecs, Prouence Gillo-flowres, , Purple Gil-lo-flowres, Indian Gillo-flowres, fmall Daunces, Daifies, yellow and white Gilloflowres, Marigolds, Lilly-conually, Diffodils, Canterburie-bells, Purple Veluet flowre, Anemones, Corne-flag, Mugwort, Lillies, and orher fuch like, as may be called. the Nofegay Garden. Alfo in it you fhall plantall forts of ftrange flowers, as is the Crowne imperiall, the Dulippos of fundrie kinds, Narcyfus, Hyacynthes, Emeryes, Hellitropians, and a world ot ocher of like nature, whofe colours being glorious and different, make fuch b braue checkerd mixture, that it is both wondrous pleafant,and dela atable to behold. The orther part fhall haue all ocher fweet fmelling hearbes, whecher rhey be fuch as beare no flowers, or ifthey beare any, yet they are not put in Nolegaies alone, but the whole hearbe with them, as Soorhernwood, Wormewood, Pellitoric, Rufenuaric, Iefamin,,Marierom, Balme, Mints, Penniroyall, Coftnaarie, Hy Tlope, Lauander, Bafill, Sage, Sauorie, Rue, Tanfey, Thyme, Cammomile, Mugwort, baffard Marierom, Nept, fweet Balme, All-good, Anis, Horehound, and ochers fuch like, and this may be called the Garden for hearbs of a good fmell.
Thefefweer hearbee, and flowres for Nofegaies, fhall be fer in order vpon beds and quarters, of luch like length and bredth, as thofe of the Kitchin Garden : and fome of them ypon feass, and others in' mazes made for the pleafing and recreating - fthe fight: ocher fome are fet in proportions nade of beds interlaced and drawne one within another, or broken off, with borders, or without borders: the greatelt

## The fecond Booke of

part of which fweet hearbes, as alfo for Nofe-gay flowers, though they grow naturally, and of their owne accord, without anie labour or trauell of the Gardener, efpecially hearbes for Nofe-gaies, yet fuch of them as fland in need of dreffing and ordering, fhall be fowne, planted, remoued, gathered, and kept, no otherwife than the pot-hearbes: but yet notwithftanding, regard mulf be had of the nature of euerie particular one, as thall be declared hereafier in the particular defcription of fome of them.

## Chap. XLVIII.

## Of hearbes for Elowers or $\mathbb{N} O \mathcal{e}$-gaies.

Sarch Violets.

NArch Violets, as well the fingle as the double, muft be fet of whole Plants in a well manured grourid, and digged the depth of a foot, before the Kalends of March s if you will fow them, you may doc ir in Autumne, and the Spring. Bute efpecially you muft beware,not to fet Violets cuerie yeare in one and the lame place; for ocherwife it will beare a yellow flower, and haue verie litele or no fmell in it. You may make, that one and the fame Violet fhall beare all the colours that others doe, that is to fay, white; pale, yellow, aind red, if you mix together the feeds of all, and tying them in a Linnen cloch, put them in that fort into a well manured earth. The Violee muft be gathered in the morning before the Sunne rife, and when it rainech not, if to be that you will haue is to keepe his vertues and fweet fmell.
The vertues of Violers.

Ablow on the bead.

The flowers of March Violets applied vnto the browes, doe alfuage the headach which commech of too much drinking, and procure fleepe. He that hall haue taken a blow vpon the head, fo that it hath aftonithed him, fhall not hiaue anie greater hurt, if prefently after luch a blow he drinke Violet flowers flampt, and continue the fame
drinke for a certaine time. There is made of the flowers of Violets, Syrrups, and Conferues, good for the inflammation of the Lungs, the Pleurifie, Cough, and Agues.
It is alfo inof excellent to preferue thefe Violets for Salads, to ferue all the yeare, as thus: When you haue gathered your Violers, and pickt them cleane, both from their ftalkes, and anie other corruption that may hang oucr cheir leaues, you fhall wafh them cleane, and frike the water chrough a drie cloch fo cleare from them as may be: then take a Glaffe-pot, of the fafhion of a Gally-pot, fo large, as you may put in your hand, and being cleane wahte alfo, firlt, in the bottome thereof, lay a layre of your Violets, of halfe a fingers shickneffe, then take of the fineft refined Sugar, beaten verie fmall, and therewith couer the Violets all ouer : then lay another layre of the Violets, and couer them with Sugar as you did before, and fo lay Violets vpon Sugar, and Sugar vpon Violets, till you haue filled the pot to the top: then take of the frongeft Wine-vineger that can be gotten, and poure it into the por, till the vineger fiwimme aloft: then lee it reft an houre or two, to fetcle: and if you fee, that the vineger be fhrunke below the flowers, you fhall fill it vp againe, not ceafing thus to doe, till the vineger will fhrinke no more: then couer the pot vp verie clofe with Parchment and Sheepes leather, and fet it fo, as it may receiuc fome frmall ayre of the fire ; and after one monech vfe them, as occafion fhall ferue : for they will laft all che yeare, both Winter and Summer, withour loofing either their colour, ftrengch, fweetneffe, or pleafantneffe, neither their growth nor fulnefle. Añ्d in this fort you may preferue all forts of flowers whatfocuer, as Rofes, Marioolds, Gilliflowers of all kinds, Cowflips, Primrofes, Broome flowers, Paunfies, Daifie leaues, or anie other fweet and wholefome flower whatfoeuer. Wherein is to be nored, that if the flower which you preferue, be of a pure white colour, and thar you feare the vineger may fomewhat abate the brightneffe of the colour, in this cale you
fhall diftill your vinegar eicher in a Limbecke, or other ordinarie Still, and with the water which commeth from it (which will be of a moft pure and chryftaline coloir) and is indeed the fpirit and fhatpeft part of the vinegar, you fhall preferue your flowcrs, and then wrthour doube they will not abate any part at all of their owne bright. neffe and colour.

White, ycllow, and red Gillo-flowres, do craue the like ordering that the March white, vellons, Violet doth, and grow better vpon walls, houfe tops, and old ruines of fone, than and fored Gilloplanted or tilled in gardens, elpecially the yellow, which come neerer to the refem- - fowres. blance ofa fhrub than of an hearbe, hauing hard and wooddy falkes, and fee full of branches, commonly called of Apochecaries Keyry. The feed of Gillo-flowres ftampt and drunke with white wine, is foueraigne to prouoke womens termes, and to further deliuerance in them that trauell.
Darfies mult not be fowen. but planted after the manner of violets, this is the lealt Dajeres. kind of the cumfreies, which is likewife found in the fields without being tilled, it flourifhech all the yeare long if it be well ordered. Daffies ftampt with Mugworr Kingsesuill refolueth the King-euill. A Cataplafmemade of Daffies is good for the palfie, and Palfy. all manner diftillations. For wounds in the breft, whereinto tents may be pur, it is ${ }^{\text {Gowisto }}$ good to drinke by and by a drinke made of ftamped Daifies : chey heale the paltules of the tongue if they be chewed, as alfo of the mouth : being braied they affwage the inflammation of the priuie members : eaten in fallades or broth of flefh, they loofen the bellie.

Purple Veluet flower, called in Latine Aramanthus, doth recreate more with his purple Velues colour, than with any fmell that it hach, for it fmeileth nothing at all : notwithftan- flower. ding who fo will haue it in their gardens, muft plant it in a drie and fandie place. The flower fupt in pottaye, doth flay the flux of the bellie, the termes and white The ewbite flowers of vvomen, the fpitting of bloud, efpecially if there be any veine broken or fowers of woes bruifed in the lungs or breft. The flower hereof infufed in vvacer or white vvine the fpace of an houre, maketh the colour of the wine red, and thus one may helpe himfelfe the more eafily to beguile any that are ficke of fome ague, and cannot abftaine from Wine.

Canterburie-bells, as well the fimple as the double, require a fat ground and well canterburies: inriched. The Latines call it Viola Colathiana.
Their flowers mingled with Wheat flower, make a good Cataplafme againft The vertuess fcuruineffe and other forts of fcabbes, likewife their roots boyled in white Wine, to the confumption of the halfe, and a linnen cloth dipped therein, and applyed to fcabbes and fcuruineffe doch heale them: the roots boyled in Wine and taken in a potion, doe heale all the ruptures of the inward parts of the bodies, doe cleanfe the exulcerated lungs, and fpitcting of bloud: brayed and ground in manner of meale and drunke in Wine the weight of French Crowne, with two or three graines of Saffron, are fingular good againft the jaundife, if the partiefweat thereupon prefently : the like vertue is in the diftilled water of the flowers : the juice drawne out of their root and flowers applyed vnto wounds doth heale them prefently : a peffarie drenchr in this juice, prouokech womens termes, and draweth out the child dead in the mothers vvombe : being diopt into the eare, whereinto there hath fome Flea, or fuch orher vermine crept, it killeth them.

Gillo-flowres of all forts are feidome fowne, but oftentimes planted of rocts or Prounece,pprrbraunches plucks from the plants: the rooc fiall be planted in the beginning of $A u-\frac{p l e}{}$ and Indian tumne, in a tat mould, and fo put in pots of earth, this it may be remoued and fet vnder forme couert in Winter for feare of the frofts: Sommer being come before the great plant haue caft forth his fprouts, you may breake off fo many fmall branches from about the root, as will a lmoft ferue to fet and piant a whole bed withall, and fo you may breed new plants of them.
You may make Gillo-flowers finell like Cloues, ifyou lay bruifed Cloues round To make cilloi about their roots. In like manner you may make them haue faire flowers, large, flomers to frmeld pleafant, and fweet fmelling, if you plucke away theirl leaues often, and take paines to like clones, digge

Gillo-flowerers of Prouence.

Purple Gillofloweres.

1ndian Gillow fowres.
digge and water their earth : furthermore fuch Gillo-flowers are commonly called Gillo. flowers of Prouence, of the place where Gillo-flowers fo ordered doe grow, large, cufted, and ample : thofe which haue not their flowers fo large, nor fo lweet, neither yet are fo carefully looked vnto and dreffed, are properly called Purple G1l. lo.fluwers.

The flowers of Gillo. flowers of Pronence, as alfo their root, are foueraigne againft the Plague. And for this caufe fuch as are well aduifed, in the time of the Plague doe make conferues or vinegar of the flowers of Gillo-flowers, to keepe themfelues from the cuill ayre.

Indian Gillo-flowers, called of the Latines Flos petillius, and Ocellus Indicus, al a though it refufe no ground, notwithftanding if you plant it, of the whole plant, or of the branches thereof, or elfe fow it in a fat and wel manured ground, efpecially in the beginning of Iuly, it will grow vnto fuch a height, as that it will feeme to be a thing degenerated into the bigneffe of a tree, and will put forth of his falke many boughs, after the manner of a tree or fhrub: and by the fame meanes there will put forth flowers induring vntill Winter.

Who will be counted carefull of preferuing his health, mutt riot finell vnto the

The Jndian gil lo. flober doth caufe the beadachand an ill drumpholefame ayre.

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$\qquad$
wild Gillo-
floserers.

Dame Violets:

Gorts-beard.

## Mavians

 Violets: flower of the Gillo-flowers of India : for the fmell thereof doth procure head-ach and giddineffe, and is a meanes to breed the Falling-fickneffe: further alfo, which is more dangerous, fome haue found it by experience, that it ingendreth an infectious aire : likewife Phyfitians giue fpeciall prohibition tofmell vnto the Indian Gillo. flower in the Plague time, becaufe the flower thereof is venimous, and of temperate much like to the Hemlocke, which may eafily be perceiued by the vnpleafant fmell it yeeldeth, being both moft frong and ftinking. That it is fo, namely that it is venimous, I haue giuen thereof fometimes vnto a Cat the flower of the Gilloflowres of India beaten and mixt with cheefe to eat : and fhe hath thereupon become verie much fwelled, and within a fhort time after dead: I faw likewife a little young child, who after hauing put thefe flowers in his mouth, his mouth and lips did fwell, and within a day or two after became verie fcabbed.Wild Gillo flowers as well white as red, although they grow in the edges of fields and along the waies, may notwithftanding be planted and fer in gardens, where if they be oft remoued, they will grow to haue a double flowre. Their feed, flower, and whole hearbe is good againft the flinging of Scorpions: and indeed haue fo great vertue this way, that the hearbe onely caft among Scorpions, taketh from them all power to hurt : their feed taken to the quantitic of two drams purgeth hot and cholericke humours.
Dame Violets haue great leaues, fomewhat blacke, notcht round about, and broad: the flowers are white and incarnate, and in fhape like vnto the Auens: they grow fometimes fo high, as that they degenerate into a tree.
Goats-bread, that it may haue faire, double, and full flowers, doth craue a fat and moift ground. The leaues thereof open at the Sunne rife, and they clofe at noone: the roor boyled in mudde doth appeafe the paines and pricking of the fide : taken in forme of a lohoch with fyrope of Violets, it helpeth obitructed lungs, and the pleurifie : boyled in vvater, and preferued with Sugar, it is a fingular preferuatiue againft the Plague, Poyfons, Venime, and deadly Stinging: the juice or diftilled vvater of this hearbe doth heale greene vvounds, if you dip linnen clothes therein, and applie them to the wounds: fome vfe the root of this hearbe in fallades, where daintie and fine fare is: the fame boyled in a pot vvith Veale and Mutton, and afterward prepared and made readie betwixttwo difhes with butter and vinegar.
Marie, or Marians Violets, for the beautifulneffe of the flowers, deferue to be fowne in a fat and well laboured ground : the flowers are good to makegargarifmes, for the inflammations and vlcers of the mouth.

Lillie-conually, called of the Latines Lillism conuallium, notwithftanding that is groweth in fhadowed Woodgrounds, yet it deferueth to be tilled in gardens, as well in regard of the faire little flowers, white as fnow, which it beareth, being alfo of a on, mon
moft amiabiefmell, fomewhat like vnto the Lillies ; as alfo ir refpect of his vertues: becaule the diftilled vvater of the flowers being taken vvith ftrong and noble vivine, doth reftore the fpeech vnoo them which haue loft it vpon an apoplexie: it is good likewife for the palley; difillations, and fainting of the hearr : yet thefe nor any ocher Lillies whatfoever can I commend for any vfe of mofegaies, becaule the fmell of them is luffious, groffe, and vnwholefome, apt to make the head ake, and (as fome hold of opinion) aptro ingender infection, by reafon of a certaine putrefaction which it firreth $v p$ in the braine, vvhereby all the inward parss are dintempered; therefore whofocuer planteth them fhall preferue chern more for fhew than fmell, and make vfe of their medicinall qualitie, not of their order ; and touching their medicinall qualtitie, there is none better than this, that if the roor be taken and cleane wafhe and boyled in milke, and fo applyed to any hard tumour, fwelling, byle, or impoflumation, is will either diffolue it, or elfe ripen, breake, and heale if, fo that is be applied pulcus wile verie hot.
Water lillie,as well the white as the yellow, defireth a waterifh and marfhie place: Water tilise. vwe fee it grow likewife in pooles and fih-ponds. The root of vvhite vvater lillie boyled with groffe red wine and drunke, flayeth womens whites: the flowers,roots, and feeds, as well indecoctions as in conferues, are verie fingular to procure fleepe, and to preferue chaftitic.

Hyacinth groweth verie vvell in a fandie ground. The root and feed boyled in Hyasmbtbo vvine and drunke, doth flay the flux of the bellie.
Narcyfus (Fo called of a Greeke word, becaufe che fmell of it comming vinto the Narof) Jut nofe doth caufe an inclination vnto fleepineffe and heauineffe) would be lowne in a fat ground that is hot and moift : it groweth alfo aboundantly in Languedoc and Italie, and buta litete in nhis countrie.
The root thereof boyled or roafted, and taken with meat or drinke, doth greatly procure vomit: alfo, the fame brayed with a little Honie and applyed, doth heale burnings : taketh away the freckles and fpots of the face, being mixt with the feed of nettles.

## Corneflag (called in Latine Gladious) as well the blew as the white, would be cornefing e.

 planted of new plants in March and Aprill : or elfe of flips, but fuch as haue roots, for they are neuer fowne, neither doe they require any great tilling. Their flowres differ from the flowres of marigolds in this, in that the flowres of the marigold doe openat the Sunne.fhine, but the flowres of Corneflag doe fhut and clofe vp themfelues then, not opening againe bur when it is cold and moift weacher. The roors mult be pulled out of the earth in the beginning of the Spring, that thereby they may haue a pleafant fmell, and a deleCtable kind of fauour, and afterward they mutt be dried in the fhadow of the Sunne. Some people; to take away the fuperfluous moifure thereof, which puttech them in danger to be confumed with Wormes, doe vvet them with Lee of afhes, as well whiles they are in the earth, as when they are out, and fo drie them and keepe chem for to procure the linnens and woollen gard ments to fmell well.The juice of the roots put in a clyter, doth appeafe the paine of the Sciatica: : the The verrmes of root dried and made in powder, doth cleanfe and confolidate hollow and filthic vl- corneflage cers: being held in the mouth, it caufech a good breath: layed amongft clothes, is $\frac{\text { siaisicfe }}{}$ preferuect them from all vermine, and maketh them fmell pleafantly. The juiceof $r$ lecto the root taken at the mouth fundrie times, purgech water in fuch as haue the dropfie, Drepfer efpecially ifit be taken mixt with the yelke of an egge halfe boyled. The root mingled with the root of ellebor, and ewice fo much Honie, doth wipe away freckles, red pimples, and all fpots of the face, if it be annointed thereupon. The decoction of the root takech away the obftructions caufed of a groffe huniour, prouoketh vrine, killech vvormes, and cafteth out che ftone. The Italians make a preferue of this roos whiles it is new with Sugar or Honie, and vfe it in all the cafes aforefaid : fome make anoyle of the flowers infured in oyle, which hath power to refolue, foften, and apr-: peafe the griefe of cold rheumes or diftillacions.

Killies

Lillies.
Lillies of diwers colours.

Lillies muft be planted in the moneth of March and Aprill in thefe councries: and in hot countries in the moneths of Oetober and Nouember, as well the white as the orange colour, in a fat and well digged ground : you thall make their flowers of what colour you will, if before you fet them, you fteepe their roots in fuch coloured fubftance as thall beft like you, and afterward likewife to water the roots when they arefet and planted in their trench with the fame liquor, and that after this manner. Some fay that the flowers of Lillies become red and purple, if their roots before they beplanted befteept in the Lees of red Wine, or in difflued Cinnabrium, and after watered with the fame in the little pit or trench wherein it is fet. Or elfe when Lillies are in flower in the moneth of Iune, you muft take ten or twelue plants, and eying them together, to hang them in the fmoake, for fo they will put forth fmall roors like vnto vvild Garleeke, and when the time of fetting is come; which is in the moneth of March and Aprill, fteepe the fame plants in the lees ofred Wine vntill they be prettily well coloured, as being become red when you take them out, afterward fee them in prettic pits contriued in good order and water them fufficiently with the
Purple colon.
red Lillies.
Erefh Lillies. lees: for by this meanes the flowers that will come of them will be purple coloured. You flall likewife haue young and frefh Lillies all the yearelong, it before they be open you gather them, and after clofe them vp in fome bottell or well ftope veffell, that fo they may come by no ayre. Or elfe clufe them vp in fome oaken veffell well pitched, fo that there can no vvater get in, and after finke the veffell in fome Well, Cefterne, or running vvater, for fo they will keepe young and frefh all the
Lillies in fowser at diusers and Seuceralt times. yeare. And if at any time during the whole yeare you would vfe them, fer them in the Sunne, that fo by the heat thereof they may open. And to the end that Lillies may flower at many times, when you fet their roots, you fhall fet fome of twelue fingers within the ground, others eight, and fome foure, tor thus you fhall ftill haue flowring Lillies for a long time.
The vertnes of A Cataplafmemade with the Onion of the roots of Lillies, Hogs-greafe, and the oyle of Cammomile, doth maturate and ripen Bubues. An oyntment made of the faid roots, oyle of bitter Almonds, and white Wax, hath fingular vertue to pollifh
Wrinkles.
water of Lillie, and Imoth the face, and to take away the vvrincles of vvomens faces. The vvater of

Bxrring and fcaldings.
1/mooth and slijering berw. Lilies diftilled out of an Alembecke, doth take away the vvrincles of vvomens faces, and make them looke verie faire and white. The root boyled or roafted in hoe embers, and ftampt vvith oyle Oliue, is a fingular remedie againft all forts of burning, as well of fire as vvater. Being boyled vvith Garleeke, and ftasppt in the lees of red Wine, cleareth vvomens faces and countenances, vvhich haue but ill colours after theirlying in bed, if they befmeare their faces therewith at nights, and in the morning wafh them with Barlie vvater. This root roafted and ftamped with old Swines-greafe, and applied to the cornes of the feet, doth wholly fpend them, if they be kept thereto but three whole daies together : the diftilled vvater of the flowers with a little Saffron and fweet Zylocaffia, helpeth vvomen in child-birth, and deliuereth them alfo of their after-birth : the oyle that is made of the flowers by infufion, is good to foften all manner of hardneffe in fwellings or otherwife: if you chafe the priuie parts with oyle of Linfeed, and applie Wooll vver in thefe oyles vpon the bellie: Women which are in trauell of child-birth will find great eafe in the fame.
small paincess. Small Paunces (otherwife called Autumne Violets) defire a drie and fandie place: they are to be planted in the Spring time, and beare flowers continuing to Autumne, yea to Winter, if fo be they be oft watered and carefully handled. The leaues or juice offmall Paunces caken at the mouth, or applied outwardly, are fingular good to conglutinate wounds: the leaues of finall Paunces boyled and drunke doeftay the Falling. fickneffe in children when they froth and fome : the fame flowers boyled with their hearbes and drunke, doe cleanfe the lungs and breaft, and are good for inward inflammations. The leaues dried and made in powder, and drunke with red Wine to the quantitic of halfe a fpoonefull, haue great force to fay the falling downe of the fundament.

The Heltropian is a certaine flower, which hath fuch loue and fympathie with the Sunne, that as his beames ife and fpread open in the morning like a Curtaine, fo che hearbe alto openeth her leaues and glories, and (as it were) attending vpon his beames: her flower rifech as. he rifech; and when the Sunne is in his Meridian or Noone point, then the flower flandech, and looketh fraight vpright; and as the Sunne declineth, fo it likewife declineth : and in the euening, as hee fhutecth in his beames, fo it alfo clofeth vp her flowers, and remaineth (as it were) hid and lockt vp till the next morning. This Helitropian neuer bearech on one falke aboue one flower, but it is exceeding large and grear, being euer at leaft halfe a foot in the diameter: it is round and flat fafhioned, and enuironed with yellow leaues of a bright golden colour: it groweth alfo vpon a great thicke falke, ftraight vpright, and high from the ground: it beareth alfo verie manie feeds, which as loone as they are ripe, are like Marigold feeds, white, rough, and femicircled. The befteime to fow it, is in the Spring gime, at the wane of the Moone, and it is verie quicke and fpeedic in growing. The greateft glorie it hach, is the beautie thereof: yet it hath all thofe vertues which the Marigold hath, and curech the fame infirmities.

Contrarie to this, is the flower of the Night, which is verie memorible for the ma. Flower of we nie faire flowers which it beareth: It is therefore called the flower of the Night, be- nigbs. caufe at the Sunnes rifing it thuts vp hier flowers, and at his fetting fpreads them open aggaine, and fo flourifhech with great beautic all the night long: his flowers are of diuers colours, fome white, fome red, fome carnation, and fome yellow, fome intermixt, and fome encire: infomuch, that to behold it either in the morning, or in the cueniing, it lookes like a molf fine picce of Arras or Tapiftrie,to the great wonder of the beliolders, when they fhall fee fo manie feurall colours proceeding from one falke, without anie artificiall labour, or other fophiftucation. It is to be planted or fowne in the moneth of March, when the Moone is encreafing, the ground being fertile and rich, and well tilled and ordered before hand.
Tulipan is a Plant which growes about two or three foot from the ground, and Tuliparo bearech a verie faire flower, yet eommonly not before it be three yeares old : ic delightech to grow neere vnto the Flower-de-luce, and would be planted foone after Winter in the new of the Moone. The firf yeare it puttech forth but one leafe, verie large, and of a greene colour: the fecoind yeare it puttech forth two leaues: and the third yeare, three leaues, together with the knob or button, which beareth the flower and all, long before the approaching of Winter : as foone as the three leaues are Sprung vp, which are euer neere vinto the earth, the femme flooteth vpward agood height without leaues as fmooth as a cudgell, till it be come to his full growth. Now of thefe Tulipans there are diuers kinds,and are diftinguinied onely by the differenc colours of therr flowers: for fome are whire, fome red, fome blew, fome yellow, fome Orange, fome of a Violet colour, and indeed generally of anie colour whatfoeuer, except greene: yer it is to be nored, that there Tulipans which are thus of one entire colour, are but common and ordinarie: for thofe which are moft rare and precious, are of diuters colours mixt togecher, and in femblance like the flower of the Nieht before fpoken of. Againe, there is another tote of admiration in this flower; which is, that it changech it colour euerie yeare of it owne nature, forthe which no Gairdiner is able to giue anie a ccount: Alfo there be fome Tulipans which will not flourih aboue fourc or fiue daies in the yeare, and then after it carrieth no flower atall.
The Marragon is a plant which putteth forth verie rare and excellent flowers, much what in thape like the Flower-de-luce, and are infinitely defired for their excellencies: it is moof commonly either of an Orange or red colour, and may be cither fowne or planted in a good ground in thic Spring time, when the Moone encreatrech. It growect in heightr feldonic aboue three foot, neither hath it anie branches: it garnffieth the earth with mainite greene leanes, both long and fharpe, benting cheir points downeward. At thie toppe of the ftemme the flowers put forth, vpon feuen or cight round buittons or cuppes, which after a fow daies
doc open, and out of eueric button fprings forth a flower, which will continue thereupon at leaft three or foure daies, and then they will fall away, and the bowle isperceiued in which the feed is retained, which is not verie great but of a little and meane compaffe.

Of pionic:
crowne Em: periab. Amongitall the flowers wherall delicacie, whence it commeth that it is called
ther for odour, glorie, or gener
the Crowne Emperiall, it may be fownefrom the feed in any well dreft ground in the Crowne Emperiall, it may be fowne from the feed in any well dreft ground in
the Spring of the yeare, and the new of the Moone, yeti is is much better if itbe planted from the root, which root is bigge and round like vnto a great S. Thomas ted from the roor, which root in bigge and round a little fine mould tempered Onion, about which ind cows dung, and then fet it a good depth into the earth, dhe femme of this flower will lpring out of the ground three or foure foot,garnifhed all along with fine leaues, will fpring out of the ground threc orfore thout any braunches; athe top puttech forth eight or nine flowers, yet without
borne vpon feuerall litele brancheses diftinguifhed from the ftalke, eurric one of them
being being of equall height and length, the flowers thereof for the moft part fhew pendant, becaufe (like che Helitropian) they continually follow the Sunne, and neuer ftand ffreight vpright, but at hie nuone onely; the colour of them moft commonly is a pale red, and they haue within the inward $p=r t$ of them a round liquid drop like vnto an Orient pearle,which whileft the flower is in frength, being for the moft part fifteene or twentie dayes, you can by no meanes fhake off, nor will it be beat away with !howers or tempefts, but if with your hand you wipe it away, a new one will arife againe prefently in the fame place: : chis pearle if you taft vpon your tongue is fweet and plealant as Honie or Sugar. This flower muft be carefully preferued from the froft, and the flips of it would be feldome or neuer fer, becaule they arelong cre they bring forth flowers as threcor foure yeares at the foonclt.


Bajb.
Pionie are flowers of diuers kinds,fome being fingle, and fome, doubie, and are only eiteemed for the beauric of their flowers, they may be fowne or planted on any well dreft earth; immediatly after Winter the ftalike of it is greene, and being rifen halfea foot from the earrh, it puttech forth diuers large branches, vpon the tops whereof arifeth many great buttons, out of which breakech forth the flowers, being round, great, and large, fo that fome haue beene meafured from the circumference to be the chird part of a foot in the diamecter, \& chefef flowers are cuer of one colour, as being all red, all white, or all purple,and not mixt or fripped as other flowers are.
Amongf all the flowers which beauitfie gardens, none inay compare with this ei--
 Afill, as well the great as the (mall, is fowne in Aprill and May in a fat ground, and commeth vp quickly, iffo be that by and by after it is fown it be watered with water fomewhat heated: It may be fowne likewife in Autumne, and the feed would be watered with vinegar, for fo (though it buta verie litele). it will grow forth into branches. If you fow is in a drie ground lying open vponthe Sun; it will by and by turne and become either mountaine thyme or creffes. When you haue fowne it, you muft draw vpon the ground fome roller to faften and fet it clofe togecher, for if it fhould lye light and hollow, the feed would eafily corrupt. It mut be watered at noone-tide, cleane contrarie to other hearbs which would be watered at morning or cuening. To caufe it to grow great, it is good to crop, it of with your fingers, and not with any yron thing. Some report a maruellous Arange thing of Bafill, as namely that it groweth fairer and higher, if it be fowne with curles and injuries offered vnto it: and further that there is a deadly hatred betwixt amber \& bafil: for whereas amber or blacke jet is giuen to draw fraws ab
vnto it vponthe touching of them, it driuech and puttech farre from it the leaues and Atalkes of Bafill.
Such as are fubjęt vnto head-ach,or feare to be troubled therewith,muft thun the fmellof Bafill altogether: for the fmell thereof begettect paine and heauineffe of the head, yea fometimes it ingendrech in the head litele frmall wormes, like vnto Scorpions: as we read to haue happened to a certaine Italian in our time (as Monfieur Houlier D. in phyficke doth teftifie in the beginning of his Practica) in whofe braine the oft fmelling of Bafill did beget a forpion, which caufed him to endure extreame paine, and brought him to his death in the end. The greateft vertue that To be deliuered this hearbe can haue, is that if a woman doc hold the roors of Bafill in her hand, to- of child-birth gether with a Swallows feather when fhe is in crauell, fhe fhall be deliuered by and woubout paize. by without any paine.
Rue, as well that of the garden as the orher which is wild, doth not loue eyther a Ruved moift or cold ground, neither yet a ground made verie fat with dung : but rather a hot and drie ground free from vvind, and where the Sunne fhineth much, in refpect whereof it mult be coucred with a fhes during the Winter time : for the naturall heat of the alhes doth caufeit to refiff the cold. It may be fownc in March, Auguff, and September, although in deed it grow better fer of roots or braunches, than fowne. When it groweth old, it degeneratech into a wooddie fubflance, and therefore you mult cut the falkes twice euerie yeare euen tw the root, to recouer his youth againe: it mult not be fuffered (if polfibly it may be let) to flowre, for if it befuffered to put forth any flowres; it groweth fo much the more drie. Some report, that this hearbe The bewraisr. litele, by a woman that hath abuled her bodie, or that hath her termes, that it dyeth by and by.

To caure that it may grow faire and have a more pleafant fmell, it muff be planted vnder the fhadow of a Figge-tree, or grafted in the rind of a Figge-tree : for the warmith and fweetneffe of the Figge-tree doth temper the fharpeneffe and acrimonie of the Rue. Some fay likewict, that Rue will grow fairer, if the branches thereof befer in a Beane or Onion, and fo put into the ground. It is likewife reported, that it groweth fairer, if one curfe and hurt it when they fet and plant it. But looke how. friendly and kind $i t$ is to the Figge-tree, fo much it is enemie vnto and hatech the Hemlocke; likewife Gardiners when they would pull vp Rue, for feare of hurting their hands, rub them with the juice of Hemlocke.
Wild Rue is of greater force than the garden Rue, and of a more vnpleafant fmell, and alfo a more dangerous fmell: furthermore offo Tharpea vapour, as that if it come neere vnto the face neuer folittle, it will breed the wild fire in it. The feed. both of the one and the other by the hiot and drie temperature ic hath, driech vp the feed of man, and makech him barren : the fame feed in decoction is good for diftites lations, and the moifture of the matrix.
Rue hath a fingular vertue and force againft all manner of venime. Likewife wei milbridates bix read that the king CMithridates was accuftomed to vfe an opiate made of twentie opiate for the, leaues of Rue, two drie Figges, two old Walnuts, and a little Salt, to preferue his flate. Plague. againftall manner of poylon. For this caufe you muft plant in your gardens; and: neerc your theepecoars, houfes for your fowle and other cattell; great quantitie of Rue: for Adders, Lizards, and other venimous beafts, will not come neere vnto Rne anenemie Rue, by the lengch of the fhadow of it. Some alfo hold it as a tried thing, that to to vernimes and driue away Cats and Fulmers from hen-hioufes and douc-houfes, there is nothing pop/oans. better than to fet Rue art the doores thereof, or round about them. And that to fiece a to cats andi roome offleas and gnats, it is good to water the fame with water fprinkled abour with fulmers. a branchof ruc. In the plague time it is not good to put rue neere vnto your nofe That rue frould (contrarie to that which we fee many men prątife) becaule by the fharpeneffe of the not tomenereto rent there is cauled a heat and excoriation of the part which it tourchech : notwith to the nofe". fanding to draw out the venime that is in a bubu or peftilent carbuncle, there is nov. For aubbo or thing better than to applie chereto a cataplafme made of the leaues of rue flampt with plaguc oree.
leauen, hogs-greafe, onions, figges, vnquenche lime, fope, cancharides, and a little treacle. Ifa man haue eacen of hemlocke, cerufe, mandrakes, blacke poppie,or any other hearbes, which through their great coldneffe haue caufed them to be fleepie and blockifh, they may profitably ve the juice of rue, to drinke if for the deliuering of them from fuch danger, or elfe the wine wherein it hath beene boyled. The diffilled water of rue powred into vvine and rofe-water of each as much, is good for the weakeneffe of the fight. It is verie foueraigne for the headach, and being boyled in wine with fennell, and fo drunke, it eafech all obftructions of the fpleene orliuer, and taketh away the pain of the ftrangurie, and alfo ftoppech any flux, being flampe with Cummin-feed, it eafech all maner of aches, and being flampt with honie, wheat flower and the yolke of an egge it curech any impof fumation whatfoever.
All forts of mints whether garden or wild, doe nothing defire the ground that is dunged, fat, or lying open vpon the Sunne, but rather a moilt ground neere vnto water, for want thereot chey mult be continually watred, for elfe they die : it is more fowne than fer; but if it befer, then itmay be eicher of roots or branches, in Autumne or in the Spring time, efpecially about the twelfth of March or Septeriber. Who wantech the feed to fow ir, may infteed thereof fow the feed of field mints, putcing the fharpe point downeward, thereby to tame and reclaime the wildneffie of ft. When it is growne it muft not be toucht with any edge toole, becaufe rhereupon it wonld die. Neither need you take care to fow it eueriey yeare, for it will grow of it felfe without being fowne or fet in great aboundance.
Tbe vertwes of Mincs ftampt and applyed to breafts too hard and full of milke doe foften them, axints. and hindrech the curding of the milke : flampt with falt, it is good againft the bitings of a mad dog: flampt and put into a caraplafme it comfortech a weak fomach, and frengheneth digeftion : two or three fprigs of mints taken vi ith the juice of a pomegranat, flayerh the hicker, vomiting, and furfets. It is good to help them which haue lof their fmelling, by putcing it oft to the nofe. The leaues dried, made in powder;and drunke with whire wine, doth kill the wormes in yong children. Such as loue Wormess. milke, ater chey hauc eaten it, muft by and by chaw of the leanes of mints, to flay The curding of the quailing of the milke in their fomachs : for mints haue the fpeciall propertic of Maries bath, in a glaffe Alembecke, and taken the quantitie of foure ounces, doth fay bleeding at the nofe, which is a very frange thing : they that would liue chaftly, muft not fmell vnto nor eat any mints : and therefore in auncient time it was forbidden captaines in warre to eat any mints.
Calsmint:
Calamint, (otherwife called Mentastrum) delighteth in the fame ground that mints, we fec it likewife grow in vntilled grounds neere vnto high waies and hed ges. It prouokech the termes in women, whecher it be taken at the mouth or in fomentation, and that with fuch violence, as char women may not in any cafemeddle with it, if they take themflues to be with child : ic is fingular good vfed in fomentation for the paines of the flomach, for the colicke and diftillations: the juice thereof taken at the mouth killech wormes in the bellic, and being dropt into che eare, is killeth them there alfo. Of this Calamint there are three kinds, as the foone Calamint, the earth Calamint, and the water Calamint, the water Calamint is excellent to make a man foluble; the earth Calamint is verie good againft leprofie, helpeth pain in the cares, and comfortech the flomach, laftly the fone Calamint is foueraigne a gainft poyfon, and frengtheneth the heart, if it be bruifed and made into a plaifter with wax and fewer, it healeth any venimous wounds, and to drinke it three or foure daies togecher either in ale or wine, it curech the jaundife.
Thyme as well of Candie as the common, doth grow better planted than fowne, and craverha place open vpon the Sunne, neere vnto the fea, and learie, and it muft be planted at mid-March in a well tilled ground, that fo it may the fooner take: as allo that it may grow the fairer and fuller leafe, it will be good so water the ground
of with water wherein hath been ftecped for the fpace of one whole day drie thyme Goodly Thyme. fomewhat bruifed. If you be difpofed to gather the feed, you muft gather alfo the flowers wherein it is contained, feeing they cannot be fundred.
A Cataplafme made of thyme boyled in Wine, appeaiech the paine of che Sciati- The vertiues of ca, and che windineffe of the bodic and marrix. The faielling of thyme is foureraigne Thmmeo to raife then that haue the Falling-fickneffe uut of their fir, and alfo to keepe them from their fit, by decking their bed abour with the leaues chercof. The of $v$ fing of thyme with wine or whay, is good for melancholicks perfons.
Winter Sauourie crauch no fat, manured, or well tilled yround, but rather an Winter Saucoizo open, fon e, and light ground, lying fo as the Sunne may fhine full vponit. Beth Thyme and Wincer Sauouric are good for the nourifhing of bees, and for the preleruing and feafoning of mears : they ate alfo caliced fine, Iebell, or fmall and flender hearbes.
Organie, otherwife called baftard Margerome, louech a rough, flonie, peble, organico weake, and yet well funnifh ground, and vvithall craucth a manured ground, as aifo to be watered, vnill it be growne vp to hisfull bigne ffe, notwithfandung it be feene to grow in many places withour watering or dunging. It may be remoued of little fprouts or fciences, and the lower end fer vpward, to the end that it may purf forth new fprings and fhoots; and be fown of his feed, the which the elder it is,fo much the fooner it will put forth of the earth, alchough that organie du not ordinarily fhew it felfe before the 30 or 40 day afer the fowing of it : in many places it is fowne neerevnio bees, becaufe they willingly load themfelues from chence, and make fingular honie.
Organe boyled in Wine, and layed vpon the region of the raines, doth take away and vndoe the difficultic of making vvater: being boyled in wine and drunke, it is good againft venimous beafts, or the fting ings of Scorpions and Spiders. A Cataplafme made of Organie and Barly meale boyled tog cther, refolueth che tumours vnder the eares. The decoction thereof is good to comfort the fincws, and che relaxed and weake parss :che feed thereof drunke vvith Wine dorh prepare and difpofe a vvoman to conceiue : the flowers and leaues of the fayd Organie dried at the fire in an earthen teff or melting pot, and being wrapped vp veric hot in a cloth, and applied vnto the head, and kept faft tied thereunto, doth cure the rheume comuning of cold.

HyITope affeeteh a place free from fhadow, and lying open vpon the Sunne: it Hy/fopes may be fet or fowne about the twelfth of March. It mult be cut in the moneth of Auguft, and dried to put in potrage in Winter.

Amongf other principall vertues that it hath, it is of great vfe for the affecis of The vertues of the lungs, and to prouoke vvomens termes; if there be a broth made thereof to fup HyJope, fafting in the morning. Some fay that the fyrope of Hy fTope, taken oftencimes with fowerfold fo much of the vvater of Pellitoric of the wall, caulech the flone and much grauell to auoyd from the reines: Hy fope with figs, rue, and honie boyled together in water and drurke, is good for thofe that are fhort breathed, and for old and hard coughs: ftampt with falt, cummine, and honie, and applied, healech the flingings of Scorpions: ftamp: wich oyle and rubbed, it killech lice: pills made of hylfope, horchound, and pionie roots, doe heale the falling-fickneffe.

Sonmer fauourie doth delight in an open Sunne fhining place, and therefore Sammer Sarbomult be fer or fowne in fuch a one, not in a fat or manured ground : for it is often feen rie. grow of it felfe in leane grounds, and neere vito the Sea. It groweth more delightfully and of a better raft, if it be fowne amongft onions. It is verie good for fauce to The vertues of mear. The leaues and flowres applied vnto the head in forme of a cap or garland, Sauorie. doth away the drowfily inclined. A Cataplafme made of fauorie and wheat meale, The dromp/e doticure difillations. dijeafe.
Coriander fortech well with any kind of ground, notwithftanding in a fat and ${ }^{\text {The Seriaitica }}$ new ground, it growerh a grear deale more aboundanely, and it feekech for an hot aire: againe, that which groweth in a funnie place doth ouerthriue that vvhich growech in a fhadowed place: when you goe about to fow it, chufe the eldeft feed
you can get; for by how much it is the elder, by fo much it is the better, fo that it be not mouldie and foughtie. Sow it aifo in a fat and moift ground, and yee defpile not a leane ground: and to caufe it to fring vp the fooner, you muffteepe the feed in water two daies before you fow it. If you muft dung the ground where it is to be fowne, it muft be with Sheepeor Goats dung rather than anic other.

The vertues of Coriander.
Digefiom. Windineffe.

To keepe flefh.
lt prouoketh the termes, Wormes.
wild firc.

## Tocleane the

fomacke.
being excen aftee heat thereof bringeth Head-ach, and the trembling of the Braine: be prepared. The way it comfortech digeltion, and difpellech windinelle, fo that ic caft vpon it verie good wine and vineger mixt together, and leaue it thus fprinkled and wet the fpace of foure and twentic houres, then drie it vp , and keepe it for $\mathrm{Ph} \mathrm{y}^{-}$ ficke ve: beng flamped in vineger, and caft vpon flefh, it keepech it from corrupting: it prouoketh womens termes: and fome fay, that looke how manie feeds a woman drinkech with white wine, fo manie daies hall her termes continue. The feed drunke with the iuice of Pomiegranats, killech the Wormes in children. The iuice thereof, with Cerufe, Litharge of Siluer, Vineger, and Oyle of Rofes, healecth the Wild fire, and all Redneffe. The feed ftamped in Vineger, doth keepe the fefh from corrupting in Summer. Alfo to drinke the iuice thereof with Honey and Wine, killech Wormes : and adding the feedes bruifed thereto, it helpeth a quartane Feuer.
Sage, as well the litele as the great, is planted of branches wrythen at the foot, and alfo of roots, in the Spring, and Autumne. It is fowne alfo at the fame time. The root delighrech to be laid about with Lee afhes. It muft be fee neere vnto Rue, to keepe it from Adders and Lizards, which vfe to take vp their lodging neere vnto Sage, as may be knowne by the leaues, which haue their tops ofentimes withered and dried, the fame comming of hauing beene touched by Serpents. Sage refufech neither hot nor cold ayre : howbeit, naturally it groweth in a barren, ftonie, and ill-conditioned ground; and that in fuch fort, as that in fome places of Spaine the mountaines are all ouer-growne therewith, and the Countrey inhabitants burne no other wood. Notwithftanding, to grow faire, it would be well digged about, and kept cleane from leaues and ftalkes that are dead.
It hath a fingular vertue to comfore the finewes that are hurt by being troden vpon, or otherwife become weake: And for this caufe, fome make Sage Wine for to drinke, and a fomentation with the decoction of Sage for the trembling of the hands, and other parts. It comfortech the mother, being taken in a fume at thi fecret parts: by fuch fume italfo fayech the whites. Such as cannot beare their conception out their time, bur mifcartie vpon flight caufes, muft oftentimes in the morning eat forme Sage leaues, for they frengthen the retentiue facultie, keepe aliue and freng ghen the child, and make women verie fruitfull. And this is the caufe why the Egyptians, after agieat mortalitie, conftrained their wiues to drinke the iuice of Sage with a litrle falt, keeping themfelues foure daies from hauing to doe with their husbands, and then afterward to lye with them, that fo they might conceiue and bring forth manie children. To flirre vp appetite, and cleanfe the fomacke full of ill humours, Sage muft be vfed oftencimes in pottage, and otherwife: it affuageth the paine of the head, and cleanfech the teeth and gummes: it makerh a fweet breath,being boyled in wine: the diffilled water thereof doth cleare the fight: the conferue of the flowers of Sage hath the like vertues.
Oake of Ierufalem (called of the Latines Botrys) crauech a drie and fandie ground, and then to grow in fwiff running Brookes. Beins once fowne, it needech not to be fowne againe afterward:for it growech againe euerie yeare, and that as it were in manner of a flarub. It hath vertues much like vnto Thyme, that is ro fay, it is good againft the fuppreffion of the termes, and vrine. Being dried and laid in Wardrobes, it givech a verie gaod fmell vnto the garments, and keepech them from vermine. The decoction thereof with Licorice, is wonderfull good for fuch as haue a fhort breath, and are fluffed in their lungs, if you put thereto a little Sugar, or fyrrup of Violes:
yea, and furthermore to fuch as fpie matter, vpon no other penaltie, but that it be $v$ red a long time. The hearbe parched vpon a hot tyle, and befprinkled with Malmefey and applyed vnto the bellie affiwageth the pains of the matrix,yea and more too, if you adde thereunto the leaues of Mugwort, and the flowers of Cammumile, all fried with oyle ot Lillies, and the yolke of an egge.
Horehound (called in Latine Marrubium, or Praflium) as well the blacke as the Horebound. white growech in euerie ground, but rather in an vutilled than in a tilled ground: you may alfo fee it grow neere vnto walls, hedges, wayes, and borders of fields: it is true that the wild defireth watrie places, as ditches, litele rivers, moift and low places. It is verie good in decoction tor the cough and difficultie of breath, becaufe is cleanfech the lungs, and caufech fipiteing: it prouokech womens etrmes, and bringech forth the after-birth.
Sea, Romane, and cominon Wormewood, is nos fo much fowne or fet becaufe of his fmell, as for the profit that it bringech vito the health. The Romane groweth in a fandie ground: the Sea-Wormewood growech in a falt and afhie ground: the common in hillie, ftonie, drie, and vastilled grounds; for to fet them, you muft writhe the roors.
Wormwood, amongft other his verues almoft infinie and admirable, doth efpecially comfort the ftomach laden with cholericke humours, but not the flomach oppreffed wish flegmaticke humors, and for that caufe there is a Wine made of Wormwood, and called by the fame name. The decoction of dogs-graffe his roots, and the crops of Wormewood, doe heale the Iaundife.. The conierue of che crops made zaundije. of a pound thereof, and three pounds uf Sugar, doth cure the old, inueterate, and defperate drop fie, if it be oftentimes vfed after purging: ie doth pieferue likewife from Dropfic. drunkenneffe. It is an antidote in cafea man haue eaten venimous Mufhromes, or taken downe any other venime, efpecially the Hemlocke, as alfo in bitings and flingings of Spiders and other venimous beafts. The juice mingled with the kernells of wormesi $p_{\text {eaches, }}$ doth kill the Wormes. The leaues made into afhes, and mingled with oile Tomake the of Rofes, doth make the haire blacke. The leaues layed in Wardrobes, doe keepe baire blackeo the garments, and doe driue away Flies and Grats.

Southernewood growech beft being planted of roots or fhouts, for it doth not fo Sothermwood well being fowne offeed. It cannot abide much cold, nor much heat, and therefore it and his verthero muff be planted in fome fuch place of the garden as is temperate. The feed che weight of a French Crowne flampt with fome of the leaucs in white Wine, adding thereto an old Nut, and a Tittle Bole. A rmoniacke, all being flrayned and drunke, is a fingular drinke againft the Plague, and all manner of poyfon. The crops of the The Plague. tops of the leaucs, and the flowers being beaten and flampt in oyle, and made into the forme of a liniment, doeferue to flift off the fhiuerings of agues, if fo bethat the Ioles of the feet and vertebres of the backe of him that hath the ague be rubbed therewith. Southernwood taken inward, or applied outward, doth kill wormes in young children. It is true that Galen forbiddech the taking of it at the mouth, becaufe it is an enemie to the ftomach.
Rofemarie lonech chiefly a reafonable fat ground: it growech in any ayre,but bef Rofemarie. by the Sea fides, and thereupon it bearech his name. It mulf be planted in the Spring and Autumne, of roots or braunches writhen and fet faft in the earth, and chat in a warme place, or at the leaft lying open vpon the £unne, and not fuch a place as is veriemoift or fubjeft vnto the Northerne vvind, becaufe this plant can hardly eridure the cold, and therefore it muff be planted vpon the Sourh vnder fome wall, and the good time of planting of it is, when it will pricke, and then you muft take off the Imall young fpriss, and fee them three inches vvithin the earth, making the earth faft and clofe vnto them abouc : or elfe of fome part of the moft leauie branches therot,which being afterward helped by making the ground light, doth fpread and concinue frefh, hauing no need to be watered, except at the verie time of fetting of it, if the ground be fat: and yee notwibhtand ing if it be watered, it will profper the betrer, and flourifh the more. So long as it is young, it would be diligently weeded and
picked:
picked : it requireth no dung, but onely a good mould, and to be compafled about the root with good earth. The lees of Wine, and the Icraps broken off from Bricks, layd at the foot thereof, doe caufe it to grow maruellounly. There are two forts of Rofemarie: the one bearing feed, and the other not. Some plant it for food neere vnto Hines, becaufe it flowrech betimes, and tor that the Bees doe greatly delight in it, and by it doe better conuinue in health,as alfo make better honey than thofe which feed not vpon it at all. The flowers of it will keepe a yeare or two, without being fpoyled, if you gather them cleane, and not mixs with anie filthie rhing, hauing alfo dried them a litele in the Sunne, vntill they haue loft their newnefle and frefhneffe: afterward drie them vp throughly in the fhadow, and put them not vp so kecpe till they be peffectly dried.
It is good in the Plague time to perfume che houfe with Rofemarie, for the fume
The vertwies of Rofemarie: : An euill ayre, Headach. efpe friucth away the ill ayre. The leaues and flowers are good againt headach, efpecially to fay the whites, if a woman doe vfe chem long time euerie morning: bus more fpecially, to make the fight better, if the partie that hath the weake fight doe cat fatting both the leaues and the flowers of Rofemaric ioint together, with bread and falt cuerie morning. The flowers thereof made in conferue doe comfort the Stomacke, and are good in melancholike Paffions, the Falling fickneffe, Conuulfions, and Paifies. The feed drunke with Pepper and white Wine, doth heale the Iaundife, and take away the obftructions of the Liuer. The decoction of the leaues thereof in white Wine doe comfort weake and oppreffed Sinewes: If you wafl your head therewith, it will make a hard skinne, and comfort the little braine, and alfo keepe the haire from falling fo quickly. Some doe make Tooth-pickes of the wooddie parts thereof, and thcle verie good ; as alfo Coales to draw the firlt Lineaments and Ground-worke of Pietures, and luch other things, to be painted.
The ordering of Iefamine is like vnro that of Rofemaric, faue that Iefamine doth concinuc alwaies greene, and not fo fubiect to froft as Rofemarie, and is much in requeft for Arbors and Shelecrs, and for the fetting forth of a Quarter. There may be made an Oyle of his flowers, infured a long tinie in Oyle of fiweet Almonds, ftrayned in a bagge from betwixt a Preffe, which will be foueraigne to comfort the weake
Weake inemes. cold difillatio ons.

Mountaise
T'hyate. finewes and other parts of the bodie troubled with cold diftillations, anid to appeafe the frets of young children.
Mountaine or wild Thyme delightech to be planted or fowne in grounds neere fome Fountaine, fmall Rundle, or Well, and fuch as is ill rilled, being drie in Summer, and full of water in Winter : and thus placed, iv yeeldech a great deale the fairer leaues. It requireth notwithftanding a ground that is neither fat nor dunged, but open to the Sunne, and would be oft tranfplanted. Somecimes it commeth of Bafill that is ill husbanded.

Mountaine Thyme boyled in vineger and oyle of Rofes, affuagech the headach, if the temples be rubbed therewith : boyled in Wine, and drunke, it prouoketh Womens termes, bringech forth the after-birth, and dead child : with Honey it cleanfech the Lungs, and helpeth the Falling fickneffe. The decuction is good for the windineffe, fwellings, and hardneffe of the Marrix. The perfume of Mountaine Thyme killech Serpencs and other venimous Beafts, and driueth away Fleas. The

To kili Serpents, Belly ach. Difficultic or painfull making of water. cultie of vrine
Penyryall.

To prouoke wou mens termes. To kill fleas. cultie of vrine. weight of a French crowne of the powder of Mountaine Thyme, drunke with water, affuageth the belly ach, and deliuereth the partie which is troubled with diffi-

Penyryall growech well either fowne or planted: wherein this mult be marked, that if it be planted of the root or branches in Autumne, it will bring forth leaues and flowers in mid Nouember. It being once planted, continueth alwaies, fo that it be well wed and pickt euerie yeare: it muft be warred verie diligently. Penyryall is excellent good againf the Dropfie, for the Spleene, Iaundife, and furthering of womens celiuerance in trauell, as alfo to bring forth the after-birth, and to procure the termes, being drunke with whie Wine. The perfume of Penyryall killech Fleas
and venimous Beafts. A Cataplafme made of Penyryall boyled in Wine, doth af- The Sciaticen, fuage the paine of the Sciatica.

Dill loucth better to be planted than fowne, and craueth chiefely a ground fome- Dillo what warme, but more enclining to cold. If you would haue it to grow faire, you muft water it oftentimes. When it is fowne, it is not needfull that the feed fhould be couered with earth, becaufe it is not fubieft to be earen of Birds. Dill hath power to take away Belchings, and inward Gripes, Vomit, and Hicket, and that onely with Belchims. fmelling to it,to prouoke Vrine, and helpe the digeftion of the Stomacke : it caufech Grip ps. a fpring of milke in Nurfes, healech the fuffocation of the Matrix, and ripencth all Diffiuthie of manner of tumours.

Annife crauech a well bated, tilled; fat, and manured ground. It muft be fowne Annife. in March, and oft watered. Euerie man knoweth how good and profitable the feed thereof is, eaten in the morning, for fuch as are fubiect to the gripes of the Stomack and Guts, to the Hicker, Belchings, ftinking Breath, and which defire to hauca beau: 1 firking tifull and comely countenance: after meat, it alfo helpech digeftion: it is good for Nurfes to caufe them to haue much milke. It alfo takech away the foppings of the Stomacke or Spleene : it helpech Collickes, prouoketh Vrine, makes a man apt to fweat : and laftly, keepes che bodie foluble.

Biflops-weed crauech fuch ground and fuch tillage as Annife, which being once sijhopsmeed: fowne, doth lightly grow there eueric yeare by the feed falling from it : it groweth chicfely in refled grounds. The feed is excellent good againft Wringings and Gripes, to prouoke Womens termes, and Vrine, if if be drunke with Wine, fo that it be vfed but feldome, for otherwife it caufech a pale colour. The perfume doth mundifie and cleanle the Matrix, and maketh barren wommen fruiffull, if together with this fuffumigation the barren woman doe take euerie lecond morning the weight of a dramme of the powder of this feed, three houres before thee eat anie thing, continuing it for foure or fiue times: but in the meane time, the husband muft lye with his wife vpon fuch daies as fhee fhall vfe this powder : a thing proued diuers times.
Caraway is fowne in the moneth of May, in a good, cleane, and manured ground, infuch fort as we haue faid in the Kitchin Garden. The feed helpeth Digeftion, prouoketh Vrine, expelleth Windinefleaznd hath the fame vertues that Annife hath: being made into powder, it is with good fucceffe mixt amongft fuch remedies as are vfed to be giuen for drie blowes.
Cummin doth grow fairef, wher it is fowne in a fat and hot ground, or in a ground lying open to the Eafterne Sunne amongft the pothearbes (for fo it groweth better) in the beginning of May. Some likewife fay, that for to make it grow faire and well, it mult be curfed and rayled vpon. It muft not be watered fo prefencly after it is fowne; but after it is put forth of the earth, it muft be offencimes watered.
The feed taken at the mouth, fcattereth the winds which breake vpward, it mendeth the inward gripes, and takech away the difficulcie to make water; as alfo the blackneffe of drie blowes, the powder thereof being prefently applyed affer it hath beene beat verie frmall and fine, and heated at the fire. Being taken in a Suffumiga- Drims water. tion, or pur vp into the fecret places, it helpeth conception. The fume of this feed taken vpon the face, doth make it pale and deadly. And this doe they verie well know, which are giuen ouer to counterfeit holineffe, fincere and vpright dealing, or the fubduing or bringing vnder of the bodie. Alfo che feed thereof bruifed and Boyled in Oyle, is good againf anie Impoftumation, and affuagech anie great fwelling.
${ }^{23}$ Fennell findech not it felfe agrieted with anie ayre or foyle: howbeit, natirally it Fernek.
is more enclining vnto a hot than vnto a cold ayre, and vito a grauellie ground rather chan ynto a better: onely it flyeth and refufeth a fandie and altogether barren ground, as not thriuing anie whit tierein. It is fownie in the Spring and Autumne, and it is planted lixewife art the fame times, the falkes are remoued hauing, pur sitras
forth
forth a tuft, eueric one from another, or elfe the whole cuft onely : notwithftanding, the fweet Fennell loueth rather to be fowne than planted, and that rather in the Spring than in Autumne, for fo it groweth more. fweet, and beareth the greater feed. It muft be fowne in and remoued vnto a ground open vpon the Sunne, and reafonably drie, and feldome fowne, as not aboue one yeare. It muft be kept verie cleane fo long as it is in growing, and vntill it be come vnto his full growth, for otherwife bad weeds would choake it.
Swete Femme
To haue verie fweet Fennell, put your feed in a Marfellis figge, and fo fow it, or elfe mix honey with the earth wherein you fow it;or elfe fleepe the feed in honey one or two nights before you fow it, or elfe in the water of honey, or in milke, changing the fame, and putting new in fead, in fuch fort as we haue faid in the handling of Melons.
cleare Juhb.
Fennell, as well the leafe as the feed, is wholly dedicated to the clearing of the eyes: and for this caufe, fome draw the iuice of the leaues and ftalkes whice they are yet tender, and drying it, keepe ir for the fame effect. Somecimes the water of Fennell is diftilled all alone, and by it felfe, or elfe mixt with honey. The feed of Fen
Wiadineffo. nell is good to reffraine wind, taken after meat, notwithftanding that it is hard of digeftion, and bringech but litele nourihment vnto the bodie. It may be eaten greene after the beginning of Auguft: as alfo the buds and tender ftalkes may be preferued, and likewife the branches as they beare their feed, with falt and vineger, in earthen pors, to vfe at all times, and efpecially whiles there is raigning
'Aboumdance of milke.

Sarierome. of milke.

Marierome growech of feed, roots, or fhoots, as Sage doth. It defirech fhadowed places, and that fat, well manured, and oft watered. It will be the fairer, if it be remould in the beginning of Summer. The roots mult be defended from Rats and Mice ; for this kind of vermine doth it more iniurie than anie other : which you thall find and proue true, if it pleafe you but to make triall thereof. The ivice
prefled out of the leaues, and drawne vp into the nofthrils, doth purge the head:
To parge the
brainc.

Dropsie:

## Slugraort.

The verimes. and a lee, it dryeth the rheumes, and icoureth away the filthinefle of the head. The broth wherein it hath boyled, is good againt the beginning of a Dropfie, as alfo for them that cannot make water well, and which are fubiett vnto Gripings.
Mugwort, whether it be fet or fowne, crauech a drie and flonie ground, contraxis to another hearbe refembling it, and called hearbe S. Iohn, and groweth in marfhes, and is indeed the male Sothernwood.
Mugwort hath fingular force againf the bitings of Serpents, vfed as well inward as outward, as alfo againft the Plague: That it is fo, the Almaines doe fufficiently proue, who account not themfelues to haue anie more fouleraigne remedic againft the Plague, than Mugwort made into afhes, and afterward boyled into a chymicall falt, to vef fo foone as they perceiue chemfelues frrucken with the Plague, with foure or fiue ounces of good Wine, or Malmefey, and afterward to goe lay themfelues downe in bed, to caufe themfelues to fweat two or three houres. It hath fingular verrues againft the difeafes of the Matrix : for the leaues putinto a bagge, or made in forme of a Cataplafme, and applyed warme from vider the nauell vnto the flankes, The Matrix ons doe procure the termes, and doe appeafe in like manner the Marrix relaxed, or out of order, and vиrub. of order and place. The leaues flamped with oyle of bitter Almonds, and applyed vnto the flomacke, doe flay the paine thereof. There is made a fingular Peffaric to bring downe womens termes, with the leaues of Mugwort, Myrrhe, and Figges, all being brayed with oyle of Ireos. The root powdred and drunke with white wine, doth fo purge the Marrix, as that it caftech forth the mole and after-birth. The iuice is with good fucceffe drunke againft Opium:the powder of the dried leautes drunke with wine the weight of three drammes, is exceedingly good for the Sciatica. Some fay, that the traucller which carriech Mugwore the whole hearbe, tyed vnto his legges, or thighes, fhall not find himfelte wearic at all : and that hanged at the
entries of houres, it with-holdech all Incantations and Witch-crafts. When a woman labourech of child, and cannot auoid her after-birth, there is nothing better than to apply vnto her,vnder her nauell, vpon her thighes and flankes; Cataplafme made of Mugwort leaues, boyled with Barly meale : but prefently after the child or after-birth is conte forth, you muft take away this Cataplafme, otherwife it would draw downe the Matrixalfo. If you fampe the iuice of Mugwort with the yolkes of egges boyled, adding thereto Hogges greafe and the feed ot Cummin, and apply is all in manner of a Cataplafime vpon the Marrix, you flall remedie all the pane that ordinarily doch follow a feer child-birth.

Tanfie, as well the great as the fmall, growech in moift places, as vpon the brinkes Tanffe. of Riuers and frall Brookes, and fomectimes in dree places, as wee fee it grow in Wayes, and inthe edges of high Wayes. The feed or flowers drunke with milke or wine, doch kill the Wormes : and that is the caufe why fome call it Worme-banc. It wormess: feruech alfo to prowoke Vrine, and to breake the Stone and Grauell of the reines, efpecially in men, as Fetherfew doth the fame in women.

Ferherfew doth require the like ordering and ground that Mugwort doth, and Fetberfine they are allo (as it were) of the like vertues, both of them appropriate vnto the affects of the Matrix: but Fetherfew furpaffeth in this, that the flowers, but principally the leaues, flamped and applyed vnto the teech or eare of the fide that akech, it wholly affuageth the paine of the teeth : And this is the caufe why the Parifians doe call it Espargoutte, becaule the leaues thus flamped and applyed; doe caure to diftill out of the mouth, drop after drop, the flegmaticke humour, which caufech the faid tooth-ach. It is good alfo for them which haue the fwiming of the head, as alfo for them which are troubled with Melancholic, or with the Stone.

Cacs-mintr, or Nept, is a kind of Calamint, whereof wee haue fpoken before: fo called, becaufe that Cats doc exceedingly delight in the fmell thereof, and doe tumble themfelues round vpon the leaues and ftalkes : it groweth without anie great husbanding in marfhic and waterifh places, as may eafily be feene and tryed. It is reported to haue a fingular vertue in helping women to conceiue. In like manner Phyfitians are wont to prefcribe Bathes and Fomentations made of this hearbe, for women that cannot conceiue and haue children. Alfo it is verie delicately purgatiue, and openeth the bodie verie gently, without offence, or danger of aftercoftiveneffe.
French Lauander being an hearbe of a verie good fmell, and verie vfuall in Lan- Frenth Laumant guedoc and Prouence, doth craue to be diligently tilled, in a fat ground, and lying der. open to the Surne. The decoction, fyrrup, or diffilled water doth comfort the braine and memorie, takech away the obftructions of the Liuer, Splcene, Lungs, and Matrix : but fuch as are cholericke, muft not vfe it, becaufe it difquietech them mightily, in caufing them to vomit, and altering them much, by bringing a heat vpon all the bodie.

The drie, ftonie, and Sunne-fhining place is verie fit for Lauander, whether Launander. male or female. Before it flower, it mutt be cut and picked verie carefully. It is of a fweet fmell, and good, when it is dryed, to put amongt Linnens and Woollen Clothes, imparting of his fweetneffe vnto them, and keeping of them from vermine. It is veric excellent to comfort weake and wearied finewes, or otherwife ill affected, through fome cold caufe : and by reafon hereof, Baths and Fomentations made of Lauander for Palfies, Conuulions, Apoplexies, and other fuch like affects, are verie foucraigne. The flowers, with Cinnamon, Nuimeg, and Cloues; doe heale the beating of the heart. The diffilled water of the flowers, taken in the quantitie of two fpoonefuls, reftoreth the loft fpeech, and healech che fwownings and difeafe of the heart. The conferue and diffilled water thereof doe the like: The Oyle thereof dryeth vp Rheumes alfo : and beeing annoynted vpon the nape of the necke, it is fingular good againt conuulfions and benummedneffe of finewes.

All-good, otherwije clary.

## Tocleare the

fight。
All-good (orherwife called in French Orualie, becaufe it is as much worth as gold) growerh in anie ground, without feed, and with feed : it delighteeth notwithftanding to be often watered. The leaues ftamped and applyed, doe draw forth thornes and prickes that are faftened and runne into anie part of the bodie whatloeuer: It doth, in like manner, bring the child out of the mothers bodie, being in trauell. The wine wherein it hath been fteeped in fmall quantitie, doth make men pleafant and cheerefull, and apt to carnall copulation. The feed thereof put into the eye, and turned manie times round about the eye, doth cleanle and cleare it, in wiping away the flegmaticke humour, wherewith you fhall well perceive the feed to be laden, and (as it were) wrapt in fmall filmes after that it is taken out of the eyes. The flowers and feed put in a veffell full of fweet Wine, whiles it yet purgeth, giueth it the talt of Malmeley. It is true, that fuch Wine will quickly makeone drunke, and caufe the head-ach, as we fee that Beere doth, wherein Brewers boyle Clarie in ftead of Hoppes.
Nigella $A_{0}$

Balme.
checrefulneffo.
Nigella of the Garden muft be fowne in a ground that is fat and well eilled. The fume of the feed taken, doth flay the rheume, drie the braine, and caufeth the fmelling that is loft to come againe : boyled with water and vineger, and holden in the mouth, it affuageth tooth-ach.
Sweet Balme groweth rather in Woods and Forefts than in Gardens : notwithftanding, he that will haue it in his Garden, muft fow it in a fat and well battild ground, where the heat of the Sunne comaneth not verie frongly.
It ferueth to reioyce the heart, and deliuereth the fpirit from melancholike imaginations and fanfies: it is good not one'y againft bitings and ftingings of venimous bealts, but alfo againft the Plague, in whatfocuer manner it bevfed. And further, if anie man doubr himfelfe to haue eaten anic venimous or poyfoned meat, as it falleth our often in them which hauc eaten Mufhromes and fuch like things, then this fer-

To keepe bees
from flying
from their
bizes.
To diviue them
from them.
Camomile.
To mollifie, re
folwervarifio. it
mile is fingular good to mollifie, refolue, rarifie, and loofen: and in this recaufes, than bathes made with the leaues and flowers thereof. The leaues of Camomile ftamped with white wine, make a verie good drinke to cure all forts of Agues, but efpecially. Tertians : for which reafon, the Priefts of Egypt did confecrate it vnto the Sunne. Alfo the water of Camomile drunke warme in the beginning of the fit, doth throughly heale the Tertian by vomit. The leaucs of Camomile yee greene, being dryed vpon a Tyle, or hot Fire-panne, doe by and by appeafe the head-ách. Being allo fried with fweet Sewer and vnfer Leekes in a Frying-panne, and put hot into a Linnen bagge, and fo applyed to the nauell, it killeth Wormes either in old, middle age, or young infants, and taketh away all manner of paine in the bellie.
Mellopen . . . Melilot refufech no ground, be it fat, or be ir drie, and yet it loueth to be watered. Melilot dort mollifie, refolue, and rarifie, as doth Camomile, and yeeldeth i verie good fmell, efpecially when it is new, or when it raineth, in Summer: it alfo affuageth the ach of anie part or member, whatfocuer it be. Alfo the inice thereof, mixed with Turpentine, Waxe, and Oyle, ripeneth, breaketh, and:healeth anie Impoftume whatfocirer: it taketh away all hard fwelling, and cleanfecth wounds.
Manie men being verie defirous to adorne and fet forth their Garden with all forts of Plants, doe amongft the reft prouide to furnifh it with Apples of Lout (which the Latines call CMala infana) by reafon of the beautic of their fruit, which
which is as shicke as a Cucumber drawing toward s a red colour. They mult be fowne in the Spring, in a fat and well battild foyle, and where the Sun hath great power, becaufe they cannot abide any cold : they craue the like ordering and husbandrie that the Cucumber doth.

Many licorifh mouthes lee not to be eating of thefe, no more than of mufhroomes: they take away their pilling, they cut them in flices, boyle them in water, and after frie them in the flower of meale and butter or oyle, and then caft vpon them pepper and falt : this kind of meat is good for fuch men as are inclined to dallic with common dames, and fhort-heeld hufwiues, becaufe it is windie, and withall ingendreeth cholericke humours, infinite obftructions and head-ach, fadneffe, melancholicke dreames, and in the end long continuiing agues: and therefore it were better to forbeare them.
Mandrakes as well the male as the female is more acceptable and to be commen- Mandrakes. ded, for the beautie of his leaucs, fruit, and whole plant, than for the fmell it hath : it mult be fowne or planted in fome fhadowed place, a fat and well batrild ground, and be kept from the cold which it altogether detefteth and cannotabide.
The Apples of Mandrakes procure fleepe, if you put but one of them vnder your The vertues. care when you are layed in bed: it is all but fables which is fooken of the root which is not fo cooling as the apple, and hath vertue on the conitrarie to drie, foften, and refolue all the hardneffe of the liuer, fpleene, kings cuill, and fuch other tumours, how hard and rebellious foeuer that they be. Which is more, Diof oorides reporteth, that if one boyle the rootes of Mandrakes, vvith Iuorie for the fpace of fixe houres, it ma* keth the Iuorie fo tractable, and foftenech it in fuch fort as that you may fer what impreflion vpon Iuorie that you pleafe : peraduenture fuch as bring vs vnicornes horne from thence, doe vef fuch deceiiffull and wily dealing with vs , feeing by fuch their cunning skill, they are able in fuch fort to foften Iuoric or the Harts-herne, and thereby likewife able to worke it to the fame forme which we receiue the vnicomes-horne inat this day.
With in this frall time there hath beene feene a plant fomewhat like vnto apples ofloue, bearing a round fruit like an apple, diuided vpon the outfide as the melon is with furrowes, in the beginning it is greene, but afterward when it commech to ripeneffe, it becommeth fomewhat golden, and fometimes reddifh. This plant is more pleafant to the fight, than either to the tafteor fmell, becaufe the fruit being eaten, it prouoketh loathing and vomiting.

## Сhap. L.

## Of the forme of fetting Hearbes in order, by proportion of diuers falhions.

CEe haue alreadie deliucred the forme of fetting Hearbes in order, as well fuch as are of a fweet fmell, as thofe which are for nofegaies, and that either vpon particular beds or quarters: now we will fpeake of the manner of befto wing of them in proportions of diuers fafhions, and in labyrinthes or mazes. But in this courfe I cannot fet thee downe an vniuerfall, and as it were inuiolable prefrript and ordinance, feeing the fafhions of proportions doe depend partly vpon the fpirit and inuention of the Gardener, and partly vpon the pleafure of the maifter and Lord vnto whom the ground and garden appertainech: the one whereof is lead by the hops and skips, turnings and windings of his braine; the other by the pleafing of his eye according to his beft fantafic. Notwithftanding that there may not any thing be here omitred, which might worke yourbetier con-
tentment and greater pleafure, by looking vpon the beautie and comelinefle of this your garden-plot: I intend to fet beforc you diuers figures of proportions, and the manner of drawing of them cunningly, to the end you may haue the meanes to chufe thofe which thall moft delight you, and beft agree with your good liking. In which I defire you to giue great thankes, and acknowledge your felfe greatly beholden and bound vnto CMonfieur Porcher, Prior of Crecie in Brie, the moff excellent man in this art, not onely in France, but alfo in all Europe: and not vnto me, who fhall be but his mouth in deliucring what he hath faid, written, and communicated vnto me in precepts, yet extant, and to be feene with the cye. And rouching thefe proportions, you hall vnderftand that they are of two kinds, inward and outward, the inward are thofe beauties and proportions which are beftowed vpon the inward parts or quarters of your garden, as are knots, mazes, armes, braunches, or any other curious figures whatfocuer, and thefe are diuided by flender rowes, or lines of hearbes, flowers, turfes, or fuch like ; the outward beautics or proportions are thofe which are beftowed in the outward and generall parts of the whole or entire modell of the garden, drawne into what figure, knot, or deuife your fancie can create, or the ground recaine, and are divided by alleyes, hedges, deepe borders, and fuch like, as fhall be at large fhewed vnto you hereafter.

To come therefore vnto the matter, all the fweet fmelling hearbes and others for nofegaies, which we haue mentioned before, are not fit and good to make proportions of. The moft fit and meetare, penniroyall, lauander, hyflope, wild thyme, rofemarie,thyme, 「age, maricrom, cammonile, violets, daifies, bafil, and other fuch hearbs, as well thofe that are of fweet fmell, as thofe which are for nofegayes: as for example, lauander and rotemarie of a yeare old to make borders abour che proportions or knots; and as for boxe in as much as it is of a naughtie fmell, it is to be icft off, and not deale withall. All the reft of the hearbes as penniroyall, hyflope, wild thyme, thyme, fage, marierom, and fuch like, arefitelt ro be vfed about the quarters, or elfe in fomefuch prettie little deuifes as are made in the middeft of borders, or whereof proportions of quarters without borders, as wel whole as broken, are made. Germander allo is an excellent hearbe for the fecting forth of any inward proportion, for it growes euen and comely, thicke and vpright, fo is alfo mother of thyme, winter-fauoric and pinises, prouided that with your fheares you keepethem from too mach fpreading.

The hearbes whercof borders fhall bee made, mult bee more high and thicker fet of leaues, than thofe whereof proportions of quarters either whole cr broken are made, or yet the other which are in the middett of the borders, that fothe beautie and good proportion of the knet or quarter may bee feene and difcerned more eafily.

I call in thefe places that the border which compaffeth the proportion or quarter about, as allo the alleys of the garden : I call broken quarters, thofe many fmall parcels which are fundred and feperate one from anorher. The proportions cither without borders or borders, are either equally fquare in wideneffe and lengrh, or elfe vnequally fquared, that is to Cay, longer than they are wide, or wider than they are long: Orelfe of the forme and thapeof an egge : or of a forme and fantionthat is mixt of a round and a fquare, or of fome fuch other forme, as fhall pleafe the gardener: as for example, the fathion of a flower-deluce, of a truc loues knot, of a lion rampant, and other fuch like portraitures.
That which fhall be in the midft of the proportions with borders, or without borders, fhall be of a fquare forme, or of the fafhion of an egge, or round, or mixt of a §quare and a round, or fome other fuch like forme.
If you be difpofed to plant any hearbe in the midft of broken quarters, itmuft not bee ouer high, but leffe and fhorter than thofe wherewith the proportions are fet, that fo it may not hide or hinder the fight of any parc of the quarter. It is crue indeed that in this middlemoft part, you may fer an hearbe of a mearie and middle height,

- Yea, or fome fuch as for his bigneffe may refemble a fhrub or litele tree, butit may not be thicke fee with leaues, nor fpreading far abroad, but rather putting forth his flalke vpright, as doth she Bay and Cypres tree.
But in refpect of the beautie and comelineffe of the quarter, you muft notplant any thing in it,or if you do plant any herbe, you muff fee, that it be of a thorter falke than that which compaffeth it about: the knot that is made of borders, muff confift but of two forts of herbes: as for example, of Lauander or Rofemarie, or Boxe for the border, and of Penny-royall or Hiftope within. It is true, that in the middeft, and foure corners thereof,there may be feffome Cypres, or Rofe-marie,or fome fuch other herbe,or litele tree, which is not thicke fet with leaues,nor fpreading far abroad, but rifing in height vprighr.

Butthe knot made of broken quarters, may bee made of diuers, and differing herbes, which notwithfanding may not grow great and tall, becaufe they would hinder the view of the garden, but they mult be fhort, and thinne fer with leaues, as Sage, Penny-royall, Margerom,Cammomill, Datfies, Violets, Bafill, Rue, and fuch others, which herbes fhall be planted in diuers quarters, to the fetting forth of greater varietie in the knot, and to giue grace vnto the littie quarters. It is true, that with fome round quarters, or fquares of broken quarters, you may worke fome finall birds, men,or other fuch pourtraites made of Rofe-marie, according to your pleafure, and inuention of your Gardener.

The herbes wherewith proportions are fet out and deckt, muft bee planted of rootes or flippes : the time to plant them is Ianuarie, Frebruarie, March and Aprill.
It is true, that if you plant herbes, efpecially Peniny-royall and Lauander vpon flips. The cime of gathering of good plants, will beat the end of Ianuarie, and in the monech of Februarie, and nor later, becaufechis kind of flip will not bee frozen by any froft that may happen, and withall, in the meane time, it doth not fland in neede of watring, becaufe it hath taken roote before the hot umes of the yeare come in.

A gaine, if you fet herbes of the roote, you muft fay till March and Aprill, and looke well vnto it, that your herbes haue found, luing, and euery way fuffcient rootes, for otherwife, they will not bee able to profper, fpread, and grow in the carth, but will die for the mofl part. It is meete alfo, that when they are planted, you fhould water them verie often, becaufe of the heat then growing more and more euery day, for otherwife they will wither, or grow fmall and dwarifh, or die rightout.

Wherefore for the greater affuredneffe, I could wifh youto plant your herbes rather of flippes chan of rootes: for befides that, it will bee morceafie, and of leffe Wharge and coff to purchafellips, than to purchafe the whole herbes with the roots. Itwill be alfo leffe labour and crauell for to preferue and make to grow the one than the other : for the flips will affuredly grow without watering, and notwichfanding any frofl, and they will thew faire and thicke leaued, by fuch time as Sommer fhall begin. To plane withinthe earth, whether it be root, or llip, you muft caft trenches, rather with fome fhorc handled hand-forke,or hand-fpade, than with a dibble,which you thall find a great deale more eafic.
Behold hereche greateff part of the ethings which you are diligently to looke vnto before you pur your hand to the worke of cafting your proportions or knoss: and whereas their whole beautie and commendation doth confift in a well framed and proportioned forme, and in a well carried and appointed order of difpofing them, fuch as may delight the eie : to the end you may atraine this commendable and well pleafing kind of proportion in the contriuing of your quarters, you muff firft caft what is the fpace and whole contents of your quarter, wherein you meane to draw your proportions, that fo according to the faid contents, you may fit them with fuch forme as the place will affoord. After that, you fhall haue in your hand many meafures of frall cord, and yet fufficient ftrong: many cord-recles and dibbles,
and fuch ocher thingsto finifh the proportions which you defire to have drawne in your quarrer. And with borders. Before you fretch your line rod draw and caft the fhape of it, you mulf firft take ethe bredth and length of the border, and that fuch as the quantitie of the ground inay conueniently beare, and fo make it more long and broad, or elfe long and broad accordingly.

It is true, that if you haue good ground enough, as abour fome fixcrie foot fquare,af. ter the meafure of a common foor, euery one concaining twelue inches,y ou may make your border large enough: but and if you haue leffe quanticic of ground, then you muft make your border leffe, and the proportions at large : you fhall fo finifi vp your borders, as that in the middeff of them, you may haue fome prettie liecte knot. When you haue calt your ground, you fhall begin toftrecth your line with good and firme line-recles, to take the bredth and length of your borders found abour. Then you fhall draw your line a croffe, from the which crofle, and from abour the which faid borders, you fhall not draw vp your line and line-reeles, vniill you haue marked out all your border, or ar the leaft one fide, or halfe of it, becaufe this is the directurie, for the whole quarter and border 0 : this is it, whereby you mult be gnided and directed for the making of compaffes and largeneffe of your fquares and rounds. Furthermore, you may frecth your line in the middeft of the border, thereby to take the iult middeft, and that for to direct and guid you. Furchermore, you thall haue two lines of the length of the border, or quarter, and two foot ouer, and there are called the flying or running lines, for that they ferue to carric or remoue from plaze to place,for the planting of herbes in the faid borders. A gaine, you fhall ftrecth out a line from corner to corner, becaule that without fuch line you cannot make vp your corners: and this is the manner of making your borders. As concerning the knot contained within the borders : to takethe meafure of the proportion or fquares, you mult haue two fmall rods, of the chickeneffc of a thombe, of willow, or fome other ftraight wood, the one eight foot long, and the other betwixt three and foure, the long one to ferue for the largelt works, and the fhort for the fmaller: vpon which rods, you muft marke out your proportions, wherof you meane to make your fquares, or any other forme that it fhall pleafe you to make. For round workes, you muft haue an inftrumicnt, commonly called the Gardners Bilboquet, the patterne whereof you fhall fee hereater ; bur giue it what name it pleafech you, but this is the manner of making of it: You fhall cake a prop or ftandard, fomewhat thicker than your chombe, you thall purt thereto a line of the fame thicknefte that your gardening lines are, of threc or foure foot long, or according to the length and greatneffe that you would haue your rounds of. Vponthis line, fhall you make knots, according to the bignes or ouffide of the worke, and then another knot for the fecond or inward circle of the round, which fhall be eight or nine inches, or leffe if you will: but Itell you before hand, that if you make them any leffe, the börder will be ouerfhadowed, and will not laft and continue fo long; and yet Iftill refer it to your owne difcretion. To euery knot of the faid line for to make your rounds withall, you fhall make faft, right ouer againft the knot,on the backfide thercof, a little flicke fome foure fingers long, more or leffe as you thall moff fancie, and of thickneffe of your litele finger. By the meanes of the fe knots fhorter or longer, you fhall make your rounds fo many, and fo big. or fo little, as hall feeme good vnto you. If it may not rather fland with your liking to make two Bilbuquets,one for your fmal rounds, and another for your greater. This figure following, doth hew the forme and farhion that muft be followed in vfing your lines for the making of your quarters wirth borders. Thefe draug hits will ferne alfo to make a border to broken quarters, with fome fmall whole and vribroken proportions in the midी, euen as you lee a fquare in the midft,and fhall further hereafter fee is in other portraitures, which fhall be fet out for your vfe. To work the more furely, you hall lec all your lines be ftretched out in length,and our ftandards, props, or dibbles faft in the ground, vnillfuch time as you haue throughly finithed the bor
der, that is to fay, your croffe lines in the middeft, as alfo thofe which paffe, from corner to corner, and thirdly, thofe which make the fides of the borders. All which faid lines are noted with the letter B. The others which are marked with the leter A. are the running or flying lines, which are carried from one place to another to make middle partitions, to the treading of the rounds, and to chelquaring of the faid border, \& when as one fide is downe, hey are then to be taken vp, \& to be pitched down elfe where. And although that here be foure, yeetwo is fufficient, at the difcrection of the gardener, who according as his number of workefolkes is, more or leffe, fhall fretch and draw mocor fewer lines.

## The manner of vfing, and platforme, fhewing the practife of handling the lines, for the laying out of a fimple quar-

 ter without any border. And how the lines muft bee contio nued and kept fretcht till the whole proportion be drawne out and finifhed.

The vee and manner of practifing by the ftretched lines.


The vfe and manner of practifing by the ftretched lines.


## A fimple proportion, or draught of a Knot.



A fimple proportion, or draught of a Knot.


## A fimple proportion, or draught of a Knot.



A fimple proportion, or draught
of a Knot.


## A fimple proportion, or draught of a Knot.



A fimple proportion, or draught of a Knot.


A a

A fimple proportion, or draught of a Knot.


A fimple proportion, or draught of a Knot.


Aan

## A imple proportion, or draught of a Knot.



The way and maner to ftretch the lines, to make a quarter with borders, and to make a border with ๆquares bre: ken and croffed thorow the middeft.


Aas

The manner of ftretching your lines vpon a border with a leuered knot in the middeft,


A border with his feuerall proportion in the midt.


A border of broken fquares, with a middle confifting of fiue proportions.


## The manner to ftretch the lines to make a quar-

 ter of broken fquares. Let reft and abide in their places the lines til you haue finifhed the proportions. Take the meafure of the ftandards of a croffe and corner line, whether it be a fquare or a round, and let there be fo many of them, and as great as the ground will beare. And if perhaps you would plant any thing in the middeft of the quarter, helpe your felfe with the running lines, and their fandards, to plant there what you would, withour putting downe any other ftandards, or fretching any other lines than are alreadie : and thofe you muft not flacke, according as hathbeene faid before.


## The manner of fretching the lines, vpon a

 quarter of broken fquares.

## A border of broken fquares with the middle.



The forme and fhape of Bilboquet, which is an inftrument to take the meafure of rounds, as we haue declared before.


The forme of a Labyrinth.


When the hearbes, as well of the Borders, as of the Quarters, are growne vip, if they become too thicke let of leaues, and by their large lpreading doc ouer- fhadow the one the other, couer the fmall alleyes of the proportions, and therewithall fpoyle and hurt the comelineffe of the whole Quarter, they mult be cue. The feafon to cut them, is at all fuch times as need thall require. It is true, bhat there muft efpeciall care be had not to cut them, the time of Auguft being once paft, by reafon of the great loffe that enfueth in hearbes, which thereby will fall to wither and pine away, and become as things burned with the Sunne. To cut them which fand in a right and ftraight line, you fhall ftretch a line verieftiffe, being of the length of the proportion, by the direction whereof you thall cut verie neere firf the two fides, and then the vpper face thereof. As concerning Rounds, you mult cut them, for the fight of the Countrey, as round as cuer you can. To cut the Border, whecher it be of Lauander, Rofemarie, or Boxe, you muft vfe che ordiasrie theeres, which haue handles of wood. To cut other fmaller and leffe hearbes, you mult have theeres like thofe which Taylors vfe.
Now you flall againe vnderftand, that thefe inward Quarters, wherein you place thefe Knots, or other Deuifes, may be circumferenced or bound in as well with fine curious Hedges, made battlement-wife, in fundrie formes, according to inuention, or carrying the proportions of Pyllatters, Flowers, fhapes of Bealts, Birds, Creeping things, Shinpes, Trees, and fuch like, as with Borders; efpecially if your ground be little, or fraitened, becaufe thefe Hedges rake not halfe fo much roome as the Borders. Againe, you may at your pleafure, either within thefe Hedges, or in the fame Line wherein thefe Hedges grow, plant all manner of Fruit trees, or other Trees of anie curiofitie whatfoeuer: and within them you may plant your Goofeberrie trees, Prouence Rofes, Muske Rofes, or anie other fruit or flower that growes forub-wife, or not aboue two or three foot aboue the earth : So that whereas your Border containeth not anie thing but one entire hearbe, as Prympe, Boxe, Hyfope, Lauander, and fuch like; by this manner of bordering, which is to fay, with a Quickfet Hedge, you thall have not onely all them, but allo all kind of fruits, flowers, and fweet fmelling hearbs whatlocuer : befides, they will keepe your Quarters and Knots in a great deale more fafetie, becaufe they are not fo eafie to be runne ouer, or broken downe, either by man, or beaft, as your other Borders of hearbes are. Now, for the making of thefe Quickfet Hedges, it is in this manner: Firft, you fhall with fine fmall ftakes. cut to the length and proportions of your worke, ftake your Quarters about : then with fmall poles, bound to thofe Itakes either with ftrong Wyar, or Oziers (but Wyar is the better) make a Lattice-worke, about two foot aboue the earth : then with fhorter poles and wands, made plyant for your purpofe, fanion your battlements of what fhape foever you pleafe to haue them; whecher made plaine, er pyllafter-wife, or in femicircles, or other proportions, in fuch manner as you intend your Hedge fhall grow: and this done either in Autumne, or the beginning of the Spring. Alongf the bottome of this Hedge you fhall fee Prympe, whiee Thorne, Eglantine, and fweet Bryer, mixt togecher, and as they foot and grow $v p$, fo you thall wind and plafh them within the Lattice-worke, making them grow and couer the fame; euer and anon, as need Thall require, either with your Sheeres, or Hooke, cutting them to that fhape and proportion to which you firft framed your Lattice-worke, and this will in two or three yeares bring your Hedge vnto fuch perfection, that befides the beautie thereof, the defence will be fo good, that you fhall not feare the harme that Dogges, Swine, or other Cattell may doe, if at anie time they fhall chance to breake into your Garden. Thefe Hedges are alfo verie excellent to fer alongtt your Alleyes, or other Walkes, and adde a great beautie thereunto. There be fome that make thefe Hedges onely of Oziers, or fmall Sallowes; planted croffe-wife, or otherwife, as your inuention pleafech, and thefe Hedyes are good, and beautifull, and verie fpeedie in their growing, but they are not of any very long continuances: therefore, except your ground be very moift, the former Hedge is mueh the better. Which that you may the better know how to make, I will here fet you downe the models of a couple of chem;
by the example whereof, you may at your pleafure make anie other proportion whatfocuer: and you hall alfo vnderftand, that thefe two Models containe bist the dead worke onely, which is to be made of Poles or Wands, and the Quickfes to be planted clofe vnto it, and fo placed within the dead Lattice-worke, as yon may here perceiue.


Chap. LI.

> Of the manner to keepe aind preferue Hearbes, either for the vec of the Pot, or of Pby ficke, or fuch as are of a sweet
> fmell and $\int$ a.uour.

The preferuing of the root of Elecampane.


He root of Elecampane is preferued after this fort: When you have taken up the root in the moneth of October, at fuch time as it is verie ripe, you muft firl rake away all the fand and earth which is about is with a rough Linnen Cloth, or with a Strainer: after that, you muft fcrape it all ouer with a verie flarpe knife, and according as the rootes are of bigneffe, to cleaue them in two, three, moe or lefle pieces, ot a fingers length, and boyle them in a Braffe Cauldron with vineger, and that in fuch fort, as that the flices may not burne within the Cauldron. Three daies after they muft be dried in the Sunne, and put into a new pot well pitched, and cuted wine put vnto them, and that fo much, as that they may be coucred therewith, and a good deale of Sauorie preffed downe vpon them, and then the veffell clofe thut vp and couered well with leather, Otherwife: You muft carefully looke that the rootes thereof be made veric cleane, and then cut in twn or three pieces, of a fingers length : then afterward, for the face of a whole day together, you mult infule them in water vpon hor embers, and afterward boyle them with twice or thrice as much Honey. or Sugar.

There may likewife conferue be made of the root of Elecampane after this man- Conferne of ner : Make verie cleane the roots of Elecampanc, as wee haue faid, and cut them in Elecarryane fmall flices, infure them a long tume vpon hot embers in water, and after to boile them fo long, as till they be tender fodden: then flampe chem and fltraine them through a Linnen cloth or Strainer, and in the end boyle chem $v p$ with thrice as much Honey or Sugar.
You may in like manner preferue and conferue manie ocher roots, as Gentian, Pionie, Corne-flag, wild Vine, Parfneps, Althæa, or marf1 Mallowes, Turneps, Carrets, Radifhes, Nauets; Caraway, Eringus, and fuch other like, all which will be the more pleafant, if you put vinto che conferued or preferued a little Cinnamon.
Laftly, be it knowne, that by this word confeted, preferuing, or confection, is to be vndertood the remaining of the root or other thing (whatioeuer it is that is pre. ferued or confected) whole : and by the word conferue, or conferued, is to be vnderftood that manner of ordering things, whereby they are ftamped and beaten verie fmall.
Purflaine is preferucd in this manner: Gather Purflaine before it have caft the feed, take the tendereff falkes thereof, and the fulleft of leanes; from thele you thall take the roots, and wafh them throughly from the fand and earth that might hang about them: afterward drie them a litele, euen fo long, as till you percerue them to begin to wither: afterward pur them vp handfomely in fome Barrell or lietle Veffell of earth, in manner of lietle Beds, euerie Bed fufficiently couered with falt. When the Barrell or Veffell fhall be full, powre thereinto a fufficient quantitic of Vineger, or elfe one part of Veriuice, and two of Vineger. This being done, fet the Veffell in fome dric place, and not moift, for feare that the preferue fhould fmell anie thing of muftineffe, and looke to it well, that the Purflaine be continually couered oucr with the pickle : And when you would vfe it, wafh it firt with warme water,or wine, afterward make it vp in Salads with Salad oyle. After che fame manner, Samphire, the 1prours of Afparagus, Harts- horne, Trick-madame, Broome flowers, the flowers
of Capers, Cucumbers, Limons, Oranges, Plummes, Peares, and fuch like, may be of Capers,
preferued:

Lettuce is preferued after chis fore: They take the ftalkes of Lettuce eleane picked, and the leaues pulled off, euen from the loweft part of then, vnto where you percciue the leaues to grow tender, and thefe ftalkes you muff falt in a little Trough or Tray, and folet them continue a day and a night, vntill that they haue turned the falt into brine: after this, they muft be wafhed in the fame brine of falt, and after that they haue beene fpraind, they are layed abroad vpon hurdles, vntill they be well dried: afterward there muft be pur vpon them dried Dill, Fennell, a litete Rue, and Leekes chopped fmall: after all this, the faid falkes are put vp in a pot thus dried, and there is powred in vpon them a pickle, which is made of two parts of vineger, and one of falt brine: after this, in ftead of a double Linnen cloth to couer it, there muft be chruft in good fore of drie Fennell vpon them, in fuch fort, as that the pickle may fwell vp and ouer-couer them. And evermore, in all confections, it mult be a peciall great care that they remaine not drie, and to that end to powre in pickle oftentimes, it by turning thema fide you fee they haue need. After this farhion may Succorie, Scariole, Harts-horne, the tender fhoors of Brambles, the young and tender croppes of Thyme, Sauoric,Oiganie, and Radifhes, be preferued: and fuch preferues mult be made in the beginning of Summer.
The hearbes preferied with falt and vineger are chiefely ordained for Salads; but thefe that are made with fugar and honey, doe ferue forthe vfe of Phyficke: fuch are thofe which follow hereafter.
There is but veric feldome any preferues made of the flowers and lenues of herbes: I vaderftand by this preferue, taken properly, the preferuing of things whole, and not flampt and beaten into one bodie: notwithttanding, who fo is difpofed to preferue the flowers or leaues of hearbes, may doe it in this fafhion : Take the leaues or Howers of fuch herbes as you will preferue, make them very cleane; afterward, without
anie manner of ftamping of them, put chem all whole into fome vellell wherein you will keepe them, caft vpon them a fufficient competencie of fine Sugar made in pouder, and fo fet them to Sunning in the veffell. Alfo in this fort boyle chem at a fmall fire with Sugar, folong, as till the Sugar become as thicke as a lyrrup, and after put them in a veflell. Otherwife,atter that you haue diligently cleanfed the leaues or the flowers of the hearbes, put them in an earthen por or glaffe, and after poure into them of boyled Sugar of the confiftence of a fyrrup, and well clarified. Thus may Rofes, leaues of Mints, Spleeneworr, Maiden-haire, Sorrell, Ceterach, Buglofie, and fuch
like, be preferued: the flowers of Marigolds, Succorie, Violets, Broome, Sage, and

Preferues are more delightSome and asceptable than conferues.
other fuch like: and fuch preferues are more acceptable than conferues, becaufe the flowers and leaues doe in better fort retaine and keepe their naturall fmell thus, than in conferues; for in conferues they are powned with Sugar, which doth rebate verie much the naturall fmell of the leaues or flowers.
Now as concerning making of conferues of leaues or flowers of hearbes, you mult keepe this courfe: Ta ke the tendreft parts of the flowers or leaues, and caft away the hardeft, fuch as are the white tailes of Rofe leaues, the ftalkes of Mints, Spleenewort, Maiden-haire, and fuch like, make them verie cleane, and bray them atterward in a Marble Mortar, or of other Stone, with a peftle hard and folide ynough, and that to long, as till they become in manner of a paft, and then put vnto them ewice or thrice as much Sugar or Honcy: And if it fall out, that the leaues or flowers fo ftamped be of themfelues fomewhat too moift,as the leaues of Violers, water Lillies, and Buglofle. be, then put thereto great quantitic of the powder of Sugar. When you haue thus done, put them into an earthen Veffell, and fet them abroad a Sunning a whole moneth, that fo their fuperfluous moifture may befpent by the heat of the Sunne; but they muft be ftirred euerie day. Or if you had rather, doe thus : Set the Veflels vpon hot afhes, to the end they may take a little boyle : but this is not fo good as the fereing of them in the Sunne. After this manner may the flowers of Rolemarie, Marigolds, Betonic, Pionie, Marierome, Balme, Scabious, Elder tree, Mints, Fumitoric, Eye-bright,Succorie, of the flowers of the Peach-tree, Sage, Broome, Oranges, Mallowes, Hollyhocke, and other fuch like, the toppes of Thyme, Hyfope, and Worme. wood s the conferue whereof, we haue faid before to be verie foueraigne in the Dropfic: as alfo the conferue of Peach-tree flowers, and that of Broome flowers, for the obftructions of the reines and fpleene. And for as much as the conferues of Violets and Rofes are in great vfe and requeft, we will fpeake particularly of them.

To make conferue of Rofes, you muft take the leaues of Rofes, white or red, which
are not as yetopen and blowne, you muft make them cleane, and ftampe them, with out being dried before, in a Stone Mortar, and after put thereto thrice their weight in Sugar, and then put it vp ina Glaffe-veffell well couered with Parchment, and fet in the Sunne the fpace of three moneths, and ftirring it almoft euerie day. If you would conferve of drie make conferues of drie Rofes, boilc in halfe a pound of Rofewater one whole pound, Rofes.
conserue of Vioters. To make conferues of Violets, you muft take thefrefh and new flowers of Violets, and take from them their taile, and the little greene cup by which they hang, and after drie them fome frmall time in the fhadow of the Sunne, to take from them their fuperfluous moifture which they have : after that bray them in a Stone Mortar with twice fo much Sugar, and put them in a Glaffe veffell, which fhall be fet to Sunne for the fpace of three moneths, and ftirred verie oft during the faid time, as hath beene alo. readie faid of the conferue of Rofes.

If you would make conferue of drie Violets, makeone or two infufions of Vio- Conferue of drie lets, and in them boyle fine Sugar, afterward cafting halfe an ounce of powdred Viotets. Violets to one pound of Sugar: then boyling them a hittle together, you fhall with a fpatule make your conferue into morfels or cakes.

For to make Muftard, you mult picke and cleanfe your feed veric well, fearce it, The making of walh it in cold water, and afterleaue it a whole night in the water : then take it out, Mulard, and when you haue wrung it or preffed it (asneere as you can) drie with your hand, then put it in a new or verie cleane Mortar, and bray it with a peflle with ftrong vines ger , and theri after hat ftraine it. But the mof ordinarie way for the making of your Muftard, is, onely to walh the feed verie cleane, then put it into your Muftard Quernes, and grind it either with ftrong vineger (which is the belt) or with good Beere or Ale, or with Butter-milke; onely the Beere will make it cat a litele bitter whilef it is new, and the Butcer-milke will die foone. Some make a verie pleafant Muffard in this manner : Take two ounces of the feed of Senuie, halfe an ounce of Cinnamon, powne them verie frall, and with honey and vineger make a pafte, and of the pafte little loaues, which you fhall drie in the Sunne,or Ouen : and when you would vfe it, difloluc one, or fome of one, of your loaues in Veriuice or Vineger, or fome other liquor. Some, to take away the great flarpneffe that is in it, doe fteepe the feed in new Wine during Vintage time, and then make it as we haue faid alreadies: after chey put is in litele Barrels, luch as Muftard of Aniiou is wont to be put in. The people of Dijon make it in fmall loaues, and when they will vee it, they diffoluc it in vineger. The Muftard of Dijon hath woon the praife from all other, either becaufe of the feed growing there, which is better than that of other Countries, or by reafon of the making thereof, which the inhabitants there doe performe more carefully than in other places.
To preferue Cucumbers, you muft put thenn in Lees of white Wine, which are not fowre, and in a pitched Veffell, and flop it well. Otherwife, you muft put them in fale Btine,or elfe hang them in fome Veffell wherein is a littel Vineger, but fo alfo'the $V$ effell mult be veric well fopped. Some preferue them in an earthen Veffell with Salt, Vineger, and Marierome. Others caft them into fandie Pits, and couer them with the feed of Senuie bruifed, with Vineger, and after that put vpon them drie hay and earch.
To preferue Gourds, take them when they are tender, and cut them, then powre The preferuima vpon them warme water, and let them coole in the open ayre for a nights fpace: after of Gowrds. that fowce them in frong falt Brine, and fo you fhall preferue them a long time : or elfe drie them in the Sunne, and after hang them vp in fome fmoakie place: In France they are preferued all Winter, being hanged vp vnder fome chamber floore, or fet in rowes vpon planks, efpecially the Citruls.
To keepe Onions, you muft drie them in the Sunrie, and afterward put them in How rokepg fome drie place, and well ayred. Some preferue chem after chis manner: Firft they drie them in the Sunne, and lay Thyme and Sauorie below in the bottome of a pot, and lay the Onions aboue, putting thereunto pickle, which fhall be made of three parts of vineger, and one of falt brine, and aboue this againe a bunch or fmall buridle of Sauorie, to the end that by the weight of is the Onions may be funke downe into the pickle, and whicn they are fo drencht, as that they haue receiued of the pickle into their owne inute, then they fill vp the pot with the fame pickle. Some do fteepe thiem onely in water, and afterward preferue them the whole yeare in vineger. Buis there is no better way to prefertec or keepe Onions long; than after they are firt gathered to forcad them thinne vpon a boorded floore; where they may receiue boik Sunne and Wind : and then, after they are fufficiently dried, to bind them vp in long Riopes or Bundles; and So hang them neere the ayre of the fire, as ouer your Kitchin. Ghimen, or fuch like.
Noo:...

Muffard of Anion.
Muflard of
Dijon,

Preferuing of cucumberfg
4-, w:

[^3] Onicnts

## C нар。LII.

# Abriefe dif courre of fmall and great trees, as weilf fitainge as growing in the Countrey, planted or remoused in the Garden: and first of fuch as Arbours are made of. 

THe Garden of Pleafure hauing beene deuifed and ordained for the onely recreation of the chiefe Lord of the Farme (as hath alreadie beene faid) and feeing that this his recteation cannot be altogether fo great and fo fufficient in the onely fmell of flowers and fweet hearbes, as and if there be withall prefented vnto the fight the view of ftrange and Countrey-borne erees, both great and fmall; which doc not onely yeeld a more pleafant fmell, without comparifon, than the hearbes, but doe alfo (the greateft part of them) bring forth fruits of great wonder and admiration, as Pomegranate-trees, Caper-trees, Citron-trees, Orange-trees, Limon-trees, Cirron-trees of Aflyria, Date-trees, Figge-trees, Oliue-trees, baftard Sene-trees, and others fuch like. Therefore, to the end we may leaue nothing out of our Garden whereof the Mafter of the Houle may reape anie folace, we will fpeake briefely of handling and husbanding of great and fmall Trees which muft be planted in it : of which, fome are imployed as neceffarie about Arbours, and the Garden is to be fer about with them; they are the Cypreffe-tree, Iuniper-cree, Sauin-tree, Cedar-tree, Rofe-tree, Box-tree, and others: otherfome are fowne, or fet, and remoued vnto Beds only proper vito them, or into Veffels and Cafes, as the Bay-tree,Mulberrie--tree, Date-tree, Pine-tree, Citron-tree, Orange-tree, Limon-tre, Figge-tree, Oliue-tree, and fuch like, which fhall be fpoken of hereafter.
The Cypreffe-tre, as well the male as the female, notwithfanding that in the Ifle of Crete it doth grow in great Tufts and Forefts, without anie fowing, or planting, of his owne accord: yet in this Countrey it cannot be got to chriue, without the great paines of the Gardiner, and notable goodneffe of the ground : for naturally it delighteth not but in hor Countries, where it groweth as one would wifh it. It groweth either fet or fowne in a drie ground, farre from Flouds, Riuers, Marifhes, dyrtie, and moift places, and on the rops and fides of Hills where the Sunne fhineth, better than in valleyes. It abhorrech all manured ground efpecially and moft of all; be ir neuer fo little: yea, if one doe but fill a trench wish dung round about where it is planted, it will die in a fhort time: notwithftanding, it is requifite fome certaine time before you plant it, to put fome good mould mno the pit where you intend to plant it,or to fow it. This is (as it were) a wonder of Nature in the feed of this rree, which, though it be fo fmall as that one can fearce fee it, yer it bringeth forth fo goodly and fo call a tree. When you fow it, you muff fow it in furrowes, fromidfice the twentieth of OCtober vntill Winter : and neere vnto it, fome Bárly; for there is. fuch great familiaritie betwixt thefe two feeds, that they grow (as it were) in fpight one of anuther : whereupon it will come to paffe, that when it is a great Barly yeare; it will be alfo a great Cypreffe yeare. If you remoue it, doe the like: but be carefull in the meane time not to water it, nor to prune it, or to fnip off the tops of it; for it cannot endure anie wound, be it neuer fo little. This tree hath a male and a female : The male growecth more high, bath his braunches and boughes more \&lofe and frraight togecher, and bringeth forth Fruis, or Nuss, but fo doth not the female.
The Cypreffe-tree bearech fruit and flourifheth three feucrall times a yenre, as in lanuarie, May, and September: and therefore at thefe times you muft gather the Nuts, which you fhall drie in the Sunne, to make them eafie to breake; and take ous the feed, which you muft likewife drief in the Sunne: And if you be defirous to fow it(the fiet time for which is Aprill in verie hot Countries, and May in temperare ones,
and in this Countrie from the twentieth of OCober vntill Winter) you muft chufea drie, faire, and calme day; and being fowne, you fhall riddle ouer it with a frall riddle,open aboue, fome earth in an euen and equall fort about the thickneffe of two or three fingers, and after that,fo foone as the Cypres is put forth of the ground, you muft be watchful oues the Ants, and befprinkle it with water cuerie ehird day before the Sunne rife, or elfe after the Sunne fer, which is much the betcer: butaftee that it is growne aboue the earth, you mult not water it but verie feldome, for often watering of it would make it die : but in fteed of this, it muff be carefully weeded, pruned; and digged, but without touching of the roor: nether muft you goe vpon it,for treading vpon it with your feet killech it: and whereas for the firft and fecond yeare it is verie tender, you muft couer the head of it for that time to keepe it from the burning heat of the Sunne by day, and the pinching cold of the frofty nights, euen fo as wee haue faid of Melons : the laying of the carth light about it fpoken of before, is to be vnderftood of she time of his young yeares, and whiles it is growing: for after it hath once perfected his fciences and bowes, it hath no more need either of thator any other labour and helpe. It is wont to be remoued being betwixt fiue and fixe yeares old, and that in March or in Aprill, and becaufe it fcattrereth and fpreadeth abroad his roors, and pearcech not farre downeward with them, the pit whereinto it is to be remoued muft be made wide, and that fomewhat more than it felfe is broad in the roots, and in a moift countrie it muft be but a lietle depth, vhereas in a drie'countrie it may be two foot deepe. The Gardener muft be carcfull to keepe if from ants, becaufe this little vvorme louech Cypres aboue all other things, and caufech it ofentimes to die.
The vvood of Cypres is better than any other to make coffers, chefts, cabinets, The vertussi and preffes of, becaufe befides the good fmell which it yeeldech, it endureth an infinit long'time without corrupting, moulding, or rotting any thing at all, and it is fuch an enemie to all vvormes and vermine, as that the leaues and nuts thereof being laied amongtt cloches, doc free them of vvormes. The leaues and feed are verie much commended for the killing of vvormes in children. The decoction of the nuts in vinegar doe affuage the tooth-ach, if the mouth be often wafhed therewith : the decoction of the leaues vvorketh the like effed: the afties of Cypres nuts, and thi horns of an Afles hoofe mixt vvich oyle of Myreles, keepe the haire from falling. The decoction of new and freif gathered Cypres nuts made in old vwine, doth exceeding good to them vehich havie the falling downe of the fundament, if they drinke thereof euerie day the quantitie of fhrec ounces, but in the meane time they muft rub their tefticles vvith the leaues of Cypres brayed and beaten: and this is a certaine remedie, luch as hath oft beene experimented and tried : the like vertue hath the young feiences of the Cypres-cree, if they be fo chawed, as that thereupon their juice may defcend into the bodie.
The Rofe-tree fitcech it felfe for all manner of ayre, wvecher hot or cold; but in countries that are hot and fomewhat moift, it groweh more faire, greater, and flouriThing a longer time, as may be feene in manie coaft townes and places necre the Sea in Spaine, vvhere Rofes continue and flourih vnto mid-Winter- It requiretha fat, fubflantiall, and reafonable moift ground; for as for grauelly and fandie grounds, they arealtogecther enemies vnto the Rofe-tree. It mult be planted in Otaber, Nouember, and December, in hot and drie countries, and in Ianuarie and Februarie in cold and moift councries; yea and alfo in March, and fuch as are planted in the later feifon, vvill put forth Rofes che fame yeare, wvhich vvill not fall out in thofe vivich vvere made haff of and planted a great deale foónei: if the earth be good of it felfe, the Rofe vvill craue no manure, burtyectid a more perfect fmell; but and if it befpent and vvorne out, it muft be fuccoured with dung well rotted.

- As for Rofes there be manie forts of them, that is'to fay, the vvild ones, vwhich we call Eglantinc, and the red alfo growing in hedgee $:$ Damaske of the colourof Scarlet, vvhich wee call Prouence Rofes: and amongft the braunches, befides the vvild onesthere are, Muske-Rofes, Common-Rofes, and $\not$ Rofes hauing fue leaues onely.

The Rofestree groweth either of plants or feed. It is planted of fhoots, or little rods,
The Refe-tree「owno.

Seeds of Rofes,
but that which is contained and nourifhed in the little fruit which the Rofe bringeth forth after Vintage, which is knowne to be ripe when it groweth blacke and foft.

For to haue Muske Rofes, you mult graft the Rofe-tree vpon it felfe, or vpon the Eglantine, and before the grafting of it, to put into the cleft, where the graft is to fland, a graine of Muske, or elfe one or two drie leanes of fweet fmelling Rofes. Such Rofes are pleafant to behold, as being but a little tree, and yet laden with leaues, the flower verie fweet of fmell, and fuch as will never faile, but alwaies hold and bring forth in their feafon : befides that, a man may fit the root and branches thereof to make a fhadow. Such Rofes are not good to make conferues, or diftilled water, nor for anie vfe in Phyficke, onely they are good to drie and put amongft Linnen and other Apparrell, becaufe of their good fmell. It is true that fome fay, that they loofen the bellie. Looke further in the third Booke in the Chapter of the fpecie. all properties of Grafting and Planting.
To haue Rofes chat fhall fmell verie iweet, you muft plant your Rofe-tree in a place

Verie spect fmelling Rofes.

Early, bafic, and timely Ro. Ses.

Frefh Ropes, that is verie drie, or elfe to fet it round about with Gatlicke. The Rofes will come early, if you make a little trench of fome two hands wide round about the Rofe-tree, and therein powre warme water morring and euening: and yet this muft not be attempted before it begin to put forth his buds es You fhall doe the like if you plane your Rofe-tree in baskets, or pots of earth, and order them after the manner of timely Gourds and Cucumbers, as hath beene taught before.
Youmay keepenew Rofes in theirliuelineffe, if you put them in the lees of Oyle; Co as that the lees may fwimme abouc them : Others pull vp greene Barly, roots and all, wherein they wrap Rofes as yet not blowne, and fo put them together in a poe that is not pitched. The way to haue greene Rofes, is, if you graft the Rofe-tree vpon anold Colewort ftalke, or vpon the bodic of an Oake, but then the Rofes will haue nofmell.
Tomake carna- You may make the Carnation Rofe white, if you perfume it with Brimfone as tion Rofes white fuch time as it beginnech to fpread.

You may haue Rofes of a yellow colour, if after you haue planted the Rofe-tree vvith his naturall earth neere vnto the broome, you bore through the broomeftalke vvith a vvimble, and plant in the fame hole diuers roots or fhoots of the Rofe-tree, fcraped round about fo farre as they are to lye in the hole, and after tie and make them faft vnto the broome plant with mortar : and whenas you fee the hole bored in the ftalke to be growne vp againe, you thall cur off the broome ftalke aboue the place vvhere you bored the hole, and fhall let the Rofe-tree to put forth his fhoots, and fo by this meanes you fhall haue yellow Rofes.
The vertues of the Rofes are fufficiently knowne vnto eueric one. Some diftill the yvhite and Prouence rofe, vvhich, if you vvill haue it to retaine the full qualitie and vertuie of the R ofe, together with the fmell and fauour of the fame, you muft diftill in a glaffe veffell, and not in lead; as is ordinarily accuftomed: Some make infufions and fyropes of carnation Rofes, which have force to loofen the bellie, and to purge the humours offending in Cerious, and cholericke matter, as allo good for tertian 2 s gues, the jaundife, the obftructions of the liuer, and beating of the heart.
The yellow growing within the Rofe, which is a flower accompanied as it vvere.

## the Countrie Farme.

with fmal haires, doch flay che vvhite flowers of voomen : the white end of the leaucs of Rofes, are good in a decơtion to flay all manner of fluxes: the cup hath che fame force and vertues: the feced and vvooll contained within the button of the Rofe, as alfothe whule button, dried and made into powder, is fingular good to flay womenis whites and termes, for the fralding of fhe vwater,for the dileafe called Gonurrhe,a,aken the weight of dram wish fowre red winc.

Box-tree is planted of fhoots or boughs, after the twelfth day of Nouember. It sox-stre. delightech in hillie places and mountaines, and growech verie well in coid, drıe, and vvindie places. It mult not be planted neere the place where bees are kepr, for the flower killeth them fodainly. Some affirnie, that it corrupted the ayre by the ftinking fmell it hath, and for this caufe it would be as fparingly planted in the garden as ponfly may be.
Box-tree is better to make combes and other durable inftruments of, than for to vfe in medicine, ifit were not that Phyfitians doe hold that the frrapings or rafped powder of Box and the leaues thereof boyled in Lee, doe caufe the haire to looke red. Some likewife doe thinke that it hath the like properties that Guaiacum hath in decoctions for the French difeafe, but herein I referre my felfe racher to experience than to reafon.
Broome, as well the fmall as the great, is planted of fhoots and boughs, in the in- Broome. creafe of the Moone, about the Calends of March. It may likewife be fowne, and it To make waster: requireth a drie and fandie ground. The flowers, as alfo the feed, doe prouoke v - The fone: rine, and breake che fone, as well of the reines, as of the bladder: the flowers prouoke To vomite. vomic, taken in a drinke : the leaues and crops beyled in wine or water, are good for the dropfie and obftructions of the liver,(pleene, and kidneyes : fome vee ehe ftalkes" of broome to tie their vines, as alfo to make ropes and fackes of, and that by ripening it in water aschey doe hempe.
Spanif broome growech alfo in drie places : it mult be remoued after the firt spanifb broome yearethat it is fowne: it is fowne in Februarie, and remoued in March the next yere after : the flowers in decoctions procure vomite after the nanner of white hellebor: the feed alone doth loofen the bellie, and forceth downeward great fore of water.
Furze grow in vantilled and fandie grounds : the leaues boyled in water or wine do Furef: fay all manner of fluxes.
The Cedar-tree is verie rare in thefe countries: fo that if you will haue it in your The Cefar sree? garden, you muft affigne it a well husbanded ground, and lying open vpon the Sun, notwithfanding the places where it is found moft growing, be cold and imoift mountaines, and full of fnow : if you doe well you muft fow in pors of earth, and cafes or impaled places the fmall and exceeding little feed that commeth thereof.

The liquor thereof put into the hollow parts of the teech, doth flay their ach : being annointed it killech the wormes, and preferuech bodies from rotting. The wood is verie pleafant to looke vpon, and to fimell vnto, whereupon fome vef it in fteed of perfumes.

Sauin is planted as box, and groweth much better if it be watered with Wine Lees, or fprinkled with the duft of tile ftones. The leaues as well in decoction as in perfumes, prouoke the termes, and expell the after-birth and dead child : they alfo caufe to fall off the warts growing vpon a mans yard.
As concerning Iuniper it affectech the tops of mountaines, and fonie ground for $t 0$ grow well in, and by how much it is she more tof of the winds, and pinched with cold, fo much the fairer it growech. The fruit thereof is good for the ftomach, for weake and broken people, and againft all forts of venime, whether it be drunke or taken in a perfume, as alfo againft an euill aire : It is vvith good fucceffe veded in the decoftions prefribed againft the pockes: take feuen Iuniper-berries, and as many Bay-berries, halfe a dram of Zylocaffia, and a dram of Cinamome, put all this whole in the bellie of a Turtle-doue ; roaft the faid Turtle chus ffuffed, and ball her with Capons greafe, giue euerie fecond day one of thefe at fupper, to a woman that is readie to be deliuered, and the fhall haue aṇ eafie deliuerie : boyle twelue pound of Iu-
niper wood cut fmall, or rafpt in a great cauldron, and in a fufficient quancitie of water to the confumption of the third part of the water, put this wood and water into a bathing tub, and let the partie troubled with the gout, fit in this water vp vnto the middle; he fhall feele incredible reliefe hereby.

Elderofrce:

Head-ach.

Rofemaric arid Lefamin.

Elder tree is fitter to plant in the garden hedge, than to make arbours in quarters: notwithftanding where other forts of mall trees are wanting, there may vfe be made ofthe Elder-tree. It would be fet in the moneth of Nouember vpon fciences and fhoots, in a moift and fhadowed place, neere to fome little riuer or brooke. To caufe it to grow well, you muft take this diligent courfe : to caft the earth as it vvere into furrows of a good halfe foot broad, and a whole foot deepe with a fpade, and not with a pickaxe, for there muft no earth be taken away : then prefently after the feaft of Saint CMartin in Winter, plant your Elder trees, the great end thereof which Mall be put into the earth, fhall be cut bias like the foot of a Hind, and thruft downe into the ground thus prepared, a foot or nine inches deepe : and let it ftand vp aboue the ground, at the leaft a foot and a halfe, or two foot,fo as that in all, your plant muft be two good foot and a halfe, or three foot long : before you put them into the ground, open it vvith a dibble, either of yron or vvood, fo that the rind of the plant may not be torne, in putting of it into the earth. If you plant it in the furrows, there muft be at the leaft three foot betwixt euerie furrow, and a foot betwixt euerie plant. Hauing once thus planted them, you fhall neuer need to take any further paines vvith them, if you vvill not your felfe, but to cut it two joynts at the leaft cuerie yeare for the \{pace of the two or three firf yeares, to the end the root may grow the greater: and the firft two or three yeares being paft, you may cut it from two yeares to two yeares to make props for vines : in any cale you mult lop it euerie yere, and cut away all the euill fciences and Thoots wvhich it ill fauouredly putteth forth.
Some diftill the vvater of the flowers, as fingular to appeafe the head-ach comming of hear, if the brows or hinder part of the head be rubbed therewith. Some likewife doe make verie good vinegar vvith the flowers and juice of the berries. The juice preffed from the rind of the root, moueth vomit, and draweth forth the vvater that is in thofe that haue the dropfie : the juice preffed from the leaues and taken vvith fome pottage doth loofen the bellie : the dried feed is good againft the dropfie, and for fat folke to make them leane, taking of it the quantitic of a dram in white vvine, and continuing it a certaine time, and mixing therewith a little cinamome, becaufe it is a procurer of vomit, and a difquieter of the fomach.

Rofe-marie and Iefamin are likewife fit for the adorning of arbours in quarters, of the ordering vvhereof vve vvill fay nothing in this place, becaule vve haue before fpokenthereof verie largely.

Iuie, as vvell the great as the fmall, doth delight to be planted in moift and vvateric places, from the monerh of Nouember vntill March, and it flowreth not but in Autumne, neither doth the berrie thereof become ripe but in Winter: it groweth not high, if it be not neere vnto fome tree or old ruine, vnto both which in the end it vvorketh ruine and ouerthrow. It vvill bring forth a goodly fruit, if you ftraw it vvith powdred Allome, or afhes made of burnt Oyfter-fhells. Blacke Iuie vvill become vvhite, if you vvater the root thereof vvith vvhite earth tempered vvith vvater eight daies together continually.

If you take three Iuie berries, and tying them vp in a cleane linnen cloth vvith 2 thread, giue them to fome one that is troubled vvith paine and fifnefle of his fpleene to vveare about his necke, the faid partie fo vvearing them three daies together vvill be vvhole and cured of his difeafe. The leaues brayed and applyed, doe heale burnings and fcaldings made vvith hot vvater : boyled in vinegar and applied, they cure the hardneffe of the fpleene: the gum thereof killeth lice and nits, and being annointed in any hairie place, caufeth the haire to fall away. The veffells made of the wood of Iuie are fingular to know if there be any vvater in the vvine, for the water vvill abide in the veffell, and the vvine vvill run out. Seuen Iuie berries, vvith as many peach kernels the skins taken off, boyled in oyle, and afterward ftampe and
applied vnoo the temples and brows, doe affuage the head-ach comming from the braine : the juice of the leaues of Iuie drunke with red vvine, doth heale the fwelling of the fpleene : a cap made in forme of a head-piece or skull of the leaues of Iuie fowed together, and applied vnto the head of a little child which hath the falling of the haire called Tinea, doth heale it throughly : the water or gum which droppech out of the focke of an Iuie tree the rind being cur, killech nits and lice.
Priuet groweth more than a man would wifh amongft brambles and bufhes, Priueso from which places it may be cranfplanted into the garden for the benefit of arbours. The water of the flowers thereof may be diftilled, and it is moft fingular againft all manner offluxes, wvhether of the bellie, marrix, fpitting of bloid, and of che eyes, as aifo for all forts of cankers : the fame vertue hath the juice preffed our of the leaues, efpecially for che canker growing in the mouth. There is an oyle made of the flowers thereof infured in oyle in the Sun, which is fingular good for the head-ach comsming of a hot caufe, and alfo for inflammations.

## Chap. LIII.

Of Hearbes for the Arbours of the Garden.

HexOr want of trees of low growth (fuch as haue beene fpoken of here be- The wild tindes fore) you may helpe your felfe in the making of your Arbours for your Garden of Pleafure, with certaine hearbes which are plyant, and with their leaues apt to make fhadow, ftill prouided, that they be borne vip by poles of Willow, or Iuniper, dreffed and ordered in forme, and after the manner of Arbours : They are fuch as follow; the wild Vine, Hoppes, Gourds, Cucumbers, the maruellous Peafe, Winter Cherries, the maruellous Apples, and other fuch like.
And as concerning the wild Vine, it growech more plentifully than a man would wifh amongft the Brambles and Buthes : and therefore from hence it may be tranfplanted and remoued into your Garden for the benefit of your Arbours. The root, efpecially the iuice, doch mightily loofen the bellie, prouoke vrine, purge the braine, open the fpleene, and take away the hardneffe thereof: applyed in forme of a Peffaric, it bringech downe the termes, the after-birth, and dead child: ftamped with falt, and applyed, it healeth vlcers, it cleanferh the skinne, and taketh away the red pimples of the face : for which purpofe alfo feruech the water thereof, which you may gather in the moneth of May out of a pit which you fhall make in the head of the soot, as it flandeth in the ground , according as we havie alreadie faid in the Chapter of Violets going before. In a Cataplafme it is fingular againft the Sciatica, as alfo to take away the haire from fome place : being mixed and ftamped with Bulls bloud, it is of maruellous effetts in hard and fchirrous fwellings, and cankerous tumours.
We haue fpoken heretofore of cucumbers and gourds: and therefore it is not Cuenmbers needfull to make any new repeticion.
The ordering of hops is like vnto that of the wild vine, for one and the fame ground and dreffing viill ferue boch. The flowers, crops, and juice preffed our, doe take away the obftructions of the liuer and fpleene: and the vfe thereof is verie conuenient for fuch as haue the dropfie : therewith beere is made,as we fhall further declare hereafter.
Maruailous apples are verie fit to ouerfpread arbours, as well in refpet of cheir Marneibxut beautie, as for that they are pliant, and winding eafily about the poles. They would applese befowne in the Spring time, in a fat and well battilled ground: they cannot endure the cold: ©o foone as their fruit is ripe, which is in Auturnne, they drie away by and by: wherefore you mult fow them where che Sunne hath full power vpon
them, and water them of in the time of great heat, gathering their fruit in September. Thefe apples refemble little lymons, as being fharpe pointed ar the end, greas bellied in the middef, rough as wild Cucumbers, greene at the beginning, but afterward turning red : the firft that euer brought them into France, was Rene du Belliry, Bifhop of Mans. They haue alfo beene found in the gardens of the religious of $S$. Geimanes in the fields, and inthe Temple garden at Paris. They are called of the Greekes Gratious apples, becaufe of their well pleafing beautic ; and of the Latines, Uiticella, CMomordica, and Balfamita, this laft name was giuen to them by reafon of the vertues of Balme which they haue : and in French Maruailous apples, becanfe of the emaruailous vertue that they haue to heale wounds. Some takeall the feeds out of the apples, putring the faid apples into a viole of vnripe oyle oliue (or infteed of oyle made of vnripe oliues, which is not alwaies readie to be had at Paris, fome wafh common oyle verie well in Rofe. water or Common water, or plantaine, or Mulberie water) and doe afterward fet the faid viole a long time in the Sunne when it is in his heat; or elfe they put it in a velfell of hot boyling vater: or elfe burie it in the earth, or in horle dung, and this oyle is fingular good to afluage inflummations of wounds, and of the breafts, and hach no lefle vertue than Balme to confolidateror heale wounds eicher new or old, being a thing tried of many. The fruit foaked in oyle of fweet Almonds, or Linfeed, adding thereto an ounce of liquid vernilh for

Hemorrboides, Euraings.
Gripings in the bellic.
colicke.
The falling downe of the fundament.
Tomarereno.
men fiuitfull.
The maruailens peajon.
winter Chervies. euerie pound of oyle, maketh the oyle veric foueraigne for the paines of the Hemorrhoides, Burnings, prickings of the finews, and to take awray the skarres of wounds. The leaues dried and made inro powder, and drunke the quantitie of a fpoonetull with the decodtion of plantaine, doe heale the gripes in the guts, the paine of the colicke, and the wounds of the guts. The oyle wherein this fruit hath beene foakeds doch keepe in his place the fundament wont to fall downe in lietle children, if it be of ten rubbed therewith : it maketh barren women fruiffull, if ffter they haue bathed in a bath for the purpofe, and drunke of the powder of theleaues of this hearbe, they annoint their fecret parts with chis oyle, dwell ling afterwards with their husbands.
Themaruailous peafe are verie rare in this countrie, refembling fomewhat Winter cherries, as hauing their feed inclofed in a litele filmeor skinne, like vnto a cich peafe; in the middeft whereof, there is the fhape as it were of heart. They delight in a very fat, moift, and well funned foyle, and cannot abide to endure the cold.

Winter cherries (which the Latines call Halicacabum, and the Arabians cAlkakengi, ) are delighted in vines : wherefore they which would haue it planted in their garden, muft picke our for it fuch a foyle as would fit the vine. The lietle cherrie which is inclofed in the bladder, is fingular good to prouoke the decayed vrine, and to take away the fharpneffe and fcalding thereof, for the juice thereof mixt with the creame or milke of white poppie feed, or with the decoction of the feed of melons or gourds,mallows, or barly prifane, and drunke, doth maruailoufly mitigate the fcalding ot the vrine : if the root come neere vnto the afpe or lizard, it caftech them into a dead Ifeepe, and killech them: the vfe of the cherrie is fourraigne againft the fone and granell. Likewife forthis difeare fome make a Wine which is called Wintercherrie wine, which is made with the new preffed liquor of good white wine, wherin hath beene infufed a certaine quantitie of thefe cherries : or with a certaine quartitic of thefe cherries caft with an equall quantitic of whire wine grapes all whole into a new veffell, he fame veffell afterward being filled $v p$ with white wine new from the preffe, being afterward fcummed and vifd after the manner of other wines: or elfe chis wine may be thus tmade, thefe cherries are troden amongft ripe grapes, and being fuffered to worke togecher certaine daies, they are afterward tunned vp into veffeils, and ordered as other wines: this wine taken the quantitie of foure ounces in the morning three or foure daies together in the decreafe of the Moone,cleanfech the reines, and purgethout great quancicie of grauell.

## Chap. LIIII.

Of Trees both great and fmall, as woelloutlandifh as of the fame Countrie, being planted or fonse either vpon beds or in veffells, in the Garden.

(674He Bay-tree will grow in all places, but it is not as cafily preferued and The bay-tree. kept in cuerie place: tor it delighteth efpecially and naturally in a hot or temperate countric, for in a cold it growech not but by conflraint: but and if you be difpofed to haue it to grow in this cold countrie, you suuft plant it fo vpon the Sunne, as that it may thereby $\mathrm{f}_{2}$ ke off and better paffe ouer the extremitie of the cold; and on the contrarie, in a hot coustric you muff plant it fo, as chat the Sunne may come but faringly to it, to wit, cuen when the fhadow will be hard at the foot of it : notwithftanding it delighteeth much in places neere vnto the Sea, in leane anid thin grounds, where the ayre is warme and temperate of it felfe. It nult be planred in Autumne and in the Spring time, of fets, of whole plants, or of branches: and in March it is planted verie fitly and feafonably, when as the fap putech vp and commeth to the barbe. It may likewife be fowne after the foureteenth day of March in a ground that is well manured, one foot within the ground and foure berries together: and at the yeares end, to remoue it to fome other place. The Bay-tree feareth the cold aboue all other things, and for this caufe it mult be planted in this countrie in a firme and folide ground as hath beene faid, to the end that during the times of fnow, froft, and freefing vpon raine, the roors may be defended from cold, which although the boughes and braunches fhould be dead by the cold of Winter, it would yet continue to bring forth new boughes in the Spring time : for the faftneffe and cloteneffe of the ground will haue let and flayed the ayre from hauing pierced vnto the roots. And in cafe the ground where you haue planted your Bay-cree fhould be fandie, drie, and barren, then it will be your part ciuring the time of Winter to fpread and caft afhes and ftraw about the roots of the Bay-rree,to preferue che heat of the earth, and to withhold the cold from piercing vnto the roors. Then for to procure a flourihing and faire Bay-tree, two things are neceffarie, the heat of che ayre, and the taftneffe of the ground, of which, f fthe one be wanting, the Bay-tree will not grow any thing at all; ; or if it grew, yet it will be but a fimall and ftarued thing, as we may eafily make criall and proofe in this countric. The Bay-tree may be grafted vpon it felfe, as allo vpon the Dogge- tree, the Ahh-tree, and the Cherrie. .rre, as we will declare more largely in the third Booke.

The Myrtie-tree is of two forts, the one is a darke greene, the other is a light The onyrito greene, the one beareth a yellow flowre, and the other a white, but of thefe the later treto is the better : but euerie fort of Myrtle crauech a hot Councrie, a light, fandie, leane, and brittle kind of ground, and yet notwithfanding this, it groweth well vpon the Sea bankes, as alfo vpon the fides of pooles, lakes, and fennes. It is planted either of young boughs borowed and cut downe for the exceflue rankneffe of them, after it is foure or fiue yeares old, or from the fhoots putring forth at the root thereof, feperating them from the maine root fo foone as they be put vP, and from after a yeare of their firft planting to remoue them : or elfe of feed, rubbed and chafed betwixt your hands, and after thruft into an old band or fmall cord: the fame buried all along according to that length that it is of in a furrow caft a foot deepe, or thereabout, and well manured with rotten dung, and watering the place. The Myrcletree would be planted in the highelt part of the Garden, for by his frell it maketh the place moft delightfome : it may be fowne alfo after the manner of the Bay-cree, but then it will not grow vp cill after a long time. It will grow both high and faire, if you make it cleane and fcoure it often round about, and it will bring forth much and great fruit, if you plant Rofe-trees neere vnto it,or elfe plant it neere vnto Oliuc̀-
trees, in the countric where they grow : for the Myrtle and Oliuc erees doe helpe one another greatly. It loueth and craueth to be watred with mans vrine, but efpecially with fheepes : or when you can get neither of thefe, with warme water, wherein it delighteth exceedingly, as fomecimes appeared by a Myrtle planted neere vnto a bath, which to cuerie mans fight grew verie pleafantly and beautifully, though there were no reckoning or account made thereof. Myrtle-berries put in a veffell which is not pitched, but well couered, doth keepe a long time greene and frefh: Some hold it better to putthem in, hanging vpon their boughs: The Myrtle fhunneth nothing fo much as cold, and taketh delighe to be neere vnto pooles, brookes, and

The firiit of mortles woithont ary kernell. maritime places. If you water it oft with warme water, it will beare fruit, but withous any kernell.
The fruit is called Myrtle-berries. It mult be gathered when it is faire, cuen a great while after the Rofe is fallen and thaken. It may be grafted vpon another of his owne kind, and the white vpon the blacke, and the blacke vpon the Apple-tree, Medlar-tree, and Pomegranet-tree.

After vintagetime, in the countric of Protience, wherethere is a great number of Myrte-trees, the birds feed of the fruit of the Myrtle-tree, and thereby become fo fat, and their fefh fo pleafant to eat, as that men eat birds fo fatted all whole, withous pulling out of the garbage: infomuch as it is growne into a common proucrbe, T hat the excrement is better than the flefh.

The leaves, bayes, or berries of myrtle-tree by their aftringent force and facultic doe ftay all manner offluxes, whether it be of the bellie,or of the termes, or principally of the whites : the juice and diftilled water of Myrtle-tree are fingular good to drinke, to keepe vp the falling fundament. The decoction of the feed of Myrtletree, doth blacke the haire, and keepeth it from falling. The berries of the Myrtletree may ferue in fteed of pepper, the fauce made therewith workerh the like effect, and is fingular good to comtort a languifhing ftomach: myrtle berries eaten do comfort the heart, and cure the beating of the fane: the àthes of the dric leaues of myrtletree burned within a pot of raw earth, fo throughly as that they become white, being afterward wafhed, haue one and the fame vertue that Spodium or Pompholix hath.
The Myrt.tree. If you cannot make the myrtle-treeto grow in your garden, you muft content your felfe with the Myrt-tree, which craueth the fame ground and manner of ordering that the Myrcle-tree, as being a kind of wild Myrte-tree) and which may be ved in the fteed of Myrtle-tree vvhen it cannot be come by, as hauing the fame or elfe like vertues.

Butchers-broome is alfo a kind of wild myrtle, which groweth commonly in Fo-
sutchersbroome.

Tamariske refts and Vnderwoods, from whence it is better to tranflate it into your garden, than either to fow or plant it.
He that is defirous to plant Tamariske in his garden, mult make choyce of the moift and wetteft ground, and for want of a fufficient moift ground, to water it oft : It is likewite feene that Tamariske doth grow faire and tall, by ponds, fennes, and other ftanding waters. It is planted either of roots or fprouts, and that from the firft of OEtober, till the foure and twentieth of December, yea vntill the beginning of Februarie; but yet it thriueth beft being fet of roots: there is no froft almoft that will hurrit, efpecially the root, for when it is once taken, it putteth forth continually branches and boughs along the plant.
The wood is principally commended, for that it afluageth and diminifheth the fpleene in fuch as haue it ftopt too full of melancholicke humours : and hence it commeth that many troubled with that difeafe, doceat and drinke in veffells made of the wood thereof. And fome likewife doe counfell to giue fwine that are troubled with too much fulneffe of the fpleene, water to drinke in their troughs, hauing firft quenched therein coales made of the wood of Tamariske. The decoction of the root with damaske raifons is good for lepious perfons, and fuch as haue their fpleene amifle: as allo for the pockes.
safiard Sence. Baftard Sene ; (called of the Latines Colutea) delightech in a fat ground, and well
batrilled with Sheepes dung. It groweth not planted, but vpon feed : and it is meet that the feed be freeped firft a long time in water, euen vnill it begin to fprout. The time to fow it, is about the beginning of the moneth of Iune. It muff nor haue any of the branches cur off, nor be pruned or touched before che fourth yeare. The fruis ferueth to good vef for the fatiing of Sheepe, and maketh chem to haue much milke: it is good alfo to fat chickens, bees, goass, and kyne. Some take it to be Sene, but they doe greatly deceive and beguile themfelues.
The Caper- tree in many countries groweth without any tilling, in earable ground: The caper-tree. but where it wantech, if it mult be fowne, it muft be in a hot councrie, and a drie, ftonie, and fandie place, which fhall before hand be inclofed with a little ditch, which fhall be filled with fone and lyme, or elfe with fat earth, for to bea fortreffe and defence vnto if, that fo the roors of the Caper-tree and thereby all hoots that might grow vp from them, may be kept from breaking forth, and Ipreading furcher than this ditch: for if they fhould be flayed and kepr backe from fpreading by fome fuch meanes, it would come to paffe that within a fmall time they would oucr-runne the whole Garden, and plans themfeiues in eucric corner of the fame. Notwithfanding the Caper-tree is not fo noyfome in that refpect (becaufe it may be pulled vp) as it is by inueniming ( I know not by what venimous humour or juice) the whole ground, and making of it barren. It hath no need (except a verie lietle) to be any way tilled or fahioned: for it groweth well ynough (without any thing done vnto it) in fields and defart grounds. It may befowne in the Spring and Autumne.

The fruit of the Caper-tree, as well the great as the frmall, is good in a fallade to prouoke appecite, cleanfe the flegmaticke Itomach, and to take away the obffructions of the liuer, but principally of the fleene : the rind of the root and leaues haue the like vertue, but morc effectually. Capers both the great and the fmall, whiles they are yer greene and nor falted, doe nourifh a great deale more, both of them are in requeft, not fo much for that they are fruit, as for their manner of preferuing, which is performed either with vinegar,or elfe with falt brine: for Capers not pickled are of a verie fharpe and vnpleafant taft, but the vinegar wherein they are preferued doch make them veric acceptable ynto the ftomach : but the great ones becaufe they haue both more juice and more pulpe, are a great deale better than the little ones: though the littic ones are more delightfonie to the taft than the great ones, becaufe they are fuller of vinegar than the greatones.
efgnus Castus, feeing it commert verie neere to the nature and condition of the isgus Coflus Willow, and of the fame colour with che leaues, difagreeing onely in fmell, crauech to be planted in a watrie place, where there is much fhadow: or at the leaft to beofs watered. The leaues, feed, and flowers, are fingular good for then which would liue chaftly, taken inwardly, or applyed outwardly : for fome fay, that the leaues, chafititio. reeed, or flowres, pur into little bagges, and applicd vnto the reines in bed, do helpe to kecpe the chaftrie of the bodie, which is the caufe that in many countries is is feene planted almoft in all the Monkeries. The decoction of the leaues is good againft the Heaz of Vrime fcalding and burning Vrine, as well in drinking as in fomenting it, as alfo againft the obftructions of the liuer, fplecne, and marrix. If you carrie a branch of Agnus CaStus about you, you fhall not grow wearie,no not after much trauell. The funine there- The burning of taken in ar the fecret parts of women, doth quench the vnfatiable luft and burning heat of the fes defire vnto venerie and carnall copulation.
Beane-tree, or S. Iohns-bread (bearing a long, flat, and broad fruit, like vnto that carrober Bustris of Caffia) would be planted of new fhoots, in Februarie and Nouember, in a drie ires. ground, ly ying open vpon the Sun, and where as there are verie deepe ditches made. It may alfo be grafted in a Plum-tree, or Almond-tree: in any cafe you mult neuer thinke vpon the fowing of it, becaule fo it would neuer beare any fruit, but would die verie quickly : it mult be oft watered.
The Cods are good cither to fat chlldren or fwine, but not fo fit to feed men with. To fexd wing all: It istrue that the fruit doth loofen the bellie gently, as is were after the manner of Caffa.

These

The Dat--trec.
There are manie forts of the Date-tree: fome beare fruit, and fome are barren: and of the fruiffull, fome beare a reddifl fruit, and fome a white, and ocher fome a gray. Furchermore, fome are males, and fome females, fome are high and tall, and fome are flooping downe, and but low, and therefore called the litele or dwarfe Datetree; and fome of a middle fize betwixt both : but howfocuer they differ, yet herein they agree, that they all defire a hot ayre, a great deale more than temperate: for in a hot Countrey it bringech forth verie faire and ripe fruit, and of it felte is fufficiently kept and preferued, without anie furcher paine or care, except it be about the watring of it $;$ where, in a temperate Region, it either ripenech not his fruit, or elfe bearech none at all. It crauech a fandie, $\mathfrak{F}$ alt, and nitrous ground, forefeene that it be fomewhat moift, and this is che caufe why it profperech well vpon the Sea coaft : and if the ground where it be planted, be not fuch, it muft be watered with falt water, on fale brine. It is planted of fmall Plants, with roots in Aprill and May, the Plant being well layd about with fat earth. Some alfo fow the new ftones of Dates (and they bring forth their trees in O ctober) two cubis decpe in the ground, and that mingled with a fhes, and well enriched with Goats dung, and the Charpe fide of it muft be vpward: it mult be watered cuerie day, and euerie yeare there muft be falt fhed about it : or elfe, which is better, that it be oftentimes watered with water that is fomewhat falt. Againe, that it may grow high and farre, it gladly acceptech the watering of his roors with the lees of old red Wine flrained.
Note likewife, that(feeing of one Date ftone alone there will hardly grow vp any Date.tree, bearing fufficient bigneffe in the bole and bodie, to carric and vndergoe the weight of the head) it will be good to put and ioyne rogether two or three Date ftones, lowed $v p$ in a Linnen cloch, in fuch fort, as that the fharpe fides may behold one another, and fo to fet them; for by this ioyning of two or three together, your tree may come by a bodie fufficient big to beare the head. Note further, that if you would haue the female Date cree to beare fruit, that then you muft plant it neere vnto a male Date tree, and not one oncly, but manie, if it be poffible, becaufe the neere flanding of the one vnto the other, caufech that the vertue of the male is conueyed and imparted vnto the female, and that by the commixtion made by the wind, from whence arifech aboundance of fruit. But and if you haue not the meanes to plant manie male Date trees neere vnto the female, it will be fufficient if you doe but touch the male of entimes with your hand, and then afterward lay the fame hand vpon the female: or you muft gather of the flowers of the top of the male, or of the moffe of the male, and fprinkle the fame vpon the female. Eat but as few Dates as you can, for they make obftruCtions in the liuer and fpleene, and are alfo of hard digeftion, and caufe the head-ach.
The Pine.tree
The Pine-tree groweth chicfely of a kernell, which muft be planted in October or Nouember in warme places: or in cold places in Februaric or in March: or about the fall of the apple,or a little a fere, and that in pits well digged, and which haue lyen vnilled and vnoccupied a good time : the apple muft not be broken by force of an yron thing, to ger out the kernels, which muft lie in flecpe three dayes before hand, and feuen of them fet togecher, and that fiue fingers deepe onely, when they are growne vp , you muft not be too haffie to remoue them, becaufe they take not root but in long time, and verie hardly : nay, they cannot abide at all to be cranfplanted without their great hurt and hinderance: but yet when time may ferue to tranfplant them, in any cale beware that you doe not hurt their roots, efpecially the primcipall and thickeft ones. The Pine tree groweth chiefely and thrueth beft, vpon high mountaines, and places shat are open virto the wind, ftill regard being had, that the place where they fhall be planted, be as carefully husbanded and cilled, as if it were for to beare and bring forth whear. It will continue the longer time, if the barke be oft taken from it,becautie that vnder the barke certaine little wormes do breed, which
fret and deffroy the wood.
The diftilled water of new Pine-kernells, take away the wrinckles of the face, and diminifh the breafts that are too great and fwagging it there be laid vato chem linnen clothes
clothes dipped in this water as oft as you can : this water alfo is fingular goodto draw narrower the fecret parts of women being too much diftended and enlarged, and to cure them of all manner of rheumes and diftillations: but yet their juice is niore effectuall for thefe matters, than the diffilled water.
Pine apples arc a meat of verie eafie nourilhneent, znd for that caufe are verie good for fuch as are croubled with the cough, for them which are in a conlumption, and fuch as are ficke of an hecticke feuer, but they muft haue beene fteept fometime in Rofewater to take away their acrimonie, fharpneffe, and oy lie fubftance: it is true that they be hard to digeft, and therefore to fuch as are cold of nature, you mult giue them with honie; and to thofe which are hor, with figgar, to helpeour with the hardneife of their digeftion. They are good for fuch as hatue the palfey, for ach in the finews and backe, for heat of the vrine, and gnawing of the flomach, taken with the juice of Purfaine.
Figges (being one of the bef fruits we haue, according to the ground and plant The Figge-rree. whercof they come) are either more or leffe fweet and fauorie, and this commeth of the ayre as it is cempered with heat, cold, or a milder temper : or elfe in refpett of the moifture and drineffe of the grounds, their fatneffe, and leannefle; their roughneflic or fmoothneffe; cheir ftergyth or gentleneffe; and eafincffe; their floninefle or being withour it:-nes, or their fectuation amongit fome old ruines and rotten flone walls: for in refpett of all thefe, it falleth out that there are great diuerfite of figges, as hauing forme great, fome fmall, fome round, fome fharpe pointed, fome white, fome blacke, fome greene, and fome gray. So thai this tree loueth to be in places flanding open vpon the Sunne, and therewithall rockie or clayie, flonie or mixe much with lyme, neere vnto walls or old ruines, yea within the verie walls being ciouen, or haife fallen downe, efpecially that which bearech little figges, verie fwees and white ones, fuch as are chofe of Marleillis, for fuch a figge-tree delighteeth in a drie and grauelly place: as on the contrarie, the figge-tree that bringeth torth great, leffe fweet and reddifh figs, defireth a fat and well manured ground. It thriueth and profperech in a hotand temperate aire, fo that the ground be fomewhat moift: for this tree is verie dainitie and quickly wronged and injured by frofts, broken downe by winds, and made chin and leane by drought, by the which che fig will fooner be ouprerhrowne and fpoyled than the Mulberrie. They are eafily hurt by Frofls, Mifts, and great Cold:wherefore they muft be planted in the Spring, when Frofts are paft, vpon the South or Eaf quarter, in great, deepe, and well -digged piss, of fhootes and boughes of two yeares growth, being faire and round ones, and tull of knots; tor thefe are monf fruiffull. And to caute them the better to ake toot, you fhall take away their barke at the nether end of the ftcmme about halfe a toot, and yet leauing is notwithfanding faftened thercunto, that fo the faid barke may turne into rootes.
It may in like manner be fowne of figges layd in feepe, and bound abour with fmall lines, and then afterward planted in that manner, and watered oten and dillgently: but it would fure better, if is were grafted vpon a Plumme tree or Almond tree; for fo it continueth a grear deale longer. But whether it be planted or grafted, it muff not be much watred. For aboundance of water corruptech the naturall beautie of the figge-tree, and maketh shem verie fubiea to rot. It would be a great deale betrer, to make them grow faire, and become fruiffull,to thrult the plant into a wild Garlick, called in Latine Squilla, and berter in Englifh,Sea-Onion:or elfe to fteepe it in Brine, or to fer it round about with Oxe dung,or with vnquencht Lime. And to keepe and guard them from Frofts, they muft from the elenenth of Nouember be couered verie well with Straw, or with the falkes of Line, tying rhefe things to the roots and to the boughes fo well and in euerie place, as thas chere remaine nothing to be feene of the plant. If you would haue the figge-tree to bring forth a late fruit (which is a ching againft his nature) you muft take from it his fiff fmall figges which begin to grow great, and the figge-tree will put forth another \& fecond fruit, which will bekepr will Late figers

## The fecond Booke of

A fruitfult figge-tree.

Elirels and timely figges.

Figges of di-.
wers colours.

Winter. Likewife it will be fruitfull and bring forth a full figge and of a good verdure, if from the time that it fhall putforth his leaues, there be put to his roor red earth bearen and rempered with the fetlings of oyle olines and mans dung: or elfe when it fhall begin to fring, 20 cur off the tops and ends of the braunches. Figges will be more forward and early, if there be applyed vnto the roots of the trees pigeons dung, and pepper brayed and mixt with oyle: or elfe if when their grofle and varipe apples fhall begin to grow red, you annoint them with the juice oif greatonion, mixt with oyle and pepper, or if when as their fruit thall be reafonably great, you pierce chem with a needle, and afterward rubbing them with oyle, you couer them with oliue-tree leaues: for the heat, being nothing hindered through the great moifture of the figge, doth concoct the fruit and ripen it moft eafily. But if your figge tree grow in a cold foyle or fuch a foyle as the clime appearech fomewhat vnnaturall therefore, you fhall then when he purteth forth his firlt or later knots, and by realonof his want of Sunne-fhine is not able to ripen them, you Shall then let them remaine on the tree, and by no meanes pull them away, and the next yeare following, in the height of Sommer, they will all be ripe and pleafant which you fhall know by their fhining, foftneffe, and tranfparancie, then will they alfo put forth other new hard knots which yow fhall againe fuffer to remaine till the next yeare, and thus allowing them two yeres to ripen in, you may haue in England or elfe where as good and as pleafant figges as are any in Spaine.

They will be of a diuers colour, that is, white on the one fide, and red on the other, if you tie together in a linnen clorh the feed of two diuers figge-trees, and fo To make a good planting them, atterward to tranfplant them. You fhall reclaime a wild figge tree, fgge of a woild. if you water him at the roors with wine and oyle mixe togecher: Figges will not fall downe from their rree, if you water the bodie ditched round about with falt-brine and water equally mixt rogether : or if you burie neere vnto the figge-tree the hornes of Rammes or Weathers. You fhall keepertem continualiy greene, if you put them in a pot full of honie and well flope, in luch manner as that one of them doe not toúch another, nor yet the por : or elfe in a guird eneric one by it felfe; hanging the gourd in a fhadowed place, where neither fire nor fmoake may come vnto is. Or if you put them in an earthen veffell, hauing the mouth well ftopped, putting the fame veffell afterward into another veffell tull of Wine: for as long as the Wine remaineth vncorrupted, fo long the figges will remaine found and fafe. You fhall preferue drie figges from rotting or corrupting, if you fpread them vpon a hurdle in an ouen, after the bread is drawne, and purthem afterward into a new earthen veffell vnpitcht. You fhal haue figges that loofen your bodie, and make it foluble, if you put
Soluble figges. at the root of the figge-tree when you plant it fome blacke hellebor fampt with fpurge, or fome orher fuch purgatiue.

Totame a moild ви 4 l.

## romake hara

 fefb tender. caule bor fes and affes to faint vader shem.Furthermore, the figge-tree hath this vertue, that if you haue a wild and vnruly Bull which you cannor tame by any meanes, if you tie him to a figge-tree, by and by he will become gentle, forgetring his naturall fauagencfle. Furthermore, to make the hard and rough flefh of any beaft tender by and by, you mult hang it to a branch of a figge-tree; as alfo, to make it to be boyled quickly, you muft ftirre it oftentimes in the por wherein it boyleth, with a ladle of the wood of a figge-tree : for the figgetree breatheth forth a certaine kind of vapour which driech vethemently, and digefteth the hardueffe of any flefh whatfoeuer, whether peacocke, birds of the riner, or other fuch like. It is true that there is other meanes to make tender the fiefh that is tough, as to put it in a heape of corne. We may further note I know not what fecret vertue in the figge, for the horfes and affes laden with figges doe eafily fall downe vnder their burthen, and loofe all their ftrength, which notwithftanding are as eafily recouered of their Arength and refrefhed, if they have but giuen them a morfell of bread. It is alfo worth the noring how that the juice or milke of the husbanded ortame figge-tree (as we haue before hhewed in the creatife of the making of chee(es) ferueth for the turning or changing of the milke into curds, as wel as the renning:
figges
figges boyled with Hyfope, doe heale an old Cough, and amend the difeafes of the Lungs. The fruit doth foften the bellie, nourifheth much, prouoketh fweas : being drie, mingled with the flower of Linfeed and Fenugreeke, it killech or refoluech impoftumes, and hard fwellings: in decoctions it is good for the Cough, and difficultic of breath: the flowers are good to ext, notwithflanding that Swine auoid and hunne them in all they may.
King C Mitbridates made an Opiate againftallmanner of Poyfon and danger of The Plague. the Plague, which was compounded of Figges, Walnuts, and Rue, as we haue faid before in the Chapter of Rue.
Figges burne and made into powder, mingled with a verie little Wax, doe make a verie foueraigne medicine for Kibes. The iuice of Figges dorh heale all Rough- For kibed beeles neffe, ill conditioned Scabbes, fmill Pocks, Purples, Freckles, Ringwormes, and other (pots and defilements of the bodic and of the face, being annointed thereupon wish the flower of parched Barly. It curech alfo the paine ot the teeth, a lietle Corton wooll being dipped therein, and laid vpon the tooth. It openeth the Hemorrhoids.
This Tree is eafic to make grow, and delightech in hot and cemperate Countries, The olize tree. as in Languedoc and Prouence, where it may be feene growing (as it were) in litrle Forefts: and it is fo long liucd, and of fuch durablenefle, as that though the labour due to be beftowed abour it, be left off for a long time, yet it ceafech not to beare fruit more or leffe: and comming to it felfe agane, being old, it becommeth young againe, and getting foot liuely, of drie ir becommeth marrowihh and fattie, alld of barren, fruittiull. In thefe Northerne.Countries it groweth not without great paine and labour, by reafon of the coldneffe of the ayre. Wherefore if you be minded to plant the Olive tree in your Garden, chufe out a place ftanding vpon the South or Eaft quarter, rayfed fufficient high, and open to the Wefferne wind, and which hath alfo refted a good while, confilting of Potters clay vnderneath, and aboue mingled with Sand and Fullers clay, being alfo a clofe, moift, and not leane ground: and in this you thall plant it about mid March, not of fprouts putting forth at the foot of the Oliue tree, but of fienes, fhoots, and branches that are young, faire, and ferrile, pulled from the boughes of the tree, as thicke as the wrift, and a foot and a halfe long, verie round, haluing a fleeke and glifering barke, without boughes, and cut downe in the new of the Moone, rayfing the thicke barke about the length of a fathome, and letting the greene barke alone, which is more fine and thinne:!' And you fhall fet them in the ground in fuch manner as they did grow vpon the tiree; as the lower end downward, and the vpper end vpward towards Heauen,as when they grew vpon the tree: for if you fee them the vpper end downeward, they will hardly grow; but and if they grow, yet they will abide barren for cuer. You mult lay the roor, as alfo the head, all oner with duns mixe with athes, and fet them on fuich a depth in the earth, as that there may be aboue them fome foure fingers thicknefle of fine fmall mould, and afterward tread all clofe downe togecher, round about the new-fet Plant, and fo caft ftill more earth vnto it, as it finkech with treading, or elfe you may beat it downe with a rammer of wood. It muft not be tranfplanted till after fuiv yeares : but in the meane time you muft digge it cuerie moneth, and dung it with Goats, dung elierie yeare in Autumne'. You muft water it with raine water, rather than with Fountaine, Riner, or Well water. And fomecimes you muft prune and cut away the fuperfluous branches, efpecially the drie and withered fhoors, and the branches pittring forth vpon it, if fo be that the plant be not become old, feeble, and broken, infuch fort, as that if fandech in need ro be renewed and planted againe, for then it will be requifite to leaue growing one or two of the faireft, and not to cut them downe before they hane growne cight yeares, and then at fuch time as the Moone is decreafing, and the feafon drie and faire. And fometimes, euerie eight yeare, you muft moiften the root of the Oliue trees, that are luftie and well liking, with the lees or grounds of Oliues, to keepe them from wormes and ocher vermine, which are ofentimes noylome vnto this Plant. You muft alfo defend them from

Cattell, efpecially from the browfing of Goats, which would make them altogether barren. You mult not plant anie other Plants neere vnto the Oliue tree, except the Figge-tree, or the Vine, whofe companie and neighbourhood it reioy ceth greatly in, and hatech efpecially the Oake, yea, euen to be planted in the place where the Oake was ftanding, and is pulled vp, for there it dieth prefently. The Oliue tree may be grafted in the bud with that kind of grafting calied the Scurcheon, and that of the thickeft and frongeft grafes that may be picks out of the Oliue tree,as we will further thew hereater : but it were but a loft labour to fow it of his ftones and kernels.

The Oliue tree is leffe fubiect vnto vermine than anie other, becaufc of his ftrong

4 maruellowa
thing about the otive tree.

Virginitic. Chaficie. fauour, infomuch, that it is as good as a fhield vnto all other hearbes that are about it : as alfo by his bitternefle it killeth Coleworts, Lettuces, and other moilt hearbes which are fowne in the fame ground with it. Some hold (which is a maruelous thing) that the Oliue tree groweth morefruitfull and aboundant in encreafe, if it be planted and looked vnto by fuch as are virgins, and haue not vnlawfully abufed their bodies, and other mens beds, or otherwife: and that therefore in fome Countries the planting of it is committed vnro fuch youths as are certainely knowne m be chalt, as alfo the ordering and gouerning of them, and that there they grow faire, and bring forth much fruit.

You muft gather them with your hand, when you are got vp into the tree by a lad. der : you muft not hurt the branches, for that might make the Oliue tree barren : it mun be done in Nouember, when they begin to change their colour, and are verie blacke : this time mult be faire, and not rainie: yea, and if it haue rained fome time before your gathering,you muft fee that it be dried vp againe verie throughly. Some gather their Oliues after another fahion: They beatchem downe with long flender Poles, or Pearches of Reed, not of Wood, and are carefull not to ftrike againft them for feare of beating downe fome of the branches, together with the fruit : but fuch manner of gathering Oliues is not good, becaufe the Oliues beaten downe, or frucken, doe wither incontinently, and doe not yeeld fo much oyle: put alfo vnto this difcommoditie, that other; which is, that the tree is bruifed, and manic of his branches broken, which is a great hinderance in the yeares following.

Furthermore, Oliues are gathered for two ends, either to make Oyles, or to ferue
olives ferve to make oyle of, and to ferue at Table. wee mat Banquets, to the end that they may prouoke appetite: notwith ftanding, wee muft not thinke that all forts of Olites indifferently doe Serue for thefe two vfes; for the greateft, for the moft part,are better for Banquets, and the leffe to draw Oyle out of. But thofe which are intended to be referned for Banquets, muft be carefully preferued with falt Brine, or fale Vineger, or Oyle, or the grounds of Oyle, or with Cute, or the droffe of Grapes, or Honey, or Veriuice, in manner as followeth.

They mult be gathered with che hand, hauing got vp into the tree with a ladder, in faire weather, when they begin so be black, and are nor as yet throughly ripe: then afterward to fpread then vpon a hurdle of Oziers, and there picke and cull them out at your pleafure, putting afide all fuch as are fpotted, corrupred, or verie fimall, and referuing onely thofe which are groffe and great, fafhioned like an egge, full, faft, hauing a long and flenderftone, a clofe pulpe, or fleth, and in good quantirie. This done, they muft be clouen in foure places, or withour anie luch cleaung, be put whole into an earthen por, and falt Brine or Veriuice powred vpon them, or elfe Honey with Vineger and Salt, or Oyle, with Salt beaten fmall, or elfe with Wine new from the Prefle, or fuch other liquor as hath beene alreadie fpoken of. Some put in the botrome of the earthen por, vnder the Olives, or into their pickle, the leaues or ribbes of Penyryall, Mints, Annife, Maflicke tree, Oyle tree, Smallage, Rue, Parfley, Fennell, and Bay tree leaues, and the feeds of Fennell, Annife, and Rue. Finally, you muft keepe the veffell well ftopped, and put it in fome Cellar to keepe: but he that would keepe Oliues a long ume, muft change his falt Brane cuerje quarter of a yeare.

As concerning Oliues to make Oyle of, they muft be gathered when they are fomewhat more ripe than thofe which are to be preferued, and when as there are manie of them become alreadie blacke, but yet not fo manie as are white : in other refpects they mult be gathered in fuch manner as wee haue faid that the others fhould be gathered, that is to fay, with the hand, and when it is faire weather, except it be thofe Oliues which by tempefts and winds haue beene blowne to the earth, and fuch as muft needs be gathered, as well becaufe of wild, as tame and houfe beafts. There muft no moe be gathered at one time, than may be made into Oyle that night and the day following: tor all the fruit that is gathered in a day, mult prefenely be pur vpon the Milles, and fo into the Prefles. But before that they be Pur into the Preffe, they muff firft be fpread vpon hurdles, and picked and culled: as likewile, that therl lees and waterinh liquor may runne out a lietle, and fpend it felfe; for it is a great enemie vnto the Oyle: infomuch, as that if if remaine, abide, and fland with the Oyle, it fpoyiech the taft and fauour of it. And thercfore in this refpeet, when fomerimes the quantitie of Oliues is fo great, as that there want Preffes and workmen to difpatch them, you mult haue a high and well-rayfed floore, where you mult prouide parcitions to keepe afunder cuerie daies gatherings: and thefe partitions, in the bortome, muft be paued with Stone, or with Tyles, or Squares made fomewhat floping, that fo the moiftueffe of the Oliues may conucy if lelfe along the channels which fhall be there prouided. And thus much concerning the preparing of Oliues to make Oyle of: it remaineth now to f peake of the making of Oyle; but wee will referue that for the end of the third Booke, where we will make a large difcourfe of the making of Oyles.
Finally, there is a verie aftringent and binding facultie in the Oliue tree : for the decoction of the leaues in a Cly ter doth fay the flux of the bellie: the iuice preffed from the leaules, with white Wine and Raine water, doth fay all manner of fluxes of bloud: the liquor which droppech from the greene wood of the Oline tree when it is burning, doth heale the Itch, Ringwormes, and Scabs. Oliues yet greene and vnripe, doe fture up and prouoke an appetite, being eaten, and caufe a good fomacke, but they make the bodie coftiue, and are hard of digeftion. Ripe Oliues doe onerturne the flomacke, and make boylings therein: they caufe alfo headach, and hurt the eyes. As concerning the vertues of Oyle,wee will feake of them in his place. See more of the Olius-ctree in the third Booke.
Piftates require as great toyle and diligence about them as the Oliue-tree, and Pifates. would be fowne about the firf day of Aprill, as well the male as the female, boch ioyntly together, or at the leaft one verie neere vnto the other, the male hauing the backe turned to the Weft : for being thus ioyned, or neere neighbours one vnto the other, they beare better and greater flore of fruit, efpecially if they be fowne in a fat ground, and well ayred: and there you may graft them at the fame time vpon themfelues, or vpont the Turpentine tree, notwithftanding that fome doe graft them on the Almond tree. They may in like manner be fet of Plants; and the manner of planting them is thus: You muft make Pirs fufficient deepe in fome place where the Sunne fhinech verie hot, and chufe new fhoots of the tree which are in verie good liking, and thefe bound togecher, put into the Pits the fecond day of the moneth of Aprill,afterward bind them togecher from the earth vp to the boughes, and couer the roots with good dung, watering them continually for the fpace of eight daies. And after the bodic of the Tree is chree yeares old, you muft lay open the Pit neere vnto che roots, and fet the bodie fomewhar deeper in, and then couer it againe with good dung, to the end, that when the Tree fhall be growne great, it may not be ouer-blowne with great winds.

This Tree was rare and hard to be come by in this Countrey, before the moft reverend Lords, Cardinall du Bellay, and Rese du Bellay, Bifhop of Mants, brethren, and men worthie of eternall memorie for their incomparable knowledge, alone, and before all other Frenchmen, had brought into this Councrey the knowledge, not onely of names which were altogecher vnknowne vnto vs, but alfo the ordering and figures
of frange Hearbes and Trees, the fruits whereof we are greatly in loue withall, and doe highly commend; notwithftanding, that as yet we doe fearce know themfelues. Bue furely herein this whole Nation is bound to acknowledge an cuerlafting ducic vnto them for the fame.

The fruit of Piftates (as Auicenne faith verie well, not fticking at the fcruple and doubt which Galen cafteth in the way) doe comfort the ftomack, and nourifi much: and this is the caule why they are prefcribed them which are leane and worne away with fickneffe, and which defire to beftrong and mightie in performing the act of Venerie.

Citron-trees, Orange-trees, Limon-trees, and Citron-trees of Affyria, require the like manner of ordering, by reafon of their like nature, whereunto, in refpect of their great tenderneffe and incredible daintineffe, it is needfull to giue great heed : for otherwife there is no hope of reaping any profit or pleafure of them. And for as much as they are beft dealt withall, and found to profper moft, when they are gotter alreadie growne great from fome other place (it being fo difficult a thing, and exceeding toyle, to make them breake the earth, and grow vpon the feeds in this Countrey) I will make a briefe difcourfe concerning whatfocuer is requifte for the preferuing, planting, remouing, and goucrning of them in our Countrey and Grounds. And therefore to fpeake (in the firt place) of the manner of tranfporting of them, wee mult thinke, that thefe Trees get no good by changing their place, but that they would doe a great deale better in their naturall and natiue foyle and ground, where they were firlt planted, fowne, or grafted, than to be remoued elfe whither. Notwithftanding, if it pleale the Lord of the Farme to procure them from farre, hee mult doe it in the Spring time rather than in Autumne: becaufe euen as in Autume the wood thereof groweth hard and folide, being ripe, and for that the fappe ceafeth to comfort it with his warme moiffure, by reafon of his approaching cold; fo in the Spring time, on the contrarie, they begin to bud by and by after that they are fee and planted, and bring forth leaues, yea and flowers, if the Plants be great and ftrong ynough.
The way to tranfport them, is in fuch fort to fit the rootes with clothes or ftraw, as
Taken out of the remembraicts of Monheur Nicot, fent from Portugall vinto 2. moiber, and to ibe Cardinall of Lorraine.

Ground fit for thefotrees. that you may bind therein vnto them fo much of the earth, from which they were taken, as may defend them from being hurt either by the Wind or Sunne : and hauing thus done, to fit them further with Barrels, or Sere-clothes, the better to keepe them from all the iniuries of the ayre, as alfo from the raine, and to caufe them to be conueyed vpon Horfes, Carts, or Waggons: fo foone, euen the fame nighe that they fhall come to the place where you would fet them, you muft well aduife and confider if they be alcered (which will be knowne by the change of the leaues and barke) and then to prouide for that accordingly: for in fuch cafe you muft take away the earth, and temper it foft anew, water them, cut them, and take away the blafted or withered, vntill fuch time as the pits where you intend to fet them, be fealoned in fuch fort and manner as fhall be faid hereafter.
You fhall in the day time view well your ground, and fee that it be a good fubftantiall blacke, open, tender, fweet, light, fat, and cleane earth, without anie manner of ftone whatfocuer, neere vnto the Sea coaft, if it be poffible, where moifture aboundeth : and furthermore, that it be eafie to be ftirred, to the end it may drinke in the water in aboundance where you meane to fet thefe Trees. For thefe Trees craning much watering, if the water fhould fland aboue the earth, and not finke downe, the soots would become ficke,difcoloured, and by little and little would looke the deadly colour of pale, blacke, orblew. If the earth be not eafie to be ftirred, you muft couer it with Horfe diung verie well rotted, or elfe with Oxe or Sheepes dung, and by this meanes it will become eafie to be pierced or ftirred. The place where they are to be planted, mult be open vpon the Sunne, a high place, and fheltred from all the quarters from whence froftie winds doe blow, but principally the Northerne wind, which is alwaies moft contrarie vnto thofe Plants. It muft be alfo open vpon the South (becaufe contrarie to the nature of all Trees they feed vpon this wind,
and ftarue through that of the North) and a little vpon the Weft, in fuch fort, as that they may be guarded on the back part, and both fides, but fpecially the Citron-tree, which is the woft ender of all the other. For which confiderations, it will not be amiffe to fet them neere vnto fome wall, of a conuenient height, to the end chey may haue a rampart againft the Norcherne parts: and for the more certainetie, to make them a hood and flankers of Bay trees, for the encreale both of the beautifulnefie, as allo of the profit of the fame: for fome hold, that the companie of the Bay tree doth keepe the Orange cree from froft. Thefe Bay trees fhall be planted in double cheffe, that fo the thinneff plazes of the firlt may be amended by the thickeft places of the fecond : but and if you have not Bay trees to doe it withall, then you may take Cy preffe trees. And here you muft learne, that Orange-trees loue not the companie of anie other tree but of the fore-named, and of the Myrtle-tree. The beft of all, and moft affured for profit, were to plant the faid Orange-trees, Citron-trees, and other fuch like Trees, in halfe Barrels or Veffecls of earch made for the purpofe (they being the chisfe pleafures of Princes and greac Lords) or elfe in Cafes, that are wide below, and narrow aboue, builded of clouen boords, verie well ioyned and firted together, in fuch fort, as shat no fhoots may grow through them : for the earth, by reafon of the oft watering of it , doth not ceafe continually to caufe them to put forth and breake out one way or nther. But that fuch watering may be conueyed in beft fort for their growth, it mult be prouided and brought by fome low conduic and paffage, and the furplufage carricd away by fome fuch cocke as is vfed in L.ee tubs: and fuch,or the like Veffels,muft be made to carrie into anie place whatfocuer a man will : for leeing that thefe Plants doe die, if they be touched neuer fo litele with froft, as being moft tender and daintie of their naturall uaclination, it muft belooked vnto in Winter, after that they are well couered and compaffed about with ffraw, or the ffalkes of Gourds ( for by a naturall contrariecie they are giuen to let and hinder che fooll from hurting them) that they be conueyed vpon frall Wheelebarrowes into vaulted Caues, and when Summer is come,to returne and bring them backe againe into che full and open Sunne, to be nourihhed and refrefhed by the heat thereof. Then hauing found out fuch a place in the Garden (as wee haue (poken of ) chere fhal! Pits be caft with diftances betwixt : and whereas the Orange- Hotes,orPitsio tree doth hlooo out his roots deepe into the earth, you muft caft the faid Pits a good fadome decpe, and a fademe and a halfe in compaffe, which fhall be well broken and made foft, that fo che roor may reft and fpread it felfe at pleafure : which $\mathrm{P}_{\mathrm{its}}$ fhall grow narrower by litele and litele towards their top, and where chey are to embrace and clofe in the foor of the tree. Thefe Pits, to doe well, thould be kept open a yeare, or thereabout, if it were poffible, for the well feafoning of them, which by manie Sunne-fhines, and manie Raines, would be efféted: bur chere may more fpeed be made with them, either by couering the places of the faid Pits with well rotted dung and new afles, which neuer were wet, and wareing it with a litthe water, if che time and feafon be not rainie, or by filling vp the faid Pits with Wheas ftraw, or with fmall Vine branches, burning it all, and afterward watering the afhes which fhall remaine, if the feafon be drie, and without raine: for within eight or tenne daies after chis preparing of it, the faid Pits will be well feafoned. Abcut the end of the fame cime, you muft againe breake and foften the earth of the feat of the faid Trees, and the fides thereof, and lay into them a finger thickneffe of dung, and againe, vpon chis dung, the like thickneffe of good mould, and then vpon it ro fee the Tree, in che verie lame afpect of the Sunne, if jit be poffible, that it flood in before the raking vp; that is to fay, that euerie part of the erree ftand vpon the fame quarters of the Heauens chat it did before: for otherwife it would not ferue, if the fide beholding the North before, fhould now behold and fand vpon the Eaft or Wef. And this obferuation is of great noment : for as much as they which faile in this, doc oftentimes fee cheir Trees dead, or elfe ( notwithftanding whatfoeuer other meanes vfed ) bringing foorth verie late and vntimely fruit, with like vntimely grow th and blofloming, which they would not haue fallen into, if they had beene fee
againe after the manner they food, before they put forth anic budde or branch ous of the earth. And this difaduantage likewife happeneth vnto them, which hauing planted their Trees in Pots or Cafes, vee to carrie them into houfes and vnder roofes in the Wincer time, and out againe at the Spring, vvithout anic regard to fet them after the fame fituation and flate of flanding whercin they flood the yeares before.
Thus the Tree being feated vpon the ground in the like afpect of the Sunne that it was, you muft drefle it about the foot with a leuelled bed of good earth, of the thickneffe of halfe a foot, and trample it downe : and againe, vpon this, to makc a bed of the fame chicknefle of good made earth, and for want thereof, with earth newly mixt with good dung, and to tread and trample it downe, and thus by courfes of the one and the other to continue till the Pit be filled $v p$ euen with the greene fwarth, and then to water it. Alt thefe faid and feuerall workes fhall be ended before the full of the Moone, and the betcer, if it be in the encreafe of the day, that is to fay, about nine or tenne a clocke in the morning : For feme hold, that if thefe things be done in the full Moone, that then there would grow Wormes and Ants betwixt the bodie and barke of the Orange tree. Being thus planted, you fhall order and gouerne them both in Summer and Winter in manner as followeth: In Summer they thall be watered eucrie three daies, morning and euening, and ofter too, if the greatneffe of the heat doe require it: For the Orange tree, aboue all things, doth require water, and flandeth in need of two buckets of water at the leaft ynto euerie foot or tree roots and therefore che Gardiners are happic in this cafe, which in their Gardens, or not farre off, haue water at commandement, becaufe commonly they reape both more fruit, and thatalfo more beautifull and faire, and better fafoned. Such as. water them, mult beware of touching the flocks or trunkes of the cree,or elfe the foor therewith, but rather that they caft it a pretic way off, and that round about, that fo it may fucke in and finke downe equally vnto and vpon the rootes: And to this end you fhall make a lietle furrow, digged fome three fingers deepe round about, and into this you hall poure your water, and when it is funke, you fhall fill vp the furrow againe. In Winter the care and labour is the greater, in keeping them from being tainted of the Froft : and therefore, fo foone as the Froft fhall begin, you fhall courr them in good time, about the firf of O Atober, with good flore of boughes, held vp with props, or elfe to make for euerie one of them a lodging of Mats, with a doore in it open vnto the South. Some vfe to couer them with Corke, and it is a verie good couering for them. Some, as hath beene faid before, remoure them into vaults vnder the earth, carried thither vpon little W heele-barrowes, and fitted of Barrels or Cafes. But which of thefe courfes foeuer it fhall be that you flall take, you muft alwaies fee, that their tops and ouffides be a libertie, and not pinched of due roome by that which couereth them, and that this couerect be not taken away till Winter be paff. It is true, that beforc you couerchem, or fet them in vaulted caues, you muft fee, that they be not wet anie manner of way : for if the cold fhould feize vpon them in that pickle, both the tree and the fruit would be eafily fpoyled by the frof: befides that, this wetneffe would caufe the flowers and fruis to corrupt and rot when thcy were vnder their couert: but good and wife Gardiners,before they couer thefe fruiss, doe take from the Citron trees (being the leaft able to endure cold of all the reft) all the flowers, buds, and tender boughes of the fame. You muft beware that it raine not into their lodging or place of couert, efpecially vpon the chaw of Snow, becaufe Snow water is more hurffull ynto them than anie other. Likewife, if anie drift of Snow or Sleet come thwart their lodging, or that anie trade wind doe bring it vnto them, you muft hake it off from their branches, and take it from the foot of them, for it would fcorch them. And therefore, to meet with thefe inconueniences, if there be anie cleft or hole in the couering, you muft make it vp clofe, and flop it well with dung, or wifpes, fo as they may be taken out when it is a taire and cleere weather, and that the Sunrie fhall caft forth his beames, that fo it may fhine vpon the Plants, and difpell the ill, corrupt, and infeeted ayre, and take away and drie vp the infecting
moifure rifing of the continued fhadow: and then againe, when the Sunne goeth downe, and fallech off, you muft fop them vp againe, that fo the cold may not take hold vpon them. It will not likewife be amiffe to make a fire there, during the extreame cold times, of good drie Wood, or Coale, becaufe the heat thereot would be great, and continue well, without working anic annoyance vnto the plants, either by his flame or fmoake : and this to be moft chicfely performed in the behalfe of the C tron.trees, which are moft fubiect vnto the cold of all other, the caule being, for that they haue in them greateff fore of iuice and fubftance; as on the contriarie, they are leaff fubiect to cold which haue leaff iuice and fubftance in them. Againe, you may not be too haftie in vncouering of them, vpon fome fhew and promife of gentle, meeke, and faire weather, becaufe che cold oftentimes faining if felfe to be gone, returneth againe in more vehement manner chan before, chreatning the killing of them, onely it will be the beft and fafeft to open fome boord or window of their lodging, that fo the trees may enioy the prefent heat of the Sunne for certaine houres. In the time of the couering of thefe new tranflated trees, you mult not forgect to renew them at the foot a cubic height with good earth, enriched with good roteen dung, and chac to lye round about the faid foor the breadth of a good tadome : and this will ferue and fland in ftead, in care that by extremitie of cold the bodie of the tree fhould be frozen, to reffefh and repaire it againe from below, where the froft fhall not haue pierced is, notwithfanding, if in fuch extraordinarie cold feafons you couer and lay oure their former couering with other dung well rotted, you hall preferue the faid Orange trees. Their gratts (whereof wee are to (peake hereafter) are a great deale more ender and more eafie to be broken by the cold and froft, and cherefore they mult be coulered at the foor, and layd high with earth, and as it were cloaked or hooded, and double courered and cloathed, as hath beene faid, and that a great deale higher, that fo it may nor be pinched in the place of the fetting in of the graft. Bus and if the cleff, or ocher receit made for the fetting in of the graft, be fo high, that the faid provifion and defence cannot conueniently be applyed vnto it, you muft then courer fuch chafe with thicke new cloch, being well woolled, or elfe wich fraw, and to tye the one or the orher faft to, by wreathing it about with one of the breadths of a Mat, and ftay it vp with a prop, if need be. In hot Countries, as Spaine and Portugall, it is held as an approoued opinion, That by how much che more Oränge trees are watered in Winter, fo much the leffe fubiect are they to froft; becaufe their water is eicher out of the Well, or frefh drawne from fome Fountaine, or of water broken out of the earch, and made warme with the Sunne, or with che fire, and for that it is drunke vp all into the earth : bur I feare me, that it would not fall our for well done, if fo be that in this cold Countrey one floould take that courfe : notwithftanding, if you will vfe the fame order, you fhall doe it either by the helpe of the forefaid Sunne beames, or by a pipe of Lead, laid good and deepe in the earth,a farre off from the root of the tree, powring of the faid water into it, that foit may defcend and reach vnto the roots: but fo foone as you have thus powred in your water, you mult fop verie well and couer the faid pipe with earth and dung, that fo the cold ayre may not runne along it vnto the roots, for fo they would be frozen. They muft be vnder-digged and calt at the foot from moneth to monech, if the feafon will fuffer it, and the earch made light and foff, mingling it with dung, and watering it as hath beene faid. And for the better preferuing of the branches of thefe plants, and keeping of them in their ftrength and force, they mufl be cus euerie yeare, more or leffe, according as the good and expert Gardiner hall iudge it neceffarie, in as much as thefe trees, being both daintic and precious, doe require a verie carefull regard to be vfed in this cutting. It muff not furchermore be forgotten to take from them continually all manner of fuperfluicie, filch, and graffe, growing at their foot, or elfewhere; and likewife thornes or pricks, and that witheche hands, or fome other cutcing yron: And if anie branch, through froft, or otherwife, grow drie, pale, or blacke, you mult cut off the dead pars at the Spring in the decreafe of the Moone, in faire weather, and calme and temperate, and vpon the putting of ie forth againe, and this muft be
done with a Garden Sickle or Knife well fharpened, and the cut muft be well clofed rogether, and coucred ourer, that fo it may put forth branches againe. You mult alfo bow the boughs as fhall be neceflarie, and to raile fome higher, and pull fome lower; as occafion thall require: cur the ends and fprouts which pur forth at the toppes of the tree: take away thofe chat grow too high,to the end they may be proportionable in an equall meafure of growth: for thefe trees, efpecially the Citron tree, growing in anie great height, and hauing anie great ftore of boughes, doe neither bring forth fo much nor fo good fruits, as when they are otherwife fitted and freed from their vnneceffarie boughes : and furcher, if need require, to fee fome ftore of poles to hold vp the boughs. If notwithftanding all the paine and prefertuation fpoken of before, they fall now and then into minlikings and difeafes, then you mult burie at their foos fome Sheepes hornes: for fome are of opinion, that by thefe they are maintained in found eftate and good plight.
The fetting of And thus much as concerning the ordering of thefe Trees, when they be brought out of other Countries : but as for thole which wee procure to grow and fpring ous of the earth here in this Countrey, wee mulf know, that they grow either of fhoots, boughes, gratss, or feedes. But to fpeake of thefe particularly, he Orange tree groweth not, but verie hardly, either vpon fhoots or grafts: for hauing a verie hard wood, is hardly takech root. It is true, that fome vete to prepare a Plant of it in fuch manner: They picke and prune from an Orange cree bough his fprigges and fiences, plant it the fmall end downeward, wrapt in a Linnen cloth, hauing within it Calues dung that is verie new : and of fuch plants haue beene feene to grow Orange trees, growing indeed lower than the other, but hauing a well fpread and large head. Bur yer it is better to fow it, fo that it be in a good foyle, notwishffanding it be long be-隼uft it bring forth fruit: but he chat will helpe chat, and caufe it to haften to bearing, manure trit . The manner of fowing all thefe forts of trees, is, firlt to prepare and with Oxe or Sheepes dung, and to mixe therewith fome Wood afhes, or which were better, fome Cucumber alhes : then making pist in the faid ground, of the breadth of halfe a foot, to put three feeds together, and the fharpe end vpward, and the higher part of the feed toward the carth: after chis, they muft be oft watered with warme water, or with Sheepes milke, for lo they will grow better and fooner. And yet forgét not, before you fow them, to lay them in feepe in Cowes milke that is warme: and if you defire to haue them fweet fruit, put to the liquor wherein you fteepe them, fome Sugar candie.
You thall plant their fhoots after the fame manner, in a well husbanded and digd ground, as alfo their boughes and grafts, about mid May, fetting the great ends vpward, and filling the pits with afhes made of Cucumbers. Thefe bring forth fruit, and the middle part of the apple will be fweet, if the bodie of the tree be pierced with a Piercer in the inoneth of Februarie, and that there be made therein an oblique and Iloping hole, which muft not goe through, and from out of this the fappe is let diffill, vnill fuch time as the apples come to be formed, and then you muft top vp the faid hole with Potters clay or morrar : or elfe giue a flit in the thickeft branch of the rree, and in the place where you haue giuen the flit, make a hollowneffe of the deprhof a good foot, which you fhall fill with honey, and fop vp with morrar, for feare of raine and of the heat of the Sunne: when as the tree hath drunke in all the honey, you fhall put in more, and warer the root with vrine: in the end, you thall cut off all the little fhoots which fhall put forth of the tree, letting thofe alone which fhall grow vpon the flit branch.
Tografio orange Athe fame time Orange trees may be grafted chiefely vpon the Pome-Adamgrafts. tree, for vpon this they thriue maruellounty (efpecially the Orange tree)both in goodneffe, greatneffe, beautie, and thickneffe of fuch fruits as they bring forth, in refpeet and coroparifon of thofe which they bring forth when they are grafted one vponanother: that is to fay, the. Orange vpon the Citron, or the Cieron vpon the O rangetree. They may be grated likewife vpon chemfelues, as the Citroneree vpon .0 .
the Citrontree, and fomerimes vpon the Pomegranate, Peare, Apple, and Mulberrie tree, but feldome bewwixt the barke and the wood, but vpon the head of the trunke or bodie of the tree, cut off neere vnto che root. In the grafing of them, you muft make choice of the faireft grafts which may be found, as to graft a good Citron tree vpon a better. The Limon grafted vpona the Citron, doch beare fairer fruit than the Citron grafted vpon the Limon, becaule the Citron tree is a great deale more fappie and full of juice for to make nourihment of than the Limon tree. Citrons and Li mons, grafted vpon an Orange tree, doe beare more fruit than vpoin their owne ftumpe and bodie, and are not fo fubieat vnto che cold, becaufe they enioy and participate fo largely of the Orange cree his propercies and qualities : which confifting of a hard wood, withour fappe, doth refift the cold a great deale che more. The chiefe way to graft them, is by cleauing the flocke, and then it muif be done in Aprill, or in March: or by way of crowning, and that mult be done in May : or by cucting a round hole in the barke of the cree, and this mult be done in luly. When they be grafted into the barke of the tree, you muft cut away whatfoener is fuperfluous, or more than needech, of buds or fprouts which are nor grafted, and withall, take away all the fhoots which grow thereupon afterward. When they are planted, you thall not fuffer anie weeds to grow there about them, except is be the Gourd, whereof Gourrds afiend they are refreehed, if ir grow neere vnto them, as being much fuccoured by them, vnito the citrono and protected from the cold; as alfo for that the a fhes thereof fowne and caft abous the roots of Citrons, doe make them more faire and fruiffull: And feeing that the Citron tree is verie fruiffull, and beareth a heavie fruit, after fuch time as is hath brought forth his fruir, you muft garher the greater part, and leaue but a few remaining, and fo the remainder will proue verie faire ones, and a grear deale the better.
The Orange tree will neuer freefe nor die with a cold wind, nior yet with the froft, if it be grafied vpon Holly, being an approued thing : but then indeed the fruit will not be fo naturall as that of the others.
Citrons,Oranges,Limons,and Syrian Citrons, muft be gathered in the night,with To heepe cirrans their leaues, in the change of the Moone, net before they be ripe, but when the O- or. lango range is of a golden colour all oure, if you purpofe to keepe them long: and you muft not tarrie eill they be become pale before you gather them. You may keepe themfrefh and vncorrupt all the yeare, if you hide them in heapes of Barly, or Millet : or elfe if you annoint them ouer with plaifter well tempered: or if you clofe them vp in veffels cueric one by it felfe. You muft not in anie cafe lay Citrons neere vnoo hot bread, for it would make chem rot.
To haue Oranges of a mixt nature, and as it were halfe Oranges, halfe Citrons, Oranges of a you muft about the beginning of March cut a fience or branch of the Citron tree, mixi mature. whiles it is yet young, of the chickneffe of three fingers, and plant the fame in a conuenient time, giving it all his orders and beft helpes of husbanding: at the end of two yeares, or thiereabout, when it is well taken, and betwixs March and Aprill, you fiall fow it of a finger wishin che earth, and clofing the cut faft, you fhall graft, by way of cleff, a graft of a young Orange tree thereupon, as of fome two yeares old, proportionable and futable vnto the Citron tree in thickneffe: afterward you fhall rub and annoint the faid cut, and chafe or cleff for the receit of the graft, with the roor of the hearbe called Aron, and you thall couer it well with a good cappe, after the manner of other grafts, putting therewithall vnto the foor thereof well rotted dung, or the a fhes of Gourds: after that, you fhall lay it about with good carth, a reafonable height, and vnderprop it, illl fuch time as it finall grow great and ftrong: but know, that the grafe mult be taken of that fide of the Orange tree which ftandech towards she Eaft, and it muft be done in the encreafe of the Moone and day, for fo it will prof per more effętually.
The Citron will be red and fweer, if it be grafted vpona Mulberrie erree, and will citrons. grow in fuci, forme \& afferfuch marner as a man will haue it, it before it be grownero his bigrefff, any'way ir be clofed $v p$ inia frameor mould, cuta after che fhape you would
haut if of, that foit may grow forth his iuft quancitie chercin. By the fame meanes, if it be pur into a veffell of earth, or glaffe, before ir be fully growne, it will beare the fafhion of the veffell, and become as great as the veffell : but, in the meane cime, to let it haue ayre, you muft make fome frmall holes in the veffell.
The fruits of thefe Trees are alike differing, both in colour, difpofition, taft, and

The difference
betwixt 0 range, citron, and Limon trees. trar trees. cure a fweet breath: the rind preferued heateth the ftomacke, and hel peth digeftion. bye luce preffed from the rind of an Orange, is quickly fet on fire: it pierceth alfo, ther great fubtlenefle, through the glafle, even into the $W$ ine that is contained

To fofien peayls.
ro diminifb vfe: for Oranges haue a more yellow and golden rind, a fowre or fweet taft, or both fowre and fweet together, being round as an Apple, and fitter for the Kitchin than for Medicine: The Limon harh a longer fhape, a paler rind, a fowre taft, and is good for the Kitchin, and in Phyficke, to coole, cut, and penetrate. The Citron is long, after the fanhion of an egge, the rind thicke, yellow without, fowre, good for cordiall and preferuatiue medicines. Syrian Citrons are twice fo great as Limons, being faflioned like Cucumbers, and the rind an ynch thicke.
The leaues of the Citron tree doe caule a good fmell amonglt clothes, and keepe them from the freting of Moarhes. The rind, iuice, and feed of Citrons, are all of them verie foueraigne againft all manner of Poyfon, and danger of the Plague: as is alfo that of the Limon. And for this caure there may a whole Citron and Limon be boyled in Rofe water and Sugar, vntill fuch time as all be confumed away to the juice, and after to vfe euerie morning, to the quantitie of one or two fpooncfuls of this decoction, in the time of the Plague. The rind and iuse of Citrons doe protherein. The iuice of Limons killeth Scabs, Itch, and Freckles, and taketh away the ipots of Inke out of Cloth. The fame diftilled through a Limbeck, maketh womens countenances fmooth and beautifull, and taketh away all filthinefle from all she parts of the bodie: being giuen to children to drinke, it killeth the Wormes which are in their bodies. If one bring the Limon neere vnto the fire, the thinne iuice that will come forth, doth cleanfe the faces of young girles, and taketh away red pimples in the fame, as alfo other manner of fpots like vnto them. Likewife, the iuice of Limons diftilled in a Limbeck, befides that it helpech and polifheth the countenances of women, is furthermore good to take away, out of the face, and orher parts of the bodie; all white Spots, Warts, and otherfuch like things. The iuice of a Limon is of fuch vertue, that if you ftraine it twice orthrice, and then waln in it whole Pearles, and af cerward Iteepe them in it, and after lay them in the Sunne, within fiue or fix daies they will become fo foft as honey, fo that you may make anie fhape with them that you will. Furthermore, the iuice of Limons is fo corrafue, as that if you feepe in it a piece of Gold fome certaine houres, you thall find it diminithed, and become light: and as much will fall out, it you fticke a piece of Gold in a Limon. See more of this matter in the third Booke.

The flowers of Oranges are preferued with Honey or Sugar, and thofe are verie cordiall: therewith likewife is made a very precious water, of rare and fingular fweet- neffe, which is called the water of Nafe.

Pomegranate trees craue a hot or temperate ayre, for they cannot beare fruit in a cold Countrey : and albeit their fruit be of one of thefe three tafts, as fweet, fowre, or both foeet and fowre, notwithftanding, all manner of Pomegranates doe craue one and the fame ayre, ground, and manner of ordering. They maintaine themfelues in good fate in all manner of ground, whether it be far, or ftrong, or grauellie, or clayic, orfandie, forefeene that the fand be fomewhat grofle and moift. They refufe not the fituation of anie ground, be it hill, valley, or plaine: yea,they refufe not to grow well inftonie, drie, and rough grounds, for a little nourifhment doth content them: And for thefe caufes they need not to be fo carefully husbanded as the former; and the rather, becaute they will grow if they be but prickt downe, and doe well beare either to be planted or grafted. Further, if you will take the paines to picke and prune then whiles they are young, and in due time, the fruit will be a great deale the big. ger, and of a beter fafion: but it muft be looked to, that they be planted vpon the C

Sourh Sunne, bue neuer vpon the Eaft, nor yet vpon the Weft, for this quarter doth moft hurt them, as well as the Vine. Note notwithftanding, that the young branches which you fhall cus off from them mult be taken when the eree hath put forth his buds, and not before (which is contrarie to the branches of othet trees) as alfo that the fiences, with barke and all, be of the thickneffe of the helue of a knife. And before that you plant them, you muft make fure and clofe both ends of them, and annoint them with Swines dung, which is more tamilar vnto them than anic other, and then lay them ouerthwart or croffe in the earth. They delight in a g.tound that is not leane; nor moift, but indifferent far: and they grow the more eafily and faire; if there be platred and fet by them the Sea Onion, or efpecially fome Mulberrie eree. The time to plant them, is from after March vntill May : betwixt the fame times it is good to graft them vpon themfelues, but to better furcefle vpon the Myrele cree, wherein they delight greatly. The Citron tree, the Willow, and the Mulberrie tree are not fo good, howfocuer that fometrmes they may be gratted vpon them.

The manner of grafting them, is to put into the bodie of the tree the graft of the To graft pomene. Pomegranace tree, fo fonne as euer it fiall be cut off from it, and atter to poure vpon granatso it fome oyle, and to plafter and couer it with carth : and as concerning the gratt, it muft be taken from the Pomegranate erree after it hath budded, after the lame manner that we haue faid of the branches. Furchermore, they craue to be often watred when the Sunne is in Libra.
Pomegranate trees, by mightic raines, exceffiue dewes, and great fogges, doe eafily loole their flowers and fruits before it be tipe: but to preuent this mifchefe, they would be planted neere vnto fome wall, and hane their boughes bowed downward, to the end they may not fo eafily take wet, which is to noyfome vnio them. They endure clefs and chaps in their bodies, without anie danger : and therenn they are like vnto che Figge-tree and Vine. If the Pomegranate tree bring forth fowre, or Icarce fweet fruit, you muft water the roots thereof with S wines dung and mans dung, mixt Sweet Pomee: with old vrine: or temper a litele Beniamine with wine, and therewith to bath and grazasto walh the top of the tree, or to fpread vpon the roots Affes dung; and afeer to couer them and water them with mans vrine.
The feeds of the Pomegranate will be white. if the roots of the rree be compaffed white Pomegrad. about with Potters and Fullers clay, and one frurch part of Plaifter; for the fpace of nate ferds. three yeares. The barren Pomegranate tree will become fruitfull, if the bodie chereof Poperfant be offen wathed with afhes and lees. The Pomegranates will become red, if the rooss tree. of the Pomegranate trees be ofen watered with lee, or couered with the ahhes of Red Pemergre: Acorncs.

The Pomegranate will grow groffe and thicke', if you put much Swines dung at Thich Pome: the foot of the tree: againe, looke how murch more of this dung you put chere, by fo granats. much the more fweet will the great fowre onies become. Pomegranates will have no feedes, if you take away the greater pare of the fappe of the boughes of the tree, and Pomegrenats lay them in the ground all hivered, and after that they hane rake, cut that part of the mitbout anis Plant which fpreadech furcheft, and hathialreadie put forth his buds. Pomegranate kerrelso trees will be fruitfull, if you ftampe Purflaine and Spurge togecher, and therewith annoint the bodic of the tree.
Pomegranates will nor breake nor open vpon the tree, if there be three flones put open Pomse at the root of the tree when it is planted : but and if the erre bie aliceadie planted, thien granatso neere vnro the tree roots you muft plane the Sea O'nion. Bue indeed, all thefe helpes, and fach other, doe bite lietle preuaile: and cheretore it were better to plant or giaft them onely which will not bring forth a fruit that will breake when it commeth to xipeneffe: The Pomegranare eree will not fall his flowers, if the roors be watred cuerie yeare thrice with old vrine mixe wihh as micch water.
Pomegranates will keepe and continue, if you dip them in faire warme water, and take them our again by and by:or elfe if you pur them apart in drie far d, or in a heapeSweet Pome:
they be ripe, and yet hanging vpon the tree, you wrythe the fmall bough a litete, and the fart by which the Pomegranate hangeth : or elfe lay Pomegravates in Fullers clay tempered with water, and after drie them in the Sunne. It is good likewife to lay them in duft, or fcrapings, or lawings of the Poplartree, the Holme tree, or the Oake, in a new earthen pot, and withnit to fet them in order, in manner of a bed; and then afterward to coter the pot, and lure it verie well. But whatfocuer way you take, the principall end muft be to keepe Oranges in a cold and drie place; and thas they be gathered with their ftalkes, as alfo with their litele branches, if forfibly it way be done without hurting the tree, for this helpeth much to keepe them long. They muft likewife be gathered in the old of the Moone, fo that they be then ripe and verie drie, and not being wet from aboue: and then, after that, to keepe them a day or two in the Sunne, their flowers lying downeward: then, atter that, to clole them vp in a pot verie well ftopt, and well pitcht or feared, that the ayre may not get in. Some doe couer them and worke them ouer verie thicke with Potters earth, verie well beaten and tempered, and when it is drie, then they hang them in a cold place:and when they will eat them, they fteepe them in water, and cake away the earth. Others doe wrap euerie one of them alone by it felfe in hay or in ftraw within cafes. The boughs of Pomegranare trees doe driue away venmous beafts: and this was che caule why men in auncient cime were wont to put the boughs of Pomegranate trees both vider and aboue them in their beds.

The Plare tree.
The Plane tree is more commended for the beautic of his leaues and Shadow, than for his fruit: it groweth of Thoots and fiences drawne and raken from the tree, and planted in a verie moift ground, and fuch as is neere vnto fome Fountaine or Riuer: and yet befides chis, it delighteth to be watred ofentimes with neat Wine, and fometimes with mens Vrine, to helpe it to hoot vp and grow high, and to put forth large and ample branches, and long leaues, for to make che betcer fhade. In this Councrey we cannot fee manie faire ones. I remember, that I haue feene one at Bafil in Saine Peters place, betwixt the heiglit of fifteene or fixteene cubies, vnder the fhield and Thadow whereof, the people betooke themfelues, for their refreflment, during the time of great and forching heat. Some make dinhes of Plane tree wood, to affuage paine and wringings in the bellie, being applyed thereunto. You muft beware of the

## $\because \because 1$.

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Tbe Lote or Netlle tree. dutt which hangeth vpon the leaues: for being taken into the bodie, by drawing in of your breath, it hurteth the rough arterie and voice, and in like manner, the fight and hearing, if it fall into the eyes or eares.
The Nettle tree is well ynough knowne in Languedoc and Prouence, efpecially in a borough neere vnto Mompelier, called Bontonnet: it growech in a fat ground, well manured and toyled, open to the South or Eaft Sunne. The wood is good to make Flutes, Cornets, and other Inftruments of Muficke: it is good alfo to make ndles for Kniues and Swords. The fruit is verie much defired at the Tables of great States, for his great fweetneffe, and moft pleafant and delightfome fmell which
 fruey find in it that doeeat or fmell to it. Likewife, fome doe prefle a Wine out of this

The saficke trec.
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 new preffed fweet Wines, but it lafterh not aboue tenne or twelue daies.

The Mafticke tree delightech in moift places, and is planted after the firft day of Februarie: it beareth fruit thrice a yeare. The leaues, barke, and wood in decoctions haue power to reftraine, ftrengthen, and comfort. And this is the caufe why it is vfed so make Tooth-pickes thereof.
The Turpentine tree delightech in a low and moift ground, and withall, in a hot and warme ayre, open vpon the Sunne. The leaues, barke, and wood, haue the like vercue that the Mafticke tree.
The Minube ...The Iuiubetrec, and others, as well forraine as growing in our owne Councries,are tree, armed further to be feene and read of in the third Booke.

the Countrie Farme.
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## Chap. LV.

## Of the two particular Gardens fcituate or lying at the end of the Kitchin Garden, and of the Garden of Pleafure.

 aboue declared, may haue referued out of them, two or three acres, for the profit of the Lord of the farme, as for Madder, Woad, Tafel, Line, and Hempe. And we may alfo adde vnto thefe, Saffron, albeit that all chefe things, euen as well as pulfe, if it be a free and kind ground, doe well deferue to haue eueric one his feueral field by it felfe, and to be tilled and husbanded after the manner of corne and pulfe.For Madder therefore, it is meet that there fhould be appointed out foure or fiue acres of ground in a place by ir felfe, which muft not lye farre from the water, but in a free and not in a ftrong mould, and yet not too light: which hath had his three or foure arders with the plough, or (as indeed is beft) digged and fifted : notwithftanding that the fifting of it be a longer peece of worke, and of greater coft, it being $v$ fed to be caft and tulled with thicker raifings of the earth, and fmaller clouds than is wont to be in the cafting or digging of a new vineyard. For this plant hath his pro- The differense per and particular feafons to be dreffed and planted in, as well as the vine: but in betwixt the this they differ veriemanifetly, that the one is an hearbe, and the other a fhrubbe, and as it were a knot of many trees : the one dieth yearely (and there is nothing of it in requeft but the roots for to make good colours of) but theorher lafteth and continueth at the leaft twelue yeares in good liking and liuelihood: of which, the firtt fixe is for growth, and a little for bringing forth of fruir., and the later fixe, for whole, ample, and intire profit, the daunger of haile, wafhing away of the grapes, when the vines be in flowre by much raineand froft, being excepred; vnto which in like maner Madder is fubjeet, and oftentimes more than the vine, becaufe of his tenderneffe. This prehemencie it hath, that the vine being frozen, cannot be recoviered, but Madder may be either fet or lowne againe, as alfo Woad, the fpeciall husbandrie of fuch as dwell in Prouence, and the wealth and commoditie of Dyers of Cloth or Wooll, with what colour foever it be. It may be fowne or planted; but indeed being fowne it yeeldeth farce at any time any great flore of increafe : but if you will fow it, then beftow the like quantitie of the feed tliereof vpon an acre, as you are wont to doe of Hempe, and that in the monch of March, vpon the tops of hills well battilled and manured : thus the feed being caft into the ground, and the fame well incorporated with harrows or rakes, chere is no need of any other labour bur keeping of it cleane from hurtfull weeds, vntill fuch time as the faid Madder be readie to be gathered in September for to take the feed of it.
The choyce of the roots which you intend to fet and plant, muft be out of the countrie of high Prouence, being more: Eafterly and coole, and as for the fight and taft of cherr, they mult be more yellow, thicke; and ftringed, comming neere vnto the co. lour of the true Prouence Orange tree, verie bitter in taft, and in feething (for the triall of it) more red and fulliof juice, that is to fay, not fo drie and withered. The rime to plant; is from March be ended vrito mid-May; and as. for the beft and moft profit to be expected from it, it is not to beattained or come by, till after the two firft yeares afterctie firt planting of it : and withall, you mult make a fure defence about yone ground againft the comming in of eattell; for there can no greater hurt happen vito it. In Talie they vfe not to take vp the roots of Madder, till after they have continued ten yeares in the ground, eicher fet or fowne : but they cur the boughes of iecuerie yeareto haus the feed, and aferer they couer the roots one after another, layiuntevo fingers depth of earth vpon cuerie one, the meafure being taken from his RI.vim
chiefe
chiefe and principall, to the end the froft may not hurt them, and that fo the roors may grow the thicker : after the eightor tenth yeare, they pull vp the roots, drying them in the Sunne, and afterward when they would grind or preffe them, they doe further drie theri in a great Ouen made for the purpofe, and fo prefle them vnder a Mill-forte, and this is called the fine Madder. Thus they haue found by experience, that looke how much the longer they delay the gathering of the root, fo much the more Madder haue they eucrie yeare, and that fine, which is more than if they fhould take vp the roots euerie yeare. You may both fow it and plant it in the fame place, where you haue taken it vp, or which is better, fow that place for the next two or three yeares following with wheat, becaufc it will beare veric faire and gteat florechereof: in as much as the field wherein Madder hath beene fowne, is made much fairer and better chereby, as whereof it may be faid this ground hath refted it felfe, feeing the root hath done noching but brought forth boughs, for feed, and that the leaues falling from them, doe as much feed the ground as the ground doth the roots and boughes.
But Autumne being come, and when you fee that the hearbe beginnech to looke yellow, and to loofe his naturall colour, you fhall draw if out or pull it vp with the fpade or pickaxe, and fhall ftrip the roots from their leaues, which you fhall caft vpon finall heapes to drie, for the' Pace of three or foure daies, if the weather be fuch as it hould, oselfe fixe or eight daies in a rainie and moift weather: then you fhal caure them to be taken vP, dufted, and frraped, that fo they may haue none of their hairie ftrings at them: and when they are thus made cleane, you hall keepechem whole, or ground into powder cither groffe and great, or more fine and fmall, either for your owne vee or for the fale.

Tocolour the Vrint.

Toprocsure the termes.

Madder is in this one thing much to be maruelled at, in that it colourech his vrine that thall but hold it in his hands : and which is more, it makech the bones and flefh of thofe catell red, which haue beene fed with it fome certaine eime: fome fay, that the powder of it is fo penerratiuc, and fo taketh $v p$ the nofthrills, as that it inuenimeth and killech many in a few yeares. The decootion procurech vrine, and the termes of women, and colourech egges sed that fhall be boyled withis. The leaues becaule chey are rough and 1 tiffe are good to fcowre braffe veffell.

## Chap. LVI.

of Woad.


S concerning Woad, it is silled in a field, and requireth much labour, even as che Nauets or Turneps, chough there be no part of it in requeft but the vppermoft, and that which is furtheft off from flowers and ftalkes: it doth not feare froft, raine, or extraordinarie cold: Indeed ir doth not crauc any long reffed fat ground, but a frong ground, and fuch as may be faid to be in good plight, rather than an indifferent and light : it growech better alfo in grounds, which haue layed fallow three or foure yeares before, or which hane beene Medowground two yeares before, than in grounds which haue beene well tilled; which is cleane contrarie vnoo Madder, which crauech as much helpe, as the ground appointed for wheat or vines: yea and it crauech the reft of foyle, and fet from one yeare to one : for otherwife the roots when they are fet, doe degenerate oftentimes and maica. ric, loofing their force and goodneffe. And whereas Madder doch fat the ground, Woad doth make it leane, and therefore it mult not be fowne in a leane ground, where it euermore growech but litete, and where it prouech almoft nothing worth; but racher in a ground that is well manured before it be fowne, asalfo renewed with dung when it is to be fowne. But the beft approued ground of all orher to fow woad in, is chat which hath laine long fwarth, and hath feldome beene broken vp befores whereis
wherein you are to obferue, that in the ploughing vp offuch grounds, you muft turne vp a great and a deepe furrow, laying them broad and flat, infomuch that the feed may be throughly well couered, and that the fwarth rotting vnderneath and aboue the fame, may be as a warme and comfortable meanure to make it flourifh and increafe. Being fowne offeed, it muf be diligently harrowed, to the end it may bewel couered and incorporate with the earth, and when the plants haue put forth their leaues the height of fwo fingers, you mult weed and digge ic abour mid. A prill, or fomewhat later, accordngg as the time hath beene faire or rainie : then fhortly afterward you muft gather the leaures: and they being gathered, you muft weed and digge the feet of the faid roots fo left voyd of their leaues: and this mint be continued cuerie moneth, that is to !ay, Iune, Iulie, Auguf, and September: infuch fort, that cuen as the leaues are gathered from foot to foor fiue times, fo they muft be digged and the earth calt as oft, and that fo foone as the gathering of the leaues is paf: and this labour of digging is ordinarily to be fenen umes gone ouer, that is to fay; the fiue times now fpoken of, and the two firf, which are before any gathering of the leaues doe fall. The manner of gathering them is in this fort: When the leaues begin to be coloured about the edges, and nor in che middeff, you woft take them from plant to plant in your hand, and breake them off in fuch manner from the root, as that it may feeme and fhew as though one had cut them away with a hooke, and after chat, to lay them in order in the fhadow, that fo the Sume may not horme or injure them.
The manner of making Woad: Vnder your Mill, which would not be as fome To make vfe Mill-fonc, for that crufhech out the fap and juice of the Woad too much, but a Woadh Mill mad of ftrong timbers the compaffe of a large. Mill-ftone being hollow or deuided one out-fide from the other, and running circular or round, and thefe out-fides Thall be bound together both in the middeft by the drawing axell-tree, and alfo at the outmon Verdges, by ftrong plates of yron made broad and flat, with reafoniable rebated edges, and thefe plates fhall be at leaft three foot in length, anfwering to the full bredth of the trough in which the Mill fhall run, and this Mill mult be drawne about by a horfe. Now the leaues (as aforefaid) being frewed in the trough vider the Mill, you fhall grind them as fmall as may be, till they come to be as it were all one fubflance, which may eafily be done; by of turning the Woad ouer and ouer as the Mill runnes, which one muft continually doe with a fhouell, then the Woad being thus fufficiently weil ground, you fhall fay the horfe, and take all the ground Woad out of the trough, and then fill the Mill with frefh Woad againe, and thus do till you haue ground all yous woad, which being fini fhed, you thall forthwith mould it vp into greac round balls, as bigge as a culuerine bullet, or twice fo bigge as a mans ffits, and thefe balls you fhall place vpon fleakes or hurdles made of imall: wands, pent-houfed, houfed, or couered ouer to keepe them from the raine, but all the fides open in fuch wife, that the Sunne or Wind may haue full power to pafferthrough the fame, and thefe hurdles fhall be mounted one aboue another in many heights and degrees, and your Woad balls fhall lye chereupon without touching one another till they be chroughly well dried, then at the later end of the yeare, which is towards Nouember, you hhall breake thofe balls againe, and put them vnder the Mill, and grind them as before, and thentaking it from the Mill, you fhall lay it in great heapesin fome coole vault kept for that purpofe onely: and when vpon this laying together vpon heapes it :hall begin to take heat, it mult be turned, and in turning watered, vntill it be fufficiently moifned : for as too much water drownech it, fo too much heat in the heapes doth burne it: thereupon you muitt pile it vpon heapes not high but long ones, and firre it euerie fecond day, fo long as sill it become cold, and yet after chis, to putrit abroad euerie fourth or fixch day; while ir be throughly cooled indeed, And this worke muft be verie carefully performed, for otherwife the woad would roalf it felfe, and proue not any ching worth, whichbeing fo trimmed and ordered as it fhould, it is left in fome cold and paued place, vintill the cime of the fel. ling of it, and looke how much che longer it lyeth in heapes in this cafe, by fo much it becommeth the better and finer. The counitrie men of T holouf, in whofe countrie
there groweth grear fore of Woad, doe not grind their Woad-balls into powder, but gather it togecher by great veffells full, and put vnder the Mill-ftone to preffe out the waterifh parts of it, and then they make vp the remaining fubftance into lumps like loaucs, which they drie and rot afterward, by laying them in the greas heatof the Sunne in Sommer time, and then they calt thefe lumpes into their fats, where they put cheir Wooll to be died, a blew, blacke, or other colour, as it beft pleafech the Dyers. The leauss thereof made into a plaifter, doe refolue impoflumes, and heale wounds new made, they fay fluxes of bloud, heale the wild fire; and the vlcers which runne ouer the whole bodie.

Alfo the leaues of Woad thus ground, are excellent to kill any itch, fcabbe, or other minfike either in men or children, alfo it is moft excellent for the difeafe in horfes called the Farcie, and curech it verie fodainely.

## Снад. LVII. of the Tasell.

He Tafell (called alfo Venus her bathing tubbe, becaufe it keepecthrome drops of water (being by nature as all theorher Thiftles are, hor and drie) in the lower part of the leaues, clofe by the ftalkes, to refrefh and water it felfe withall) feruech greatly (in refpect of his head) for the vfe of Clothworkers, both to lay the Wooll of their new cloches fo much as is faft, as alfo to draw forth fo much as lyech loofe out of order amongft the reft : and it is as feruiceable or more vnio Cap-makers, after that the Cap is fpun, wouen, fulled, and fcoured with fope, Walkers-earth, or orher fcouring earth : Now he that will reape profit by this hearbe, mult make choyce of a good fat ground, well manured and tilled with two, threc, or foure arders, and well harrowed : and then afterward fow it with the beff feed that poffibly may be found, and that verie thicke, and when it hath fhot out of the earth as in the beginning of May, then to make is cleane, and weed it with the hand, and in Iune and Iulie to digge it, if need be, inthe end of September you muft gather the heads that haue flowred the firf yeare, leauing the reft to grow for to be gathered the yeare following, at fuch time as they fhall bein flowre. The heads cut off, the plants mutb be planted anew in a well tilled ground, putting all the root into holes, from oneto another (which is all one with the ordering of the Radifh) and trampling the ground vpon them veric orderly and duely: and furthermore, to digge them when they begin to pricke and pur forth branches, in March, Aprill, and May : and to cut them which are cankered or rotten, and fo vnprofitable; that fo the juice of the earth may be fed vpon by thofe onely which are good and feruiceable. And whereas at the time of their flowring they begin to flowre on high on the head, and fo downeward till the whole head be flowred, the flowre being once fallen, you mult cut off the head either euening or morning, siuing halfe a foot of falke chereunto. Furthermore you muft nor forget, that they mult be fee or fowne in furrowes, that fo water may haue an orderly courfe to fall to the foot of thenl, and giue them a continuall refrefhment, and not to fow them in anie other place burfuch as is reafonably warrie : for tno much moifture maketh the ehiftle or the head thereof (which is the thing of moft importance) more low and Ihort, and of leffe commodioufneffe. You muft not gather or bind them vp in bundells, but in a dric feafon, towards she moneth of OCtober at the furtheft, and not any fooner or earlier than the later end of September. Some gathering it doe leaue it at the barne to drie in fome place by iffelfe, becaufe it is fubject vnto fleas or lice, and ocher fmall vermine, which caufeth the fmall foot that fhould hold vp the head to fall downe: others doe put ten or twelue of them in litele faggors together, and fo hang them vp ftanding onea prectic deale from the other in the fhade or wind, and not in the Sun,
or in any moift place. Some drie them in the South Sunne, turning them twice or thrice, and afer hanging them by paires in order vpon poles.
The Tafell is to be commended in this point, for that in the middeft of the head thereof, after it is well dried, there is found a littele Worme, which being hung abour the necke or applied vnto the wrefts, doth heale the feauer quartaine : it afluageth likewife the great ach of impoftumes which grow about the nailes, being applied thereunto.

## Chap. LVIII. of Saffron.

5S for Saffron, the befl Farmers, and fuch as are mof cunning in the ordering of plants, doe make verie much and highly efteemeot that which is called Baftard Saffron, and of the common people tearmed Parrot-feed; being the fame that old writers call Carthamus : the plant is of no vfe, the feed excepted, which purgech flegmaticke humours, or elfe feeds Parrots, which are daintie and fine mouthed. This plantwhen it is growne vp being well husbanded and ordered, beareth certaine little thicke heads, like the heads of Garlecke, and in the middeft of it a flower which one would fay were Saffron. This good it doth ${ }_{2}$ namely, that it enrichech and makech fat the ground where it groweth: likewife. it craueth no great food or maintenance, neither leauech it any roor in the carth after ir is gathered that may put forth or take any acknowledgement of, or doe any harme vnto the foile wherein it grew. There is cuerie way as much profit in tilling of this hearbe, as chere is in Anife or Fennell : when all is faid, a good Farmer will make profit of euerie ehing, and there is not (as we fay) fo much as the Garleeke and Onion, which he will not raife gaine of, by felling them at faires, moft fitting for their time and feafon, and fo helpe himelelfe thereof and fill his purfe with money. :
The ordinarie Saffron, feruing for fauces, painting and making of colours, isa thing of toyle and of profit, as may be learned and eafily vnderftood by che inhabitants of Tourain, Prouence, and Portugal, where the fame growes exceeding aboundantly : It is planted like cammomite in the Spring, vpon heads, foure fingers off one from another : but it muft be in a free and well battilled ground, not verie fat, nor verie leane, but open to the Sunne: it mulf be well troden downe with the feet, when it fhall lee fall his flower : but when it buddech and puttech forth, it mult be leff alone to natures worke. At the time of the gathering of it, you muft haue linnen cloaths to draw it outof his beil cuening and morning: and after drie it well in the fhadow of the Sunne, and couer it with cleane linnens, make it cleane, and raking away his white, purge it; that fo it may be free from all filth, and fit to bekept in a drie place well couered, or in fome veffell clofe flopt: and leauing in the carth che Onions or heads of the Saffron, with a good quantitie of Grapes,or.of the droffe thereof as it commeth from the preffe put vnto them, you fhall take them vp in the monech of March when they haue brought forch fruit three yeares, and drie them in theSun, keeping them after in fome place that is not moift, thar fo you may plant themagaine in fome other place and ground that is well cilled; as hathalready beene deliuered at tadge in the fue and thirtieth Chapter. Some are of judgement chat it is naught for a seffrma \& Pesis man ro. vfe Saffron much, and that it is a peciall venime vnto the heart : but howfoce allveenime of uer his be erue, the profit of it is great: and therefore commodious and requifite for the hemb the Fariner, which would not that his ground fhould be vnprofitable vnto him. See more abous in the place aforenamed concerning Saffron.

[^4]

## C нар. LIX.

## $\triangle$ briefe and bort rexiens concerning Pulfe.

R20Will fay nothing of the Nauet, nor of the two kinds of Turneps, of which, the great and round one is for them that dwell in Lymofin, Arnernia, and Prouence; and the long one (which they call Radifh) for Fraunce and orher places: as in like manner I will make no mention of Muftard.feed, Millet, Pannicke, and Cummine $;$ : neither yet of great wild Tares, Lupines, Lentils, and Fenugreeke: vvhich notwithftanding are all pulfe and feed of profit and commoditie for the houfhold, as hauing referued then for the pulfe-garden,planted at the end of the kitchin- garden: I wili content my felfe in this place to admonifh the good Farmer, that for the bringing of the ground into fome kind of occupation during the time of his reft, and after that it hath been imployed in bring. ing forth better corne, it will not be amiffe to fow therein either Nauces or Turneps, forcfeene that the feed, atter the pulling vp of the plants, be fo well and thoroughly gathered and carried away, as that the ground may be quite rid and voyd of the lame, for otherwife in time there would be nothing to be found amongtt this feed but wild Coleworts, Danewort, and ocher noyfome weeds : and in deed pulfe doth make as much for good husbandric, as the corne elhat is good for to make bread : feeing pottage is in continuall requelf for the houthold, in what houfe focuer it be.Some make a craft of making bread of Millet, as is to be feene in fome places of Gafcoigne, but it is not but when great neceffitie driueth them to it. But howfoever it be, beanes, peafon, fiches, and fetches, are not of leffe requeft or inferiour in taft vnto great wild tare, lupines, cunmmine, fenugrecke, and lentills : and for the proofe hereot, I wil call to witnefle the people of Aruernia, Lymofin, Sauoy, and Dauphine, for the cilling whereof (not ro fpeake firrther in this place of any other thing whatfoeuer, that may be as it were fuperfluous) we will referre you to learne che whole fummse int the treatife of tilling of feeds and pulfe in arable grounds.

## C иар. LX. <br> Of remedying of firange accidents that may happers vato Hearbes.

(2]He Hearbes either fowne or planted in the gardens beforefpoken of,are not hurt onely by haile, lightning, thunder, frofts, fogges, blaftings, and other harmes hapning by the courfes of feafons, but alfo they are annoyed, by reafon of waft and deffruction brought vpon them by litele beafts, as Grathoppers, Weazles, Caterpillers, houfe and field Rats, Cats, Moules, Pifmires, Flies, Gnats, Bats, Wall. lire, Fleas, Greene-flies, Horfe-leaches, Frogges, Snailes, Adders, and fuch like, which mifchiefes you muft be verie carefull to meet withall, that fo you may not loofe your labour about your garden, and be fruftrated both of the profit and pleafure that might rife and come thereby. And to Speake generally of the preuenting of thefe inconueniences, it is good, according to the counfell of Columella, to fteepe the feeds for a certaine time in the juice of trickmadame, or to mingle with che faid feed fome foot, or elfe to water them with water wherein foot hath beene tempered: but it is better to f peake of thefe things particularly.

Generally againft all fuch beafts as doe hurt gardens, it in good to burie jn fuch
place of the Garden as where you thinke thefe beafts doe moft abound and keepe, the paunch of a Sheepe, full of dung, as it commeth out of the Sheepes belly, and to couer it with a litele earth, and within two daies you fhall find all thefe beafls gathered togerher into this place: before you haue done thus wwice or thrice, you flall be prouidel of the meanes to kill and root out all thele vermine: know then, in a word, what be che neceflarie remedics for the auoiding of fuch accidents.
Againी Haile, ancient men were wont to fet the whole compaffe of their ground Againf Haileo about with white wild Vine, or elfe to faften vnto the top of a high poft an Owle, hauing her wings Ipread.
The Lighnnings and Thundring will doe no harme, if there be buried in the midft Againf Lightof the Garden a kind of Toad, called a Hedge-toad, clofed vp in a pot of earth. Others doe hang in the midft of the Garden, or at the foure corners thereof, the feathers of an Eagle, or the skinne of a Seale. Others plant manie Bay-trees round about the Garden. It is true, that to breake or diffolue the Thunder, accompanied with a great thicke cloud, threatening haile, there is nothing better than to ring the belles, as is vfed to be done in hot Countries, and to fend forth the roaring founds of the Canons, as is wont to be done ar Sea : or elfe to fet on fire fome heapes of Weeds, or flinking and rotten Seeds.
There is norhing more hurffull or dangerous for hearbes than Froft, which com- Frofo meth when Snow and Ice are thawing. And for to preferue your hearbes from this inconuenience of cold, you muft fpread ail ouer the ground great fore of ftraw, and afhes withall aboue that : for by this meanes the heat of the earth will be preferued, and the frof hindred that it cannot enter.
If you conceiue that your hearbs are like to be hure by mifts or fogs, you mult get $A_{g}$ inin mifs together in diuers places of your gardens diuers heapes of tender twigs and fraw, or and Fogs. of weeds and fhrubs pulled vp in the fame place, and after to fet then on fire: for the fimoake thereof doth correCt and cleare the diskifh and cloudie ayre.
Againf blafting, which is a corruption happening to hearbes and trees by fome Biafings euill conftellation, there is nothing better than to burne with the dung, the right horne of an oxe, in fuch fort, as shat there may on euerie fide be caufed a verie great fmoake: for this finoake will driue away and refolue the cuill qualitie of the ayre which is the carrier of this maligne influence: or elfe it will be good to plane in diuers places of the gardens, diuers Bay-cree-boughes, for the blatting will fall all vpon them.
To preferue feeds from being eaten of birds, you muft fatter round about your Againf Birds; gardens wheat or barly fod in wine, mingled with hellebor : or elfe, water and feepe the feed in the decoction of cray fifhes, boyled in freh water, affuring your felf, that looke what growech of fuch feeds, will be free from all danger of thele fowles : or elfe water your feed with water and the lees of wine: or elfe leater throughout the gardens, fome boyled leekes, for fo foone as they fhall haue fwallowed thew, they wil be eafily taken vp with your hand. Some put ten cray fifhes in a veffell full of vvater, which they couer and fet out in the Sunne for the fpace of ten daies, aterward they water the feeds they would fow with this water twice; once before chey be fowne, and the other cight daies after that they are fowne. By this meanes the feeds will not onely be kept fafe from birds, butallo from all other manner of bealfs.
To take away all harme which may come by little beafts, it will be good to drie; Agaisf litrle ypon the skinne of a Tortoife, all fich feeds as you intend to fow in your Gardens: seaffo. or elfe to plant in diuers places of your Gardens fome Mints, efpecially amongf your Coleworss:or elfe to fow annongft your por-hearbs fome Cich-peafe, or Rocket, or to fill the ground of your Kicchin Garden with Goofe-dung, tempered with fale brine, or elfe to fow the feeds in the firft quarter of the Moone.
New Oyle lecs, or che foot of the Chimney fowne all about in your Gardens, is Againg Snilet? good againt Snailes.
To keepe away Caterpillers, you mult water your hearbes with water whercin Againf catme hauc becene fteeped the afhes of the young hoots of Vines: or perfume your hearbes pillers.
and trees with quicke brimflone. Some ftecpe the feeds in the lee of fig-tree afhes, and to kill the caterpillers, doe caft vponthem the afhes themfelues : others like is better to plant a great onion called Squilla, or elfe ta burne toad-flooles that grow our of the nut-tree : or elfe fome great flore of garlecke without any head, to the end that by theftrong fimell which fhall rife thereof, they may die.

Columella maketh mention of a certaine and approued remedie in this cale of Caterpillers, which is, that when they will not be driuen away by other meanes, to procure a woman bare footed, hauing her termes, her bofome open, and haire about her eares, to walke three times abour the quarters and alleys of the hedges, or walls of the garden. This done, you fhall fee the Caterpillers fall vpon the earth, from the hearbs and trees bearing frut, neither more nor lefle, than and if by fhaking you beat down the raine or water from a tree : but in the meane time there muft be care had that this be not done at Sunne rife, becaute that then euerie thing in the garden would wither and pine away.
Againft fleas or If you water the fleas or lice with ftrong vinegar, mingled with the juice of Henlice.

Againfl grals. bane, wherein the water of hemlocke fhall haue boyled, or with water wherein Ni gella hath bin fteeped: or with the decoction of muftard. feed; they wil die flcurtly.

Gnats will be killed if you lay rue in fleepe, and fprinkle the water about the gar, den: or if you make a perfume of Galbanum, or of Brimftone, or of Cummine, or of ox-dung. If you would driue away flies, make a perfume of Coloquintida, or warer the place with water wherein it hath feeped.
Againft the pal. To gather together all the Palmar-wormes and other like beafts into one place,to mer woorme. the end you may kill them, you mufl fpread in the place, efpecially where they abound, the guts and intrailes of fome fheepe newly killed, the fame wade nothing cleane, but ftill full of filth and dung : then two daies after, you fiall find them all come together vnto the entrailes.
 weazles. fow them neere the place where the Weazles haune, for by this they will either be killed or caufed to run away if they eat it : Some fay, that if your catch a Weazle and cut off her taile and cods, and let her goe againe aliue, that afterward there will be no moe feene in that place.
Againf Ants.
Anes will fle away if you burne thofe which you take, or if you annoint the barke of the tree which they vfe, with oxe-gall; or with the decoction of Lupines: or elfe if you burne in the garden wild cucumber : or if one clay ouer with white or red clay the tree where they are : or if there be put at the mounh of their hole, fome organic and brimftone together.

You fhall kill wormes, if you perfume their holes with the fmoake of oxe-dung,or if you water them with pure lee. You fhall make them come out of the ground if you water the place with the decoction of the leaues and feed of hempe : or if you fow lupines in the ground where you fee great fore of wormes: it is true alfo that you fhall rid your ground of them, it you eare your ground during the cime of great heat, for then you hhall find them in great numbers vpon the face and vppermoft part of the earth, and fo you may gather them into bowles to giue them to your hennes, which thereby will become fat, and lay great fore of egges.

You fhall kill fnailes, if you frinkle them with the new lees of oyle, or with the foctof the chinurey.
Againf Graf: : Grahoppers will doe no great hurt vito hearbes, if they be vvatered with vvahoppers. ter vvhercin Wormewood or Leekes, or Centaurie hath beene flamped: Alfo to kill chem, you muft boyle bitter lupines,or wild cucumbers in falt brine, and fprinkle them therewith, orelfe burne a great fort of Grafhoppers in the place from whence would drive them, for the fmell of the fmoke doth kill them: but and if you would
ABM: … - banifh them altogether out of your gardens, you mult hang vp fome Bats von your higheft trees.
agginfl: Fieid Youfhall driue away field-Rats, if you caft in the canicular, or dogge-daies, the rats. feed othemlocke into their holes, together with hellebor and barly meale : or elfe if育:
you fhut the mouthes of their holes with Bay-tree-leaues, to the end that when they would come forth, they may be forced to take thofe leaues in their teeth, and fo by the onely touching of them they are killed. Or if you mingle amongft their meat fuch as you know them to be delighted in, quicke.filuer, timne, or burns lead, blacke hellebor, or the f cum of yron : or if you make a perfume of che bodies of their kinds: or if you boyle beanes in any poyfoned water, \& fo lay the faid beanes at the mourhes of thcir holes, which vpon the finell thercof will quickly run vnto them.
You fhall alfo kill Rats and Mice with paftemade of honie, coperas, and ftamped glaffe mixt together, and layed in places where they haunemoft.
Moules will neuer caft in thofe gardens where the hearbe called Palma Cbrifti doth grow eicher of it owne accord, or purpofely fowne : likewife you fhall either kill them or driue chem away, if you lay at their holes mouthes a Walnut filled with chaffe, brimftone, and perrofin, and there fet it on fire; for by the fmoake that will come of this nut, the Moules will be killed, or elfe run away : or if you lay in diuers furrows aboutche garden a fmall ball of hemp-feed, it will be a ler to keepe chat there come not any into thofe grounds out of other, and withall will driue away thofe which are there alreadic. There are three waics to take chem : the fiift is to ftand as it were vpon your watch about Sunne rife, neerc vntu the place where they haue lately caft vp the earth; for this is ordinarily the verie houre that they caft in according to their cuftome, and thus may yon throw them verie eafily out of their holes with a pickaxe or fpade. The fecond way is, by caufing water to run into the hole where they haue newly digged ; for when as they once feele the water, they will not flay to come forth and faue themfelues vpon fome greene turffe or other, and there you may either take them aliue or kill them. The third way, Take a liue one in March, when they are a bucking, and put the fame into a verie deepe and hollow bafon at night after Sunne fer: burie the faid bafon in the earch vp to the brims, that fo the Moules may eafily tumble into it, when they heare the captiue crie in the night e cime; for all fuch as fhall heare her (and this kind of cattell is ofa verie light hearing) comming neere to their food, they will into the bafon onc after another; and by how many moe goe in, by fo much will they makethe greater noyfe (not being able to get out againe) becaufe the bafon within is fmooth, fleeke, and flip perie. Some lay garleeke about their holes, or onions, or leekes, and thefe make fuch a fmell as that they either driue them away, or kill them.
All manerof Serpents are driuen away with the perfume of Gallanum, or of harts- Ingainf Serio horne, or of the root of lillics, or of the horne of a goass claw; or of hyflope, or brim- pentse. flone, or pelliterie, or an old Thooe-fole. It is good alfo to plant in forie part of the gardens an Elder-tree, or an Alh-tree; for the flowres of the Elder-trees by their flinking frell doe driue away Serpents : and the fhade of the afhe doth kill them: In like fort it farech with the pomegranat-tree, whofe fhade (as we haue faid before) driueth away Serpents. It is good likewife to plant fome one or other bough of ferne in the garden, becaufe the onely fmell thereof doth driue them away.
You fhall driue away fcorpions, if you burne fome of them in the place whence Againf Scon? you would banifh them : or if you make a perfume of veriuice mixt with Galbankm, pionso or the fat of a goat: or if you plant in your garden fome litcle Nut- tree.
The perfume of Iuie will caufe ehe Reremoufe to abfaine flying in your garderio Againf Bats: 5rogges will hold their peace and not crie any more, if you fet a lanterne with a dgainf Eroes candle light, vpon the fide of the water or riuer, which compaffech the garden.If you burie in any corner of your garden the gall of a goat, all the frogges will gather thither, and fo you may eafily kill them.

Сния. LXI.<br>Of the Honic-Bee, the profit rifing thereof, andof chusing<br>a place to fet them in.

.Vtif the greatelt part of the profit of a farme depend and hang of the keeping of cattell, I dare be bold to affrme, that the fruitullelt thing that can be kept about a Countrie-houfe is Bees. Indeed chere is fome paines and care to be taken in chufing,gathering togecher, holdıng, feeding, watching and keeping of them cleane in their hiues: but withall, what!o great, rare, and fingular a commoditie haue we as the vvaxe which wee enjoy by the Bees: yta what fay you to honie it feffe, that their admirable worke, and no lefle profitable and pleafant for the $v$ le of man? Let it not then feeme ftrange vnto you, if we aduife the houfholder to giue eare and be carefull to kecpe Bees about his tarme, and therewithall teach him in a few words, what fhould be the ordering and gouerning of them and cheir hiues, and withall at what time and houre it is good to gather honie and vvaxe.

The houfholder therefore fhall firt make choyce for the keeping of Bees of fome fis and fecreet place in his Garden of Pleafure, in the bottome of fome valley if it be poofible, to the end they may the more eafily rife on high to flie abroad to get their food, as alfo for that when they be laden, they delcenid the more eáfily downeward with their load. But let vs fee to it efpecially, that the place be open to the Sourh Sume, and yer notwirlhftanding, neither exceeding in hear nor in cold, but temperate : and that the fame by hill, wall, or fome other rampart be defended from winds and tempelts, and fo allo as that they may flie their fundrie and feucrall waies for to get diuerfitie of paftures, and fo againe may recurne to their lietle cottages laden with sheir compofition of honie: and againe in fuch a place, as wherein there is great quantirie of Thyme, Organie, Sauorie, Iuie, Winter Sauorie, vvild Thyme, Rofemarie, Sage, Corneflag or Gladdon, Gilloflowres, Violets, white Lillies, Rofes, flowre.gentill, Bafill, Saffron, Beanes, Puppie, Melilot, Milfoile, and other fweet hearbes and flowers, wherein there is no bitternefle : and in like manner fufficient good flore of trees of good fmell; as Cypreffe. trees, Cedar-trees, Date-trees, Pine-trees, Turpentine trees, Iuie-trees, Mafticke-trees; and alfo, fruit-trees, as Almond.trees, Peach-trees, Peare-trees, A pple-trees, Cherrie-trees, and other fuch like: befides all this, maruellous grear flore of hearbes, and thofeof the rareif and leaft knowne, and withall fuch as grow in well tilled grounds and paffures, for thefe caufe them to grow rich in good vvaxe, as the wild Radifh, the wild Bell-flowre, wild Succurie, and blacke Pionie : and befides thefe, wild Parfeneps, and garden Parfeneps and Carors, Broome and the Strawberrie-cree are not altogether good for ro make honie: the Elme. tree caufeth chem to haue the flux of the bellie, as alfo the tithimales or fpurges Box maketh honic of a bad fmell, and which croubleth their brains that eat it, and yet notwithftanding profitable for them which haue the Falling-fickneflic. But if at any time you fhall chaunce to hatue any of your fockes to milcarrie, or to dye, by what chaunce fouer it fhall be, you fhall then by no meanes firre the combes more than cleanfing them from all manner of filth, and ake of the beft life hothie you can get, damaske Rofe-water, and the juice of Fenell, and mixe them verie well together, then with a bunch of Fennell dipt in the fame, firft (prinkle the combes verie well, and alfo rubbe the hiue within therewith, laftly rubbe the fone whereon the flanderh, with the fame that you did the hiue, and you thall be well affured that the firtt fwarme that rifech either in your ownor in any other mans ground (if it be not aboue a mile or two from you) will knit (without any other paines taking ) in that focke.

The place muft be clofed in with a verieftrong hedge, or elfe with good vvalls;
for feare both of beafts and thecues: for kine and heepe doe eat vp their flowres, and beat the dew off from the flowres, whereof the Bees fhould load them, and which is fo well beloued of the lietle prettic birds, yed and chat alfo, which falleth downe at the breake of the day infaire weather, and is purified on the leautes and flowers of the plants, hararbes, and wild trees: but of all came beafts, there is none that doth fo damnifie thefe litele prettie vvretches, as Swine and Guass: for the Goats waft their food, and jumpe againft their houfes, yea and ofentimes beat them downe : the Swine befides the wafting and eating vp of their food, ruubing themfeclues againft the hues, doe ouerturne them and the fears whereon they be fet : Theepe in like manner loofing fome of their lockes of Wooll vpon the hed ges, are caule that the fillie poore Bees now and then become intangled therein, when they labour to get cheir food, and fo leaue their carcafes for a pledge : hennes likewife have a gluttonous apperite towards them: Serpents alfo doe fomecimes take vp their Innes in their hiues: but to take away chis cafualtie at once and for euer, you muft plant Rue round abcut them in good quantitie, in as much as venimous beafts cannot by any meanes abide this hearbe.
Callamint alfo is verie good to be planted for the fame purpofes neere vnto the hiues, fo is alfo the hearbee Angelica or Gentiana, but aboue all things you muft be carefull to make your hiues exceeding warme, that is to fay, of what fluffe focuer they be made, you fhall on the out-fide daube them better than two fingers thicke with lime and Cows dung mixe together, and ouer them a vvarme coatootlong Ryeftraw, couering the hiue from the top to the bottome, and hanging fomewhat below the fóne.
Their place allo mull be farre off from the dunghill, common draughts or iflues, bathes, marhes, fernes, dropping, dirtie, and myrie places, which might hurt them with ill imells, and for chat thefe prectie beafts are deadly enemies to all filthineffe and vncleanneffe : bur rather let their place of abode be neere fome fmall brooke of water naturall and of it felfe continually running, or by art in fome chanell, that will conuey along thewater drawne our of fome vvell or fountaine, and this rundle muft haue by the edges flones or boughes of trees for the bees to light vpon.
But whatfoeuer the place is, whether in che garden of Pleafure or elfewhere (albeit we haue afligned this to be one of the fruits of pleafure to be gathered in che garden of Pleafure) it mult not be hemmed in with high walls on euerie fide : and yec if for feare of cheeues, you were difpofed to raife chem the higher, then you mult pearfe the wall fome three feet from the ground, and worke it with fmall holes, for the bees to flie through at, and fone twentie or chirtie paces off to build fome little houfe, if you be fo difofed, for him to dwell in who hath the charge of looking to them, and thercin alfo to put his tooles.

## Chap. LXII.

> Of the falbion of the Hiwes, and the manner of Setting them for Bees.


Place and ftanding for Bees being thus appointed, the next ching is according tothat farhion which may be molt convenient for the Councrie to make hiues. Some thinke, the beft are chofe which are made of quarters of fawne boards, vvide ynough, but not verie long: others you mult haue both long and narrow, that fo you may haue two forts of hiuces, that is to fay, greas and fmall ones: the great ones, for fuch as are to be imployed in the making of Honie, and the other,which arethe lictle ones, for fuch as are to fwarme and caft : the faid boards being fitted to gether with nailes, but yerfo as that one or two of the boards
may be lited $\mathrm{p} p$ when the honie is to be taken, or the faid hiues to be made cleane: the hiues which are beft and moft conuenient next vnto thefe, are thofe which are made of Barke and of Corke: and next vnto them, thofe that are made of Palme-tree and Sallowes, fuch as we fee in this countrie : the worft are thofe which are made of baked earth, for they fcald with hear in Sommer, and freeze with cold in Winter. If find thofe nothing conuenient which are made of dreffed ftraw, or of brickes : for the one is verie fubiect to the fire, and the other cannot be tranflated or carried from one place to ancher, if need fhould require. Yet thofe of flraw may veric well be indured and imbraced if they be well looke vnto, becaufeche Bee-garden is feldome within the danger of the fire; onely the worft fault they haue is this, that Mice are verie apt to breed within them, and to deftroy the honie as it is gathered, yet notwithftanding in fuch places where wood is fcarce, they are not to be refufed, neither in the cold councries, becaufe of all hiues they are the wai meft. There are alfo other hiues which are made of fplinted wands of haffell or fuch like plant wood, and they are efteemed the beft of all ocher, and are indeed the fwecteff, fafeft, and eafieft to worke in; provided, that they be trimmed, daubed, and chatched as is before faid: Now againe in your hues is a great care to be taken touching the proportions of them, for although the auncient allow but a cubit wide, and two in length, yet is a cubit and a halfe not amiffe in the bottome, and two and a halfe in length, for the largeneffe of a hiue (if it be not too vnreafonable) neuer doth hurt : and whereas fome ve to make two forts of hiues, a greater and a leffer, if you make but one fort, and thofe large ones, it will be cuerie way as good, for you fhall maliy times haue occafion to inlarge your hiues, but verie feldome or neuer to flraiten then, for all that curiofitie it felfe can fpeake againlt them that be grear hiues, is but onely this, that it is long in cafting, and caftect feldome, whercas, on the concrarie part, the little and fmall hiue cafterh more foone, and farre ofter, yet this is moft certaine, that one fwarme taken from the large hiue, is better than two fwarmes taken from the little hiue, bening boch more frong and more able for their worke, and a great deale more better able to endure Winter, nor is it the number of flockes which inrichech the farmer, but the quantitiie of the honie.
Moreouer, they muft be wide beneath, and narrow aboue, they muft be a cubit wide, and two cubiss high, drawne ouer and dreft on the out-fide with lime and oxdung mingled together, that fo they may continue the longer : Neither mift they be made as fome are flat atthe top, and thallow, but afcending pyramid wife, frmaller and fmaller till it come to the top, for thereby it buth fheddeth off the raine much better, and makeht the frames of the Bees a great deale ftronger. Thefe hiues you muft croffe-barre wishin with clouen ftickes verie well rubbed with fweet flowers, vpon the which the Bees mulf faftentheir combes; and thefe croffe. barres muf be in two places of the hiue, that is, neere to the top, and necre che bottome. They mul be fet vpon boards fitted for the purpofe, and that neere vnto fome vvall, but not clofe to it, that fo there may be fpace for one to goe about them and make them cieane : or eife you may fet them vpon fonse vault of fone or of bricke, to the height of three foot, and as much in bredth, layed ouer with mortar on euerie fide, and planted, that fo the lizards and ferpents, and other noyfome cattell, may not get $v p$ and clime thither for to hurt them.
But the beff and fafeft manne: offerting of hiues, is to driue chree ftrong ftakes into the ground, fo as they may ftand of one euen and juft height, and about two foot and a halfe aboue the ground, then vpon thefe flakes you fhall lay a faire large pauing.ftone that may reach euerie way halfea foot or more beyond the ftakes, and vpon that fone you fhall fet your hiue, for by that meanes neither Moufe nor other fmall vermine fhall get to annoy the hiues.
Moreouer, the hiues fhall be fo fet, as that there may be a diftance betwixt the one and the other, to the end that when need fhall require, to looke vnto any one forche making of it cleane, or any other thing, there may not any occafion be giuen solhake or rogge vpon the other, nor yee difturbe che adjoyning Bees: vvho doe
greatly feare when they are touched, leaft cheir workmanh hip of Waxe (which is verie weake and eafic to be (poyled) hhould be ftirred or broken. The fore-part, where they go in, muft be hanging fomw hat forwaird, that fo there may not any water or dew fall into it: and when as anie, by hap, flall fall in, chat then it may not fay, but find that as a readie way our: And for this caufe the Hiues mult be couered with fimall couerings and fhelcer, befides the fhade of leaues and boughes made taft thereto with morrar of earch for a band; and this will ferue againft che cold, (now, raine, and heat, alchough heat doe not fo much hurt vnto Bees as cold. Alfo you fhall with a clofe binding morrar daube che Hiue as clofe as may be to the fone, that if anie raine happen to fall thercupun, yer it may by no meanes finke into the Hiue, bult racher fall off, and fhed vpon the earth. And therefore behind the Bees as shey fland, there muft be fome building, or elfe at the leaft a wall, which may be vnto them in flead of a Sunnie banke againft the North wind, and withall, may keepe the Hiues in a moderate warmeh. And furrhermore, Hiues, though they bethus detended and couered from the cold by this building, yee they muft be turned vpon the Eaft in Winter, rather than vpon the South (becaulf if they were turned toward the South, they would be layd fore vpon by exceffiue hear in Summer:) to the end, that in the morning the Bees, for their earlier comming forth, may have the Sunne hot vpon them, for cheir betrer wakening; whereas otherwife the cold would make them heauie and flouthfull: and therefore the holes by which they paffic and repaffe, muft be verie litele, that fo chey may nor giue place for the entrance of much cold, and they will be fufficient great, if to be chere may but one Bee paffe. Againe, by this meanes it will be prouided for, that neither the venimous Stellion, nor the villanous Beecill, neither yet the Butcerflies, fhall poffibly enter to rob the Hiues and Honey-combes. And moreouer, according to the quantitie of Bees in the Hiue, you muft make in the fame hatch ewo or three holes, one fomewhat diftant fiom another, that they may paffe in thereby, as alfo for the deceiuing of the Lizards, which would, by reafon of their watch, kill chem as they came forth, if chey had but one hole in all. It is further meet, that the fhelter vnder which the Hiues fhall fland, be well appointed for litele open windowes, which you fhall Itop in Winter with Paper windowes, or Tyles, and that in fuch order, as that they may be eafily opened when the Sunne fhineth, and fhut after that the Bees are returned home into their Hiues : and yet there muft be holes in the faid Paper lights, that fo they may paffe forth along at cheir pleafure whither they are difpofed. Yerthis is a currofite feldomeor neuer vied amongf Beemafters: and therfore, in mine opinion, if you keepe them clofe, without any more than their ordinarie dores to paffe in \&out at, it wil be beft:and thefe dores would be made of a fine chin board, or a piece of an old worne trencher, cut in this maner and fo fixed into the bortome of the Hiue, on that fide on which the $\Omega \Omega \Omega$ Sunne moft commonly rifech: and all thefe dores you thall keepe open from the later end of Aprill cill Seprember : but afer, which is the dead time of Winter, you fhall'clofe chem vp, and keepe but one open at the moft, and that no bigger, than a Bee may well paffe through the fame.

## Chap. LXIII.

## Of what gualities and condations the Bees muft be.

doubtlefle, that Bees are bred of Bees, either of their blowings, or fome other matter of their generation : but the firft is moft likely, becaufe the firft combes which the Bee frameth, fhe filleth with her young, before fie labour for honey, and thefe young are at firft but Jitt!e bigger chan flye-blowes, white and long, and fo encreafeth till ic produceth a hape, which takech life in the combe, and then departech thence, and laboureth amongft the other Bees: yet being ftraitened in the Hive, and wanting roome co lodge their honey in, as foone as the warmth of Surmer commeth in, they with one confent depart the Hiue, and feeke out fome other place wherein to imploy their labours: and thefe are called the fwarmes, or encreafe of young fore, which the elder forks bringeth forth. But letting paffe thefe digreffions of the workes of nature, I will defcribe them as they are alreadie engendred; as, what be the properties of fuch as are fit and like to make good honey. 1 here are manie forts ot Bees: for fome are of a golden colour, cleare, fhining; and bright; orhers blaikifh,rough, and hairie; fome great, fome fmall; fome shicke and round; and others fpare and long; fome wild, and fome tame. But and if you would buy or gather together Swarmes out of the Foreft, to take their honey from them, looke and take good heed that they haue the markes following; as, thar they be little ones, fomewhat long, not hairie, neat, golden coloured, fhining and fparkling as gold, fpotted aboue, gentle and louing: for the greater and lenger that Bees be, the worfe they are; and if they be cruell, they are nothing worth; notwithftanding, that their choler and malice is eafily helped, if that otherwife they be well marked and fruitfull, by feeing them of : for in your of going to them, they become tame. But becaufe one cannot learne to perceiue and know if they hauc all thefe marks aforefaid, if he fee them not: if you buy them, before you cope for them, you muft open the Hiues, and fee whether they be well replenifhed, or not: and if you cannot looke vp higher into them, then you mult goe by geffe and ayme, and confider if there be good fore at the mouth, and whether you heare a great noife.and huzzing within; and further, if they be all retyred, and at relf : in putting your mouth to the Hiwes mouth, and blowing a good blaft into ir you may perceiue whether there be manie, or few, by the noife which they will pretently make when they feele the breath. Or where you thall make doubt of anie of thefe former fignes, there you thall take the Hiue from the ftone, and poife it vnder your arme, and according vnto the weight fo you thall chaffer for it : becaufe if you fee it is well replenifhed with Bees, and alfo verie heauie, then you may affure your felfe it is an excellent Stocke, rich both in Cattell, Wax, and Honey, and fo confequently worth your money: but if it be light, though it promife neuer fo manie Bees, yet it is but cafuall: for either the fwarme fell late in the yeare, fo that they wanted time to get their prouifions; or elfe the yeare was vnnaturall, and too moift, whereby they could not worke; or elfe the Swarme was weakes anic of which will hardly endure out the Winter following: and in that refpect the buyer ought to be verie heedfull of his purchafe. Now it is an old receiued opinion among $\{$ old Bee-mafters (how true I leaue to your iudgement) That thofe Bees profper beft, which are either giuen, or come by chance: Truly I would not perfuade anie friends of mine, that can get Bees at this reckoning, to goe to higher rate, for fure the eafineffe of the purchafo makes the profit fo much the greater, and in that refpect the faying is true, but no otherwife, I am fully perfuaded. Others are of opinion, that folne Bees thriue beft; but I would haue no man belecue it: for I neuer knew profit in difhoneftic; neither is it poffible that there can be anie bleffing giuen vnro an act of fo much wrong, as the taking away of another mans goods commeth to : yet this hath beene an old receined opinion, and for knowledge, not for practife, I relate it. It is good to buy them as neere vnto your abode as you can, and not in other Countries farre off from your dwelling place: for the change of their Paftures, Ayre, and Countrey, doth afonifh and amafe them: befides alfo, the further they are carried, the more they are pained in their Hiues. But and if they cannot be got, but by feeking farre for them, you mult conuey them, betwixt place and place, fome other way than by high wayes, and that the rather in the Spring than in Winter, as allo verie fottly,

## the Counirie Faime.

for feare of Thaking shem. It will be good to take them before day, and to carrie them away at night vpon his necke, or rather it is better that two men fhould beare them : for in the day ume they munt be lec reft, and haue giuen viro them fome fwees liquor, that fo they may haue to feed vpon, though they be kepe within. And when they are broughe to the place of their abode, you mult not open them vntill the nexe day at night, to the end, that after they haue refted all nighe, they may be the fitter to come torth peaceably in the morning : although yet it were beteer not to alter or change anie thing about them for the Ipace of three daies, but to fop vp the mouth with fome thinne cloth, vntill the Sunne haue fhone, and in the euening atter to open chem.
There is no fuch carefull heed taken in the chufing of thofe which are giuen, nor yet of chofe which hane beene taken or gathered in the Fields or Forefts, although I could aduife men to the contrarie, feeing the charges and paines are as grear about the bad as the good. Notwichftanding, when one gatherech thein, it is not poffible to makefuch choice as he would : and therefore he muft be content with that which commerh next to hand; and yet not to be negligent to purchafe and get the beft that may be come by, and to take goud heed not to mingle the goed and the bad together, for fo the bad would difhonour the good, and there would be a great deale leffe honey, becaufe of the bad and flouthfull ones which are mingled amongtt them. The gathering of then fhall be after this falhion: When you have found anie place, by which great numbers of Bees doe palfe (which is commonly in Woods and Forefts where Hearbes doe abound, and Trees of fweet fmeil, neere vnto fome fmail Rituer or Fountaine) you thall vee all diligence to find out the place of theirreft and abode, which you may eaflly learne after their hauing beene at water, whether it be neere or farre off, by the place whither they turne: then afterward, in the beginning of the Spring, you muft take Balme and Thyme bruifed, with other fuch like hearbs which Bees loue, and therewith annoint your Hiue fo throughly, as that the fmell and iuice thereof may ftay behind: after thar, you fhall make the Hiue cleane, and fprinkle it with a little honey; and hauing thus handled it, you frall fer it downe in the $W$ oods or Forefts, neere vnto the Springs, and when it is full of Bees, you fhall carrie it home. And thus much of gathering fwarmes of Bees.

## Cнар. LXIIII.

## Of the manner of zouerning Gar den Bees.

He Lord of the Farme, or Farmer, hauing prouided Feeding,Grounds, Hiines, and fic places for Bees, as allo hauing bought or gathered good flore of $S_{\text {warmes to replenifh his }}$ Hiues, hall be caretull to affoord them a more diligente and attentiue kind of gouernment, and ordering, than anic ouerfeer or gouernour of other Cattell doth allow vnto the faid Cattell vnder his charge : the caufe is, for thar the Bee ismmore difcrect and induftrious than any other kind of liuing creature : yea, feeing the harh a kind of wifdome comming neere vnto the vnderftanding of man, therefure fhe looketh for a more carefull manner of vfage and carriage towards her from them that are her gouernours, and therefore cannot abide chem to be mockers, llutiifh, or negligens, forthey cannot abide to be niggardly or filthily entreated. It mult therefore be his condition that fhall haue the charge of them, to corifider their mianners, and manner of liuing, and accordingly to The maxwas frame himfelfe chereunto in the beff fort that may be. They hane a King whom they of Deses obey as their Soueraigne in allthings, accomplifhing and fulfilling whasfocuer hee Thall giue chem in charge, whecher it be to goe forth, or to returne home, or to ftay within: and they ateend him alwaies in companies wherefoeuer he be: they comfore
him if at anie time he be ficke, and doe keepe about him if he cannot flie : not one of them is negligent and flouthfull, but cuerie one readie and quicke to anie kind of worke. Some of them gather the Rofes, and bring home what they get of flowers and fweet fmelling leaues, vnto thofe which flay within the Hiue making Honey: others are bufie in making Combes, and building of little Cabbins; fome makeHoney, and others attend other matters and vocations: fome lay to their hands to the foftening of Waxe, and temper it fo well, as that making thinne leaues thereof, they therewith build vp and frame them Celles and Cloyfters: others with great labour doe funder the groffe and droffie fubftance, and make readie a place for euerie fort of Honey. Some of them with their paine and diligence doe keepe cleane the Hiues, which notwithftanding are neuer defiled by anie of their owne dung, for alwaies in flying abroad they anoid their excrements in flying. Some there are whichordinarily doe nothing but keepe watch and ward, to the end, that to the vetermoft of their power they may withftand whatfoeuer thing may annoy and hurt them. They carrie out fuch as die within the Hiues: but when their King is dead, they firre him not from his place, but crowding one vpon anothers backe abour him, it feemeth that they lament and mourne, as they make fhew by their noife and humming, and that fo vehemently, as that if their kecper doe not looke vnto it, and take him from vnder them, they will fuffer themfelues rather to die for hunger, than they will forfake him. To be briefe, eueric one of them is fo diligent at his worke, as that they cannot beare it, that anie one fhould be in their companie that fhould not be occupied in doing fomething: and this is the caufe why they drive away the Drone, which will neuer worke, neither is good to anie thing elfe, but to waft the honey, and deuoure it. They hate, aboue all things, euill fents : they ncuer flie againft the light, nor vnro anieffent, orbloud, or fat, but content themfelues with leaues and flowers onely, which haue a fweet fmelling iuice. They take delight in pleafant and yoodly Songs : whereon is commeth to pafte, that if they be fcattered abroad, they will be called together at the delightfull ringing of fome Bafon, or fmall Bells, or in hitting the hands in a foft and eafie fort one againft another. To be briefe, their fafhion and manner of liuing is(as it were) wonderfull in mature : but giuing ouer all further defrribing of them, I will content my felfe in deliuering the conditions and duties required about their ordering and gouerning.

## Сняр. LXV.

## The order of gouerning Bees all the yeare long.

Hofocuer he be cherefore that hath the charge and ouerfight of the Bees; muft be carefull firft of their paftures (whereof we haue made mention before:) then he fhall diligently looke vnto their Hiues twice or thrice a monech, beginning at the Spring, and concinuing till Nonember:for there is not that time in the yeare wherein they fand not in need of fomeching: and if they be well ordered, they will continue eenne yeares. They muft be opened about the monech of March, and the Honey-combes made cleane with a verie ftrong and folide feather, when as chey cannot be come by with the hand, that fo, whatloeuer filth is gathered there in the e ime of Winter, may be caft out, and the Spiders webs, which fpoyle all the Combes, may be taken away: aferward he fhall fmoake them all with $O$ xe dung burnts for this dung, by a certaine affinitie, is gratefull and well liked of Bees. But in the meane time, before he handle the Hiues, he flall be well aduifed, that the day before he haue not had to deale with his wife; that he haue not beene drunken; and that for the prefent he come not neere vnio them, without being wafhed, madecleane, and well apparrelled: in like manner hee muft abftaine from all meats shat are of a ftrong fmell, as are all falt meats, and fowfed ments, and
all ehings being ftrong of fent, as Garlicke, or Onions, or fuch like things : and contrariwife, let him carrie in his mouth fomething that hath a good fnell; for by this meanes they will loue him fo well, as that he may handle ther Hiues at his pleafure, and the little pretie birds will neuer hurt or annoy him. At the fame time(in as much as then they begin to multiplie and encreate, and to caft their fwarmes, which fo foone as they can flye, defire nothing more than to flye away, and not to abide with the old ones, and much leffe to become fubiect vnto them) it will be meet to keepe watch verie diligently, and that from after the morning tide is paft, till twis houres after noone, that fo they may not flye vnto fome other place. Wherefore if you can Kings of Bees, difcerne and fpie out their Kings, it will be good to take their wings from them, if they make fhew of themfelues of entimes, and feeme as though they would flye together with their companie; as alfo to caft duft vpon them, or elfe water, for by thefe meanes they will be kept from going away: fo that then they will not goe out of their owne yard, nor out of the limits of their owne kingdonse; neither will they fuffer their troupe to goe farre from them : or elfe it will be good, after that they are come forth, to aftonifh and occupic their minds with the founding of Bafons, or of the Thards of broken Pots, ringing forth fotely, in as much as by how much you found the ftronglier, by fo much they mount the higher into the ayre, and ftray the further off: but and if it be a gentle and low found, they in like manner doe ftay and keepe themfelues neere at hand and below. And if they proceed to fatten themfelues vpon the next branch of the tree, as a clufter of Grapes doe hang vpon their branch, you mult gather them with your hand, or with a trowell, into a basket annuinted with iuice of fweet Balme, or Some drops of Honey, and after fet it on the row with the other baskets : or elfe, to make a Morter difpatch, he may cut the bough or branch of the tree, and put it verie loftly into all thele Bees, which are within the drefted Bas: ket, or Hiue, the mouth of the fame hauing beene firft fprinkled with Wine : Then, after this, it mult be fee vpon a board vpon the ground all an end, the vpper part being kept fo clofe, as that the Bees may goe in no where but at the place which is open vnderneath. But and if this fwarme of Bees, or little Birds, be got into anie hole or cleft of the bole and bodie of a tree, then carrie thither a Hiue well annointed in euerie place, as alfo at the hole or mouth, with verie fweet fmelling hearbes; and draw it ouer this hole and entrance of hollowneffe, to the end you may inuite them to a banquet with the delightfomeneffe of this fmell, and with the better contentment to goe in to abideand dwell there. If they reft themfelues in a place where you cannot come to them with your hand, and fuch a one as is withall fomewhat vneafie to be dealt with, then take a pole, and tye to the end of it a Hiue fprinkled with good Wine, and hold it neere vrito this clew of Bees, and thus they will not faile to goe into it : then carrie them neere vnto the Hiues, for no doubt but they will goe vp and fettle themfelues in a fhort time. Or elfe, which is the beft, hee fhall hold, all readie, a new Hiue to receiue them, when hee feeth that the young Kings fhall be come forth with their young traine, which within a day or two will all be come together at the mouth of the old Atacke, and Shew by fufficient fignes and tokens, that they are defirous of fome place of their owne, and peculiar vnto themfelues: for then if he doe giue them one, they will reft contented therevith, and abide therein.

It is ro be knowne when this young hoaft will come abroad, by the noife and humming which they will make in the Hiue three daies before that they purpofe to come abroad, as if a campe of warlike men would rife vp and remoue: and for to know when they make this noife, he mufl lay his eare at cuening to euerie Hiue, that fo he may heare the noife and humming, when they make any.

And yet indeed this noite and humming is fomerimes a figne and token of fome warres amenem fighe or frife raifed betwixt them and fome other fwarme: which muft be well pre- Befo. uented; for otherwife by fuch ciuile warres and deadly fights all the whole troupe and companie will quickly be ouerthrowne and brought to nothing. This intended combat is taken vp with a bowle of cutc or boyled wine fet vnto them, or elfe fome
honied wine, or other fuch liquor, which by his fweetneffe is familiar to Bees, for thefe will appeafe heir furie. But yet and if you perceiue chat thefe skirmifhes are not thus

To kill the Kings of the Becs. ended, you muft make haft to kill the Kings of the Bees, which are the caulc of fuch feditions and tumuits. The manner to kill them, is to obferue when the whole troupe commethour of the Hiue, and is alreadie ferled vpon fonie bough of fome tree, and then to marke if the whole fwarme of Bees doe hang ater the tnanner of a clufter of Grapes vpon the branch; for and if they be fo, it is a ligne that there is but one King: or and if that there be mue, that yet they agree amongt themfelues, and therefore you fhall let them alone till they be in their Hiues. But and if the whole troupe be diuided into manie clewes, or round bunches, you need not then doubr but that there are manie Kings, and that they doe not agree together. And then where you fhall fee them gathered moft ona heape, and in greateft troupes, there you may learch and looke tor the King, annointing your hand with the iuice of fweet Balme, or with Honey, that fo they may not flic away when you fhall tonch chem; and feeke thus a. monglt them vntill you haue found the King, which is the author of all this warre, whom you mult kill and caft out. And thus you may difcerne and find out the Kings
Themart ksand fighes of the xings of the Bes.
orherwife you fhall quickly make an end of them, as it hath beenc of tentimes feene to come to paffe.
All the Summer they mufl gather Honey (whereof we will fpeake hereafer) and at che fame cime, eueric tenne daies, their Hiues muft be opened and fmoaked with Oxe dung, and afterward be cooled, by watring the emprie parts of the Hiue, and cafting thereinto coole water: and likewife be made cleane, and all grubs taken ous of them, if anie be therein : and after chis, lee them rowle and tumble themfelues vpon the flowers: and then you muft not take anie thing from them, that fo you may not annoy and become tedious vnto them too ofs, and fo caufe them to flye away in defpaire. In fome faire day, about the end of Autumne, you muf make cleane their Hiues, looking that it be hot alfo and calme: and if at this time there be found euer a Combe vngathered, and not pluckt away, which fometime was leane and thinne, you muft not therefore kill the Bees, as manie doe: but rather, to faue them, you mult fprinkle it with a brufh dipt in honied water, or in milke, hauing driuen thern rogether on a heape with the fmoake, keeping them clofe and fhut vp after this in their Hiue: for all the Winter you may not open nor touch them, bur keepe them clofe within, till the Sunne.beames breake forth againe for their comfort, and that well couered, ftopping wishour, whatfoever clifts and holes, with Mortar and Neats dung mingled together, in fuch fort, that there be nothing left open, but onely a way for them to paffc in and out thereat: And alfo this muft be carefully looked vnto, that although their Hives doe alreadie fland vnder couert, yet that furcher, they be couered againe with fubble and boughes, and fo much as poffibly may be, keps from Cold and Winds, which they feare and abhorre more than anic other thing. You mult forefee likewife, that neither Raine nor Snow may doe them hurt: and alfo make prouifion of fore of the iuice of fweet Balme, honied water, fugred water, milke, or other liquor which may be fit and conuenient for them; in whichliliquor you mult fteepe pure and cleane Wooll, whercupon the Bee fitting, may fucke out the iuice or liquor that is therein. And to the end that they may not endure hunger in the Winter, and that they may not need to cat the Honey vp that they haue made, and which is left vntaken from them, it wil be good to giue them,at the doores of their Hives, in little pipes or troughes made of Reedes, Elder, Iron, or Lead, fo prepared, as that the Bees may not drowne themfelues when they goc about to drinke, fome drie figges, flamped or tempered in water or boyled Winc: It will be good likewife to giue them fome Raifins out of the Frayle, famped and fprinkled with water: or elfe fome Corans, flamped with verie good Wine, and boy led together : or elfe fome drie Apricots, flamped with Honey, and mixed with boyled water : or of Pancakes made of verie ripe Corans, of the bell Figges and boyled Wine mixed together : or elfe to caft amongft them, in at the doore of the Hiue, fome fweet liquors, with Siringes, as Milke, and efpecially Goats Milke, as the beff of all the, ref, to beare out the fcarcitie and poorenefle of the time, vntill the Spring approach.
In the Cumbes there are found Drones like vnto Bees, but greater, which (although they be vnprofitable, becaure they gather no food or fuftenance, but eat vp that which others bring in) yet doe ferue for fome thing; for they hatch the young brood, whereupon come the fmall Bees: and therefore you muft not kill them all, bur keepe a certaine number of them, to the end that the Bees may nos grow flouthfull and idic.

## The Jecond Booke of

## Снар. LXVI.

## Of the remedies of the difeafes that Bees are fubiect unto.

The dijcafes of Beeso He Bee is fubiect vnto the Plague, in which cafe there is no more foucare troubled with the flux of the bellie in the beginning of the Spring, heir feed, where they are giuen to feed greedily, and with great ftomacks, as hauing fated all Winter : and they be fo defirous to eat of thefe new and young flowers, as Epeedily torefee eat of new Apples; and thereupon they die quickly, it it be not grow vpon plants: in fuch forr, as that in fome places of Italie, where the Elmes doe quickly helpe this flux of the bellie with the rindes or feedes of Pomegranus pow ned and fearced and aferward mixed with Honey, and fprinkled with goad powWine : or elfe with Damaske or Languedoc Raifins dried, powned, and mixed weth good fweet Wine, or with honied water, wherein hath beene boyled Rofemarie: or elfe with figges of Mareilles, which haue beene boyled a long time in water: all thefe giue them in puts or pipes of wood, to the end they may eat and drinke thereot.

Bees are fomerimes ficke, when as euerie yeare continually there is great ftore of Howers: for the Bees thereupon labour rather to make great fore of Honey than anie young Bees; and fo it commeth to paffe, that manie die of exceffuc toile and trauaile: and further, becaufe thole which remaine a:e not fupplyed with young and new ftore, they likewile die all of them. Wherefore, when in the Spring tinie the medowes and fields are filled with flowers, it will be good cuerie third day to flop vp the places whereat they goe in and out of their Hives, leauing onely a few little holes, but fuch as the Bees cannot get out at, that fo they may be turned from making of Honey; and that fo alfo, when they perceiue that they cannot fill vp all their IVaxen chambers with Honey, they may apply themfelues to fill them with young Bees.
Lice and Grubs. If Lice or Grubs, which are engendred of the filth in their Hiues, do trouble them,

Heat, or cold. you muft imoake them with a bough of the Pomegranat or wild Figge-tree.

Fighting betwixt joparmes

Cruel and fierce Bees.

## corrupted

combes. verie great heat or cold fumption, and become all dried away, after hauing endured a bearech our or cold. And it is euidently perceiued: for it is oftenleene, that one are within, and aliue, become all penflue and fad, after the manner of a generall nung: which when it happenech to them, they mult haue meat made of Honey boiled and beaten with Galles, or drie Rofes.
Yout fhall ftay the brawles betwixt fwarmes, if you caft vpon them fome fmall duf, or boyled wine, or honied wine, or other like liquor, which by his fweetneffe is common and familiar vnto Bees.
The Bees that are cruell and rigorous, will become tame and gentle, if you vfe to goc amongft them oftentimes.
Sometimes there is fuch ftore of Honey-combs made, as that for want of Bees they ftand emptie : whereupon it commeth, that they rot and deftroy the Honey by their rotcenneffe; and the fpoyle of the Honey caufeth the Bees to die. For to remedie this, you mult put two fwarmes into one Hiue, or elfe cut away the putrified Combes with a verie fharpe and well whetred toole.
The Butterfles, which vfe fomerimes to hide themfelues in the Hiues, and doe kill fies. the Bees, will themelues be killed, if when Mallowes are in flower, and they abounding in great quantitie, there be fet amongft the Hiues, in the night feafon, a high and narrow mouthed Tinne-pot; with a burning Light in the botrome of it,
for prefently all the Butceffies will hafen and fle thither vnto the light, and flying about it, will burne themfelues : for they cannor eafily, from a narrow botome, flye right vp , neither yet flunne and auoid the light, in getting themfelues farre off from it, feeing they are forcibly lept within a narrow fcantling, the pot it felfe being not wide, but narrow.

To kill Drones, which doing no good, deuoure the Honcy: When it fhall be neere Againf Droneso night, water the couerings of fome veffell, which you nall fee neere vnto the Hiues, with water; the Drones will all of them flye vnto thofe couerings to coole themfelues and quench their thirft, which they haue gotten by eating too much honey, and then it will be an eafie thing to kill them: and as for ftinging of you, you need not feare it, for they haue no fting at all.

## Сhap. LXVII.

## Of the manner of gathering Honey.

(8)Orthe gathering of Honey, about which there is fo much labour taken The gatheringe continually, jt is chiefely effected at three feuerall times of the yeare, of Honey. as Chortly after the Spring, all the Summer, and in the beginning of Aum tumne. But there cannot anie prefixed day or certaine tume be appointed for the fame, feeing it dependeth of the finifhing of the Combes: for and if you draw them out before they be throughly wrought, the Bees grow malecontented, and ceafe to worke anic more, by reafon of the thirft which they endure. The cime of gathering Honey is knowne, by the Bees their no more making of a great noyfe, bur turning the fame into a foft and low buzzing: as alfo, if the holes which are aboue in the veffels be flopped with Wax: if the Bees driue out the Drones, which are like vnto Bees, but a greater bealt, and alcogecher voprofitable, and withour taking of any paine; for they gather no food, but eat vp that which others bring in. The houre of taking the Combes, is commonly in the morning, for it is not good to difquiet and trouble them in the heat of the day:and this muft be done with two yron inftruments or kniues; the one whereof muft be long and narrow, for the cutting away of the Combes; and the other, for the feraping away and pulling out of the filth that thall be fallen into them. It will doe well to moiften theie two tooles oftentimes in water, that fo the Wax may not fticke vnto them, and that the Eees which fhall beabiding within, may not be hurt. The veffels may not altogether be emptied, and fo all the fruit taken our, but there muft be left reniaining (as it were)che centh part, or (as others fay) the fifth part, as well in the Spring, as in Summer; bue in Autumne two parts mult be leff, and the third onely taken, for by this meanes you fhall not much difcontent them: and withall, you fhall leaue aboundantly behind for them to eat and feed vpon. The gathering of Honey moft commonly vfed, and moft reafonable, is but to take the moft ripe Combes, and thofe which are beft perfeced, and withall, of them but two thirds. If the Hine be halfe full of Honey, then there is but the halfe of that to be taken away: and if it be vnder halfe full, then there muft be taken from it with difcretion proportionably. Furthermore, you mult make them come forth with the fmoake of Neats dung, or of a Wolfes bladder, or Galbanum, or wild Mallowes; and with the inice of this hearbe mult he be annointed which thall gather the Honey, to keepe him that he be not flung: or to make him bold, let him take atmaske with a pare of Spectacles fet in it to giue him light to fee, and let him alfo hane a Linnen cloth, clofe wryched about his necke and head, and gloues vp. on his hands, forto geld and handle them to his good contentment: or, which is better, let him haue a Linnen hood to compante and goc ouer his whole face, made of a moft fine and clofe-wrought Kall, like vnto Net-worke, for by this meanes a man fhall fee at his pleafure that which he goeth about to doe, and yet be free from

## The fecond Booke of

the danger of the Bees finging. But notwithftanding that you take from the Bees their worke of Honey and Wax, yet you muft not kill them, nor driue them farre away, if it be poffible, but to keepe them for to draw yet more profit out of them afterward: and when as yet there is no hope of good of them by reafon of their oldneffe, euen then you muft not vfe anie vigratefull crueltie, in fead of recompence, and murtheroully mafla cre them. In the Countrey of Tufcanie, in remembrance of the bountifulnefle of this poore cattell, it is forbidden vpon a great penaltie to kill Bees, fo long as poffibly by anie meanes they may be kept aliue. It will be good therefore, for their lafegard, at fuch times as their Combes are to be gelded, to fmoake them in fuch fort, as that they may withdraw themfelues fafely into fome corner toward the middeft of the couering of their Hiue, and nut to come forth : or elfe you mall make them come forth, the couering of their Hiue taken away, and a facke tied to the mouth of the Hiue, and after fmoaking the Bees from vnderneath, for fo they will betake themfelues into the faid facke, which nuft be faft tied and layd vpon the ground, vntill that the Honey be taken away at leifure. After this, the Hiue or Veffell mult be fet to the mouth of the facke, and the comering put vpon it againe, that fo the Bees may returne and enter into their hotife againe, to begin their worke anew: or elfe fer necre vnto the Hine which you meane to geld, another emptie Hiue, which fhall be perfumed and hung about with fweet fmelling hearbes, and it fhall haue a hole in the couer as bigge as ones hand made round, to the end that Bees may goe in at it, hauing made an end ot the building of their Combes, euen to the top, and downeward more than the halfe part of the Hiue : by this meanes you fhall take away, at eafe, fuch Honey as is in the Hiue, and not loofe anie part of it, feeing that it may betaken forth at anie houre that you are difpofed, without hurting of the Combes, and without molefting or troubling of the Bees, in fmoaking of them, to caule them to gather together vpon heapes into fome corner, or elfe by conftraining them to flye fome whither elfe. The Combes being takenaway, fhall be carried to the place whire you meane to make the Honey, and ftopping the windowes of this place, preuent the comming of Bees thereinto; for they will bufily fecke the treafure that they haue loft, and, if they find it, waft and confume it. And therefore, to cut off all meanes of ensrance for them into this place, you muft there raife a fmoake which may driue away them that fhall affay to come in. And this fmoake would be made of greene Wood, wet Hay, Rofemarie, or fuch like, which fendeth forth a fharpe and piercing fume.

Now, though this be the opinion of the auncient Bee-mafters, yet experience hath taught vs in thefe later times, that it is much better vtterly to kill and deftroy thofe focks from whom you intend to take your Honey, than thus to robbe them: for it is certaine, that thefe Bees, thus fpoyled of their wealth, and wantiny weather, flowers, and other meanes whereby to renew their ftores againe, doe forthwith become robbers themfelues, and fpoyle all the neighbour-Hiues which are neere vnto them; as allo they breed a ciuile warre and much flaughter amongft other Bees: and therefore it is better vterly to deftroy them in this fort ; either at the clofing of the night, when the Sumne is fet, and euerie Bee come home, you fhall gently take the Hiue from the flone, and fowfe it into a fowe of water, and there let it fland cill all the Bees are drowned, and then take out the Honey and the Wax : or elfe with a Fuffe-ball, or fome fharpe fmoake, fnoake them to death, and then take their wealth and difpofe it at your pleafure.

## the Countrie Farsme.

## Chap. LXVIII.

## Of the making of Hosiey and Wax.



Ou mult make your Honey the fame day that you haue taken out your To make Horey Combes, although they be warme and fomewhat hot. And for the do and wax. ing hereof, the Combes muft be fet one againft another in a Willow or Ozier basket, wrought verie cleare, and fafhioned like an Hypocras bagge, after that you haue once cleanied away from the Combes the feed of young brood, and all manner of other filch: and when the Honey flall be runne through the basker into a bafon chat thall be fet vnder it, you mult put it iaro an earthen veffell, which muft for fore fruall time be left open, till it haue done boyling and calting forth of his froth by flaying in the fame: this done, the pieces and lumps of Combes thall be taken our ot the baskec;and prefled, and there will Honey come out of them, but not fo good as the former, which niult be pur by it felfe, chat fo the pure, and that which is indeed verie excellent, may not be corrupted thereby. Afrer that the remainder of the Combes is throughly preffed our, and wafhed in fweet water, they fhall be caft into a Copper veflell with fome water, and fo fet vpon a foft fire to melt. This Wax thus melted, fhall be frained, letting it runne ous into water, and chen being melted againe, with water you Mall make it vp into what forme you will.

## Снар. LXIX.

## Of the marks of good Honey.

(2)He good Farmer makech gaine of eurrie thing, and by whatfocuer hee can perceiue neceflarie for the inhaunfing of his houfe. Now I dare boldly affirme, That there are few things found abour a Councrey houfe, which are of greater encreafe and aduantage than Honcy. Againe, wee fee what traffique the Spaniards make with it: who, through the barrenneffe of their Countrey, hauing no other meanes to enrich themfelues, doe kecpe a great number of Bees, to make much Honey of them. In like manner doe the inhabitants about Narbone; who fend amongf vs great quancities of white Honcy, which wee make ferue for our vfe. But I would aduile fuch as make a craffique hereof, that chey would nor gather anie Honey but thar which is good : for the labour and coft is no leffe to nourifh and keepe bad Bees, than to seepe thofe which are good.
The markes therefore of good Honey are, that the Honey be of a yellow colour, The marks of pleafant fmell, pure, neat, and fhining in eueric part, fweet and verie pleafant to the good Honge. taft, and yer notwithftanding this, hauing a certaine kind of acrimonie, or harpeneffe: of an indifferent confiftence betwixt thicke and thinne, hanging togecher in it felfe, in fuch fort, as that being lifted vp with the fingers end, it keepech oogether in maner of a direet line, wichour any breaking afunder; for it fhould argue it felfe to be cither too thick or too thinne, if it fhould not hang together, but breake, or elfe to haue fome ocher vnequall mixture : It muft nor be long in boyling, and yeelding but fmall Nore of fcum when it doch boyle: aboue all it may not exceedingly fimell of Thyme, though fome (as I my felfe doe know) doe greatly efteeme of fuch. And that which is gachered in the Spring, or Summer, is much berere than of hat which is gathered in low, fo that there accompanie it theother marks of yoodnes, fuch as chat is which the

Spaniards and men about Narbona doe fend vnto vs, being verie white, and fufficient firme and hard, and therefore better, without all comparifon, than anie other fort of Honey.

New Honey. OldWine.

Honev is beft at the botturse.

## The vertues of

Honej.

## The tearme of

 the Bees life.The diftilled mater of Henc)

Honey the newer it is, the better it is, cleane contrarie to Wine, which is more commended when it is old that when it is new. This alfo is to be marked in Honey, that as Wine is beft at the mid-Caske, and Oyle in the cop, fo Honey is beft towards the bottome : for by how much Honey is more firme and heauie, fo much it is the better, as being the fweerer.
The vfe of Honey ferueth for manie things: it prolongeth lifeinold folkes, and in them which are of cold complexion : that it is fo, we fee, that the Bee, which is but a litele creature, feeble, and weake, liuerh nine or tenne yeares by herfeeding vpon Honey. The nature of Honey is to refift corruption and putrifaction : and this is the caufe why Gargarifmes, to cleanfe and mundifie the vicers of the mouth, are made therewith. Some make a diftilled water of Honey, which caufeth the haire that is fallen away to grow agane, in what part of the bodie focuer it be.
Char. LXX.
The manner of preparing diuers forts and diuers coms.
pofitions of Hosey.
 Here is fuch excellent vertue in Honey, as that it preferuech and defendech things from purrifaction and corruption : which is the caufe, that when anie are difpofed to keepe Rootes, Fruiss, Hearbes, and efpecially Iuices, it is ordinarily acculfomed to conferue them in Honey: whereupon it commeth, that wee vee thefe names, Honey of Violets, Rofes, Rofemarie-flowers, Damaske-Raifins, Myrtles, A nacardıe, Bugloffe, and fuch like, which are made with iuice and Honey; of which onely we will fpeake inthis place.
The Honey of Violets, Rofes, Bugloffe, Mercurie, and Ronemarie. flowers, are all prepared after one fort: Take of the iuice of new Rofes a pound, of pure white Honey, firf boyled and fcummed, cenne pounds, boyle them all together in a Cauldron vpon a cleere fire: when thefe boyle,adde vnto them of new Rofes, yet greene, cut in funder with Scizars or Sheares, fonre pound; boyle them all vntill the ivice be wafted, ftirring them often with a ficke: this being done, ftraine them and put them in an earthen veffell for to be kept, for it is better and better afier fome time. Otherwife, and better, and ofer vfed : Stampe in a Morrar new Rofes, adde like quantitie of Honey, and fee them in the Sunne the fpace of three moneths, afterward flraine thern, and boyle the liquor ftrained out to the chicknefte of Honey. Otherwife, take equall parts of Honey, and of the manifold infufion of new Roles, boyle them all to the confiffence of a Syrrup; looke how manie times the more double the infufion of the Rofes is, by fo much the Honey of Rofes will be the better: and this fame is the moff fit to be taken at the mouth, as the firft and fecond are for Clyfters. Or elfe take new raw Honey before it euer boyle, or hauing but lightly boyled, and put thereto fome quantitie of fweet water, red Rofes that are new, and newly dryed in the fhadow, their white taken away, and a chird part of Honey, put them all together in a glafle-veffell, or carthen one, well glaffed, which being clofe ftopped, Thall be fet in the Sunne, and flirred cuerie third day :and thus you may fitly prepare Honey of Rofes and Rofemarie-flowers a great deale better than after anic of the former waies.
Honey of Myrtes is made with a pound of the iuice of Myrcle-tree, and two thes. pound of Honey, all boyled together vpon a fmall fire.

The honie of damaskes raifons is thus made : Take damaske railons cleanfed from Honie of datheir fones, fleepe them foure and twentie houres in warme water, and ater boyle maskeraijonss them to perfection : when they haue shus boyled, ftraine chem through a ftraincr verie ftrongly, and after that, boyle them againe to the chicknefle of honie.
CMel e Anacarainnm is chus made; Stampe a certaine number of the fruit A nacar. Fonie of the dia, and after leet them lye to feepe for the fpace of feuen daies in vinegar, butonthe fruit Anse cight boile them to the confumption of the one halfe aferward ftraine them through a limnen cloch : the juice that is frained out, mult be boyled with like quantitic of honie.
The manner of making honied water: Take one part of honie, and fixe parts of Honied wattro raine water, putall togecher in a lietle barrell, well pitcht and fopt aboue, that fo no: ayre at all:may enter in at it : aterward, fer is out in the hottef weather that: is; as in Iulie, but out of all raine, and leaue if fo about fortie daies, but wih fuch prouifo as: that you turne the barrell eurerie eight daies, to the end that the Sunne may workeion: all fides of it. To make it more effectuall, and of greater vertue, it will be good in quince time, to mixe therewith the juice of quinces, in fuch quantrie as that there may. be for euerie pound of honie, a quarter of a pound of jure of quinces. Some before they pur the honie and water together into the barrell;, boyle them eogecher vpon a cleare fire, or vpon coales without fmoake, they feun the honie, and boyle is to perfertion, which they gather by cafting an egge into it, which if it iwimaboure, then che honie is fufficiently boyled, but and if if finke, then it is not boyled ynough,
The Polonians, Mufcouites, and Enghifhmen, doe make a drinke hauing the A wine made forme of a honied water, which is farre more pleafant, and more wholefome chan mad. of boxie and ny mightic wines, and it is called Mede. They take one part of honie, and fix parts. ${ }^{\text {pater. }}$ of raine, riuer, or fountaine water, they boyle them together, and in boyling them, take off che fcum very diligently, and continue che boy ling cill the halfe of the vahole: be confumed: being cooled, they put it vp in a wine vefleill, and afteradde vnto it fix ounces of the barme of ale or beere, to make it purge and boyle vp, and withall they hang in the veffell a nodule or knot full of cinamome, pepper, ginger,graines of paradife and cloues : alfo they caft into the veffelt a handfull of Elder-tree-flowres : they fet the veffell in the Sunne in Summer time, for the fpace of forcie daies, or in Winter they fet it in fome caue vnder the ground. This kind of honied water is verie foueraigne againf quartane agues, ill difpofitions of the bodie, difeafes of the braine, as the falling ficknefle, apoplexie, and palfic, in which cafes wine is forbidden.
The countrie men of Prouence, and the Italians, doe make marchpaines of honie Marchpeimes of and almonds after chis manner: T Take white honie ehree pound, and three whites of bonico egges, beat all togecher with a woodden peftill in a bafon,till i grow vnto the colour of milke : afterward fet che bafon vpon a fire of coales, ftirring all togecher very carefully with the peffill, till fuch time as it become fomewhat thicke : then put therero fweet almonds flamped and fried, fuch quantitie as fhall be needfull for the making of it offone grod confiftence: being yet hot, powre it out vpon fome marble or polifhed table: make vp your marchpaine thereof, and it will be fingular good for them to eat which are in a confumption, as alfo to procure fpitting.

> C н а Р. L X X I.
> Of the markes of good Waxe, and the manner of preparing diuers fores of Waxe.

Ood Waxe muft be of a verie yellow colour, fmelling fweet, fat, light, The figne of pure, firme, clofe, neat, and purified from all filth. It is the ground of sood Waxe. other Waxes; called artificiall, as being by art made into diuers colours, as blacke, red, greene, and white Waxe.

Blacke

Brackersax: Greere wax. Fedroax. whese woux.

Blacke Waxe is made with athes of burnt paper; greene, by putting verdegreare vnto it; red, by putting the root of Alkanct vito cormon Wax, or the powder of Cinnabrium ; but white Waxe is made nany waies, but for the moft part, after this fore and manner : Mele Waxe in fome vellell fit for the purpole, afterward ftraine it from all männer of fuperfluities through a ftrainer; being thus flrained, fet it vpon a foft coale fire, in a grear skellec or veflell of copper, to keepe ic liquid and in heat: clofe thereby you fhall haue one or two great barrells, made after the manner of lee. cubs, full of water newly drawne out of the well, in which you fhall wet two boards that are round, flat, and halfe finger thicke, fafhioned like round couers or lids of pors, and in the middeft they thall be made faft to a litele flicke or woodden pin in manner of a grafpe, by which one may handle chen) : you thall dip the fame (firft well wet in water) in the veffell where the Waxe fhall be melted, and prefently atter you fhall pull them out tull of Waxe; and pucthem in the water tubs, where the wax will abide, that fhall have cleaued vnothem: you fhall gather this wax together, and; fpread cuerie peece by it felfe vpon hurdles couered with linnen cioth, in the greateft. heat of the Sunne, in the moneth of Iulie, and vpon thefe you fhall leaue it till to become white. In the meane time, while it thall thus he in the Sunre, it it happen that the heat of the Sunne be fo vehement, that it melteth the wax fo fpred vpon the hurdles, you mult w ter and fprinkle it often with coole water, \& by the fame means alfo defend it from the Bees, which will flie thither from all corners to get outche honie. Otherwife, hoy le the wax in water fo oft, as vntill that you fee it white: howbeit this manner of whitening wax is not fofure, nor of fo esfie charges as the fuft, for the often melting of the Wax, doth watt it verie much : but the drying of it in the Sunne, bringeth no great loffe, as you fhall beft find after proofe and criall made.
Tomake fearing candle : Take two pound of new Wax, a pound of good rofen, and a quarter of a pound of turpentine; mixe chem, and make fearing Wax.

The end of the fecond Booke.

# THE THIRD BOOKE <br> of the covntrie 

FARME.

## The Orchard, or Greene plot.

Снар. I.<br>Of the differences of Orchards, or Greene plots, and the inclofing of the Fruit-Garden.

2月3 cater Hereare three forts of Orchards or Greene plots, the one (otherwife called an Arbour) contriued with great bankes, and this is pointed out and prouided in a field couered with green gralle, and a fountaine in the middeft of 15 , and wrought into diuers plaine and enen plots and braunches, confilting of lofss, which are fuftained and borne vp with carpentrie or frames of timber, vnder which a great number of people may fit couered ouer head. Of this fort I haue feene at Bafill and manie other places in Germanie : and, to fit a place for this manner of greene plot, ic is requifite that it be cleanfed from all manner of fones and weeds, not fo much as the roots left vndeftroyed; and for the better accomplifhing hereof, there muft boyling water be powred vpon fuch ends of roots as flaying behind in the ground cannot be well pulled vp, and afcerward the floore mult be beaten and croden downe mightily ; then after this, there mult be caft great quantity and fore of turfes of earth full of greene grafle, the bare earthic part of them being turned and laied vpward, and afterward daunced vpon with the feet, and the beater or pauing-beetle lightly paffing ouer them, in fiech fort as that within a fhore time after, the grafie may begin to peepe vp and put forth like fmall haires; and finally, it is made the fporting green plor, for Ladics and Gentlewomen to recreare cheir firits in, or a place whereinco they may withdraw themeelues if they would be folitarie and out of fight.

The fecond fort of greene plots is that which our auncient Frenchmen, who firf wrote our Romane difcourfes and hiftories, haue taken and vied for a place of pleafurefir for Princes, and was called in auncientrime after the manner of a fojourning Tbe Joieurnine or abidine place, but now by the name of a beautifull profpect. Which befide the place. ftately building fingularly contrive? in partitions, diverfitie of workes, and moft The beautifuls faire windows, compaffed in with goodly water ditches, fed from continuall running Springs, duth containe an inner and bafe Court with gardens for pleafure and
fruits, with vnderwoods, warrens, firhponds, and whatfocuer goodly and beaucifull thing is wont to ftand about princely palaces.
The third fort of greene ploss, is that which we intend to trinn vp in this place; and it may fupplic the place of the fruit garden, for a houte refpectrng and looking to thrift, and to keepe a houthold for husbandrie: fuch a one as we haue here relolued to furnifh and fet cut cuerie way well appointed, and in which vee are more to regard profit, joymed with a meane and moderate beautie and comeciinefe, than any
vnneceflaric fumptuouffeff.
Therefore to goe on in our defigned courfe and inteuded plot, this place requireth, that next after the kitchin and flower gar iens, with their appurtenances, vve make readie and trim vp a greene plor for fruittrees, containing in it as much ground as both the other gardens, and that without any manner of othcr alleys of diufion betwixt it and the gardens, or in the middeftof iffelfe, than fuch diftanceand fpace, as muft of neceflitie be betwixt the trees, and whereof we will ip eake more hereafter, and without allo wharfoeuer other husbandrie, graffe, or other chings, whereof you might hope to make fome profit vnderneath, whether of hay, or any fuch other thing which would grow there: For the fruit tree would not have his fultenance purloyned or kept from it, by the tillingof other plants which might be feated abour it, neither doth it craue to be kept vvarme in Winter time, but onely tillcd and ordered according to his feafons, becaufe chat ocherwife it would yeeld no profit vnto the
owner thereof. owner thereof.
The fituation of the orchard would be vpon fome hill top, or fome lietle hill, rather than in a plaine ground: for befides that fluch feats hauc betrer ayre, more pleafant and delighrfome for contenement of contemplation and view, and diuers other allurements which will there offer themfelues; the tops of hills are yet more apt to containe greater number of fruit treses to be planted therein, than the plaine ground polfibly can: for fuch as fand in plaines, if they be planted any whit necre, do annoy one anocher wvith their fhade : the other on the contrarie fide (according as it vifeth more and mote from the foot) caufing euerie tree to our-looke his fellow, taketh away the difcommoditic or inconuenience of fuch ouerfhadowing one of another. It muftallo be planted fomewhat more vpon the North than vpon the South quarter, that fo it may minifter matter of rejoycing to fuch as fhall behold it outat the windowes in his beartie and jolitie : Indeed if it be plansed vpon the Sourh, it is more open vpon the Sunne, whofe heat is verie requifite for fruir trees, but then it would not ftand fo faire for profpect : befides, that it vvould be offended and hurt of the duff and filth of the ehrefhing floore when the corne is threflhe, if in cafe it fhould ftand neere vnto it.
In any cafe let it not fland vpon the North-Weft quarter, becatife it is a moft deadly enemie vnto all forts of plants, but principally of flowers, which it fingeth asifa fire liad paffed that vvay, and the caufe is, for that it commeth from the Sea fide, and taketh part with the North, vuhich is verie rough and fharpe. but yet not fo dangerous as that Norch-Weft vvind vvhich bloweth once a yeare, chiefly in the Spring, and fpoyleth the cherrie-tree-flowers and the vine more than any of the reft. Whereupon there arofe this Latinc verfe, Va tibi galerna, per quem fit claufa taberna. In any cafe let not the ground vvhereon you plant your orchard be marfhic or vvaterih, for the fruits growing vpon fuch grounds are not vvell relifhed, neither yes vvill they laft long: itmuft likewife be inriched one y care before thar it be caft and digged, to make any nurcerie chere, cither of feeds or fockes, and after it hath beene the fecond time digged and dunged, or marled, you muft let it reft \& digeft his dung 2nd marle : and in like manner pick our the fones that arc in it moft carefully. And as concerning the naturall difpofition and goodneffe thereof, it muft be fat in handling, blacke in colour, and vwhich murleth cafily in breaking and flirring it vvith yourfingers, not being hard, clayic, chalkie, or fandie. Yet if ir be fo that the fituation of your Farme lyech in fuch a foyle as is marfhic and vvaterifh: for cucric
man cannot make choice of his abiding;and it is a brauer repuration to the Husbandman to make a barren earch fruittull, than to make a fruittull ground pleafant : therefore (as I (aid) if your gruund lye low, ana be much tubied to wet and rottennefle, you fhall trench it diuers wales, aimoft in the manner of a Labyrinth, cutting one trench into anocher, in fuch wife, that the water nay haue a deicent or falling away into fome Brooke, Riuer, or other Dike, which as a Sewer may carrie away the wet, and keepe the Orchard drie: and allo you fhall bring from tome ocher Grounds, Lakes, or Ponds, grear flure of earth, mudde, and other compas, wherewith you fhall raile and heighten the bankes betweene the trenches, in fuch fort, that they may remaine and be farre from the danger of wafhing or ouerflowing of anic water: and thefe bankes you Ihall fake well wish frong Oaken ftakes on cuerie fide, and plant great fore of Oziers al: abour chem to matneain and hold vp the earch trom falling. Then, as foone as you fee thefe bankes firmic, and beginnıng to grow to haue a greene fwarth vpon them, you fhall plant your fruit-flocks, of eueric feuerall kind, vpouthe fame, and without all doubs they wil prupper and grow there as well as in any ground whatroeuer, as may be feene in diuers places both of this and other Kingdomes: :
The inclofure or defence vnto the Orchard Thall be either a hedge of Quicklet, which is in truth the molt pleafant and conuenient, thongh yet the wall be more profirable, as being more frong, and built in leffe e time, which alfo being planted and handfomely dreffed, affoordech not much lefle pleafure than the hedge: or elfe it you like it better, a ditch caft about it, with a Q Quckler hed ge e et vpoul the raifed fide thereof: but in this according as the fufficiencle and reuenues of the Farme will beare it out: yet alwaies prouided, that it be out of the way of che catrell, ard where no man can come, except he enter in at the gates and graunted, that the wall is the fureft kind of defence, as a ilo the ftrengeft, molt profitable, and perfected inleaft time. Befides, the wall, of all orher fences, is moft needfull for che Orchard, as well for the flrength, indurance, and fafe keeping of the fame, as alfo for the great profic which commerh thereby to all rraner of fruit which is planted, and plafht vp aganfl the fame, chicfly in thole cold countries where the Sunne is not altogether fo violent, nor foreadieto rupen as in thefe our warmer foyles of France, for it is moft certaine that by planting any daintie or tender fruit clofe to a wall, and fpreading his braunches open agai it the fame, which wich loopes of leather, or feit, toyether with frmall nailes, may eafily be done, faftning euerie principall braunch and materiall wig to the wall, it will doubrleffe pur forth as early, flower, knit, and ripen, being in a cold and hard foyle, as if it were in the warmeft and fertilleftearth which doth beft of all agree wuth its nature, as may be feene dai'y both in the cold and barren councriesot Fraunce, as allo in orher kingdomes much more Northerly and lefle beholden to the Suns warmeneffe. And hérein you fhall vnderftand, that the principall fruittrees which delight to be planted a gainft a wall, are peaches, abricets, nectaryas, all forts of fweet plumbs, cherries, ol iues, almonds, and fuch like, for che reflection ot the Sunne cannot beat or play vpon them too much, they are fo infinitely in loue with the fame. And in as much asthe Orchard is altogether dedicated and appointed for the matter of planting, grafting, and tranfplanting of trees in it: we will afligne out cerreine places wherein the nurcerie of feeds and the ocher of flockes may conueniently be appointed : which nurcerie of feeds thall be as a. well furnifhed fhop to afford new fore of planss,to furnifh the orchard at all a affaies and cimes of need.
We will firlt fow our nurcerie of feeds on that fide by which we go into the Orchard, and clofe vnto it the nurcerie of flockes, where fhall be planted wild ones, remoued from out of the feed nurcerie, to be atrerward grafted vpon in their time and feafon. On the other fide, we will plane fruis vpon nut kernells, and tranfplant and graft them after diuers waies. In thole parts of the two great void places where they are fundred che one from the orher with a great path, we will according to their kinds, fute out and fet out great trees : and at the end of them, we will pricke nut oziers, (o as they may for their betcer growth receiue refrefhment from fome (mall brook or water courfe.

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(925)Ertaine it is, that Trees grow and fpring out of the earth, either vvithout the vvorke and induftrie of man, or elic by his toyle and skill painfully imployed :of fuch as grow by the skill and induftrie of man,fome grow of feeds, that is to fay, of kernells, commonly called Pippins, or of other feeds, as ot Nut kernells, cherrie flones, plumme flones, \&c. being thruft into the ground: otherfome of fhouts and fmall twigges, branching from the root at the foot of the Tree, hauing their nourifhing roots, and drawing fibres from the full growne routs of the Tree, or elife of rhemfelues. Some grow of buds and bloflomes, as fiences: or of young braunches, or ot boughes : fome of the multiplying of branches, if efpecially the Tree be yer young and pliant : others are grafted one vpon another. We vvill firt intreat of the making of them grow in the feed Nurcerie of their feeds, and fo in order aterward vve vvill increat of ocher meanes of making Trees to grow.
For the ordering therefore of your feed Nurceric, and furnifhing of it vvith PeareTrees, Apule-trees, Quince-rrees, and orhers growing of leeds, you fhall caufe to be digged good and deepe, a greas quarter in a good earth and cherıhung mouid: and that if it be poffible a Winter before you fow them, to the end it may thereby become well feafoned, and you fhall almolt mixe amongtt is halfe as much dung as the earth comes to that you turne vp, that fo it may ripen and rot wvith the earth, and to be kept in grear ridges, vnto Cyder time, wvhich is in September and O tober. At vvhich time take the droffe of the faid fruits as it commeth out of the preffe,or a little after, fo that it be before the feeds be rotted or corrupted, and chafe and vvipe thim verie vvell betwixt your hands, then lay flac and fquare your plot or quarter, and chat good and clufe, and make it out into borders of the bredth of foure feet or thereabout; and making paths, by cafting vp the mould betwixt euerietwo, to the end that they may be vved vpon the one fide and the other vvithout treading vpon them. This being done, fow your droffe chere in fuch fort as that the earth may therewith be lightly couered, and then aferward couer it againe vvith the earth vvhich you haue caft vp in making of the paths or hollowed furrows betwixt the faid bor ders, and rake chem ouer afterward, that forthe droffic of the Apples may be vvell broken and fpred, not lying together on heapes. This is an excellent vvay for the fowing of much ground, and a grear deale of feed, becaufe ifone pippin come vp of a hundred, yet the husbandmans labour is faued, and his profic fufficient: bur in cafe where fuch plentie is nor, but that a man muff from an Apple or two get all the feed he muff fow, orthat by chaunce lighting of fome few elpeciall pippins, vvhofe like fluckeshe is defirous to be maifter of, in this cafe you fhall by no meanes beflow them into the earth thus rude and carelefly, becaufe it is to be vnderfood that the kernell of the Apple is a pleafanter and more fweeffeed than any other vvhatfocuer, and thereby inticeth vvormes, and fuch like creeping things, fooner to deuoure and eat them than any orher: therefore to keepe them from that mifcarriage, and to make them take foone, you fhall takea common garden pot, fuch as you vie to plant Gillo-flowers in, and filling it vvith fine mould vvihin three fing ers of the brim, lay in your feed, and then fift vpon them other fine mould till the pot be full, and fo let them fland where they may receiue both Sunne and Raine till they \{prout, and be growne at caft halfe a fọot aboue the earth: then hauing dreft a piece of earth, and manured it vell for the purpofe, you fhall, take thote young plants, togecher vvith the earth' and all yvhich is about them, and place them orderly in the new dref ground at leaft tenne foordiftance one from another, and there alfo you fhall place in comely rowes, fo as
eueric eye may diftinguifh the feuerall alleys that paffech betweene them : Other waies there be alfo of fowing of pippins, as on the bankes of ditches ncw caft vp, or elfe amonjft the quick-fet, or in frmal furrows digged and turned vp for the purpofe, and fuch like, bur yet noric is fo certaine as this alreadie rehearfed.
Otherwife; drie the forefaid pippins, and keepe them to the Winter following, and afterward about the later end of Nouember, or the beginning of the Spring, low chem in manner as hath beene faid, without cafting vp any earth out of the paffage furrowes betwixt the borders when you fhall meature them out : but rake them in a litcle wvith your rake, and chrow thereupon good fore of thornes and boughes verie fhordly after you haue chus fowne them, that the hennes cr hogges may not doe them any injurie. When the pippins are put forch of the earth, and growne for the fpace of a yeare, cake away the thornes, and weed away all the weeds from amongit them as oft as you can, and fuffer nor any one to grow vp in height with them, for feare that when you fhall come to pull vp aftiffe and ftrong growne weed, you pull not vp therewithall the litele pippin and feed of the Tree. Watêr them if the Sommer fhall fall out drie, and begin to vveed and lop them, to acquaint them with the hedgebill, and to keepe them fill fo bare of braunches, as that their Sap may be imployed wholly in the making of one faire and luftie bodie and flocke, and not many : afterward, pull them vp toward Winter, before they haue begunto bloffome, to tranfplant and remoue into the nurcerie of flockes. To caufe them to Thoot and put the fooner out of the earth, you mult fteepe their kernells in vvater or milke, for the fpace of two or chree daies. And you are here to vnderftand, that the feed of the Mulberrie-tree doth not grow fo hatily, or bring forth fo good fruit as the feed of the Figge tree.
For to fow the Elme, you mult gather his feed before the tree be couered with Tofon the ellue leaues, which is in the beginning of March, acf fuch time as it beginnech to be yel- treeso low : afterward, they mulf be dried two daies in the fhadow, and after that fowne in a fufficient firme ground an inch deepe, and watered often, it there fall no raine.
The Bay-tree mult be fowne a foot deepe in the ground, and foure feeds togegether: trantplanting and remouing it a yeareafer into fome other place: and in like care you are tu deale with all fuch like feeds, whecher they be of Cypers trees, Myrtle trees, or others.

## Ciap. III.

## Of plants comming of stones.

8Or your plants of fonie kernells, as ofOliue-trees, Cherrie-trees, Plum- The eftring of trees, Almond.trees, Peach-trees, Chefnue-trees, Pomegranat-trees (if Jonese. fo be that Pomegranat-trees be rather to be reckoned amongft them which haue ftone-kernells, than amongft the other which haue the fofe kernells) Abricots, and Date-trees; you muft drie the flones, as they come freth out of their fruis, which you meane to fee in the ground at fuch time as the Sunne is not verie fharpe, and in the thadow thereof: and fee that ir haue beene fleeped in milke or vvater three or foure daies before, and then thruft it into the earth. Buc this muft not be done but in the begimning of Winter, that fo they may firf breake forth in the Spring; for and if you putcthem into the earth before Winter, they may alfo frout and put forth before it come, and fo finding them young and teader when it commeth, rnay preuaile againft them to kill them, they not being ableto refift the rigour and roughneffe of the cold and frofts. But and if for your auoyding of Come labour, you will graft them in cheir nurcerie, that is to fay, in the place where you firft fee chem, and wherechey haue put forch, without remouing of them to any other place, thenfet in euerie hole, three, foure, or fiue fones : and if all of them
Gg fpring
fpring vp and take root, yet you muft let none but the faireft fland and continue to graft vpon in the place, and as for the reft, they would be pulled vp and remoued into fome other place.

In what feafon foener it be that you fer your flones, yet fee to it, that the ground be
good, and digged verie decpe, bur put much fmall dung amongft it, cither alone, or mingled with duft gachered out of the high waies, and fet them three fingers within the earth, and halfe foot one from another, watering them three times cuery moneth, efpecially in Sunmer when it fallech our drie, and weed them once a moneth. Efpecially fee they be fet ina faire foile, and open vpon the Sunne, if fo be you would haue a well-fed and pieafant-tafted fruit:for otherwife, ifyou fet them in a fhadowed place, though it be of a good foyle, indeed the fruit may be faire to looke to, but vnfaurourie ynough to eat. When the ftones are fet, and haue taken footing, and are become fomewhat pretily fed, pull them vp about Aduent which you nind to tranf(plant, and brcake off the points of their roots, and ftrip them of all their branches, before you fet them downe againe in their new appointed flanding: and know, that a double remoue doth make che wild to become free conditioned and better,bring ing vnto them great aduantage.

Great and grofe Nuts. Penches. Peare-plums. Almords. chefnuts. Abricots.

And as concerning particular properties belonging vnto cuerie fone, and how it mult be fet, it is to be knowne, that groffe Nuts, all manner of Peaches, wild Figges, Almonds, Chefnus, fmall A bricots (but efpecially and mof fingularly well the branches) becommeth free and reclaimed, being fer of a ftone, forefcene that they find as good and as faire a foyle, as the trees enioy from whence the fruit of the faid fones were taken.
The flone of the Peare. Plum-tree muft be fet in a cold place, a foot deepe in the ground, the point downeward, eueric one a foot from another, and this in Nouember in higl places, and in Ianuarie in low places.

The fone of the Iujube tree muft be fet after the manner and fafhion of the fone of the Peare-plum - tree, butit is long and flow in growing out of the earth.
The fone of the plum-tree mult be fet a fag ground, a foct deepe, and that in Nouember and Februarie, and they are to be remoued the fame time of the yeare, making their holes and pits neither too wide, nor too deepe.

The fones or nuts of the Pine-tree mult be fet in cold places, in Februarie and March, or about the fall of the Pine-apple, or fhorlly after, in pits well digged and of a good mould : the apple may not be broken by violence, or with any yron infrument to get out the kernell, bur you muft attend till it be opened, and fee vpon it gaping. And the Pine-nuts muft be fteeped three daies before you fet them, and then you muit fet feuen togecher. Some lay them in litele baskets, and cut them when they are fprung vp. They need no remouc, but and if you do remoue them, you muft looke in the taking of them vp, that you hurt not the chiefe and principall roots.
Small nuts and plums of all forts, peaches the frmall and great, and great abricuts,

Small Nuts.
peaches. Auberges.
Great Abricots, in whatfocuer good ground and pleafant foyle their kernells be fet,yet they grow not altogether like vnto the fruit of their trees whereof they were gathered : and therefore they delight rather to be grafted vpon their young flockes.
The fone of the Dare, which bringech forth the Date-ctre, muff be fet the greatend
The Date flone. downeward, ,wo cubits deepe in the carth, and in a place enriched with Goats dung, and the fharpe fide vpward: it defirech to be watred daily, and that there fhould cuerie yeare be falt fowne about it, and withall it muft be remoued.

The feeds of Limons, Citrons, Oranges, Affyrian Citrons, and fuch like, as hath bin faid in the fecond Booke, mulf be prickt downe vpon beds well prepared \&\& dunged about the moneth of March, \& the fharpeft end downward, halfe a foot onefrom another, and a finger and a halfe deepe in the ground: they loue to be much watered: after, when they are growne a foot high, remoue them to the foot of fome wall, open vpon the South: and in Winter, when the time is hoarie, couer and fauour them in fuch manner as wee haue fpoken of in the fecond Booke. As much may be faid of Pomegranar kernels, and Bay-berries, as you may vnderftand by the fecond Booke.
piftaces

Piftaces doe require greater diligence and delight to be fowne, as well the male pifactes. as the female, in a verie far ground and vvell cared, the backe turned to the Eaft, and this abous the firft day of Aprill: and at the fame time of the yeare you may graft them vpon themfelues, notwithflanding that fome doe graft thein vpon thealmondtree.
The peach flone would be fet prefencly after that the fruit is caten, there remay- The Peach ning fill fome fnall quantitic of the fleth of the peach about the fone: and for the tlazt, longer lafting and keeping of it, it louch to be grafted vpon the Almond-rree.

## Chap. IIIT.

## of the nurcerie for fockes.

 F you vrould haue a beautifull and pleaant fruit of your trees, it is noz ynough that you fhould onely fow or fet your feeds or ftones in a good Foyle, but if flandech you as much vpon to remoue them after one yeare into anocher place : for this tranflating of them doth fo delight them, and reviue their vigour and fipiris, as that they yeeld more pleafanc leaues, and a better fed and liking fruir. For and if you will beftow this faucur upon vvild plants, you fhall find them to become of a gentler nature, and farre more excelling bcautie. Whercfore when the Trees which fhall hane fprung vp of feeds or flones, fec or fowne, fhall haue come by fome litele nourifhment, and grow in the feed nurcerie, takc them vp vpon a new Moone, at night, with as many roots as poffibly may be; and if it happenchat any of them be fooyled or broken, cut it: looke vnto it alfo, that you doe not pull it vp when the Northerne wind bloweth (for this wind is an entinie vnto new fet plants) and fee them againe prefently, leaft the roots fhould Spend themfelues, it muft not be in a hot, cr cold veeather, nor in an exceffiue vvind, nor in raine, but at fuch rime wher it is calme and verie faire, chufing rather a cloudie day, than when the Sunne breaketh out hor, and the Moone being iu her increafe: but and if you fhould not haue the leifurc to remone then fo foone; or and if you would fend or carrie them fomewhat farre, bind them vp in their owne earth mingled vwith dung, and make it faft thereeo with vvoollen cloth or leaues. When as you take thern vp, marke what part fandeth vpon this or that quarter, to the end that you may fet them downe againe vpon the fame quarter and coaft of the heaucns, for and ifin remoning them you fet them in a concrarie foyle and fituation, in refpeet of the heauens, they will not thriue fo vvell: and that is the caule why thofe that buy new plants, moft diligently inquire in what manner of ground they ftood, and what afpeit of the Sunne they were moft open vino, that lo they may fee them downe againe in fuch like ground, and in the fame afpeet. True it is, that this obo feruation feemech too ceremoniall vnto me, and exceeding hard continually to be kept, feeing vve buy trees at Paris fometimes to plart, whofe firf fituarion we doe not know, neither can wve learne, and yet notwithflanding being planted, they ceafe not to thriue and profper. And againe, what caufe is there of any fuch ceremonie, fecing the Sunne vvhich is the nurfing father of all planits, doth vifit euerie day all the fides of the Tree, and that the ground wheeein is is planted, is no lefle nourifhing vpon the one fide than vpon the other? Thefe things weighed, about the third of December, you mult lay flat another plot, and make a furrowed quarter, where you frall lodge according to the order of a hundred, the fmall wildings, which you fhall hauc taken vp out of the feed nurcerie, cutting off the end and beards of all their roots, and which may be in any place about their flender litele flockes, and thas in a yood ground, yea much better ifit be poffible than that is of the feed nurcerie. Is is crue, that the furrowes muft be made according to the goodneffe of the ground, \& the nature of the tree : for in a clayis or hard ground, you muft make yourfurrows the depth of three cubites : in a watrie and marlhie place, of three feet onely. Some plants, as the Afh and Oliuetree, grow better in the vpper face and rop of the earth, than in the depth and lower parts of the fame. Set in order your young wildings in the faid furrows halfe a foor one from another, and there couer them, and leaue the fpacc of a foot betwixt one furrow and another, that there you may make paths to goe about vveeding with eafe, and paffe betwixt enerie two furrows. When thus your wildings are fer, you mult cut off their flockes clofe by the earth, and fill vp the paths with dung, without ener going about to hide or couer the plants in the earth, and fo foone as they grow, they mult be well wed round abour, and cleanfed from v veeds, and vnderdigged, or lightly digged fomerimes in Sommer round about, not comming ouerncere the roors in any cafe: and they muft be vaatered alfo on euenings, when it hath beene a verie hor day, and when they haue pur forth fiences for one or cwo yeares, then going ouer them all, leaue not moe than one fience to cuerie plant, and let it be the fleekeft, beft liking, talleft, and comelieft of all the reft, cutting the other off clofe by the ftocke. As thicte fiences thall grow on, fo ftill picke off cleanefrom them the fmall fuperfluous wood growing vpon them vpward, and euen clofe alfo vnto the ftocke : and this mult be done in March, or A prili, and then muft fome fmall prop or ftay be pricke downe ar the foot of euerie wilding, for to direct and guide it by, tying them both together with wreaths of graffe, but putting moffe or fome foft thing betwixt them, that fo the hardneffe of the prop may not gall it when it thall be growne chicke. And thus you fhall order and husband them till the time come when you mult remone them, if rather you make not choice to graft them vpon the place as they fland. When through forgetfulneffe you fhall have lete your wildings or plants growne vp offeeds for two or three yeares vntaken vp, you muft furrow them as hath already bin faid, but with decper digged furrows, and then you fhall net breake the roots fo much : and it will be fit and conuenient to cut off their branches vpward, as occafion fhall require.

There are found kernels of peares or garderiapples that have beene gathered from

Fruits growing ef grafts doe alwaies keepe a better form and foghion than the other comming of plants. trees that vvere fomet imes wild ones; or growne vpon trees, which hate alreadie bin oftentimes grafted, vvhich bring forth verie Itreighttrees, and alfo of comely wood, as if they had beene grafts from the beginning, not hauing any prickes or thomes, to argue them euer to haue beene wild. Such young trees if you will remoue them as they are, or plane them out of their nurferie, without other manner of grafting them, they vvill not faile to bring you good fruit for the tafte and eating, as alfo to make Cyder of, but the beft fruit doth alwaies come by grafting: for the fruit comming vpon grafting, doth alwaies retaine a better forme, and groweth more and more kind, and withall must the greater: but thet which groweth of a kernell doth chaunge as oft as the tree is changed which beareth it. And befides you muft note, that although all trees which haue a ftrong fruit, grow beter of kernels than of boughs; yet fo it is, that a late feed doth bring forth but an ill-fauoured plant, efpecially the faid feed being put befides his familiar and well pleafing ground.

## Снағ. V.

## Of Plants, Siences, and Shoors.

Plants of chera rie trees upon Siences.
 He little fiences of Cherrie-trees growne thicke with hairie roots, and thofe alfo which grow vp from the roots of the great Cherrie-trees, being remoued, doe grow better and fooner than vpon ftones: but then they muft be taken away and planted whiles they are young, as whiles they be but two or three yeares old: for when they are growne thicke they thriue not fo well : againe, if you ftay till they be growne grofle, in remouing of them you mult then lop them, and frip them cleane of their braunches, feting their
great end in the earth the depth of a foot, and after treading downe the earth, and pricking downe withall at the foot of cuerie plant a litede ftake to hold them faft, and to let the vvinds and vwhatlocuer other thing from harming them. But efpecially yon muft fee that you cut not fiences at any other time than in Winter: for that moifture and cooleneffe (during the time of Winter efpecially) is a meanes to conferue and keepe them, and chereupon alfo they grow and bring forth their fruit the better afterward.
The Mulberrie tree groweth after the fame manner of little fiences, although the The Malberrie: beft way of planting it be by taking a twigge thereof from the great branches which tree. are cut from the old tree, of the length of a toot, and fetting it good and deepe in the ground, and that in fuch fort, as shar the ground may coucr it, three or foure fingers, and this done, you muff fee that in Sommer it be watered diligently.
Filberss in like manner doe grow of final fhoots, which grow forth of the roots of Plants of Filo. good Filbert-trees that are well rooted : thefe fiences nuft not haue their braunches cut off when they are remoued, except they be growne great and ful of branches : but three yeares after that they are remoued, it they doe not profper and grow faire, you muft cut them clofe by the ground, and they will pur forth a bufh of freight fiences, verie fmooth and near, and of thefe you may chufe whecher you will fuffer the faireft onely, or all togerher, to grow vp and continue.

The fiences of the Oliuc-tree which you intend to tranfplant, muft be long and Plants of the faire ones, and full of groffe and thicke moifture, fo as that they may be taken and Olithe treeco grafped in the hand, and the barke thercby nothing hurr. They nuf be drawne ouer with dung mixt with afhes, the head and the foor, and after laid in the earth, as they vvere vpon the Tree, the lower end more downeward and into the earth, and the higher end more vpward and looking into the aire, for elfe they will not take at all: and this mult be a generall obferuation in tranfplanting of all manner of fiences.
The fiences of a vvell fringed root of a good plum-tree not grafted, doe yeeld, being tranfplanted, a fruit no vvhit inferiour vnto that of the chiefe and principall Plants of plum-rres, from which you haue taken them. But and if the old plum-trees be Plumme.trees: grafted, you muff alfo take grafis and graft them in other plum. trees, or wild cher-rie-trees, or vpon foure Cherrie-Trees, and not to vngraft fiences to tranfplant them.

Garden plummes and hartlike cherries doe not grow naturally, being planted of Freerchplumss? fiences, but defire rather to be grafted of grafts.

> C н А р. V I. of pricking downeor falening in the esrth of mall or great brauniches.
Prigs or plants taken from boughs or branches doe grow morefpeedily, and come to better perfection, than the feed of kernels, or the fetting of ftones, efpecially if it be put a lietle befides his owne ground and foyle, and of this fort are fig-trecs, quince- trees, and pomegranat-trees.
When a man is difpofed to pricke downe fome fmall fprig of a Mulberrie,Figge, The manner of Quince,Cornell, Pomegranat, and Plum-tree, or many fprigs of all thefe kinds, priching downe and their diuers Sorts, he mult cut them off berwixr the firt of Nouember, and the of pribis of later end of December, or a little after : and he muff fee that thefe his frigs be faire Mumberie, Figg and well fauoured ones, hauing a found lvarke, full of little eyes, and as thicke as a granate, and flicke, or thicker. He muft chute fuch as be ftreight and full of moyfure, confi- Plumme:treses. fting of one onely rodd, and of young vvood, as of fome three or foure yeares old, and that they haue alfo as much old vvood as they haue young: and they mult be Gharpened like a ftake for the value of the length of halfe a foor, but the bare mult
beleft on vpon one fide, that their end which you meane to put into the ground, muft be writhen and fteept in vvater: or elfe you muft cleate it a little in quarters, and make it fland vvide open and gape, vvith a beane in the cleft; or elfe fome peafe or little frall fone put in the middeft thereof, and fo pricke it downe in the earth.a foot deepe: or eife fet it in a little boxe of peafe full of water, and fo put them all into the ground together. The braunches mult be gathered vpon a tree that is a good handfull thicke, and hath bome fruit : they mult likewife be verie found, and they may be watered with a pipe, which goeth downe vnto the root. Obferue and marke wel the place, nature of the foyle, and afpect or fcituation of the tree from whence you haue gathered the branch, to pricke it downe on the fame fide, the like foyle and the fame fituation, and lay vpon it fome Elder-tree, if fo bethat you would nor haue it to fhoot vp into a tall tree, but to continue alwaies low : the braunches being fuch, they
will take the better, and not breake in the gathering.

Toplant the fig trec after the manner of the Genowais.

To plant the Figge-tree after the manner of the Genowais, which fhall beare fruit within three yeares after (and it may be thus planted all Sonmer tme) there muft be taken a Figge-tree branch that hath borne fruit two or three yeares, and that either hauing leaues and fruit vpon it os not : it mult be fharpened and cut biace, and pricked thicke about that end which fhall be fet into the ground, and afterward planted in a pit halfe a foot deepe; in fuch fort as that the top of it may abide aboue the ground with three or foure of the little eyes, and be couered with fraw for fixe daies, and watered everic one of thofe fixe daies: afterward let it be vncouered, becaufe by this time it will haue put forth; and in the end of the yeare, towards the moneth of Februarie, you mult cut off that which is put forth clofe by the earth, and after that it will thoot fo mightily as that it will bearefruit the fecond yeare.

## Chap. VII.

## Of the manner of making Siences for to plant.

 Or to make Siences of diuers forts, which you may plant and fet according as you fhall hane need, cut in the Winter fome great tree, if it begin to be yellow, or vvaxe bleake and pale, and whereof you defire to haue increafe: faw off fome flockes of the thickeft braunches into truncheons about the length of foot, and make a furrow in fome verie fat ground, and of that depth as that you may fet your truncheons in them endwaies, the earth caft vpon and couering them fome three or foure fingers, and prouidng that being thus fee in this furrow they may ftand halfe a foot one from another : couer them well and vvater them in Sommer if there be need, and weed them verie well : in fpace of time they will put forth fiences, which you may remoue when they haue taken root forne two or three yeares: but and if they haue not as then any roots, fet them good and deepe into good carth, that fo you may caufe their roots to grow. And thefe fiences will put forth other which will likewife ferue. Marke it, that all trees that put forth braunches, if you cut them in Winter, they will fhoot out aboundanee of fiences, all which will be good to be planted.
The barberie,redde corant, and goofe-berrie-trees, are planted likewife in Win-
Plants of goojeberíse; reacto rantadd barbefrietices. bites:
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the Countrie Farme.

## Силр. VIII.

## Of planting of fhoots of a yeares growth.

Ropagating or planting of Trees is fitteft for fuch as haue beene planted of fiences, and fuch as doe put forth fiences and friall fhoors from their roots: for this caufeth them to beare a more beautifull fruit, and more aboundantly, and more durable, becaufe they attract and draw a greater quantitie of inice out of the earth. For this caufe, Plum-trees, Cherrie-trees, Pome-granate-trees, and all other Garden-trees, that are wont to be gratted vpon wild ones, would be propagated or planted: for in as much as the wild one doth nut draw fuch and fo much iuice as the grafted tree doth require, it is neceffaric that it thould be planted. As and if a fweet Cherrie-tree fhould be grafted vpon a wild Cherrietree, or one that beareth verie fowre Cherries, fuch a Cherrie-tree would not continue and laft long, neither indeed will it beare anie fweet Cherries, if it be not planted a yeare or two after that it is grafted : and the reafon hereof is, becaule the wild Cherric-tree draweth not inice ynough to caufe the tree to grow, and withall, the iuice which it doth draw, is not fo familiar or fit to bring forth and nourifh fweet Cherries,
There are foure forts of planting or propagating: as in laying of fhoots or little To plant fours branches, whiles they are yet tender, in fome pit made at their foot, as fhall be faid manner of hereafter: or vpon a litele ladder : or in a basket of earth cied to the bottome of the branch: or in boaring a Willow chrough, and putting the branch of the tree into the hole, as fhall be fully declared in the Chapter of Grafting.
There are likewife diuers feafons for to propagate in : but the beft, is in the Spring The time of and March, when the trees are in flowers, and begin to grow luftie. The young plan- propagating. ted fiences, or little grafts, muft be propagated in the beginning of Winter a foot deepe in the earth, and good manure mingled amongtt the earch, which you thall caft forth of the pit wherein you meane to propagate it, to tumble in vpon it againe. In like manner the fuperfluous fiences mult be cut clofe by the earth, when as they grow about fome feciall impe which wee meane to propagate, for they would doe nothing but rot.
For to propagate, you mult digge the earth round about the tree, that fo the roots may be in a manner halfe layd bare; afterward draw into length the pit on that fide where you meane to propagate, and according as you perceiue that the roots will be beft able to yeeld and be gouerned in the fame pit, fo vfe them, and that with all gentleneffe, and ftop clofe your fience in fuch fort, as that the wreath, which is in the place where it was grafted, may be a little lower than the fience of the new wood growing out of the earch, euen fo high as it poffibly may be. If the tree that you would propagate, fhould be fomewhat thicke, and thereby the harder to plie, and fomewhat ftiffe to lay in the pit, then you may cut the ftocke almolt to the middeft betwixt the root and the wrythen place, and fo with gentle handling of it, to bow downe into the pit the wood which the grafts have put forth, and that in as round a compafte as you can, keeping you from breaking of it; afterward, lay ouer the cut with gummed wax, or with grauell and fand.
$\therefore$ If there be manie fiences and impes in the plant which you would encreafe, multiplie, and propagate, and that all of them by hap or cafualtie doe breake in propa. gating of them, the remedie will be, to fet the tree flraight vp , and to couer the roots againe with the earth chat was about them before, and which you had taken away, and then to cut all the broken fiences a little vnder where they are broken, and to leaue chem fo vntill another yeare, when they fhall haue put forth new fhoots, which the Winter following you may propagate: but and if of all thofe fiences there remaine fome one not broken, goe forward and propagate it, cutting clofe by the $\vdots$
ground
ground fome of the wrythen place, and of thofe fhoors which are not broken. In propagating of them, fee that you lay good quantitie of the fiences of your branches into the pit, couch them there verie round, couering them with the earth which your caft vp in making the pit, after that you hane firf mixt it with good fat mould, and tread it downe by litele and little aboue, and looke that none of the faid fiences doe rife againe after you haue fu troden them downe. This being done, fer right vp all the ends which hall come out of the earth, and that fo high as you can, and to let them reff for three or fourc yeare before you furrow them, euen vntill the roots haue taken earch, and be alreadie become full of hairie ftrings: you muff pricke ftickes about them, for to handfome chem, taking heed thar you breake them not. Three or foure yeares after you muft doe the earth from them, and thas in the beginning of Winter, and hauing cut in funder all he branches that haue put forth hairic roots, together with the flocke, that is aboue the wrychen place, you may plant eucrie one of them where you pleafe, to abide and continue chere for euer : not but that you may leaue fome one of them fill fanding in the fame place, if if be fit and good for it, and then you may not pull from it his hairie roots, as you due from the ocher. If thefe plants of grafs be growne chicke alreadie, and full of branches, then when youl haue taken them vp , you mult cur off the branches before you plant them, and then after they haue beene remoued, they are free and reclaimed, and all thofe which fhall grow of them afterward, will alfo become free and reclaimed. Againe, if you would prepare the ftocke from whence you propagated your fiences, and drefle it anew after that you haue cut off all his armes, let it alone with his cuts and grafts, and out of thofe cuts it will put forth other fiences, of which you may make other free and reclaimed trees propagating them, and taking them vp at the end of three or foure yeares. No fiences are propagated, bur fuch as haue no roots of their owne; for and if they had roots by themfelues, then they fhould be taken vp and planted againe with the fpade, and not propagated.

## Снар. IX.

## Of grafing young Plants, and otber Trees of diwers forts, diwers wayes and at divers times.

 Lthough the tranfplanting and propagating of trees maketh them and their fruit both verie faire and great, yet grating doth excell both them in this kind; for by grafting, not onely wild trees are flatered and ouercome;and thofe which were barren, made fruiffull; chofe of an ill taft, become delicate; the late bearing, bringing forth an early fruit; and thof which were early, to be late; but alfo the fruit growing thereby, are fairer and better fed : adde furcher, that grafting doch ofeentimes bring forth and beget trees and fruits of great admirations as we fee in A pples,Peares, and manicother fruits, which doealter both in colour and taft by the skill and cunning fhewed in grafting. Furthermore it caufech, that not only one kind is changed into another, and that diuers fruits doe agree together, and that vpon one tree; but that ftrange and forraine trees doe come vnno vs, and ours are conueyed vnto other Countrics.

There are fue principall forts of grafting: There is one way to graft in the barke; that is to fay, betwixt the wood and the barke; and this is but in trees that are great and of a good age, hauing a hard and firme barke: There is a fecond way to graft in a cleft, that is ro fay, vpon a flock that is clouen; and this muft be vled in yong errees, for old enes doe not eafily admit anie cleft in their ftocke : The third way is to graft in a whiftle, or pipe; and this is by taking the barke of one tree, cut in manner of a pipe, co be faftened to che bough of another tree : The fourth is to graft the bud in manner of a futcheon: And theffif is allo to gratt in the bud; buit of thefe in particular
in his proper and fit place. Before we goe about to gratranie thing, we muft conff der whecher the ground or councrey be fir for Pippins, or fontes, and what trees are beft laden therc.
The beft is eo graft the fame kinds together, alehough grafts and buds may take as well in trees of diuers kinds, but then fuch gratss come not to fo good an end, leeing it is impofible, that two differing fappes hould agree, fure, and carrie themfelues to well in all points the one toward the other, as and if it were in trees that are paires, or of like lore: Adde hereunto, that the fruit doch retaine and follow the nature of the tree whereupon it hhall be gratred, rather than the graft, and fo, after a fort, becommeth degencrate and efranged from his owne nature: which makeelh me, that $i$ regard not the grafts which are wont to be made vpon Elmes, for the frust that growech thereon, doth kecpe the taft and fauour of the Elme, which is not verie coothfoine: and yet I fet lefle by the grafis that are grafted vpon the Colewort ftalke, or the white Thorne, or Goofeberrie tree, Vine branches, Rofe trees, or fuch like : for befides that fuch grafts are noching durabic (as being made vpon a fubiect of a more feeble and vnfirme nature than the graft it felfe which is fet to them, wherefore the contrarie courfe is chat which is to be followed at all times in grafting) che fruits that come thereof, will be cither of no taft, or eife verie vnfauorie in the eating. Notwithflanding, although the hardeft and moff folide young plants be to be preferred in the matcer of gratting : yet fo it is, that if you graft in young flockes of a foft and moift mature; as vpon the Poplar and Beech tree, and fuch like, the graft will grow the fooner, bur there is not anic profit arifing: and fuch grafts are not dealt in by anie but by Gardiners, which cither affect curiofitie or deccit, as defiring to haue grafts ofen, rathcr than for anic ching elfe. It were better therefore to graft in trees of the fame kind, or elfe if you fhould graft in trees of diuers kind, yet to chufe thofe which are necrefl vnto the nature of the graft, which is the commanding partie, and whereunto the plant fhould verie ncerely affift and be commaunded by ; notwithftanding that it is the feeder of the othcr. And in anie cafe you muft graft the trees thas beare timely fuits vpon others that beare timely fruit, and the late fruits vpon the late fruits.
And although that by the afiftance and helpe of grafiing, men bring in infinice numbers of monfrous things as well in rrees as in fruirs, nuingling diuers kinds to gether, yet we muft nor thinke, that we may graft all forts of grafts indifferently vpon all forts of trees: for neither will the Oa lee admit the Peare tree, nor the Figge tree or Oliue cree: and on the other fide, the Pine tree, Firre trce, Cypreffe tree, or generally anie orher kind of tree that yeeldeth Gumme, Oyle, Liquors, Pitch, or Rofin, will not admit the coniunction or grafting of anie erree ypon them, as $P$ plutarch reacheth in his fecond booke of Table-calke, becaufe they are fat, and caft our an oylie humor, which (as all orher forts of oylcs) is enemie to all manner of planes:infomuch, as chat there is no readier a meanes to kill fuch a tree as you would haue to die, as likewifc Bees, than to annoint them with oyle: adde further, that the trees which yecld the Perrofine, haue fo thinne a barke, as that they cannot procure anie firme or faff tooting or meanes to recciue the fappe, or to incorporate chemf(elues with the grafts, which fhould be fer into them, as it fallech out with all wood which hath a verie moift and fott barke; for thereby is hindered the growing of the graft vito the parts which are vinder the barke. I adde yet furcher, that as men and women which are verie fat, doe not begec or beare children, becaufe that fpending the greateft pare of their nourihment in the groffeneffc of their bodie, they leaue no profitable fuperfluitie to make feed of; in like fort, trees which drop Pitch and Rofin, fpending all their fubffance and nourifhment about the making of themfelues great and thick, they accordingly grow tall and thicke, but they beare no fruitat all, or elfe buta a verie lirtle, and that late in the yeare before it come to his full ripeneffe : wherefore it is no flame for a frang er, not ro be able to liue there, where the home-bred is farce able to feed and maintaine himelfe. Trees that haue a verie hard and folide wood, as Box and fuch other, or which haue a verie ender barke, are noe fit for grafting: for the one by
reafon of their great tenderneffe, cannot hold the graft faft and cloíe ynough, and the other chrough their great hardnefle doe wring and choake the fame.
It is good to graft about the beginning of December, or fomewhat later, as in mid

The time of grafing.

Tegraft upona soild fiock. Ianuarie, according as the weather is enclining vnto ioldneffe, or orherwile, efpecially Hart-Cherrie-trees, Peare-trees, and fuch as beare carly frus. As for Appie-trees and Medlar-trces, it is better to fay tull from the end of Ianuarie unto the beginning of March, at fuch time as they begin to bud, for they are not fo forward as the ocher: And at the fame time alfo it will be good to gratt the thicke-growne young plants, betwixt the barke and the wood, with late grafts, or fuch as haue beene kept in the ground. All moneths are good and fit to graft in, whether it be by graft or bud, the moneths of October and Nouember exsepted : but the graft is commonly grafted in Winter, as hath beene faid, at fuch time as the fappe rileth vp into the trees, and they begin to bud, for then the grafts doe grow and talse a great deale better. You may graft likewife in Aprill and May, if the grafss be full ot litele eyelets, and that they haue beene kept buried, and their rops our of the ground in cold and fhadowed places. It is true, that the time of grafuing mult be meafured and iudged of, according to the countrey and qualitie of the Region; for in a cold Countrey it mult be later, and earlier in a hot: notwithfanding, to fpeake generally of all Countries, the fitteft time to grafr, is from the firt day of Febriarie vnto the firt day of May, taking regard to the nature of the plants: for fuch as haue moft juice, muft be fooneft gratted; and thofe later which are the drier, the Pomegranate and Figge-tree excepted, which although they be drie, will notwithftanding be grafeed verse early in the yeare.
It is certaine, that grafts mult be gathered in the decreafe of the Moone, to be grafted at the fame time of the old of the Moone, or elfe in the new, or when you Ohall thinke good, alwaies forefene, that the grafts be gathered in the old of the Moone, euen all the grafts that may be. It is true, that the graft and the bud doe take better in the new than in the old of the Moone, for the Moone is the Miftreffe of fappes, as of all other iuices, marrowes, and humours, or moift things; which fappes runne betwixt the plant and the graft, and bind the one to the other, being of more force and power in the new of the Moonethan in the old: by the like reafontieere is a precept to be obferued and kept in the matter of grafting, forbidding to graft, the wind blowing at South, becaufe fuch winds are fharpe and drying. On the contrarie, thoots mult be cut in the end of the Moone, if fo be you will haue them ro bring forth much more fruit: for being cur at this time, they haue their fappe drunke in with fetled abode, and by being notched onely, they do not fpend themfelues fo much as when they be cut off, their fap then being in his full courfe and freame. Notwithltanding we trie it daily by experience, that the gathering and grafting of grafts may be doneat any time of the Moone, as we will declare hereafer.

Some hold them for the beft daies to graft in, which are the next three or foure daies before and after the increafe of the new Moone: but their reafon taken from the fap binding, and inyning together of the grafts with the plants, and from the do. minion and rule of the Moone our the faid faps, doth fhut out the firft part of that opinion: it being certaine and true, hat the weaker the Moone is, fo much the weaker alfo are thofe inferior bodies which the hath power and gouernment of. To graft vpon the wild focke, hath more hold, and is more durable than that which is done vpon the reclaimed tree : but the fruit of the reclaimed tree is of a better tafte, as likewife the fruit of the graft will be which is grafied vpon a tree which bloffomerh and flowreth at the fame time, and hath a liuing and moilt barke, and the reafon thereof is verie apparant.
Tografitir the bark.

It is vied to graft in the barke from mid-Auguft, vnto the beginning of Winter; and alfo at fuch cime as the Wefterne wind beginneth to blow, being from the feuenth day of Februarie, vnto the eleuenth of Iune: but there mult care be had not to graft in the barke in a rainie feafon, becaule it would walh away the matter of ioyning together of the one to the other, and fo hinderit.

It is vfuall to graft in the bud in the Summer time, from about the end of May vn- To graftin the cill Augult, as being the time when the trees are ftrong and luftie, and full of fappe the scustchoon, and leaues, as in Iune and Iuly : that is to fay, in a hot Countrey, from the middeft of or Bud. Iune vnto the middeft of Iuly; but in cold Countries, vnto the middeft of Augult, after fome fmall fhowers of raine. And if the Summer be fo exceedingly drie, as that fome trees doe detaine and keepe backe cheir fappe, then you mult wait till that it be returned, and then to graft thereupon fo foone as the grafts are gathered, without hauing anie regard either vnto the new Moone, or to the old, whecher it be in grafting in the itocke, or vnto the ftocke. It is true chat is fpoken, that we can neuer hauc hope of much fruit by grafting in the new of the Moone, but in the old, beginning the firt day of the full of the Moone.
You may graft in the Cleft, withous hauing regard vnto raine, when the time is To grafi in the good and coole, as from mid Augult vnen the beginning of Nouember, for the cap clefto and warming fuffe which is laid vnto thofe grafts, doe put away the waft and fpoyle which the raine and blafting would otherwife bring vpon them. It muft likewife be confidered whecher the tree vfe to beare timely frut,or not, and fo to fit it with a graft of the like condition and qualitic. Againe, the time and feafon muft be confidered wherher it be forward, or backward; for the feafons are not in all yeares gouerned and carried by an vnchangeable and vnvariable line and meafure,for either they are more forward or backward, and participate oftentimes one of anothers qualitie. And in all the forts of grafting, it is a fingular thing, and of great preferuation for the graft, to keepe che plants with Cowes dung mingled with ftraw.
As concerning the particular time of grafting, it is better to graft at the cuening To graft in the than in the morning, and neerer vnto che roots than vnto the boughs, becaufe by how auening. much lower the graft is fet, by fo much the greater frength and force it receiueth from the moifture of the earth.
The furniture and tooles wherewith a grafer fhould be furnifhed, when he is dif-Gaffing tooiss. pofed to graft, are a Basket to lay his grafts in, Clay, Grauell, or Sand, or fome fuch Earth as is ftrong,to draw ouer the Plane where it is cut or clowen, and for the ioining of the Graft vnto it : Moffe, Woollen cloches, or barkes of Willow, for to ioyne and sye vpon the lute or earth before fpoken of, that fo they may keepe boch it and the graff faft: and Oziers to tie againe vpon the barkes, to keepe them firme and faft: gummed Wax todreffe and couer the ends and toppes of the grafts newly cut, that lo the raine or cold may not hurt them, neither yet the fappe, rifing from below, be conftrained to returne againe vnto the fhoots : a Hand-faw or little Saw to faw off the focke of the Plant: a litete Knife or Pen-knife to graft, and to cut and fharpen the grafts, that fo the barke may not pill or be broken, which often commeth to paffe when the graft is full of fappe: you fhall cut the graft fo long, as that it may fill vp the cleft of the Plant, and therewichall it mult be left thickeron the barke fide, that fo it may fill vp both the cleft and other incifions, if anie need to be made, which muft be alwayes well ground, neat, burnifhed, and without all ruft : two Wedges, the one broader, for thicke trees, the other narrower, for the leffe and tender trees, but both of them of Box, or of fome other hard and frnooth Wood, or of Steele, or of verie hard Iron,that fo they may craue leffe labor in often making of them fharpe, and they mult ferue to fee wider the cleft of the Plant: a litele Hand-bill, to fer the Plant at more libertic, by cutting off fome of his fuperfluous boughes, hauing a handle or helme of Iuorie, or Box, or Brafill, or fome other Wood which is ve-rie hard.
Trouble not your felfe with maruelling at them who graft their trees fo foone as they haue planted them, or very fhorly after: for the yong plant which can attrå\& \& draw but weakely and at hand any fubftance for it felfe, will hardly beftirre it felfe in fuch ftrong manner as to feed both the graft and it felfe, and therefore the graft cannot bue drie vp: and againe, in very deed the poore plant hath iniurie ynough to betaken vp froni out of his place, and to be remoued to another, without heaping vpon it this new or double chargesand therefore it would not be till a yeare after that it hath been tranf
tranfplanted, and then the next yeare it will beare fruit; for it neuer thriues well of his grafting, if it thriue not the firt yeare: and when as it hath (ped thus ilfauouredly, it will be beft to cut it off, and graft it againe, but lower.

Chap. X .

> How to chuse, gather, and cut Grafts, to graft in the
> cleft, Jlocke, and rind.
 Ou mult chufe your Grafts of hoots that are a yeare old or two at the mult(efpecially if you would graft them vpon old trees) which are verie new, and fo thicke as ones little finger, full of fappe, hauing grofle and thicke.fet eyelets, one of them being neere vnto another, for elfe they will not beare fruit fo plentifully: They mult alfo take fome part with the old wood, that is to fay, part of that which was a fience the yeare before, and part of the new, that is to fay, of the prefent yeare, fochat it muft be a piece confiting of two feuerall yeares: and you muft, if it be poffible, gather them from on high, euen from the top, or at the leaft from the middeft of the tree, and not of the loweft and thickeft of the boughes of Fruit-trees: and they muft be in their fappe, and taken from that fide of the tree which ftandech vponthe South, for the Eaft is not fo meet and conuenient for vs in this cold Countrey. They muft alfo be grafted in the fame fituation and goodneffe of foyle that they enioyed when they were gathered: for if you grate them in the contrarie to either of thefe, it will fall out with them as with plants, fo vnaduifedly tran/planted or tranflated our of a hot Countrey into a cold. Notwithftanding, we daily perceiue, that fuch ceremonies are of fmall effect, feeing that the Surne, which is che Nurfe-father, vifitech euerie day all the fides of your cree, and that the Earth, wherein it is planted, is not leffe nourifhing on the one fide than on the other.

You mult not gather your Grafts to plant,at fuch time as the trees begin to flower, efpecially if the trees whence they be gathered betimely fruit, as Cherry-trees, Plum. trees, Mediar-trees, Almond-trees, Peach-trees, and fuch like : but the time to gather them, is abour the foure and twentiech of December, and net fooner, for then the trees are full and well ftored of a mild and fweet humour. But and if you fhould be conftrained to gather them fooner, whecher it be vpon occafion to carrie them from one Countrey to another, or fuch like, ftay at the leaft till October, at which time the leaues will be fallen from the trees. The men of auncient cime obferued and made great ceremonies (as fome doe as yet) in gathering of Grafts ppon the ending of the Moone, and for the grafting of them prefently after the change: but we find by experience, that vpon all manner of daies they may be gathered and grafo ted, in what quarter foeuer the Moone is found in, as well for Fruits of fones, which are more difficult to graft, as alfo for thofe of Seeds, or Pippins, which are more eafic.
Tokeepe grafis.: If you purpofe to keepe them after they be gathered, efpecially fuch as you mind to graft in the barke (for fuch Grafts may be gathered without eyelets about the moneth of O Ctober) ficke them downe in the ground at the foot of a tree, lay them in a pit of halfe a foot depth, couer them well with earth, marking the place fo, as that you may be fure to find them when the time of grafting commeth. Some pus them in earthen pors well flopped and couered, which afterward allo they buric in the ground. But and if you would carriechem farre, you mult pricke their ends in a Turnep that is new gathered, for by this meanes their naturall iuice and humor will be preferued : or elfe wrap them about with earth, and with a cloth, or other ching, thiai they may be fit to be handled, as that they may be grafted, and not dried away by the wind and force of the Sunne : or elfe fhut them clofe betwixt two Canes or ajnixis

Reedes, putring them hereupon in honey. Some, the better to keepe them, lay them betwixt two Ty les, neere vnio fome Riucr, and coucred well with earth. If they be fent you from afarre, looke that you goe not about to graft them, before you haue firft Iteeped them a certaine time in water, fomewhat to refrefh their iuice, and to fet in frengith againe thcir febled and appalled force.
For to gather them, you mult cur them off betwixt the old wood and the new, in To gathergrafis. fuch fort, as that there be fome of the old wood vnder one of the old eyelets of the graft; and fo alfo, as shis eyelet or lietle eye may be behind the graft, when it fhall be iet out of the clets of the plant: but and if this eyelet or little cye be verie fmall, then it were better to cut it away. You may make of one long graffe ewo or three trunchions, of which alfo you may ar anie time make verie good grafts, and fo lee goe that 0ther with partie woods, beginning at the greaceft eyelec of the fame, and making incifion cloie vnder it, to fit it,for to be fee in the flocke.
In cutring your graft, mike incifion vpon the one fide and vpon the ocher vpward To cut grafto on high : lee it bewell taken downe and fquared, that fo it may the better clofe to the flocke of the plant : and likewife, le it be fo flatted, as that by meafure it may be all one in lengeth with the cleft of the plant, when it is put downe into it; and yet it is not required, that it hould ioyne clofe with the fame in all places.
When you cur the grafts of hart-Cherrie-trees and Plum trees, doe not flat them To out the fo much as ycu did the others, for they haue a thicker and greater pith, which you grafs.sfbarre cherie.tres mulf beware not to come neere vnto, neither vpon the one fide, nor vpon the other, faue onely that at the ends they muff be verie flat. And further, if the fame incifion be not made for the taking downe and diminifhing of anie moe than one fide, it will be better than and if it fhould be fo ordered alfo on the orher fide, and cut byas, as wedges are which are made for to cleaue wood withall; and fo at the end you fhould take downe both fides, after the manner of the head of a Speare.
In cutring your graft, you mult looke well, that you raife not the vtermof barke from the wood, and that withall, you leaue it thicker than that which is on the other edge within.

## С н ap. XI. <br> Of the preparing of the young Plant wherecon yous meane to graft.

 Ow when you haue chofen your Graft, you muft likewife make choice of your Plant: which, that it may be a faire one, mult be right and flrcight, round, nct wreathen, of a beautifull colour, a found, neat, and fmooth barke, withour knots,verie flourifhing and moift, and of a tree hat hath borne fruit. It muft alfo enioy the like good foyle and fituation it did before in the place where you gathered the graft, it it be poffible: it muft bud and bloflome at one and the fame time, to the end that the new fience may take the more eafier footing and kinder nourihment there. And if in cafe the Plant were wreathen, ioyne the graft cunningly vnto it, and be fure, that in fitting of it you make them both ioyne well together, and euer marching the groffeft Plants with the groffeft Grafts.And in as much as the Plants are verie literle, therefore you muft cut them low and neere vnto the earth, and that rather with a Knife than syith a Hooke or Saw. Some fay, that a Saw doth fo fhake and loofen the barke, as that afterward it doth not take fo eafily with the graft : but thar makes no matter, becaule neither the barke nor wood doe cuer rake with the graft; butche skinne or barke, which growech and fwelleth vp from the foot of the trec, is that which coupleth it felfe vnto the graft, worketh all, and by it felfe encreafech, making a bodic of the faid foot; not that the fawed
wood doth ioyne ir felfe with the faid graff, but abideth dead. If it be of the thickneff of a finger, or thereabout, you muft cut it to the lengeh of a foot, or halfe a foor, from the earth, byas-wife, like the fafhion of a Goats foor, for to cleaue it and fet, therein onely one graff.
If it be as thicke as a cudgell, cut the flocke round with a Saw yp on high,a foot or two from the ground, to put two good grafrs into the cleft thereof:of which afterward you fhall cut away the leaft and weakcit when they begin to bud.
If the plant be as thicke as an arme, cut it likewife round fome wwo or three foor high from the ground, for to cleaue it and fet therein three grafts, two in a cleft, and one betwixt the barke and the wood, and that vpon the fide that hath the moft roome.
If it be as chicke as a legge, or more, cut it fourc or fuc foot high from the ground, and cleaue it croffe, and fer therein foure grafs: or cleaue it with one onely cleff, and graft two in the cleft, and two betwixt the wood and the barke: or, which is better, graft them all betwixt the ftocke and the barke, when the fappe fhall be vp, for the wood of fuch great plants doth pinch and wrinch the graft mightily, if you put not a wedge of greene wood into the cleft.
After that the plant is cur either with a Saw or with a Knife, cleanfe the wound cither with a litte Saw-knife, or with fome other thing : then make it plaine with a knife that is cleane, and not infected with anie euill fmells, and againe make it cleane againe the fecond time, that fo it may not be infe eted anie manner of, way with the yron, becaufe che fappe of the tree may be corrupted by it : then chure out the beft place in all the focke to faften your graft vnto, without anie care of making the cle ft , on what fide foeuer it be. I feake this, becaufe it pleaferh fome to affirme, That the tree ought not to be clouen on that fide that the wind flandech, at fuch time as they goe about to graft it. It is true,that and if the wind hould proue great, and withall at North-eaft, that then you muft turne your backe vpon it, and fland betwixt the wind and the cleff, at fuch time as jou are fitting and purting in your grait; becaufe it is tharpe and fcorching, verie dangerous vnno all lorts of plants, as allo fiuis, of what condition foeuer they be, but chicfely when they are bloflomed.
Before you make wide the cleft with your wedge, bind and tie with two or three turnes about with a wickar, drawne verie ftrait, your tree foot vpon the place where you intend to make your cleff, that fo your tree toot may not cleaue tou farre : which is oftentimes she caufe that grafts take not, the cleft being fo open, that it cannot pofibly fhut againe and grow together, and fo by that meanes breathech out whatlocuer it hath of life in that place, and both the graft and the foor doe thereupon allo perifh: but this happeneth ofteff in Plum-rree focks and branches of trees, becaufe they are more fubiêt to cleaue thus than anie of the orher forts. Great trees, and fuch as yet goe beyond the fore-named meafures, cannot be grafted by a cleft in the flocke, but verie well in the branches, as wee fee accomplifhed in great Apple-trecs, and wild Peare-trees, for they would be rotten before that the grafts could fhut and clofe vp the wound in the focke.
If the fmall branches be drie and withour anie fappe, you mult cut their flockes on armes : and after two or three yeares, when they haue put forth new fiences, graft the beft, and cut away the feeble and ftarued ones. And afterward, when the grafts haue put forth verie well,you muft ftrengthen and vnderprop them, or elfe wrap them one within another, and tie them with wood amongft, for feare that the wind fhould breake them: or elfe if it be a good and well reclaimed tree, let new fiences grow out of it. And this thing wee fee much practifed in Normandie, Bretaigne, and other Countries, where they efteeme of Apples and Peares to make Cyder of.

## Chap. XII.

## Tograft in the cleft.

(6)He manner of grafting in the cleff, that is to fay, in the flocke,being clo- Toeraff in the uen, is proper not oncly vnto crees which are as great as a mans legge or cleft. arme, but alfo vnto others which exceed thefe in greatneffe. It is truc; that in as much as thefe trees cannot eafily be clouen in their focke, that therefore it is expedient to make incifion in fome one of their branches, and not in the maine bodie, as we fee to be practifed in great Apple-trees and wild Peare-trees, and as we haue alreadie declared here before.
To graft in the cleft,you muft make choice of graft that is full of fappe and iuice, but it muft not be cill from after Ianuarie vnto March: and you muft not thus graft in anie tree that is alreadie budded, becaufe a great part of the iuice and fappe would be alreadie mounted vp on high,and rifen to the top, and there di(perfed and fcattered hither and thither into euerie twigge; a newes nothing welcome to the graft. You mult likewife fee downe and refolue not to gather your graft the day that you grafe it, but tenne or twelue daies before : for ocherwif, if you graft it new gathered, it will not be able eafily to incorporate it felfe with the bodie and focke where it fhall be grafted; becaule it will come to paffe, that fome part of it will drie, and by this meanes will be a hinderance in the ftock to the rifing vp of the fappe, which it fhould communicate vnto the graft for the making of it to put forth: and whereas this dried part will fall a crumbling and breaking, through his rottenneffe, it will caufe to remaine a cauitie and hollow or void place in the ftocke, which will be an occafion of the like inconuenience to befall the graft: and on the ocher fide, the graft being as yet new and tender, might eafily be hurt of the bands, which are of neceffitie to be tyed round about the focke,for the keeping of the graft firme and faft. You muft furchermore take heed, and fee, that the tree whereupon you intend to graft haue been tranfo planted and remoued from out of your ftocke-Nurcerie for a long time before, that foyou may affure your felfe, that his rootes are long fince well infeafoned, and haue fully taken with the earth, and thereby allo hath fufficient fore of fappe and iuice.

When you are minded to graft manie grafts in one cleft, fee that the incifion made vpon their ends be alike great: which if you looke not to, it may happily come to paffe, that the cleft of the ftocke fhall be forced wider on the one fide than on the other. You muft likewife forefee, that the grafts be of one lengeh, or not much fquaring; and it is ynough if they haue three or foure cyelets without the wrench.

When the plant is once fawed and lopped of all his fmall fiences and fhoots sound about, as alfo emptied of all his branches, if it haue manie, then you mult leaue but two at the moft before you come to the cleauing of it : then put to your litte Saw and your knife or other edge-toole that is very flarpe, cleaue it quite chrough the middeft in gentle and foft fors, firft tying the flocke verie fure, that fo it may not cleaue furcher than is need, and then put your wedges into the cleft, vntill fuch time as you haue fet in your grafts; and in cleauing of it, hold your knife with the one hand, and the tree in the other, to helpe to keepe it from cleauing too farre: Afterward, with the fame hand wherewith you held your tree, put in your wedge of Box, or Brafill, or Bone, at the fmall end, that fo you may the betcer take it out a gaine when you haue fet in your grafts. If the focke be clouen, or the barke loofed too much from the wood, then cleaue it downe lower, aild fee your grafts in, and looke that their incifion be fit and verie iuftly anfwering the cleft, and that the two fappes (that of the graft, and the other of the plant ) be right and euen fee, the one againft the other, and fo handfomely fitted, as that there may not be the leaft apparance of
anie cut or cleft : for if they doe not thus iumpe one with another, they will neuer take one with another, becaufe they cannot worke their feaming matter, and as it were cartilaginous glue, in conucnient fort arid maniner, to the gluing of their ioints together. You muft likewife beware not to make your cleft ouerthwart the pith, but fomewhat afide.

The barke of the Plant being thicker than that of the graft, you muft fet the graft fo much the more outwardly in the cleft; that fo the two fappes may in anie cate be ioyned and fet right the one with the other: but the rind of the plantmult be fomewhat more out than that of the grafts on the clouen fide:

To the end that you may not faile of this worke of imping, you muft principally take heed, not to ouer-cleaue the focks of your trees: bur before you widen the cleft with your wedges, bind and goe about the ftocke with two or three turnes, and that with an Ozier clofe drawne together vnderneath the fame place where you would haue your cleft to end, that fo your ftocke cleaue not too farre, which is a verie vfuall caule of the mifcarrying of grafts, in as much as hereby the cleft ftandeth fo wide and open, as that it cannor be fhut, and fo not grow togetheragaine, but in the meane time fpendeth it felfe, and breatheth out all his life in that place, which is the caufe that the flocke and the graft are likewife fpilt: and this falleth out moft oft in Plum-trees and branches of trees. You fhall alfo be verie carefull to ioyne together the rindes of your grafts and the plants, that fo nothing may continue open, to the end that the wind, moifture of the clay, or raine, running ypon the grafted place, may not get in. When the plant cleaueth verie ftreight, there is not anie danger or hardneffe in floping downe the graft, if you leaue it fomewhat vneuen or rough in fome places, that fo the fappes both of the one and other may the better grow and be glued together.

When your grafts are once well ioyned vnto your plants, draw out your wedges verie foftly, leaft you difplace them againe. You may leaue there within the clefe fome fmall end of a wedge of greene wood, cutting it verie clofe with the head of the ftocke : or elfe fo foone as your wedge is drawne out, put fome fmall chip of greene wood vpon the cleft of the plant. Some caft glue into the cleft,as it were to vnite and glue together the fappes of the two fubftances. Otherfome fprinkle into it Sugar, or powder of Cinnamon, orfome other fuch fpice, or fome fweet fmelling liquor, and withall dippe the ends of the grafts in honey, or in fome other fweet and pleafant liquor, hoping that by this meanes the fruits of the trees will retaine the taft thereof. But howfoeuer it is,couer the cleft of the grafting all about with grauell or fand heaped on like a caufey:or elfe with gummed waxe, which is better to couer withall than the former, or any other thing that can be learned: and that the cleft may be very well filled, it mult be laid on two fingers chicke, or thereabout, that fo neither wind nor raine may enter or get in: and you thall couer it ouer with Mofte, or Rye ftraw, or Barke,or the thinne rinde of the Elme,prepared with a little earth, and wreaths of old Woollen clothes, or the barke of Willow, and tie them on verie frait with fmall $O$. ziers; but in binding them, take heed that the wreaths doe not fhrinke to the one fide or theother: and if you haue not clay, then arme and couer ouer, as hath beene faid, the faid clefts with gummed waxe : and for want of both thefe, mingle fmall hay and the earth of the place where you graft in manner of lome or mortar. When thus your grafts fhall bewell wreathed, faften fome fmall boughes about them, for to keepe and defend them

Furthermore, if the ftocke of the plant whereupon you intend to graft, be not fo thicke as your graft, you fhall graft it after the fafhion of a Goats foot in this manner: Make a cleft in the fock of the plant, not direct, but byas, and that fmooth and euen, not rough ; thenapply and make faft thereunto the graft, with all his barke on, and anfwering vnto the barke of the plant : this being done, couer the place with fat earth and moffe of the wood, tied together with a frong band. And to che eud that the tree may not be hurt either of the winds, or other things, fticke downe, neere vntoit, fome pole of wood, for to ftrengthen and beare it ftedfaft.

They are greatly to be blaned for their fault commited, who haung faire wild trees or others (the fruit thereof difplealing them ) doe cut them verie low, hauing faire branches abouc, and a bodie of the chickneffe of a mans legge, and there grate them, when as fiue or fixe yeares will fearce couer the wound that they have made by fuch thcir kind of grafting: whereas they might with as much eafc have grafted vpon the branches of the faime, and then they had nor beene aboue a finger thicke, and would haue growne better, and broughe more profic ; becaufe that and if you hauc fourc branches, you may make as manie grafts thereof, and chefe will beare fruit the fecond yeare.

## Chap. XIII. Of grafting in the ends of brarches.

(a) esOr to graft at the end of fuch branches as haue goodly new wood, and great fiences on high, although the cree haue beene grafted before a and that it be as yee nor throughly growne, take grafis of what lort of tree you will, and cut fome of the fiences off from the high parts of the tree whereyou mind to graft : and if the grafss fhould be chicker than the fiences, then grate them after the mauncr of the Goats foot, as hath beene faid alreadie of fmall Plants. And if the fiences be of the fame bigneffe with your grafts, then cut them betweene the old and new wood, or a litele higher or lower, and cleaue them a little, and cut the graft of the like chickneffe to the fience which you haue cut off, making bura fhort incifion, and referving the barke vpon both fides, and looking that both the fides be of equall thickneffe : then fer your graft, thus firted, into the cleff, and that fo, as that the barkes of both fides the graft may fland euen with the barkes of the branch. And for thefe grafts, it is ynough if euerie one of them haue one good eyeler or two aboue the wreathing; for to leaue them anie longer, would not be good: and you muft wreath and wrap them in earth and moffe, and couer it ouer againe with Woollen clothes, and tye them vnto the fame verie flrongly, as hath beene faid.
Alfo by this meanes you may procure, that one tree fhall bring forth diuers fruits, To that they be not fuch as the firtuation of the Countrey and qualitie of the Ayre doe refufe and reieCt: as I haue feené fometimes at Padua, in the Garden of CMeffire Gabriel, where one ftalke of a tree hath borne fruits of diuers forts. And there is nothing that fhould hinder or let vs in this Countrey from doing the like, if ir be not (perhaps) that in fome places she fauourable furtherance and mildnefte of the ayre is not fo correfpondent and anfwerable.
Moreouer, if you will graft litele Plants in this manner, fee that they be of the fame thickneffe of the grafts,and graft them neere vnto the earth,as fome three fingers off, or thereabours.
This manner of grafing at the ends of branches, mult be done in trees whofe branches haue beene formerly cue off, by reafon either of fome great want, or elfe too great aboundance of fappe: and that there be put forth of their flocke fome new fhoots, which three or foure yeares after may be grafted after the manner wee haue fpoken of. Thus Columell/ teacheth vs to graft the Oliue-tree vpon the Figge.tree.

## Hh 3 <br> Chap:

## Chap. XIIII.

## To grafo betwixt the wood and the barke.

 T is vfuall to graft betwixt the wood and the barke, when trees begin to put vp their fappe, as abour the end of Februarie, and afier vncill Aprill, for then the barke partech better from the wood: and chiefely this manner of grafting is ved in thicke plants, which cannot eafily be clouen in the middeff, either croffe, or otherwife, and in the flockes and branches of trees that haue a thicke and fat barke, as Figge-trecs, Plumme-trees, Peare-trees, and Chefnuttrees. The grats that are thus to be grafted, muft be gathered and kept long before, as wee haue alreadie faid, leaft peraduenture wee fhould not meet with trees of late beare about this time, which haue not as then budded, and of which there may be grafts gathered without buds;fuch as is the fhor--legged or fhort-itulked Apple-tree, and fuch ocher like.
In this kind of grafting, the plant muff be fawed vp on high, and the grafts cur afterward, as hath now alreadie beene faid before : but the incilion of thele grafts mult not be of anie great length or chickneffe, but the barke muft be taken away a little at the end of them, and fof hioned after the manner of the head of a f peare, and as thicke on the one fide as on the other: afterward the flocke muft be veric well cleanfed, to take away the roughneffe and vneuenneffe of the Saw, with a verie fharp inftrument, that fo che grafts may grow clofe thercunto : then thrut in a fharpe-ponted knife, or fome Scizars of Bone, cr Iuorie, decpe ynough betwixt the barke and the wood of the plant, and fo much, as that when it hall be drawne our, the cut and fitted end of the graft may enter therein, and that the graff may ioyne vino the focke when it fhall be fee therein : this being done, it muft be couered and wrapt well with graucll, or other ftrong earth and molte, A feer chis manner you may pricke in manie grafts about your flocke, according as the thickneffe of it will beare. Atcer chis manner are Abricots grafted, and Apple-trees, Almond-trees, Peach-trees, fmall Peach-trees, Figgetrees, Peare-Plum-trees, Chefnut-irees, Peare-trees, and young and litele Plum-trees, being the chickneffe of a little finger, and the thickneffe of an arme, as allo all fuch as haue their barke fomewhat flender and tender; for in thicke erres, which haue their barke verie hard and thicke, this cannot well be vfed, except it be vpon fome of the branches, which haue a daintier barke and better difpofed tor the doing hereof.

## Сняр. XV. <br> Of grafting in a Pipe.

 He manner of grafting in a Pipe,as alfo that of grafting in the Barke,after the manner of a Scurchion, is verie forward in bearing fruit, but weake and eafie to be hurt, becaufe it is borne vp onely by the ftrengch of the barke: and therefore it muft not be practifed in any trees, except fuch as are full of fappe, as the Figge-tree, Oliue-tree, fweet Quince-tree, baftard Peach-tree, Abrico-trree, Iuiube-tree,fowre Cherry-tree, Cherry-tree, and Chefnuttree, and not at anie other time, than after the beginning of Aprill vnto the end of Iune; or if the time be not too hot, in Iuly, Augult, and September: bur fuch grafts are not profirable, neither yet comming fo foone to perfection, as thofe which are grafted in the cleft.
Chufe therefore in a fruiffull tree that is full of fap, a very faire branch that is full of eyelets, from whence cut with the point of a knife that is very fharpe, a piece of barke
farhioned
fafhoned like a Flute, at the leaft three fingers and a halfe long, hating one eyelec found and entire. Then doe as much vponfome braunch of that Tree vvhereupon you meane to graft the fame, in fuch fort, as that the barke vvhich you take away from the place to be grafted, may be of the fame bredth, length, and fituation or alpet of the heaucn, that that is vvhich was cut downe from the place where the graft grew, and ir muft likewife haue one found and intire cyeleras well as the orher. When you fhall faften it vito the place, beware that the barke which you fhall faften, be not wec or moift, and that it doe aunfwer and fit the window, whereout the barke was taken, and that in fuch fort, as that the eyelet in the barke to be grafted, may aunfwer juftly vnro the knob which remaineth found and vademinifhed in the vvood, and that his knob goe into the eyelet, of the pipe-like barke; which you are about to graft. By this meanes all will agree verie well rogether, netherwill there befeene any chinker, gaping, or rift, betwixt the commiflures and joynts of the two barkes. This done, bind and wreath aboue and below the faid grafted barke with a band of verie dric hempe, being vithout any manner of moifture, that fo the barke may cleaue to the betrer, and take the fap of the tree the fooner : but ftill you muft looke to it, that your band doe not touch the eyelet, or pinch the barke too hard, for this rvould keepe it that it thould not take, and neither the barike, nor the band muft be wer.

The Chefnut-tree may be grafted after this manner, and profit more by it thanany other Trees, becaufe the barke thereof is more apt to fafhion after the forme of a pipe, than the barke of any other Tiec. This way is long in working and taking, and withall nothing fure or certaine: and therefore I would counfell the Gardener to troable himfelite but littleat all with it.

## Chap. XVI.

> Of grafting in the bud after the manner and forme of a Scuicheon.

(8)Or to graft after the nianner of Scutcheon, you fhall not varie and differ much from the manner of grafting which is after the fafhion of a flute or pipe, fauc onely that the Scutcheon-like graft hauing one eyelet as the other hath, yer the wood of the Tree whereupon the Scutcheonlike gralt is grafted, hath not any knob or bud, as the wood whereupon the barke is grafted in manner of a pipe : wheretore in both the forts of graffing, we may follow the forme and order which followeth.

In Sommer when the trees are well replenifhed with fap, and that their new fiences begin to grow fomewhat hard, you fhall take a fhoor at the end of the braunches offome noble and reclamed Tree, whereof you would faine haue fome fruit, and nor maime it of his old ftore or wood, and from thence raife a good cyelet the tayle and all, thereof so make your graft : but when you chufe, take the thickeft and groffeft: diuide the taile in the middeft before you doe any thing elfe, cafting away the leafe (if it be not a Peare-plum-tree, for the Scutcheon gratt of a Peare-plum-tree, would haue ewo or three leaues) withour remouing any more of the faid taile: afterward with the point of a knife that is verie fharpe and will cut well, cut out of the bate of the faid fhoot, the patterne and refemblance of a Scutcheon or Shield, of the lengrth of a naile, in vwhich there is onely one eyelet higher than the middeft, together with the refiduc of the taile which you haue left behind: and for the lifting vp of the faid graft in Scurcheon, after that you haue cut the barke of the fhoot round about withour cutting of the wood within, you muft take it gently with your thumb; and in pullingr it away, you muft preffe vpon the wood, from which you pull it, that fo youmay bring the bud and all away together with the Scutcheon, for and if you
fhould leaue it behind with the wood, then the reft of the Scurcheon were nothing worth. Yourhall find out if the Scutcheon be nothing worth, if looking within it, when it fhall be pulled away from the wood of the flioor, you find it to haue a hole within, but more manifefly, if the bud be flayed behind with the wood in the fhoot, when it ought to haue beene in the Scutcheon. Thus your Scutcheon being well raifed and taken off, hold it a little by the taile betwixt your lips, without wetting of it, euen vntil you haue cut the barke of the tree where you would graft if, and looke that it be cut without anie wounding. of the wood within, atter the fafhion of a Crouch, but fomewhat longer than the Scutcheon that you haue to fer in it, and in no place cutting the wood within.

After you haue made incifion, you muft open it and make it gape wide on both fides, but in all manncr of gente handling and entreatie, and that with little Scizars of bone; and feparating the wood and the barke a little within, euen fo much as the Scutcheor is in length and breadth, you muft take heed that in doing hereof you doe not hurt the barke. This done, take your Scutcheon by the end, and the taile which you haue left remaining, and put ir into the incifion made in the eree, lifting vp foftly the two fides of the incifion with the faid little Scizars of bone, and caule the faid Scutcheon to ioyne and lye as clole as may be vnto the wood of the tree(being cut as hath beene (aid) in weighing a little vpon the end of the rind fo cut, and let the vpper part of the Scutcheon lye clofe vnto the vpper end of the incifion or barke of the faid tree: afterward, bind your Scutcheon about with a band of hempe, as thicke as the pen of a quill, more or ieffe, according as the tree is frmall or great, taking the fame hempe in the middeft, to the end that eyther part of it may performe a little fernice in wreathing and binding of the faid Scutcheon, into the incifion of the Tree, and it mult not be tied too ftrait, for that would keepe it from taking, the joyning of the one fappe to the other being hindered thereby, and neither the Scutclieon nor yet the hempe mult be moift or wet. And the more jufily to bind them together, begin at the backfide of the tree, right ouer againtt the middef of the incifion, and from thence come forward to joyne them betore, aboue the eyclet and taile of the Scutcheon (croffirg your band of hempe fo oft as the two ends meet) and from hence returning backe againe, come about and tie it likewife vnderneath the eyelet, and thus caft your band about ftill forward and backward, vntill the whole cleft of the incifion be couered aboue and below with the faid hempe, the eyelet onely excepted and his taile, which muft not be couered at all; this taile will fall away one pars after another, and that thortly after the ingrafting, if fo be that the Scutcheon will take. Leaue your trees and Scutcheons thus bound for the fpace of one-moneth, and the thicker, a great deale longer time; afterward looke them ouer, and if you perceiue them growne together, vntie them, or at the leaft cut the hempe behind, and leaue them vncouered, cut alfo your branch two or three fingers aboue, that fo the impe may profper the better, and thus let them remaine till after Winter, about the moneth of March and Aprill. If you perceiue that the bud of your Scutcheon fwell and come forward, then cut off the tree three fingers or thereabout aboue the Scutcheon : for and if it thould be cut off too neerethe Scutcheon, at fuch time as it putteth forth his firft bloffome, it would be a meanes greatly to hinder the flowring of it, and caufe alfo that it fhould not thriue and profper fo well : after that one yeare is paft, and that the fhoor beginneth to be ftrong, beginning to pur forth the fecond bud and bloffome, you mult gee forward to cut off in biace wife the three fingers in the top of the tree, which you left there when you cut it in the yeare going before, as hath beene fard. When your fhoot thall hauc put forth a good deale of length, you muft fticke downe there esen hard joyning thereunto little fakes, tying them together verie gently and eafily, and thefe fhall ftay your fhoots, and prop them vp, letting the wind for doing any harme vnto them.
Inthis fort you may eafily graft white Rofe-trees in red Rofe-trees, and red Rofe. trees in white Rofe. rrees, to haue Rofes of diuers forts vpon one and the fame Rofetree. You may graft after the fame manner two or three Scutcheons, prouided that
shey' be all ofone fide : for they would not be equally fet together in height, bectaufe that fo they might all become flaruelings: neither would they be one direelly ouer another : for the lower would flay the rifing vp of the fap of the Tree, and fo chofe which were aboue fhould confume in penurie, and vndergoe the forefaid inconuenience.
You mult note, that the Scutcheon which is gathered from the Sience of T Tree whofe fruic is fowre, mult be cut in a fquare forme, and not in the plaine fafhion of a Scuicheon.
It is ordinarie to graft the fweet Quince-tree, baftard Peach-tree; Abricot-tree, Iuiube-tree, Fowre Cherrie-tree, fweec Cherrie-tree, and Chefnur-tree after this fafhiun: howbeit they mighr be grafted in the cleft more eafily and more profitably, although that duers be of a concraricopinion. As thus for example :
Take ot the grafts of the fweet Quince-tree, and baffard Peach.cree, of the faireft wood and beff fed that you can find growing vpon the woud of two yeares old, becaufe the wood is not fo firme and folide as the others, and you fhall graft them vpon frmall plum-rree flockes, being of the thickneffe of ones thumbe: thefe you fhall cut after the fafhion of a goats foot, you fhall not goe about to make the cleft of any moe fides than one, being aboura foot high from the ground, you muft open it with your fmall wedge ; which being thus grafted, it will ieeme to you that it is open but of one fide, afterward you fhall wrap it vp with a little moffe, putcing thereto fome gummed Waxe or Clay, as hath beene faid before, and bind it vp with Oziar, to keepe it the furer, becaufe the flocke is not ftrong ynongh of it felfe for to hold it, and you fhall furnifh it euerie manner of vvay, as others are dealt withall. And chis kud of grafting is more profitable,and fooner growne vp than that which is done in the forme of a Scutcheon.

> С Н A P. X V I I.
> Of otber forts or kinds of grafting vpon all forts of Trees.
 Ou may graft in the bud, by taking vp the bud of a young fhoot or plant, and putting it with a litele barke in the place of another, which you Thall hauc pulled from the Tree, vvhereupon you mieane to graft, binding it there aboue and below in manner as hath beene faid of the Scut-cheon-like, graft, and this may be done at the fame time, and vpon the fame trees.
You may graftall manner of grafts, vpon all manner of trees after this manner: Make two pits, foure foot euerie way, and the one hard by the other, in the one of thele plant an Oliue.tree, and in the orher a Figge-cree, or any other fuch like fort of Trees as fhall beft pleafe you : when the Oliue. tree hath taken root, you fhall bow downe fuch plants of che fame as feemeth vnto you che faireft of the reft, and bind them to the foot of the faid Figge-tree : this being done, cut away all the other plants of the faid Oliue-tree, except they be fuch as you meane in like maner to graft : then cut downe the Figge-tree, and make fmoorh and enen the cut: after this, cleaue it in the middef with a wedge, afrer which ferape both the fides of the ends of the fiences of the Oline-e-ree, luch asthe Tree bearech, and put them in the cleft of the Figtree, in fiuch manner as that they inay reach through, afterward lome the faid clefte of the Figodefree on the one fide and on rhe other with tough lome, and tie faff within the fltucke of the faid $\mathrm{F}_{2}$ gec-rree, the (aid plants, in fuch fortas that a man caunos pullitemaway. Thus shreeyeares ater, the Figge.tree and Oliue tree will grow togecher, and the fourth leare when they are well growne, you fhall cut and vntogecher, and the fourth leare when they are well growne, your nagating, lothey
coupiethe planis of che faid Oliue- -ree from it, as is done in propall
oil

## The third Booke of

Thall feeme not to appertaine any longer vnto the Oliue-tree. This manner of grafting is verie vfuall inche Counerie of Mans, where I remember I haue tafted of a grape which had the taft of a nut: becaufe the vine that bare this grape, had beene grafted into a nut-tree, and after that manner that I haue now fpoken of.

To graftin a Canon, Flute, or Cornet, is thus performed: You muft raife a long

Tografitio cenor. Gun or Canon hauing two or three eyelets, from off a new'and reclaimed plant, thas is a finger thicke or thereabour, and cleaue it eafily the whole length of it: after, you mult raife of the barke of fome branch of a plant, of the like thickneffe, a Canon of the like length to the former, and in place of this later, you mult make faft the forefaid Canon of the faid barke of the new branch, as forward and clofe as it can be fet, and the fuperfluous barke of that wherewith there is nothing intended to be done, is beftowed vpon this thus grafted to defend it : after this, it is tied aboue and below the eyclets fo carefully, as that shey may not be hurt, then youmuft cut away the wood which is aboue the root, and worke it ouer with gummed waxe all along the feames, and at the end.

To graft in the bodic of a Tree is thus : Youmult pierce the focke of a Tree with

To graft in the bodis of a Tree. a wimble euen vnto the pith, and afterward cleanfing the hole of the wimble verie well, you mult by force put a graftecereineo, which hath two or three eyelets within, and then after that clofe vp the hole verie fure with waxe. - To graft vpon a Willow, or Colewort : Make in the pole of a Willow, or ftocke Whilom. ocher, fer therein as it were by force euen in either of them, a graft of fuch fruit as you your felfe will, hauing their barkes fcraped off; and this in fuch fore as that the holes beftopt all of them therewith: after this, you mult ftop the fame holes verie well with Waxe, pricking downe the faid pole within halfe a foot of fome water, after fuch a manner as that the grafts may be three fingers vnder the earth, and at the end of the yeare when it hath taken root, cut the plant in peeces, and plant eucrie graft where you your felfe will.

Thus you may graft in the Crowne: You mult cut off the bodie of a great Tree, rather than a litele or thinne one vp on high, but yet it may not be old, though it may haue a hard barke rather than a foft and thinne: afterward, you muft open it vp a. boue on high, in three or foure places, in the cut of the barke of the faid focke: which done, you mult with the helue of a penknife of bone being verie fharpe pointed, put into euerie one of thofe opened places a graft, gathered from the molt Eafterly part of his owne Tree, then you muft ftop and couer well with tough lome or clay thewound that is aboue, and lay a good cap vpon it, fo as that neither the raine may be able to wafh and corrupt it, neither yet the ayre to drie and chinker it: after this, you mult cie the Tree with a coard or band neere vnto the place where the Tree was fawed off, that fo it cleaue not, then you mult thruft in your wedge betwixt the barke and the wood, after which, it remaineth that thefe grafts be fitted to fet round about the bodic of the Tree, one diftant from another, no leffe than fourefingers : then, for the fhutting vp of the matter, taking away the coard or girth, you mult tie the barke with a companic of Oziers, being of that length as that they may goe about the bodic of the Tree three or foure turnes and doubles, that fo by this meanes the grafes may be garded, and ftand faft againft the winds and whatfocuer 0 ther violence : and againft the bodie of the Tree you muft fet a ftake or prop, for to beat it vp and Itay it, taking away all the Choots that are about it : becaufe that by how much the number fhall be the leffe, by fo much the nore will the fap procure the ftrength and grouth of boughs. Sheme doe grattina Sience ater this manner: They make way into the I ree, and that to the verie pith thereof with a penknife, and after grafting a plant therein, ftop, and writh it, afterward taking from it his joynts and bark, and fo graft it vpon a fhoos as thicke as it felfe, and it taketh quickly.
neffeofones thumbe, and fufficient broad and long; together with the eyclet and fifence belonging thereto, and fo verie fpeedily grattitaltogerter vpon the braunches of another Tree, cleauing the barke into three or foure, and faftening it theretoverie clofe and ftrait, and vnto the head of the ftocke, if fo be chat the morfell goe into the barke of the other, without hurting of his owne barke : it being thus gratted; will take withour any other thing or preparatiue : notwithflanding is would doc no eciull to put tough lomeor earth tempered thicke vpon the faid joynt; and to tie it wel! with fome little peece of Woollen cloth about the morfell, nor rotiching the ey elet in any cafe. In Iune and Iuly you may graft in this manner on histh vpon bratinches without vfing of any band thereto: and when this morfell hath well taken, fome doe ve to cut off that part of the branch that is aboue. ......................... Some graft vpon poles after this manner: vvitha French wimble thiey pearce a Tografi in pole of Willow, or other white wood in many places, but with this cauecit, thate the Poles. holes be halfe a toot one from another: afrerward, they put in thele holes thuspearced great fure of fhoots of fuch Trees as they are difoofed to graft, and thus they fet them in the ground, in fuch fort as that nothing but the end of the fhout is feene: after which, if fo be they take, the pole is broken, and they remoued into other places.
Some there are chat make impes of Peare. trees and Apple-trees in a greene lath of vvitch-lazell, where they put their gratts, betwixt the barke and the wood, and going afterward to chufe a moift place, therein thicy biurie the faid greene lach halfe a foot deepe, leauing the fhoots a foot long, of which they gather fome impes, which they cut away, as alfo the band of the lath where they are grafted, and etranfplant them into other places, where it liketh them beft: but this is not counted the furefl and mof infallible way.
In Normandic likewife they make plants of fprigs and new braunches growing vp from the feet of the Peare-trees and Apple-trects, thefe they cleaue in foure quarters, and in the middeft of them they put the end of a Barly care, or elfe a Beane; and are reported by that meanes to breed good and naturall trees, withour any other maner of grafting of them : but I am of opinion, that neithes the Beanes nor yet the Barly doe any good for the helping of them to take root, becaufe that commonly fuch fockes as are planted doe not put forth root at the end of the foot, but higher, as almoft euen at the top of the earth, there being the moft nourihing part of the earth.
Some pur young braunches and fprigs into the ground, yea and the thin rindes of Plun-trees, which afterward take root, and thereupon they plant abricots, but this commonly happenech in a moift, good, and fruitfull foyle.
Some doc ordinarily plant flockes of the Garden-quince-tree, and graft:Pearetrees thereon, as alfo A pple. trees and great Peaches, the fruirs whereof talt as if they were Peach-plums, but they mult be grafted halfe a foot within the ground, becaule they neuer haue any faire trunke, and bcirig grafted thus low, the graft will put forth routs of it felfe, which will make it endure and continue the longer time.

Some haue likewile found out a way to graft the vine, which is a verie fingular Tograff the and profitable thing, for hauing a vine that is not of a good plant, you may by graf- vine ting of it, fooner come to haue fruit, than by pulling of it vp , and planting another in the place.

Some graft vpon the foot of a plant, which is a great fault, becaufe that a the moft from thence they camor gather aboue two or three impes, putting thing salfo in aduenture, as well by reafon they are not fure chat they will take, as alfo becaufe that the branch is not ftrong y nough to defend it felfe from the wind. Notwithflanding feeing that the vine takech rooc of it felfe,you may make a triall what it will doe by grafting it ypona branch after this mannert
Make a great pit, like as if you would burie fome Tree, then make your choyce from the foot or ftocke of fome vine which pleafech you not, of certaine braunches which you fhall find fit andmeetn receiuc grafts; whether they be new wood, or of

## The third Booke of

two or three yeares growth, cut them off and cleaue them fome chree or foure fingers, euen $v p$ vnto fome ioint: then fharpen the othier branch which you meane co graft, and fticke it in the cleft of the other, loyning together the rind of the clouen one on eucrie fide, in fuch fort, as that they may feeme to be but one, wrapping round aboue fome mofle, and after binding it vp with fome pack-thread, or elfe with Oziers,verie well. Hauing thus done, prepare a place where you will fet it, and lay downe your your graft, atter the manner and fafhion that you vfe in propagating: then lay a little Horfe dung, not throughly roten, vpon the place where you hauc ioyned the two branches. By this meanes, of one Vine-flocke you thall make manic, turning in the earth vpon your grats of the flocke of the Vine, as is done when one layeth Vines in the ground. Atterward acquaint your grafts with lietle ftakes, as is vféd in propagating, and thefe impes doe thriue and grow as well as the propagared, and beare fruit as foone.
You may likewife make the like kind of grafts vpon Pomegranat-rrees, Nut-stres, Role-trees,and orher fuch like low and lietle erres.

## C.hap. XVIII. <br> speciallob feruations of: : raffing, planting, and Sowing of Trees, for to bainc exguifite fruits thercof.

Formard or late fruizs.
 F you graft a graft that bringech forth a late fruit, vpon a tree that bringeth forth an early fruit, the graft will bring forth an carly fruit in his kind: as and if you graft a Peach vpon a reclaimed Mulberrie-tree, it will come two monechs fooner: The fame will come to paffe, if you grafe vpon a Vine flocke, or a blacke Vine vpon a Cherrie-rtee, or a Medlar-tree vpon a Goofe-berrie-tree, or reclaimed Mulberrie-tree. The caufe of this haftened ripeneffe is the nature of the erree whereupon you haue grafted, which being the onely nurfe to the graft, and being of a timely fruit in refpect of the nature of the graft, doth haften and bring forward the fruit. On the contrarie, if the tree be of a late fruit, and the graft of a timely, he graft will afterward bring forth late fruit in his kind: and flaying after his due and wonted time, as if it be an Apple-tree vpon a Quince-tree, the Apples will proue to hang on the tree till Nouember, and will take fo much after the nature of the Quince-tre, as that they will keepe two yeares. By how much the more you graft vpon a tree of the fame kind and. condition that the graft or bud is $;$ as an Apple-tree vpon an Apple-tree,a reclaimed one vpon a reclaimed one,or a wild one vpon a wild one : by fo much the fruit becommeth greater, and is of a better taft, as hath beene faid.
Graft one Appie-tree vpon another, and likewife in Goofe-berrie-trees and reclai-
The graft of the Appleatreto med Mulberrie-trees, and you fhall haue fruit all Summer time, till the beginning of $\therefore \quad$ Nouember.
Halfe Peach "To caure fruit to grow that fhall be halfe Peach and halfe Nut, rake an eyelet of the and balfe Nuts. one and of the other, and cut them as neere the eyelet as you can, both the one and the other, and frrape their buttons a little; then ioyning them, bind them alfo verie well together, and after cut away their toppes : the fruit growing from thefe, will be halfe Peaches and halfe Nurs.

One fruit bauing the tafl of manic fruits.

You may make one fruit to haue the taf of foure fruits of his kind after this maner:
Take foure fhoots or grafts of foure differing forts, but of one kind of tree, as of foure forts of Peare-trees,or Apple-trees: As for example; of the Apple-tree take the fhore ftal ked Apple, the Globe Apple, (harpe tafted Apples, and Apples of Paradife (becaule that the fhoots or grafts mult be of one fort of trees) tie them verie well togecher, in fuch fort, as chat their barke may touch one another: afterward couer them with glue, or with fand, or fome fat earth, fo clofe, as that they may feeme to be all one:
put them thus in fome well digged ground that is full of manure, that fo they may take rooc: the fruit that will grow vpon thefe, will haue the tafte of foure forts of apples. It proceedeth of the fanie caufe if you take two grafts, the one of a fowre apple-tree, and the other of a weet, and coupling them together fo clofe and neere, as that they may ieeme to be onc onely; viethem as before, and looke as the grafts were, fo vvill the apples be. In like manner if you couple, joyne and clofe together in fuch clofe and falt manner two fmall figge-tree boughes, the one of a blacke figge-tree, and the other of a white, and fo let them, and after that they haue put forth and bloffomed, tie them againe, to the end they may incorporate and grow together, making but one focke, the figges that come thercof vvill haue a red fle fh on theone fide, and a white on the other. Some to worke the like effect; doe pur into fome linnenn clork the feeds of two forts offigge-trees, and hauing tied then verie frait, digge them in the earth, and when they are growne vp, they remoue the figge. tree which is growne vp vpon them.
Some doe likewife make grafts to beare halfe Peares, and halfe Apples, cieauing one Apple-trce-graft, and one Peare-tree-graft, and after joyning the one halfe of the one to the other halfe of the other, and tying them clofe together, and loming the joynts and feames verie well with Gum and VVax mixt together, in fuch manner as that the water cannot find any entrance at their joynts, and when this is done, they graft this double graft vpon the ftocke of fuch a Tree as thall fall for their purpofe : But you muif thinke that this manner of planting is verie hard to bring forth fruit. Wherefore they which take pleafure therein, muft be contented with two forts of grafes, and not so plant them, but rather to graft them vpona. nother Trec of the kind of the faid grafts, binding them clofe together, and harpening them verie fitly for the purpofe ar che lower end, in manner as if they were but one onely graft.
Ifyou hollow the branch of a Cherrie-tree taking away the pith, and after fer it cherrieswingagaine, it will bring forth fruit without any ftone: or elfe thus better: cut off a oktafone. young Cherrie-tree within a foot of the earth, cleauing it alfo cuen to the root, take out the pith both of the onefide and of the other, afterward joyne them together againe, and tye them clofe with a ftrait band, and a yeare after that this Cherrietree hath taken, graftcherein a graft of a Cherrie-tree which neuer bare fruit, and the fruit which commeth of fuch a graft, vvill be without any fone. Otherwife, cut off from fuch ftone-fruit-tree as you defire, a graft which may be eafily bended: fharpeniton the two ends, and graft it. likewife on the two ends vpon two parts of the Tree, make clofe the two grafted placeswith the moffe of fat ground, and tye them carefuily with a band: the yeare following, if you fee that the two ends of the graft haue taken fome force and ftrength from the ftocke, purting forth fome buds, then cut the graft afunder in the middeft, and take cleane from ir the thickent fprig that it hath, and let the other grow, and it will beare in his due time fruit that hath no flone. The fame will come to paffe, if you propagate the ends of the fmalleft boughs of the young Cherrie-tree, plum-tree, or other tone-fruit-tree, and after that you fee that they haue taken root, if you cut off the chickeft and farreft ewig, and let alone the leaneft and flendereft. The reafon and caufe of this is, for that the fone cannot grow, if the tree lacke his pith, bue in the tops and ends of little boughs there is no pith : therfore the fruit that commeth of theni, whether they be planted or grafted atter the manner that hath beene faid, will haue no ftone, enen no more than thaf which groweth of trees whofe pith is taken out.
If in the vine, figge-tree, cherric-tree, or apple-tree, you cleaue a branch which hath borne fruit, and cake the pith out of it, putting in fteed thereof fome laxatiue or foluble thing, and binding it well and ftreight, you thall make the fruir lasasiue, according to the nature of that which you hate put in : and if you purtherein fome fweet fmell or pleafant colour, the fruits will fmell of and thew the fame: and if you doe this in a rofe-tree, the effect will appeare in the rofe : and who fo thall put treacle or mythridate in the vine, wine made thereof wil cure che bitings of ferpents,
and not the Wine onely, but the grape, vinegar, branch, and afhes of the braunch, will be good againf all manner of biring of venimous beafts.
To graft fpeedily, take a graftof one knotand writhe it, and take away the barke with the knot, and after inuelt and decke vp therewith fome fhoot that is of the like thickneffe with the graft, and it will take.
To grafis a Vine vpuna Vine : you muff cleaue it as you doe ocher Tress, that is

Tograft a vine oponavine.

Plums at all times.

Peaches,cherres, and medlars, eating like Bice.

Medlars with out flones.

Peares of © gufa.
Peares of Par ma made ta be earelie ripe.
Tame malbervies earely and late.
The time of
grafting them.

Nuts without fells.

Nuts,plums, and great al monds. to fay, cuen to the verie pith, and atterward putcing the graft into the clett, you muft fop it vp vvith Waxe verie vvell, and tye it about verie clofe: but youmuft obferue, that it is no fit time to graft the vine, except it be in the moneth ot Februarie in vvarme places, and in March in cold places, and that when the Wine fheddeth a kind of thickeliquor, and not thinne like vvater: the like inay be done in May, and in the beginning of Iune, vvhen the fap or juice of the vine is all fallen, but in the meane time, you muft keepe the grafts that you vvould graft in cold and Ihadowed places, that they may put forth buds and fpring. See more hereof aboue.
To haue plums of diuers forts all the Sommer time, and vnto Ncuer ber, grate diuers forts of plums vpon the Goofe-berrie-bulh,reclaymed Mulberrie-tree, or vpon a Cherrie-tree.
To make Mediars, Cherries, and Peaches, that they may be aromacicke in eating and fmelling like fpices, and that they may be kept vatill new conse, graft them vpon the reclaymed and well husbanded Mulberrie-tree, as I haue cold you, and in grafting of them, wer the grafts in Honie, and put therein a little of the powder of imall Spice, as of Cloues, Numeg, and Cinamome, and the fruit will lhaue a tafte of them.

To caufe Medlars to grow without fones, and withall to be fweet as honie, grafe them on Eglantine, and in the grafting of them, wet them in honie. But to haue niedlars in their greatnefle two monechs before ordinarie, and that one may be better than twentie others, graftethem in a reclaymed Mulberrie-tree or a Goofe-berrie-bufh, and at the grafting thereof wet the graft.

To haue Peares of Augufta, of Parma, or of S. Rieule, a moneth or two fooner ripe than others, grafthem ina reclaymed Mulberrie-tree, and if you would that they hould indure and keepe good vnill new, graft them vpon a quince-tree, that they may come late, and on a reclaimed mulberrie-tree for them to come earely.
To haue reclaymed mulberrics carely ripe, graft the mulberric on the peare-tree, chefnut-tree, or goofe-berrie-tree : and to haue the late ripe; as towards Nowember, graft them vpon the medlar or quince-tree. They muft alwaies be grafted in the increafe of the moone, and yet better three or foure daies before the firf quarter, for how many daies the moone is old when it is grafeed, fo many yeares will $1 t$ be before the Tree bring forth fruit, as we haue touched before.

To haue nuts without fhells, you muft take a kernell which is verie found and not any whit hurt, and wrap it in wooll or the leaues of a vine, or in plane-trec leaues, that it may not be eaten of Ants, fer it thus inwrapped, and the nut-tree comming thereof will brirg forth nuts without fhells: the like may be done in almond-trees, if you of tentimes put afhes vnto the foot thereof, or vnto the roots vnder the ground, and this alfo holdeth generally in all other fruirs which haue an outward fhell if they be fet in this order.

To haue great nuts, plums, and almonds, take foure fones of the forefaid fruits, and put them in a pot or other vellell full of earth, joyning the one to the other as neere as may be, and urning the pot and the bottome vpward, make a hole in the faid bottome, and the fones thall be conftrayned to pur forth their fprout vpon high through the fard hole, and by this conftraint the toure fprouts will joyne and incorporate themfelues rogether in fuch fort,as that they will all make bur one focke of a nut-etree, which according to his feafon will beare fairer nuts than any other trees of the fame kind and nature. But for the more eafier doing hereof, you muft after the truir is once fhaped \& fafhioned, take away from the nut-tree, almond-tree, plum. tice, and fuch like, all the imall and rafcallie fort of fruit which you fhall find vpon \&.
themp
them, and fo the juice of the Tree will giue it felfe wholly to the renmainder : which alfo by that meanes will be the better fed and nourifhed, as hauing beftoved vpon then all the fubftance which was provided for the others that are taken awdy it they had not beene gathered. Wherefore the cafe flands plaine in the whole matter of nourifhment, vyhether it be int things that liaue life, or thofe which are vvithout life, that eche flatuéd or rafcally fort dorl come, by the juice his conlicr fion and being turned vnto the nourifhing of other fruits which are greater: and it cannor be otherwife fecing the diftributiuc vertue of the Trees beng occupied about many, nult needs haue the leffe for cuerie one, vvhereas when it hath but a few to feed, it dealech the more bountifully.
To caufe an eake or other rree to continue greene as well in Wineer as in Sommer, To hepepe an ohe graft it vpona Colewort flucke.
Write what you will in the eyelet of the figge-tree, vvhich you meane to graft, and the figge growing thereof will containe the faid wruting.
greencealall
The figge. rree will not loofe his fruit if the flocke be rubbed ouer with Mulberries; or if you caufe it to be caft about with pits while the feuen flarres doe appeare, vvatering the foot with falt brine and vvater mingled together equally.

The pcare-tree ehat you vvill graft, vvill beare a peare fmelling like rofes or muske The Pecere-tree graine ofmuske our graine of muske, or a dried leafe of a fweet fmelling rofe, and fo graft it. And the like or manste 5 Sa: may be done in other fruit Trees to haue vvell pertumed and fweet fmelling fruit: by this peece of cunning skill, Rofes become to fuell of muske, and the cyelers haue the fmell of cloues.
It mutf fland for a generall rule, that neither any graft after the bloffume, as neither that which is laden with fruir, is to be grafted.
If the white Poplar be grafted vpon che Mulberic-trec, it will bring forth white White owulberg. Mulberries. The Cherrie-tree vvill beare his fruit more carlie, and before his ord inarie time, if Grapes in the you lay quicke lime vnto the roots : or if they be watered oft with vaarme vvater: spring. fome fay likewife, that if you graft a blacke vine vpon a Cherrie-tree, that then the vine vvill beare grapes in the Spring, the reafors whercof we haue fer downe in the beginning of this Chapter.
Graft Citron-trees vpon Pomegranat or Mulberrie-trees, and the fruit thereof will be of a red colour.

If you would transforme fruiss from their naturall Ihape, into fome other diucers To fafbion . and artificiall hapes, put che faid fruits when they begin to be fomewhat bigge, be- fruits offter twixt two mouldes of plafter or baked earth, within which chere are portratures of one wille diuers forts, cut and tie them foftly, for the fruit as it groweth will take che flampe and impreffion more and more: but in the meane time, you muft conuey ayre into the moulds ar lietle holes : for elfe the fruit would ror with hin.

The graft that is made vpon the Alder-tree or Oake, bringech forth a verie ftrong Tree : but ifit beare fruit, yee the fruit is of no fauour or tafte.

To haue Peaches or Almonds to grow with leters written vpon then: after Peactes or iste that you have eaten the Peaches or Almonds, feepe che fone two or three dayes, af- mponds wristeen terward open it foftly and take out the Almond, and vvith a braffe pen or otherwife vvrite vpon the rindc of the Almorid, vvhat you pleafe, but doe it not too deepe, afterward put the Almond againe into his fone, ,vyrapping the faid flone abour vvith paper or parchment, and fo plant it, and the fruit growing thercupon vvill be vvritten and ingrauen.
To make Peaches redd: feuen dayes after you haue fee the Peach fone, take Rud Peechert? it out of the earth againe, and vvithin the opening of the fhell put fome Vermillion or Cinnabrium, and then fetitagaine: It will fall out likewife after the fame manner,

Peaches of one or other colour

Peaches with oat fones.

## Fruitffill ponse-

 granats.
## To make biltey

 almonds Sweet.
## Tomake good

 Mucadell.

Nuts with thin fhells.
Anulotree bearing neither. leafenor fruit till MidJommer

The grafting of Peackes.
if you graft the great Peach vpon the red Rofe-tree, or vpon the Almond-tree, or vpon the red damaske Plum-tree: you may alfo makethe Peach of fuch other colour as you will, if according to the manner aforefaid, you pur fuch colour as you To preuent that Peaches doe nor beconell. Io preuent that Peaches doe not become withered and rotten, you mutt take a-
way the barke of the flocke of the PeachCome fmall quantitie of moitture, after you mult draw che pay iffue out from thence mixt with ftraw. Pearce the bodie of the Peach-tree below, and take away the pith, and faften within it a flopple of Willow or Corneile- cree, and then you fhall naue Peaches without any fone.
Pomegranat:- trees will proue verie fruitfull, if you annoint the focke of the Tree with purcelaint: and fpurge ftamped together.

Of an Almoud-rree that is hard and bitter, you Shall make a fof and fweet, if you bare the focke suen vnto the roots which lie fhalloweft in the ground: and water them oft during certaine daies with warme water, before that it bloflome, and thus the Almonds that before were bitter will become fweet.
To make goot Mufcadell : Take an yron wyre and pur it in the plant of focke, which is cut with three eyes, vfing the meanes to haue all the pith forth: ater which fill up the faid flocke with Nutmegs, fopping it fo therewichall that the water may not get in : and the rootes that chefe three eyes fhall beare will bee Mufcadell rootes.

That nut will hate a ve, is tender fhell and a verie thicke kernell, in whofe foote, ftocke and rootes there are put afhes.
To caufe a Nut-tree that beareth no. leaues before Midfommer, vpon Midfommers cuen to put forth both leanes and fruir together, and withall to haue his fruit ripe and readie to eate as foone as any other: fili a pot with greene Nuts gathered the faid Midfommer euen, and make a hole in the bortome of the por, that the water may rusne nut, putting it after that vpon the faid Midfommers euen into the earth. Plant the fhootes that come of thefe, and you fhall find the thing before fpoken of.
The grafting which is performed to a graft vpon a tree correfpondent and anfwerable to the nature of the grate, proueth of moft beaurifull growth, and molt fruitfull, and his fruit moft durable : which falleth not out when this correfpondencie, fympathe and fellowfhip is wancing: and this is the caufe why the Peach-tree thruech better being grafted in the plum-tree than elfewhere, and the Peare- plum-tree in the Almond-tree, and there continue a longer time.
The grafing of If the eyelet of the Peare-plum-tree, and of the Almond-tree be grafted together,
plums tike to the aimond.

Fwits without bloffomes.
Apples of a yellons solour. : .

Apples of two
tasie.

Late riping
fruit:
the peaer plumz the kernell of the fruit which commeth thereof will bean Almond.

The Plum-tree grafted vpon the Almond-tree beareth a fruit like vnto the Almond, and if it be grafted in the Nut-tree, the rind or huske wall be like vnto the nut huske or 1 ind, but within it will be a plum. A gaine, if it begrafted vpon a quince. tree, it will bring forth a fruit of a diuers fafhion, according to the nature thereof.

Grafta Plum-tree graft or any other fruit trees graft vpon the figge-tree, and you thall haue your fruit to grow without bloffoming.

Graft the grafts of an apple-tree vpon a fowre peare, and vpon the Richardine apple-cree, and you fhall haue apples ofa yellow orftraw colour, and of the chefnuttree: \& to haue fuch as will laft vnto Noucmber, you muft graft them vpon a quince tree, and other late trees, and fo they will be for to keepe two yeares.
Take two grafts of apple-trees, the one fowre, and the other fweet, and joyne them clofe together when you fhall graft them : the apple will tafte both of the one ando. ther favour, as we haue faid before.

If any tree bring forth his fruit late, or if it be altogether barren and without fruit, and yet full of borh leafe and vvood: fet in the middeft of his maine roote, or elfe in the middeft of his focke about Winter, a wedge of greene-wood, thenext yere following it will beare fruit: The reafon is, becaufe by the meanes of this wed ge,
thefap and fubftance which wandred abroac and imployed is felfe about the bearing of leaues and increafe of wood, will draw in it felte, and goca clofer and neerer way to worke, conuerting his feruice to the making of fruir.
You fhall haue Cherries on many Trees which will be good to eat vnto Nouember, if you graft the Cherrie-tree vpon a reclaymed Mulberrie-tree, and vpon therrime a wild one.
-. If you defire that the fruic of your grafts fhould increafe in goodnefle, and furpaffe che taft of the common grafts as they are when they are grafted, you muff firt before you graft them, tteepethem in honie tempered with Rofe-water, fo long as till they be throughly moiftened, and then grafting them, draw them ouer afterward in fted of morter with Virgins-wax, and other things fit to lute wethall: if afere this manner you graft Medlar-trees on Goofe-berrie-bunes, and vpon naturalized mul-berrie-trees, and withall, in the grafting wet your graft in honie, you thall have a haftier or carlier and better fruic.
Graft Chefnut and Caliot-peare-trees vpon a Goofe. berrie-bufh, if you would Formard peares haue them to beare cheir fruit earely : and vpon the white thorne, for to beare it late, and late pearess or elfe vpon the fowre peare.cree.

To make apples red, you muft water the tree with vrine, or elfe planc Rofe-trees Red apples. neere vnto the Apple-trees.
${ }^{2}$ cares will haue no fones, if at the firft you picke away the fones and all other Peareswithons grauell from vnder them verie carefully, making the ground where the Tree fhall fiones. itand free thereof, and withall lay ypon it at the roots being planted good fore of fifted carth, watering it afterward verie diligently : but and if the peare-tree be alreadie growne vp, and become a perfect Tree, you mult lay it open to the loweft roors, taking away all the foones and grauell that is vnderneath, and about it, and cafting in the carth againe which you caft forth abroad, but after that it hath beene fifted, and fome dung put vnto it, feeing that it be watered, after you haue fo caft in your earth.
: The pomegranat will become verie red, if you water the pomegranat -tree with Fedponegraà water and lee mingled together.
The fowre pomegranat will become fweet, if you lay about the root of the pome- sweet porme: granat-tree the dung of fwine, and water it with mans vrine.
granats.
Graft the graft of the Peach-tree vpon the Quince-tree, you fhall haue Peaches Peachesand and Quinces togecher : likewife if you graft vpon the Peach-tree, the graft of the quines stoge. Quince-tree.
The graft of an Almond-tree grafted vpon a Peach-cree, or that of the Peach- Peachesandalitree grafted vpon an Almond-tree, caufeth the one tree or the other to bring forth monds sogether; both Peaches and Almonds, whoferind and kernell alfo will be good to eat.
To haue a pippin or kernell to bring forth a faire fruit and timelier than any other To bauefire graft vpon the fame flocke, take the branches of the Peare-tree or Apple. tree, and fruit of apion at the lower end make litetle holes, but not cleane through, and not within a hand. pin or kerneth. bredth onc of another: they muft be one right ouer againft another, and haue a grain or two of falt put into them, and hereupon the branch laied in the earth with a few oats, curting off the end as is vied to be done with grafts when they are grafted. If hercupon the branch take and wax greene, it wil beare a fairer and timelier fruit than any other of that kind.
To haue red Apples, you mult plant Rofe-rrees or Mulberric-trees neere vnto the Red applessi Apple-trees. Or elfe fer fome ftake in the earth neere vnto the Apple-tree, and there neere at hand fet a veffell full of water, whereupon the Southerne Sunne beames may directly beat in fuch fort, as that the vapour which thall rife from the water may beat againf the fruit : or elfe vncouer the Apple-trecat the foot in the Spring time, and Water them fundrietimes with vrine : couering them againe about ten or twelue daies after, and watering them with vrine betwixt times.
To make apples fweet, you muft water the roors of the apple-tree with mans vrine, sweer apples? wherein hath beene diflolued goats dung, and the lees of old wine.

Ii 3

Great cherries. A fruit fiull apple tice.

A trec bearing grapes and bes fruit

Praches.
To haue grcat cherries, you mult often hreake the cherrie-tree.
To haue great quantitic of apples, you muft compaffe the ftocke of the apple-tree the height of a foot aboue the earth, witha plate of lead taken from the pipe of a pout, and when the apple-tree beginneth to bloflome; you mult take away this band of lead. This banding may be renewed eiserie yeare, to make the apple-tree fruitfull : the like courfe alfo may be taken with the peare-tree.
To make a tree to beare grapes together with the fruit of his owne kind: Put the ftocke of a vine in the foor, and boring the tree cleane through with a wimble, you Thall at this hole put through the vine ftocke, in fuch fort as that there may be two joynts remayning within the ftocke, and fo much of your vine ftocke as remaynieth withinthe ftocke of the tree mult be pilled, and the barke taken away, that fo the fubftance of the tree and of the vine flocke may more eafily grow together : after this, you fhall ftop the holes of the faid bore verie clofe, both ot the one fide and of the other, to preuent all daunger of water getting in, and at the end of three yeares, cut off the vineflocke behind, thus your rree will beare grapes, and his owne naturall fruit, and both they will grow from the fame trunke or bodie.

Graft the graft of an apple-tree vpon a peach-tree, and likewife the graft of a peach-tree vpon a peare-tree; and on the contrarie, and you fhall hane a ftrange fruit called peach-apples, and peach-peares. And thus likewife ftandeth the cafe, if you graft (as hath beene faid) the graft of a peare-tree.

## Chap. XIX. Of the time of planting and manner of tranßlansing of grafied trees, boit great and fmall.

The fiteftime to plantio
 Ome fay, that it is beft to plant in the Spring Equinotiall (which is the time about the twelfth of March ) becaufe that trees at that time, take root, and bud more readilie, and put forth the fooner, efpecially in cold places. The greateft part of this our countric of France, doe plant and tranfplant trees before and after the foure and twentieth of December, at which time we fee here in the citie of Paris euerie Wednelday and Saturday great fale of diuers forts of trees: and yet in my judgement this is nothe beft time to plant and tranfplant, becaufe that trees would not be wafhed nor wet about their feet, atuch rime as they are planted: but for the cime before and after the foure and iwentieth of Nouember (which is called the dead Moneth) it doth nothing but raine for the moft part, as we haue obferued for this ten yeares fpace: and although this time were cold, as fome commonly repore that for three weekes before this day, and three weekes after, great cold doe rule and raigne; then if the cold be fo great, how fhould it be but that the roots of the Trees tranfplanted, as alfo other plants fhould freefe, efpecially the earth being newly ftirred, as is moft cuidently apparant in vines. But the beft time to tranfplant Trees, is in Autumne, becaufe that in Autumne there is as it were a fhadow of Sonmer, S. CMartins Sommer, and in this time it feemech as though Trees would makea new Spring, as the bloffoming of fome Trees at the fame time doth feeme oftentimes to perfuade, and for that in this time Trees take roor much better than in Winter; in which time there is nothing almoft that thrineth. And if the cafe fo ftand as that it is fit for to plant great thicke Trees, the pit mult be made fixe moneths before; and that becaufe the earth fhould thereby be corrected, and as it were renewed by the ayre and hear, as husbandmen and other workemen know verie well which turne their grounds before Winter, and all the time thereof let them lye thus tilled, then by a farre ftronger reafon,you fhal find that is is much better to plant trees in Autumne than in Winter. Buthowfoeuer it be, when you plantany thing in Autumne, it mult be done fome fiue daies before the

## the Countrie Farme.

end of Auguf: : and in high and drie places men plant at all times and feafons. It is good to fow or fet the firf day of the firft quarter of the Moone: but the $8,9,1 \mathrm{IO}, \mathrm{II}$, 12, 13, 17 , and 18 , it is not good. If you plant in the decreafe of the Moone, the tree will yecld the more profit, and fruit will grow the fooner thereupon ; and by how much your planting fallech to be neerer viro the end and going out of the Moonf, by fo much the cree will be of a more beautifull growth, and becomming more fersile and fruiffull:but and if you plant inthe encreafing and new Moone, indeed your trees will take better, and become more durable and lafting: they will pread in roor, and wood, and leaues, but they will gine ouer fo much the more to beare fruit. If conftrained by fome neceffrie, you plant in the new of the Moone, then ir will be befl for you to breake off the fhoors that they fhall thereupon pue forth about the later end of the Moone, and then they will beare thetrf fruirs as others doe. Notwithftanding, this limiting and bounding of the cime ot the Moone is not of fuch warrantize, but that the tree may be as profitable at all other times of the Moone, as well as either then, or elfe in the encreafe and new of the Moone.
Some plant in Ianuaric the plants that haue the fhanke or foot of their fioots cut byas, as alfo the plant that is fee of foncs, and in a well tempered place: but in a warme place, men are wont to plant in the moneths of October, Nouember, and December.
Trees that haue a groffe thicke roor, are planted in October, Nouember, and December: but the fhoots or little brainches are planted in March, when they are in rappe.

Trees that haue a great pith, as Figge-trees, naturalized Mulberrie-trees, Hazell, and fuch like, are planted without anie roor, from after mid September vnto the beginning of Nouember: but other trees which you would plant with roots, muft be planted abour the beginning of December, or verie fhortiy after.

Groffe erees are tranfplanted from one place into another in the moneth of No-Grofe or shicke uember, and they mult be freed from Snailes, and lopt and cropt before they be trees. tranfplanted, for fo they take the better, and put forth thcir fiences verie powerfully: and if in taking of them vp, or tranfporting of them, it happen that the barke of their roots be broken, you mult draw the pilled and vicouered place ouer with good dung or earth, before that you put it into the ground againe, and firre vp the earch' verie well round about where you intend to let them downe againe, to the end that their roots may Ipread and feat themfelues to their good contentment, without being pinchied or fraitened.
Some doe remoue from after the beginning of Nouember vneill March, when the trees begin to enter into their fappe; for the fappe once drawing vp aloft, doth forbid all remouing of the tree : and therefore, in luch cafe, the fooner the better, that is to fay, if prefently after the leaues be fallen, which is in the beginning of Winter, you goe about it ; but in waterie places it is good to flay till Ianuarie and Februarie: but nothing muft be done chis way when it raineth, or when the earth is wet; for it would fo harden vpon the drying, as that the roots would be oppreffed and choaked.
The young grafts which you haue grafted in the flocke-Nuriecrie, or elfewhere, roung graftid muft be remoued as foonc as the grafts thall haue ciofed vp the cleft of the plant, as fome are of opinion: but yet this is hazarded ware, the graft hauing not as yet taken almoft anie difpofition or good liking of the fappe of the plant, which being thus againe remoued, is halfe aftonifhed and put our of the high way of his well-pleafing nourihment, and fo beginneth to wither when ir conmmeth to take a talt of his new difles and prouifion: but and if you flay till the gratt haue put forth a fairc branch, before you remoue the graft, you fhall fhunne the danger that might orherwife enfue.
: You mult plant your trees againe as foone as you haue taken chem vp, if no other To remous weightie matter let you: but if you be put off from doing it, either becaufe it is crees. brought you from farre, or vpon fomie other occafion, you mulf; fo foone as they be
caken vp , couer their roots with the carth from whence they were taken, new leaues, and fraw, that fo the raine may not wafh them, and make them afterward to rend when they become drie againe; and to the end alfo, that the ayre and breath either of the wind or of the Sunne, or yet of the Moone, nay not drie them and fucke our the moifture, which keepeth their roots in good heart, and fit to grow, both thefe things being verie hurffull, but the raine the worfe of the two.
Sowre Cherrie-trees cannot abide to be remoued : for being tranflplanted, they will hardly put forth anie fiences, efpecially if they haue cheir chiefe and principall root maimed.
Before you remoue great trees, you mufl loppe off their boughes verie diligently, as hath beene faid: but as for little ones, you need not crop them,to take off anie part of their heads, neither yet to take anic of their boughes from them, if they haue not too bufhic a head : If you defire to know a reafon wherefore, it is thus; It you leaue the head and toppes vpon trees when they are growne fomewhar great and thicke, they will ftill be fending of their fappe vpward, not looking to the feeding of the roots, for that the ayre attractech the nourifhment of plants : as may eafily be proued by example, when there growect anic fmall cree vnder one that is verie great, for there the frmall tree will not thriue fo well as if it were abroad in the ayre, and from vnder the fhadow; and fo that which hath his head cut off, will take root fooner than and if it were whole and vntouched. But if the tree which you remoue, exceed not the thickneffe of a great ynch,you fhall let it remaine whole, becaufe young plants take root more cafily than thofe which are old, and the reafon is openly knowne.

If the rootes of the crees which you would remoue, be much longer than is needfull, you may take off the ends thereof in feting them downe againe, and that fo much as may fit beft for the hole wherein you meane to fet them, for fo by this meanes they will not be flopped vp of the fides of the hole, but will attract and draw moifture out of the earth for the nourihmment of the tree a great deale more aboundantly.

When you remoue anie tree, you muft lay his rootes round about with fat earth, and take heed, that the weedie earth which you haue digged or cut away from the. pit whither you meane to remoue it, doe not fall in amongft the roots, for it would put them in danger to be ouer-heated : or elfe, that they growing vp againe, might diminiih the nourifhment of the erce. If it happen, that the earth which you haue taken out of the pit be full of wormes, which might hurt the rootes, then mingle therewith fome lee and afhes. When the rootes haut taken foot, trample downe the ground as hard as may be, or elfe beat it with a Pauiers beetle, watering it afterward if it be drie, or elfe not.

## С нар. XX.

## Of the place and Soile for Trees in zenerall.

 He principall point in growing of Trees, is to prouide them of conuenient ayre and earth, becaule that thefe doe cheere and feafon them, and are the proper fubieCt of their nouriीment. And as concerning the earth, that is recommended vnto vs, as to be had in regard and looked vnto more than anie thing elfe, as that it be fuch as is verie murlie, temperate in cold and heat, and of a meane and middle fort of moifture and fatneffe; for fuch ground as exceedeth in anic one of thefe things, is not fo fit for anie Fruit-trec. This is a rule to ftand generall in and for all Fruit-trees : but as for particular kinds of Trees, it is verie well knowne, that euerie particular Tree craueth his feuerall and particular foyle, whence it may gather fit and agreeable nourihmment for it felfe,

## the Countrie Farme.

as Theopbrastus teftifieth. In like manner, one defirech a diuers kind of placing and firuacion from the other. Whereffre the trees which craue che effrefhment of hauing their fockes taken vp, doe commoonly thriue better in valleyes than in high places, as well for that their feat muff not be aliogecher fo drained of moifture as the higher places be, as alfo for that the moifture which is in higher grounds conueyeth it felfe and diftillech into the lower and hollow, whecher is be raine or anne fpring rifing from thence.
In watrie places you muf not make your pit verie deepe, wherein you meane to plant your tree ; but in drie grounds you muft fet thenn fomewhat more deepe : neither yet muft you heape too much earth in vpon thofe piss when you fill them vp againe, that fo the raine may the better ftay about them and water them.
That which is commonly rcceiued, as that in good ground there grow good fruits, mult be vnderftood with refpet had to the naturaill goodneffe that the fruit hath in if felf, if both the induftrie and skill of man to husband and keepe it neat, and deliuer it when anie inconuenience prelfech vpon it, to drie and to feafon it fo as chat is may yeeld his fruit in due time, be not wanting,for thefe failing, the fruit will likewife greatly failc of his goodneffe, taft, and durablenefle, and fo will falffie the generall rule aboue named.
Set downe with your felfe, to remone your trees into fo good a ground; or rather better, than that from whence you tooke them vp, hauing refpett to other efpeciall obfertuations befides to be obferued, according as will be required of the particular natures of euerie one. And if it be poifible, remoue them into the like fituation for the receiuing of the Sunne--hine, vinto that which they were firff fet and planted in: and that you may not fale hereof, narke thcir barke vpon fuch or fuch a quarter, and fet it vpon the fame againe in remouing of it. But this obleruation (as I muft conteffe) is not alwaies kept, for the reafons aboue named.

Allo plant thofe of a forward Spring in a late foyle, and a late foyle in a hot ground.
The greateft part of trees doe delight in the South Sunne, and to be feated vpon fome Sunnic banke, from the Weflerne wind, as being verie contrarie vnto them, efpecially to Almond-trees, Abricot-trees, Mulberrie- trees, Figge-trees, and Pome-granate-Irees, but principally from the North-eaft wind, becaule it is harpe \& fwith ning, verie hurffull for all forts of plants, cuen to all fruits, of what qualitie focuer that they be, but chiffely when they are in bloflome, and that becaure it blowech from off the Sea, as alfo for that it is halfe North, which is verie fharpe, but not fo dangerous as the North-eaft: and fome fay, that this wind bloweth once a yeare,as in the Spring, and that it fpoylech buds, efpecially thofe of the Vine: Undeverfus; Ve tibi Galernas per quam fite elawf a T aberna. On the contrarie, Chefnut-trees, Cherrie-trees that beare a fowre fruit, Quince-trees, and Plum-rrees, doe not much affect or fport and delight themflues either with cold or much heat.
In watrie places trees commonly grow great, and beare much fruit and leaues, but they are not of anie commendable rellifh, colour, or durablenefle : yea, they beare fruic commonly the yeare chey are fer, if they be accuftomed to beare. Trees muft be fet the thicker in a fruiffull foyle.
If you meane to plant trees in a cold place, and that yet the tree fhould not bs hurs of the cold, you mult plant them on the Sunnie fide of the banke, from the North, but towards the South.

## Chap. XXI.

> Of the place and sime whercin enerie Fruit-tree delighteth tobe fowne, planted, and grafted in particular : and
> first of the Almond-tree.

The Almonda treen

The profitable Almond-tree.

The barres Al mond-tree.
He Almond-tree delighteth in hor places, looking towards the South or Eaft, or where the ayre at the leaft is moderate ; as vpon the tops of hills, or places ncere vnto hills, that are fomewhat ftonic and grauellie, ftonie or marlie: in which places it doth not onely flourifh well, being planted, and bloffome aboundantly, bue beareth therewithall great quantitie of dric Almonds, as alfo hard and well-rellifht ones. But contrariwife, if it be planted in a moift and watrie ground, and cold place, it neither groweth well, nor beareth fruit well, neither yet continueth long. The fir time for the fetting of it, is about the Winter Solltice, which is the eleuenth day of December, euen vnto the end of the fame moneth,or fomewhat after: for the plant of this tree being forward and early in putting forth buds, if it were planted in the Spring time, it might let flip and loofen the time of the yeare, which might be the fittell forthe maintaining and comforting of his bloffome. If you would have it to grow of the flone vnbroken, and if I may fo fay, of his feed, you muft let it be in Ianuarie and all Februarie, in luch places as are remperate, or in October and all the moneth of Nouember in places that are hot. And thus to caufe it to grow of his fruit, you muft take new Almonds, thicke ones, hauing whice fiells, verie porous and fpongte, and lay them in fleepe for the fpace of twelue houres in honied water, and after this digge them in the earth foure fingers deepe, the fharpe end downeward, and after to water them three or foure tinies a moneth. It groweth alfo of hoots and fiences, but the fience muft be taken from the top of the tree, full of pith, found of barke, and cut vnder the knot. And as concerning the grafting of it, you mult take the time of Autumne, for (as hath beene faid) this tree is a quick-fpur and fore-rider: but and if you flay till the Spring time, yous fhall breake it off when the fienie is fully put forth. And for the chufing of grafts that will take well, you mult take them vp on high, and on the top of the tree, and not from the middeft, much leffe from below; and thefe grafis you may graft either in the bud, or in the cleft, and vpon a tree of his owne kind, or vpon the Peach or Plum-tree : indeed the Almond-tree that is grafted, is not of fuch growth, or fo fruitfull; as that which is planted:
The good Farmer muft plant and make grow great flore of Almond-trees, feeing they are not chargeable to maintaine, neither yet their fruit to keepe, but rather of greater profit and leffer loffe than anic other, feeing that euen vnder them Corne will grow iolly and faire, the Almond-tree hauing but a few leaues, and thofe little ones.

The barren Almond-tree will become fruitfull, and beare, if you lay open the roors in Winter : or elfe if you pierce fome part of the flocke clofe by the earth, and put through the hole a wedge of Oake, watering it about with mans vrine.
You fhall make bitter Almonds fweet, if you lay round about the roots of the Al-mond-tree Swines dung, and Vrine, cafting much earth vpon it afterward, and this yearely: or if you bore a hole in the flocke of the tree, and put therein a wedge dipt in honey: or if (as Plinie and Theopbraftus fay) you bore the flocke through and through below, and let the fappe runne out.
Bitter Almonds. Of (weet Almonds you may make fowre ones, if you let the beafts browfe and crop off the firft and tender branches.

The A mond-tree will be free from all annoyance of fogges, iffo be there be fmall gravell laid vnto the rootes before it bloffome, and when it fhall begin to bloffome, chen to take it away.

You may haue written Almonds, if you breake the fhell of an Almond veric fine- Altronds mith is ly, without doing anie harme to the kernell, whereupon hauing writen what you pronten letters. thinke good, wrap vp the fhell and kernell in paper, and fo fer is well collered with dyrt and Swines dung.
Almonds are gathered when cheir huskes gape through the force of the Sunne: The gathering and hauing beat chem downe, if you hell them alrogecher, and wafh them in falt brine, they will become white, and will keepe a long emme, prouided that betore you lay them vp to keepe, you drie them in the Sunne. Therr huskes will be eafily raken off from them, if you fpread them vpon ftraw.
The place to keepe chem well, mult be drie, whecther it be Coffer, Preffes, or Garner: and if the number be great that you would keepe, yon mult fee that the place haue good fore of ayre, and be lying open to the North wind.
The biterer Almonds haue power to refifl drunkerneffe, as $\mathcal{F}$ lutarch witneffech, of Drunkennefoo a cerraine Phyfition, which did vfe to drinke our all commers, and not be drunken himfelfe, and that by eating fiuc or fix bitter Almonds before he did drinke:bur they kill Hennes and Chickens it they ear them. The bitter Almond bruifed and rubbed or layed to the browes and temples, doe appeafe the head-ach, and procure fleepe, cfpecially if you put vnto is water of Veruaine.
The vee of fweet Almonds is good for them which are troubled with clammie Difereded lunget fleame in their throat, or which haue weake lungs, and are fubied to the granell in the reines, or difficultic of vrine, as alfo to reflore natures force, and to make men apt to venerie. The gumme of the Almond-rree doth quickly flay the ferting of bloud: yea, the daily vee fufficiently fheweth how profitable this frut is, tor if feruech all the yeare long for the making of Alırond milke, Potage, Pennets, Marchpanes, and other fuch daintie deuifcs.

## Сиар. XXII.

## Of the Peach-tree, Abricot-titree, Spanifh Peach-tree, Peach. Plum.tree, baflard Peach.tree, and the <br> finall:Peach-tree.

Each-trees are planted of their flone, fetting it two fingers within the ground, and the fmall end, thereof vpward: it delightech in fandie places, in drie places, and where the Sunne hath his full force; but in cold, moift, and windie places it diech prefencly, if it be not defended from the faid inconueniences. You muff fer the fone with the fharpe end turned into the ground, and when it is in the earth, digge it, batcle, and ftirre vp the earth about it at the foor, at che leaft thrice a yeare : you muft allow it durg, a fat foyle, and a fmall mould, and that a little before Wincer come, and efpecially Swines dung, which maketh it to grow more thicke than anie other fort of dung or bating; by this meanes you fhall haue good Peaches, thicke ones, and flefhie. You mult hikewife weed them off : after, when it is two yeares old, you muft remoue it, and lay it along in his pir, euen after the manner chat they vfe Vines, letting one onely bough fland out of the earth, which may grow to ferue for the focke and bodie, and thus it will continue long by reafon of the great number of roots which it will haue both to flay it as a foundation, and to feed it : but you muft cut off the longeff branch, and that which is the fraighiceft of all the other, which is the thing that would be diligently praatifed vpon all fruit trees, becaufe that ic is the thing which keepeth them from bearing fore and aboundance of fruit. It is not to be grafted out of it felfe, if you will hauc it excellent: how beit, to make it laft the longer (in as much as it foone waxech old) it is good to graft it vpon a bitter Almond-tree, damaske Prune-tree, or Quince-tree, but not osherwife chan fcutcheon or flute-like.:

## The tbird Booke of

It muft be watered at euenings in hot weather, with coole water, and Comerimes with water mingled with the lees of wine, efpecially when it withereth and beginneth to fall away: as alfo to remedie it when it is in danger of fainting and drying, you muft lop it and cut away all the boughes, as is wont to be done with Willowes when they are headed; for by that means they become luftie and frolike, and to haue as manie boughes as they had before. It muft alfo be flayed vpon fome Pole or Wil. low, becaufe his roots be verie tender, (mall, and not creeping farre into the earth:likewife we fee that the Peach-tree doth grow old and fall away incontinently.

It beareth a diuers fruit, as well in colour and taft, as in fubflance, and this diuerfitic commeth, for the moft part, of the ground, but principally of the husbanding of them. And that it is thus, the Peach-crees that are planted or grafted vpon Viries, bring forth Peaches of a better caft and more folide fubltance : the Peach-tree grafted vpon a Mulberrie-tree, bringeth forth Peaches that haue red flefh:the Peach-tree grafted vpon a Nut-tree, doth beare Peaches with huskes like Nuts, whofe tree is but mall, and hath leaues like vnto the Alnoond-rree, and a reddifh flower. It is true, that fuch a tree may become fuch a one of it felfe, as we fee infinitely in France. The Peach-tree grafted vpon an Almond-tree, beareth Peaches which haue a kernell like vnto the Almond, but the rind and the flefh like vnto the Peach.
There may as much be faid of Abricots, called of the Latines Precocia, or Armeniaca; of Spanifh Peaches, Medlarerree, baftard Peach-cree,and fmall Peaches, which are kinds of trees agreeing much with the Peach, all which are verje tender in froft, efpecially the grafted A bricot-tree, and it continueth not palt halfe the time of the Peach-tree : all of them are fubieft to be fpoyled of the cold, fnowes, frofts, and fogges, which happen after that they are blollomed: but to keepe thein from thefe dangers, it will be good to graft them vpon the Quince-tree or Almond-tree: all of them will beare great fruit, if when they bloffome they be watered with Goats milke. Conserning the particular vertues of the Peacl-tree, lee more aboue in the nineteenth Chapter of this Booke.

Seelanchotis. Wormes.

The flowers of the Peach-tree are excellent good againf melancholie and the
wormes, if you make fyrrups thereof of feuen or eight infufions to be taken fafting. The gumme of the Peach-tree is taken with good fucceffe in the fpetting of bloud with the water of Plantaine or Purcelane : for the cough and difficultie of breathing, with Hydromel, or the decoetion of Folefoot:for the grauell and fone with the iuice of Radifhes, Citrons, or white Wine, the weight of two drammes. The leanes ftamped and applyed vnto the belly, doe kill wormes: the iuice thereof dropt into the eare, doth the like: the kernels eaten, take away the wringings of the belly: eaten to the number of fix or feuen in the beginning of meat, they preuent drunkenneffe: flamped and boyled in vineger to the forme of a broth, and after rubbed in place conuenient, they hinder the falling of the haire: ftamped and made in forme of milke with the water of Veruaine, and rubd about the browes and temples, they ceafe the headach : the oyle made by expreffion ceafeth the paines of the eares; and in clyfters, the Collicke and Sciatica.

He that hath regard of his health, muft not vee thefe fruits but as fparingly as he can polfibly, and fafting rather than otherwife, becaufe they corrupt eafily in the ftomacke: but aboue all things, they may not be eaten dipped or fieeped in wine, becaufe wine correcteth them not, as fome thinke, but rather caufech that their iuice pier ceth the more fuddainely and eafily into the veines. The Peaches of Corbeil are counted for the beft, hauing a drie and folide pulpe, and fomewhat red, not fticking or cleauing anic thing vinto the kernell. The Romanes made great account of the Peaches which they called Perfica Duracina, as doe alfo the Britons: Theleaft dangerous, leaft fubiect to be corrupted, and mof pleafant, are the Abricors; which allo fome hauc left out of the number of the kinds of Peaches, and placed amongit the Plums, as well becaufe of their pleafant fmell, as for their harmelefneffe, and that both within and without they doe rather refemble the Plum than the Peach. The oyle preifed out of their kernell, is maruellous good againt the Hemorrhoids and fwelling
fwelling of vicers, and is alfo vfed as a remedic againft the impediments of the fpeech, and paine of the cares.

## Снар. XXIYI.

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\text { Of the fmall } \mathfrak{N} \text { at-tree or Hafel-tree. }
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 He Hafle-rece(which is called the fmall Nut-rree of thc fmall fruit which it bearech, or the Filberd-tree, of the great fruis that it beareth) groweth in anic aire or ground: but it beft delightecth in a lcane ground, that is fandie and woift, neere vito waters, or in places that men vee to warer, becaufe this helpeth them as well in the bringing forth of their fruit in great fore, as for to make them endure long: adde hereto, that they put forth and ipring in fuch fort at the root, as that thereof one may fet as manie as he will in other places. When they are fowne, they muft be put wo firigers vnder ground: but indeed they grow better of a plant that hath rout, or of a fhoot cut byas, and hating old and new wood, as we haue alreadie declared in the fixt chapter. They are planted in October and Nouemier, in a warme and temperate place, or in Februarie and March: and it is beter to leaue vpon shem fome boughes when they are fer, than to fet the m of one fingle rod, for fo they beare the more fruir. They muft yearely be digged anew at the Spring, neere vnto the foot, and round about, and their hoots all cur away, without leauing anie ftanding, faue three or foure for to plant and make thick bufhie fhadow, and the fame verie neat and cleane for height, not leawing anie branch or bough after three or foure fadome from the top. Wheretore, it they be oft lopped, pucked, and pruncd, they will grow the more ftreight, compaat, and ligh, and will beare better and fairer fruit: but otherwife, if a man negief them, they rumne out all their nourifhment into wood and leaues, without fruit : Their fruit is called the fmall Nut or Filberd. The Filberd of hor Countries (where fuch trees are called Filberd-trees) is more round and flefhie than the French fmall Nut, and it is a fruit verie eafily dried and made yellow. But and if you would keepe if fref and white almof all the yeare long, fhut it vp clofe in an earthen pot, and fet them in the carth; and when it is chus kept, it bringech not fo much annoyance with it as otherwife it would, for it naturally procurech drowfie headach and inflammation of the flomacke. I know not by what obferuation of our anieftors this fpeech hath growne common amongft the people, That the yeare which yeeldech plentie of Nuts,doth alfo yeeld manie mariages. Both the little Nut-tree, as alfo his fruit, haue a certaine contrarie vertue againf venimous beafts; for if you hang a clufter of fmall Nurs in anie part of the houle, no Scorpion or venimous beaft will enter thereinto, but flie away prefencly. The Countrey people have likewife marked in all ages, that the Serpent, Lizard; or other venimous beaft, dieth prefently, hauing beene flricken with a branch, ftaffe, or rnd of the Hafle-tree. And it is no maruell,feeing Nut kernels earen with Figges and Rue doe refift venime and the biting of venimous beafts. The beff fmall Nuts and Filberds are thofe which haue red fhells, and which are hardly broken. The raw fhell finely powdred, and drunke with water of Carduus Benediftus, doth heale the pleurific in the beginning thereof: being drunke to the quantitie of two drammes with red wine, it fayeth the flux of the belly, and the whites. İt is true, that for the flux of the belly, and whites, the red part of the kernell which ftickech vnto the fhell within is a greaa deale better and more forcible. The Filberd nourifhech a great deale better than the Nut, as being a clofer buit nos fo fata fubflance.

## Сняр. XXIIII:

Of the Cherrie-tree, fweet Cherrie-aree, bitter Cherric-iree, and: she bart Cherrie-tree.

(2)T is apparant, that common Cherrie-1rees, fweet Cherrie-trees, bitter Cherrie. crees, and hart Cherrie-trees, are forts of trees agreeing in manie things, for they all delight to grow in a cold and moift ground, or elfe altogether indifferent, betwixt hot and cold; for a hot ayre they can hardly endure : and fo likewife they refure to haue anie dung, becaure it ouer-heateeth them, and is contrarie vnto them : and for this caule they niuft neuer be planted in a manured ground. Notwithflanding, if you foremper the dung, as that it may not be ouer-hor for them, it cannot hure them to be dunged, no more than (as wee will flew by and by) to haue vnquenche lime laid to their feet, to haflen their fruit: but this is true, that if you dung the $m$ yearely, that then you fhall nor haue them of anie long conrinuance. They delight rather to haue their roots compafled with frall branches; and the broken parts of their owne fiences, or tmall lumpes and gobbers cut frons their owne fmall branches, for in thele they greatly reioy ce and profit mightily, haung them in flead of dung. You may either digge the bernellinto the ground, and burie it , or elfe plant of the fiences neeie dhe epps of hills and mountaines, whecher it be ina high or low place, in October, Nouember, December, and Ianuarie. You may graft them in Nouember, or(according to P alladizs) from chetwelft day of December vneo the firft of Februarie. The belt is to graft them in Februarie and in March: albeit that it be the beft cutting of all trees that yeeld gumne, when the gumme is not yet rifing, or after it is quite gone downe and recurned from whence ic rife. Laftly, Cherrie-trees neuer thriue fo well, being roothing done vnto but planted, as when they are grafted : they delight to haue their dried branches often weeded out from themfelues, and the fienses growing at their foot: they delight alfo to be fet in holes and pits that are digged and caft, and to be often digged abour. And ifyou would haften and caufe them to bring forth their fruif fooner, you mult lay Quicke lime to the foor of them,or elfe water their roots of en with warme water; but then fuch fruit is much alcered and made woife, retaining but little of his naturall goodnefle : cuen as wee will proue and find by the haftie Cherries which she inhabitants of Poictou fend vs vponh horfebacke.
They may be grafted vpon the Plum-tree and Corneile.tree, but beft vpon one of their owne kind: in fuch fort, as that fweet Cherrie-trees being grafted vpon fowre Cherrie-trees, doe beare a more fofe Cherrie than thofe are which grow vpon fweet Cherrie-trees, grafted into fweet Cherrie-trees. Cherries grow taireft vpon fmall Cherrie-trees, and more plentifully alfo than they doe vpon high and rall ones: Whierefore, who fo fhall graft the (mall Cherrie-tree vpon the grteat, fhall procure greater ftore of fruit, and inore thicke ones, fuch as are the wild Cherries, and alfo to haue more fore of greas boughs, than thofe trees haue which doe but as it were traile on the earth. In like manner, if when you graft them, you fet the bud and the eye of the graft below, the boughes that grow forth thereupon will tall out after the like manner.
The Coeurs and Agriots may be grafted vpon the common fweet Cherrie-tree, but better vpon wild ones than vpon garden ones. We muft therefore acknowledge eight forts of Cherries growing ypon Cherrie- trees: that is to fay, thofe which are properly Cherries, hauing a verie hort falke \& round apple, being alfo red, flefhic, fill of mise, fharpe, and hauing a fweet kernell: wild Cherries, which haue bur a lirtle flefh on thens, but are red allo on that fide toward the Sunne, and white on the other fide, the flone cleauing to the fleh: blacke Cherrics, whofe iuice is fo blacke, as that it colourech the hands and lippes : bitter Cherries, which are fomewhat of a
bitter
bitter taft, whercof they hauc cheir name: Guyens Cherries, fo called, becaute their firft orig inall was in Guycme; they are long oures, and manie hanging tegecher a one ftalke; they are alfo verie fwect : Piugares, and thele are groffe thicke ones, white, hauing a hard flefh, bur fweet, and cleauing vnto the kernell: Cours, which are like vnto a mans heart, as well withour as within their kernell;fome doe call thefe Cherries Heansmes, and the Cherry-tuee Heaumier, efpecially in the Councrey of Aniou: Agriots, which are ripe laft of all, ate fharpe relifhect, and cndure carriage farre off, and they are alfo the fame which are wonc to be preferued.
Of the fpeciall properties and vertues of the Cherry and Charry-tree, fee the nineteenth chapter of this Booke, wherein is declared how the Chery may be made to grow without anie flone. If the Cherry-tree be hurt of Pifmires, you muft rubbe his tlocke with de inice of Purcelane: if it be too full of fappe, jountruft make a hole in the principall root.
Cherrics how faire foeuer they be, yet they are of fmali nourifhment, beget euill humors in the flomack, and wornies in the bodie, and fuch are ehole efpecially which are called Cocurs. The Dharpe fweet Cherries are verie delicate, fir to preferue with Sugar, as well for fuch as are found, as for them which are ficke. The bitter Cherries are good raw, but better drie, and in faw ces, paftes, and cart fuffe. The fweet Cherries are chiefely commended, in that they make che bodie foluble, as the fharpe or eager ones doe bind it, cooie it, and temper the heat of choler. The gumme of Cher-ry-tree drunke wich white wine doth bicake the flone as well of the reines as of the bladder. The water of Cherrics newily gathered being diftilled with a gentle fire, and raken at the mouth in the quancitie of halfe an ounce, doth put off the fit of the falling fickneffe; a thing verie happily and with good fuccefle tryed in manie, as CKanardus afluretio vs.

## Снар. XXV.

## of the Quinc--trec.

Ll Quince-trees, as well that of the Garden as the wild one, and of the Garden ones, as well the male as the female, defirech a cold ground, and elpecially that which is moift withall; notwithftanding that we have feene them as well to grow in places lying open to the Sunne, as at Conflans, a place belonging to CTKonfieur de Uitle-roy, neere vnto Paris, but yet indeed not farre off from a Riuer : and this kind of tree doth fo much craue to haue the companie of moifture, as that if the time fall out dric, the neccflitie thereot muft be fupplyed by watering of it: and if for want of moift and waterifh ground, it be fet in a drie ground; or in a fonie or clayie ground, it mult then alfo be often refrefhed wih water, and muft alfo be vnder-digged and laboured about the foor, that fo the wet of the night may pierce and finke downe vnto the roors, that fo it may bring forth good fruit and good fore thereof. When it is planted of rootes, it groweth fo well, as that the fecond yeare it beareth fruit : but it beareth not fo foone, when it is planted of branches. It would be planted during the encreafe of the Moone, in the moneths of Februarie or Nouember. This tree is verie commonly vfed to graft other trees vpon, becaufe they being grafed thereupon, doe continue and endure longer, and beare a more delicate fruit, than if they were grafted vpon trees of their owne kind. The beft time tor the gathering of this fruit, is in the moneth of Ocaber, when that blafting comes, and it growech to be of a golden colour, for this is a figne that it is ripe; and this muft bee in cleare and faire iveather, and in the decreale of the Moone : and then you muft cleanfe it from the moffic hoarineffe that is vpon if, and lay them out orderly in the Sunne vpon hurdles.

Quinces of diwers colours.

If the Quince-tree rake anie fhew of being ficke, you muft water it with the fetFuller of oyle, mingled with equall quantitic ot water, or elfe with Quicke lime and Fullers clay tempered rogether with water. You may make Quinces of what fafhion you will, if you teach them to grow in moulds of wood or baked earth. As concerning the meanes to keepe them, we fhall feske of that hereafer.

The garden and reclaimed Quince-tree beareth two forts of fruits, the one the male; which is called the Quince Apple, the other the female, which is called the Quincefle, thus differing: the male is lelle, more wrichled and wrinkled, drier, of a fweeterfmell and of a more golden colour than the Quincefle: the wild Quince is veric odoriferous, but of a verie hard flefh. If you graft a male Quince-tree vpon a female, or the female vpon the male, you hall haue tender Quinces, and fuch as may be eaten raw, whereas the other are not fir to bee eaten before they bee prepared.
The fmell of Quinces is contrarie vnto venime and poyfon: alfo the Quince it felfe doch comfnet the ftomacke, flay the flux of the bellie, and make men to haue a fweet breath. For which redfon, wife Solon (as (aith Plutarch) did commaund not onely the betrothed, but alfo the married women, that they thould neuer lye with their husbands, but that they fhould firlt eat of the fleth of a Quince. And yet notwithftanding, the woman with child, when the drawerh neere the time of her deliuerance; may not vfe Quinces, although that in vfing of them in the time of her being with child, they will be fome meanes of her bringing forth of a faire babe. Some make a confection of Quinces, called Marmalade, which is verie foueraigne againft
$A$ laxative
Maymalade. he flux of the bellie, which is prepared and made in manner as we will hew in the fiue and fortieth chapter; according vnto which patterne, wee may make a laxatiue Marmalade after this fort: Take of Quinces cleanfed from their Pippins, cut them in quarters, but pare them not, boyle them throughly in water, then flraine them through a cleane Linnen cloth, and wring them out diligenely, then boyle them againe with Sugar, putting thereto a fufficient quancitie ot Rubarbe in powder. This Marmalade purgeth verie fpeedily, and withall comforterh the fomacke and the liuer. In fead of Rubarbe, you may put fome other laxative thercunto, as Sene, Agaricke, or fuch like. The Cydoniatum, or Marmalade of Lyons, is made with Scammonie.

## Снар. XXVI.

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\begin{gathered}
\text { Of Oranges, Afyrian Citrons, common Citrons, } \\
\text { Limons, and Pome-adams. }
\end{gathered}
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 He Orange, Affyrian Citron, and Limon defire to be fet vpon the South or South.welt wind : for being touched with fuch winds as are warme and moift, they become more aboundant in iuice, better coloured, and thicker: which is the caufe, that the Sea-coafts being haunted with the faid winds, die abound with durable plants, and fuch trees bringing forth verie fruitfully; for others, fet vpon the North and North-eaft, are not thereby to well fitted. Some make Nurferies of thefe kind of trees, fowing their feeds in March. They will affirme and giue it out likewife, that they grow of fiences fee and pirched downe in finall furrowes, or flucke downe in baskets : and fome doe graft them vpon the ftocke neere ynough vnto the reot, and that in Aprill and in May: and fome fay, that they may be grafted after the manner of the Scutiheon-like graft, in the moneths of Summer, putting their pippins in a pot or basket neere vnto the tree where you would they Anculd be grafted or halfe fwallowed: but the moft certane direction and inftruction abour thefe Trees, is that which is fet downe in the fecond Booke, and whereunto alfo wee referre you for the fame purpole:

The Pome-adan-trec is much to be efteemed, euen of the beft Gardiners, not in refpect of his fruir (which indeed is more beautifull than profirable, in as much as it is neither good to cat raw, nor yct to preferue, but onely fir to wath the hands, or elfe to carric in the hand) but to graft Citron-trees, Orange.trees, Limon-trees, and Affyrian Citron-trees vpon, as wee haue faid in the fecond Booke, becaufe they prolper maruelloufly vpon this tree, and bring forth verie quickly fare and great fruit, elpecially the Orangc-tree. We hauc entreated in the fecond Booke, of the differences of Oranges, Citrons, Melons, and Affyrian Cirrons; whereunto we will furcher adde, that the Citron of Aflyria is of a verie good fmell, but of little fweetneffe, or anic other taft: and therefore it is vfuall to eat his flefh with fale or fugar, or with falt and vineger. The Limon differeth from this kind of Citron, becaule the Limon is leffe, in colour drawing toward a greene, bunching out both aboue and below, after the manner of womens nipples.

As for Pome-adams, they are round, twice or thrice as great as Oranges, not ha- Pome-ddams. uing a verie thicke rind, rugged, vneuen, and hauing manie clefts or chaps, verie manifefly appearing like to clie prints of reech. Some thinke they had this name giuen, of being the Apple which eAdam did bie vpon in this earthly Paradife. They are rellifhed almoft like Limons, bur nut alogecher fo pleafant. If you cut it in the halfe, and feafon it with the fine powder of Brimftone, and after roft the fame vnder the afhes, and rubbe therewith the itching bodie, or anie part thereof, it will heale the fame.

## С няр. XXVII. <br> Of the Eigge-tree.

(4)gge-trees are either whice, carnation, red, pale, or greene; and forne alfo be blacke. There are fome that beare before the cold come; others are more late in their fruit: and againe, of all thefe, fome beare a fmall frut, as namely, the whitc ones; and otherfome a great and groffe fruis, flanding out wich great bellies, as by name the blacke ones, of which yet further there is cne kind that bearech long Figges, hauing almof no bellies, and thefe draw nothing neere in goodneffe vnto the great bellied ones, and thofe which are more fhorr. All forts of Figge-trees loue a hor ayre and countrey, a drie and fonie ground, infomuch, as that it ceafech not bearing of excellent fruit amonget the heapes of fmall ftones, prouided, that there be good flore of depth of earth to fpread and finke downe his roots into at eafe. Such a tree, as manie others, is apt for hot Countries: but hee that would haue of them to grow in cold Councries, muft make choice of thofe which bring forth their fruit before the cold cime of the yeare, and mult couer it with fome ihield in Winter, and compaffe it about the foot with far ground, or dung of Oxen, or Affes, verie well rotted, for otherwife it will yeeld him no pleafure. This tree is fo full of pith, and his fruit fo moift, as that if you water it, the fruit will not keepe: but yer you may vnder-digge and digge ir, to the end that the nights wee may enter into it. You muft take from it all dead and roteren wood, not fuffering by it the water tof find anie flanding vpon the tree, for otherwife the fruit would nos have anie taft or fauour.

The Plant of the Figge-tree, which is of a branch or of flooes newly put forth, is planted in Oatober and Nouember, in a warme and temperate ayre, but in Fe bruarie, March, or Aprill, where it is a cold aytc : and yet the Genowzyes doe plant branches all the moneth of Auguft, as they are laden with leaues and fruit. As for the grafting of it, that may be done in A prill, as well in the bodie, or flocke, To grafit the as in the barke or rind. Some fay, that the Figge-tree planted amonglt Vines, Figge-trees
doth it no annoyance, which is in fome part true, becaufe there is fome confent and agreement betwixt the Figge and the Grape, and both their woods are full of thick puth; and Raifms or dried Grapes being wrapped in Figge leaues, doe not onely keepe well and found, accordng to their nature, but amend and become better both in taft and finell: and in part falfe, becaufe the Figge-tree cafteth our fuch large branches and broad leaues, as that the fhadow thereof doth hurt the Vine. There are fome low dwarfin. Figge-irees, like vnto the Peach-tree, the fruit of which Peach-trees is fomewhat agreeing with the Grape: fo as that the Peach being fliced into red wine, doth molt highly content and pleafe the taft; and thefe indeed can doe fmall harme vnto Vines flanding amongft thent: but hee that troublech nor the Vine ftockes with anie kind of tree at all, fhall doe better than hee which doth otherwife.
If you defire to haue low Figge-crees, and fuch as may be kept in earthen pots, under your windowes, to fatisfie your defire with their pleafant fight; cut in the Spring tine a fhoot of the Figge-tree before it bud, wrythe his top with your hand, fee it, the wrythen top downe in the earth, and the end, where it was cut, vpward, and out of the earth, it will put forth manie fmall boughes all about the por which will beare plealant fruits, the tree continuing to remane alwaies low. You hall haue early Figges, if you water the Figge- tree with oyle and Pigeons dung : and on the contrarie, late ones, if you take away the firft buds when they are growne to be as bigge as Beanes.

The Figge-tree the elder is is, the more fruitfull it falleth out to be. It is verie fubiect to be eaten of vermine, and the meanes to free it from this mifchiefe, is to fet by it fome Onions: or elfe for to kill the vermine, you mult fcatter Quicklime, or caft old Vrine, or the lees of Oyle there about the place. It will not be loft coff to annoint the ftocke with the iuice of Mulberries: or if you fpread and loame it ouer with red Fullers earth when it is a full Moone : or if you hang at the branches of it young Figges newly put forth. Furthermore, Figges will grow with letters vpon them, and garnifhed with what fhape you defire, it when you graft the Figge-tree, you write in the eye of the Figge-tree fuch proportion as you would haue that the Figges fhould beare : and befides, without vfing anie fuch curious courfe, Nature delightech to fport her felfe with this fruit, in fuch manner, as that fhee carueth out an infinite number of figures and indented notches full of pleafantneffe to behold, and thefe are tokens of the goodinelle of the Figge : for as it is verie fat, the iuice doth conftraine the skinne to fall into wreaths, and to quarter out a thoufand fhapes. This is a maruellous thing, that although the fruit of the Figge-tree be verie fweet, yet the leaues thereof are of a fharpe and bitter taft. Likewife the wood being burned, doth yeeld a tharpe fmoake, and the afhes a verie fcouring lee, and maruellous itrong, becaufe of his Tharpneffe; as if the Figge-tree had beftowed and bequeathed all the whole fubftance of his fweetneffe vpon the Figge, and had left neuer a whit for it felfe. This is alfo a maruellous thing, that the Figge-tree is not fubiect vnto the Thunder-claps.

We haue oftencimes tried, that if you fteepe two or three Figges in Aqua vita all night, that fuch Figges eaten in the morning doe cure the fhortneffe of breath. The milke of the Figge-tree dropt into the eare, killeth the wormes therein. The leaues of the Figge-tree rubd, doe prouoke the Hemorrhoids. Looke for a nore ample dif courfe of Figges and the Figge-tree in the fecond Booke.

## Снар. XXVIII.

of the spple-tree.

(2)He Apple-trec which is moft in requeft, and the moff precious of all o- The Apple tree thers, and cherefure called of Homer, the Tree with the goodly fruit, growech any where, and in as much as it loueth to haue che inward part of his wood moift and fweatic, you muft giue him his lodging in a fat, blacke, and moift ground; and therefore if it be planted in a grauelly and fandie ground, it muft be helped with watcring, and batling with dung and fmal mould in the time of Autumne. It liueth and concinuech in all defireable good eflate in the hills and mountaines where it may haue frefh moifture, being the thing that it fearchech after, but cuen there it muft fland in the open face of the Souch. Some make nurceries of the pippins fowne, but and if they be not afterward remoued and graf. ted, they hold northeir former exccliencie : it thriuech fomewhat more when it is fet of braunches or thoots : bur then alfo the fruit prouech late and of fimall value: the beft isto graftechem vpon wild Apple-trees, Plum-trees, Peach-trees, Peare-trees, Peare-plum-trees, Quince-trees, and efpecially vpon Peare-trees, whereupon grow the Apples, called Peare,maines, which is a mixture of two fors offruits : asalfo, when it is grafted vpon Quince-trees, in bringech forth the Apples, called Apples of Paradife, as it were fenc from heauer in refpect of the delicateneffe of their core, and gre et fweetneffe, and they are a kind of dwarffe Apples, becaule of their flocke the Quince-tree, which is but of a fnal fature.
The Apple loucth to be digged twise, efpecially the firf yeare, but it needech no dung, and yer nowwithflanding dung and afhes caufe it prof per better, efpecially the dung of Sheepe, or for leffe charges fake, the duft which in Sommer is gathered vp in the high waies. You muft many times fet at libertie the boughes which intangle themfelues one vvichin another; for it is nothing elfe but aboundance of Wood, wherewith it being fo replenifhed and bepeftred, it becommeth moffie, and bearing leffe fruit. It is verie fubiect to be eaten and fpoyled of Pifmires and litele wormes, but the remedie is to fet neere vnto it the Sea-onion : or elfe if you lay fwines dung as the roors, mingled with mans vrine, in as much as the Apple-tree doth rejoyce much to be watered with vrine. And to the end it may beare truit aboundantly, before it begin to bloffome, compafte his flocke about, and tie vnto ir fome peece of lead taken from fome fpour, but when it beginneth to bloffome, take it away. If it feeme to be ficke, water it diligently with vrine, and to put to his root Affes dung tempered with water. Likewife, if you will haue fweet Apples, lay to the roots Goats dung mingled with mans water. If you defire to haue red Apples, graft an Apple-tree vpon a blacke Mulberrie- tree. If the Apple-tree will nor hold and beare his fruit till it be ripe, compaffe the flocke of the Apple. tree a good foot from the röots vpward, abour with a ring of a lead, before ir begin to blofforie, and whenthe apples flall begin to grow great, then take it away.
Apples muft be garhered when the moone is at the full, in faire weather, and a- Gathering of bout the fifteenth ot Seprember, and that by hand without any pole or pealing Apples. downe : becaufe otherwife the fruie would be much martred, and the young fiences biroken or bruifed, and fo the Apple-tree by that meanes fhould be fpoyled of his young vvood which would caule the loffe of the Tree. See more of the manner of gatherng of them in the Chapter next following of the Peare-tree: and as for the mianner of keeping of them, it muft be in fuch fort as is deliuered hereaffer.
You fhall haw frozen Apples if you dip them in cold water, and for refore them rocheir natu;all goodneffe. There is a kind of wild Apple, called a Choake-apple, becaule chey are verie harh in eating, and thefe will ferue well for hogges to eat.

Ofthefe apples likewife you may nake verjuice if you preffe them in a Cyder-preffe, or if you fqueefe them vnder a verjuice milforie.
Vinegar. Vinegar is alfo made afer this manner: You mult cur chefe Apples into gobbers, and leaue them in their peeces for the fpace of three dayes, then aterward caft them into a barrell with fufficient quantitie of raine water, or fountaine water, and after that flop the veffell, and fo let if ftand chircie daies withour touching of ir. And then at the terme of thofe daies you fhall draw out vinegar, and pur into them againe as much water as you haue drawne out vinegar. There is likewife made with this fort of Apples a kind of drinke, called of the Picardines, Piquette, and this they vfe in fteed of Wine. Of orher forts of A pples, there is likewile orinke made, which is called Cyder, as we fhall declare hereafter.
Neat wine.
An Apple caft into a hogshead full of Wine, if fit fwim, it fheweth that the Wine is neat: but and if if finke to the bottome, it fhewes that chere is Water mixt with the Winc.

Infinit are the forts and fo the names of Apples comming as well of natures owne accord without the helpe of man, as of the skill of man, nor being of the race of the former: in enerie one of which there is found fome fpeciall qualutie, which others haue not: but the beft of all the reft, is the fhort fhanked apple, which is marked with fpottings, as tafting and fmelling more excellently chan any of all the orher forts. And the fmell of is is fo excellent, as that in the tinie of che plague there is nuthing better to calt vpon the coales, and to make fweet perfumes of, than the rinde thereof. The fhore flalked Apple liath yet furthermore one notable qualitie: for the kernells being taken out of it, and the place filled vp with Frankincenfe, and the hole joyned and fatt clofed togecher, and fo rofted vnder hot embers as that it burne not, bringeth an after medicine or remedie to ferue when all ocher fayle, to fuch as are ficke of a pleurifie, they hauing it giuen to eat : fiweet apples doe much good againft melancholicke affects and difeafes, but efpecially againht the pieurifie : for if you roaft a fweet apple vnder the ahhes, and feafon ic with the juice of licorice, ftarch and fugar, and after giue it to eat cuening and morning two houres before meat vnto one ficke of the pleurifie, you fhall helpe him exceedingly.

Сhap. XXIX. of the Peare-tree.

The Prare.trees
 $V$ the Pease-tree (being the moft in requeft and precious (next vnto the Apple-tree) amongit all the frui--trees that are) is ordered for the moft part after the manner of the Apple-tree, although the vvood and fruit of the one be more firme than that of the other, and that the Pearctree bring forth his fruit late, as not before the end of Autumne, vwhen as all the great heat is alreadie paft : notwithftanding you flall fet it in the fame ground with the Apple-tree: and in the firft foure or fiuc yeares of his grouth, you fhall lay it open at the foot, a litte before the end of December, vncouering it euen vnso the rootes, which you fhall fhaue and trim with a knife bowed againe: and in the end of Ianur arie you fhall couer it againe with his owne earth mingled with good made mould, keeping from thence forward his place well weeded, the foot verie neat and cleane, and the focke verie well frecd from intanglentents of boughes fo farre as the hand can doe it, and throughout verie carefully cleanfed from moffe, fnailes, and caterpillers, husbanding and ordering the earth ar the foot of it euerie two yeares at the beginning of Winter : for the fruir which the Peare-tree thus husbanded fhall beare, will be both more faire and better relifhed, and keepe longer. The Peare-tree that is planted in a leane, drie, chalkie or grauclly ground, is bur of a farued growth, bea-
ring a flarpe, frmall, and ordinarily a fonie fruit. The kernels are fowne in the Nurcerie, as thofe of the Applecree, but she hoped fruit is long in comming, and fcarce attaned throughout the whole life of a man, for it is farre longer time in comming to perfetion than the . A pple-tree. It growech alfo of a branch well chofen:and he that will haue it fo grow, mult plant it in Seprember and Octuber in hot Conyerres, but in cold Countries in Februatic and March, and in temperate Countries it may be done in either of the two times, as it ihatl beft pleafchim. Bur the Peare-tree that is moft furc and likelieft to bring contentment of it felfe, is that which is gratted vpon the young plant in the Nurceric, arid in fuch curious fort maititained and oidered, as hath beene faid, as alfo if it be ienoused fome thrce yeares after, affoording it alarge and deepe roome in a good tiouldring earth. It may alfo be grated in a Peach-treés, Quince-rree, and Almond-tree, bur yer better vpon it felfe chan vpon anic of rbefe; for fo it becommeth of a better nature. It is knowne by proofe, that the Peareettec grafted vpon a Mulberrie-tree bringech forth red Peares: and it it happen ihat yout Peare-tree bring forth a ftonic Peare, you nuff remonie the earth from the foot, and powre in vpon the rootes eurrie day, for the fpace of fifteene daies, the lees of good old wine.

Peares muft not be gathered before the later end of Autumne, when the great heat To gatber of the yeare is palt, becaure their micifure being weake, and in fmall quantitie, the Pearits. Sunne fuffe:ech not that ic fhould́d come vnto anie good confifence, before fuch time as the ayre beg in to turne and change into coldnelle : and therefore (faith $T$ beopbraio Bus) this is the onely fruit-tree tliat ripencth his fruit beff and fooneft in the fhadow. Such gathering of Peares alfo mult not be taken in hand but after that the Autumnall blafting and dew be fallen at the lealt three or foure times vpon them, becaure it ftreng thenech them greatly,to their better enduring and lafting, and encreafeth their goodneffe. But in anie cafe they nay not be gathered in raine, but rather in drie weather, being themfelues well dried by the Sunne; and thar in gathering they be not hurt by anie manner of nicanes whatfoener, but to chufe them one atter another, by cutting them downe with a good knife made faft to the end of a pole : or elfe to make them fall into a cloth (pread vnderneath for the receiuing of them, and in if feparating the rotten, fpoyled, or hurt, from amingft the faire, found, whole, and vnhurt ones, that fo they may be layed vp to keepe in fuch fort as wee will declare hereafter in his place.
Although generally, and withour faying anie thing of anie particular by way of comparifon, the Apple be farre fuller of iuice, and for the moft part more found than the Peare, notwithflanding, if one fhould fland vpon the taff, the Peare is commonly more pleafant and better relifhed, and more contenting and agreeing with ones taft, eaten in his feafon, raw, :ofted, or preferued, thon the Apple : whercfore I am aflamed, that men giue not themfelues to plant moe Peare-trees than Apple-trees,feeing that befides the reafons alledged, the Peare-tree, of all other fruit-trees, is the faireft, ftreighteft, and couering no whit fo much ground with his fhadow as the Appletree doth, bearing alfo his fruit almoft euerie yeare, where the Apple-tree is but a iourneyoman, bearing one yearc, and not another.
There is a drinke made of Peares, called Perric, whereof we will fpeake : as alfo vineger of wild Peares, as hath alreadie beene faid of Apples.
The Peare hath this fpeciall ver tue aboue the reff, that the ofen vfe of the kernels fhould be maruellous profitable vnto fuch as are troubled with the inflammation of the lungs; as alfo for them that have eaten manie Mufhromes, that they may rid their foomacke of fo great a load, there is nothing better than to eat Peares: for the Peare by his weightineffe and aftringent iuice makeeth the Mufhromes, eaten and lying in the bottome of his fomacke, to deffend and fall downe from thence.

Chap.

# Chap. XXX. 

Of the cisedlar-tree.

The Redlaytref.
 Ertaine it is, that the Medlar-tree groweth into a thicke fluck: it endureth the cold ayre eafily, and yee delighteth beft in a hor or temperate ayre, and in a fandie and fat ground. It is planted either of rootes or of branches, and that in Nouember : and fome fow it of flones in a ground mixt with dung: it will beare fruit in great quancitie, if there be layed to the toot of it earth mixt with afhes. It may be grafted vponit felfe, or vpon the Peare-tree, Apple-tree, or Quince-tree : and that it may be well grateed, and with good grafts, you muft prouide your felfe of thofe, which grow our ot the middeft of the Medlartree, and not of the top: and it mult be grafted in the clefe or higheft part of the ftocke, not in the barke, becaule the leaneneffe of the barke would not be able fufficiently to nourifh it.

If you graft it vpon a Quince-tree, the fruit will be verie faire, and the reafon is verie manifelt, becaule the flocke which receiueth the graft, and nourifheth it, is giuen naturally to bring forth a thicke groffe fruit: and yer it will yeeld a fairer without all comparifon, if you graft it vpon the hawthorne, wvith which it is joyned in exceeding familiar and friendiy league, alfo the fruit that commeth ther cot is more beautifull and plentifull : it may alio be verie fitly grafted vpon any other thorne, it felfe being pricklie : if you graft the Medlar-tree vpon any other Tree that is not of his owne kind, the Medlar will hane either noftones, or verie few, or elfe verie litele ones. If the vvormes aflaile the Medlar-tree, you mult water the ftocke with vinegar, or throw afhes vponit.

Some hold it for certaine, that the flefh, and efpecially the fmall ftones of the medlar dried either feuerally and alone, or elfe together, made into powder, and drunke with white wine, wherein hath beene boyled the roots of Parlly, doe breake and confume the flone as well of the reines,as of the bladder. Looke into the fecond booke in the Chapter of Turneps, as concerning this remedie. You may makea cataplafme of drie medlars, cloues, white and red corall, and nutmeg, all incorporated with the juice of Rofes, to lay vpon the bellie in the great fluxes of the fame, and vpon the brealt for thefpitting of bloud.

Снар. XXXI.
of the Malberric--tree.

(1)Viberries grow vpon a cerraine kind of Tree which hath a firme wood, bue a britele fruit and leaues, it buddeth the laft of all other Trees, after that the cold is ouerpaffed, vvhereupon it is called by the name of fage or wife, wirtie, and prouident; it putreth not forth his leaues, till all other Trees be laden with leaues, if at the leaft you haften not forward his budding, by giuing vnto it frefh and new dung in the new of the Moone of Februarie. This Tree is of two forts, the one vvhite, becaufe of the white Mulberries; the other blacke, becaufe of the blacke or red Mulberries which it beareth and bringeth forth : which though they refemble one another in this, that both of them doe purforth theirleaues. later than any other Tree, yet notwithftanding they are vnlike in flowers, leaues, and other confiderations. For the blacke doth not onely bring forth a farre fairer and better relifhed fruit, and chat of greater aboundance of liquor than the white: but is hath befides a thicker ftocke, and a greater and harder leafe, it groweth verie hardly
and with much adoe being planted, and it is a great while in growing before it become great, and therefore is no fhame that there are fo fow, it being fo vapt of ic felfe to grow being planted of plants and fiences, as alfo propagated and multiplied vnder the earth, with the flocke that bare it, euen as is vfed to be done with the white ones, which yet doe grow minintely eueree where, as well planted of hootes, and propagated, as fowne: both the one and the other doe loue a hot ayre, or at the leaft a temperate, a ground that is fas, and well bateled with dung, and labour at the foot, and to be kept eleane from moffe and caterpillers, and without any dead wood: They are planted, efpecially the white, either of, fhoors or of roots, or buds, and that in October and Nouember, cuen in like manneras she figge-tree. In planting of them, you muft make them deepe and large pits, and couer them with earth, mixt with afhes : they may be gratted vpon the chefnut-tree,apple-tree, wild peare-, tree, cornaile. tree, elme, or white popler (and then they will beare white mulberrics) and chissmuft be in the cleft; and vpon the figge-tree in the fcutcheon-like graft: they may alfo be grafted vpon themfelues, and the one vpon the other, as the vilire Mulberric-tree vpon the white, and the blacke vpon the blacke, and that chiefely and principally after the pipe or fluce like fafhion : in what manner foeuer you grate them, the grafs nnuft be chofen of a good thickneffe, and from tuch Mulberrie -trees as beare fruits full of good feed and kernells. It would be bur labour lof to fow them vpon kernells in the nurcerie in this cold Countrie, for befides chat buta few Mulberries hauefeed, yet thofe which haue, doe bring forth neither tree nor fruir almoft that is any thing worth. But whatioeuer it is, or in what place focuer you plant, graft or fow chem, let it be farre from houles, to the end that the infinite number of, flies which flocke thicher when the fruit is sipe, may not become tedious to the inhabitants, bur yet let it be in fuch a place as that the hennes may eat them when they fall downe, becaufe this victuall doth fat and feed them verie mightily. It buddeth the laft of all Trees, as we haue faid, but for a recompence is becommeth ripe by and by.
The mulberrie-tree hath alwaies beene of great requeft and great profit is countries where cloch offilke is made, as ar Luckes, Geynes, Almerie, Granado, Auignion, and afterward at Tours and ocher places, becaufe the fmall wormes making filke, are brought vp and nourifhed of the leaues of this tree : which for the fame purpofe are carefully fought of them which doe make account to draw filke into a fleece: whereupon it is come to paffe, that there are to be feene in many places about the faid townes of great Mulberrie-trees, as it were little wings of forctls, the faid Mul-berrie-trees being planted after a juft and due proporcion and leuell of line, and moft exquifitely maintained and looked vnto by them which owe them: for from hence they reape large fummes of money, felling the leaues yearely for the purpofe before fpoken of; for as for the fruit, they make no great purchafe of it, becaule the Mulber-rie-tree will nor be robbed of his leaues, for fo it would come to paffechat it fhould not bring forth fruit, of the value of three halfe pence.
The wood of the Mulberrie-tree is good ro make chefts, forkes, and compaffes of, and fuch other workes as muft yeeld and be pliant: it is allo good about fhips and boats.
Mulberries mult be eaten before all other meats, and that without bread, or elfe but with a veric litele, becaure if they be mixt with other vi¿tualls they doe but caule them to corrupt : it is true that they coole and moiften verie much, and doe alfo loofen the bellic.
Mulberries pur into a giafle veffell well fopt =nd couered with their juice may be kepta long time.
The juice of Mulberries halfe ripe mingied with honie of rofes, is a fingular reo reedie for the inflammations of the mouth and throat, as alfo for the purrified teeth and exulcerated gums.

CHAP。

## Сhap. XXXII. <br> Of the timely Peach-tree.

The timely
peach tree.


Ve now to fpeake of the timely Peach-cree, it bearech a verie frmall fruit, but earlier than other Peach,tress doe, and hauing his name thereupon: it is of a verie good relifh, and no way harmefull, in euerieching elle it is like vnto the other Peach- tree, both the one and the other delighting in cold grounds, and open vpon the wind: they likewife craue no other manuring than that of their owne leaues, and content themfelues to be planted three or foure fingers deepe in the ground: but and if they lye verie much open to the force of the wind, they require ether to haue fome wall, or elle fome other trees to fland in the forefront betwixt them and the wind to breake it off. The timely peach crauech fuch a ground as the Plum tree, and groweth either of the flone or of a plant. It is to be planted in October or Nouember, or elfe in \anuarie or in Februarie. It may be grafted verie vvell vpon it felfe, or vpon the plum-tree, peach-plum-tree; and al-mond-tree, and in drie times it mult be ofentimes waitered and digged: it craucth the like husbanding and ordering that the other peach. tree doth. See more aboue in the Chapter of the Peach-tree.

If you fill vp a great companie of the new leaurs of the timely Peach-tree, or

Ople of the flowers of the timely Peacha common Peach-tree into a glaffe viole or earthen pot, and after flop it and lute it well, fo as that no moiflure can get into it,and fo fet ita foot or two within the ground neere vnto fome brooke, or elfe in a heape of horfe. dung for the fpace of a moneth, and after fraine out the faid leaues with a preffe, you fhall draw a fingtiar oyle to temper the rage of agues, annointing the wref of either arme, the temples, and backe bone of him that hath the aguc therewith, before the fit take him.

## Снар. XXXIII. <br> of the walnut-tree.

The walnut. tree.
 for the Walnut--tree, it is a tree verie common, and fufficiently knowne in all parts, fo called by reafon of the annoyance that it worketh others which are neere vnto it, as allo the places where it is planted, men, yea and the verie beafts : in fo much as that it is proued by experience, that ifa man doe fleepe vnder it, at his awaking he fhall find a great heauineffe in his head, and withall become fo light and giddic, as that he will not be able to flirre : yea the Shadow thereof is fo malignant, as that no good thing can grow vnder it, and the roots (as well asthe fhadow) fretching and (preading themfelues farre, doe hinder and trouble all the ground where the fame tree is fated and planted: fo that it nuft not be planted in arable ground, but efpecially not in fat and fertile ground, but rather vpon the North quarter by the high way fides, or elfewhere, fo that there be no other fruit-crees by to take harme by it. This tree is for many caufes to be gotten of the husbandman: in as much as it needeth ro great drefling or prouifion for the maintenance of it, it fuffereth and beareth injuries of thofe which oppreffe it, and yes neuertheleffe extendeth and y celdeth his fruit in liberall fort eucn with it owne loffe, it profpereth both aboue and vnder the earth, and there is neither leafe, fruit, fhell, or griflle betwixt the kernell, bur there may profit and commoditie be raifed of it, both night and day, as fhall be declared in eucrie of his particular properties. Itefpecially delightech in a fat, mouldrie, light, and (in a word) in a good corne ground, the husbandman likewife delighteeth in fuch a ground : but the Walnure uree refufeth
no kind of ayye or ground, for it can verie well endure to beare and fuffer nuch. For the planting of it, you muft make choyce of fuch walnuts and trees as beare aboundance of fruit, haung thin fliells, and a vvhite, full, and thicke kernell. And to make it grow, you may digge the nut into the earth, the pointed end downeward, or elfe plant it of the fhoots that are faire growne, and that in Nouember, and throughour all Toplant che Decerober in hot countries; but in Februaric and March in cold councries; and in watum tree. remperate countries, in which of the ewo feafons you vvill. But fuch as would haue it to grow of the nut in Noucember and all December, muft obferue and fee that the nut which they would burie in the earch for this purpofe, be but a yeare old, of a faire Thell,found, and drie : and, ifit be in the monech of Februarie, or any patt of March, the nue muft be fteeped, as fome are of opinion, for fourc or fiue daies aforehand, in fome childs vrine, or elfe (as I gefle) in cows milke : for the tree that fhall grow therof, will beare his nuts as little difpleafing either in eacing or in the oyle thereof, as if it were the fruitor oyle of fwect almonds.
Ifyou would haue this tree to grow faire, and full of nuts of a good taft, you Torcmoute the muff remour it, but lec it be poffeffed of the earth where it greve either of a graft or walnut tree. otherwife : and in remouing of it, fome find it not good that the fmall rootes fhculd be cut away as it is wfed in other Trees: bcth becaule the Maifer-rootes doe gather footing and ftrength thereby, as alfo for that being as it veere relieued by fuch fhootes, vvould become more flrong and more able to pierce the earth, and to fucke and fuppe vp greater quantitie of the muifture of the fame. I could be of mind, that when it is remoued (which muft not be but when it is two or three yeares old) there fhould be taken from it at that time whaifocuer furplufage and furcharge of roots, euen fo manie as may be cearmed baftard or by-roots, and not of the mafter or maine ones : for as for the cutting off of the ends of the great roots, thac is done but for the opening of their mouth, that fo they may the better fucke in the moifture and iuice of the earth (if one may for peake of the new nurfe whith you haue appointed and affigned it.) In relpeat of his pits and holes whereinto you remoue it, they mult be digged of a grear depth and wideneffe, and be well ftirred round about, and fee diltant chirtie or fortie foot one from another, that fo it may the better fpread forth his brancles, which are wone to couer and occupic a great deale of roome round about it : and if they fhould be anie neerer one vnto another, their boughes would grow one into another, whereas they craue to haue their fides free and open. And this is the reafon why they fhould be planted vpon the borders of grounds lying vpon high wayes: for by this meanes the great compaffe which their branches take, doe not hurt feed grounds, or not aboue halfe, and by this meanes the looking-glaffe wherein the husbandman may behold fuch hinderance and difaduantage as might come by Icarcitie that yeare, ीhall not be farre off from him or his hinds, vvho hold it for cerraine, that great fore of Walnuts doch prefage great fpoyle of corne. To fet a Tree of fome other kind amonght them, is no more profitable than to lay the inheritance of forme bafe and meanc tellow, betwixt the demaincs of two great noble men : for the Walnur-trees which are naturally great fpreaders in the earth vvith their great roots, wvill robbe it and eat it out of tood and fifte- Wathut-trees nance cuen home to his owne doores, and couerring it aboue vvill rake from it both makf fand abane the Sunne, and the libertic of the ayie. But in as much as the things of this vvorld are fo framed, as that there is nothing vvhich hath not his enemie, you muft beware of placing the Walnut-tree either vpon feed or plant neere to the oake, as alfo not to fet it in the place where any oake hath ftood ar any time before : becaufe chat thefe two Trees haue a naturall hatred one vnto another, and cannot couple or fute together.
The Waknut-tree is grafted in Februarie vpon it felfe, and vpon the Plunn-tree in The grafingor a clouen hole : howbeit, the Walnut-tree doth not profit much, or thriut, when it is the wathut tres grafted vpon anie other cree than vpon it felfe, becaule it abhorrech the companie of all ether trees. It mult be digged about, that fo it may not grow hollow by reafon of' the graffe. It mult be remoued in hot and drie places in Oetober, when the leaues
are fallen, and yee berter in Nonember : but incold places in Februaryand in March: and aceirher time in temperate places.
The beaten walnut. tree becommerb fruttfull. . $\because$
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Tender walnut Jbells. fruit it beareth the yeare after following, although the boughes be brufed and broken: for which caufe good farmers are carefull to geld and weed out fome of the boughes of fuch a Tree, and withall doe make great and diners incifions with fome edge-toole in the flocke of the tree.
If you caft and fpread ames fundrie cimes, and of at the root, and vpon the focke of the tree, the nut will haue a more tender fhell, and a more brittle kernell. It vvill grow fairer, and beare fruit fooner, if you ftrike a copper naile into it euen to the middeft, or elfe a wedge of voood. Is will not let drop any vniripe fruit, if you hang at fome of the branches, or tie vpon his roots whice mullen, or fome rent and torne fuftiantaken out of a dung hill.
Wainut without
Shells.
Walnuts will grow without thells, if you breake the Thell vvithout brufing the kerneil, and afterward wrap the fayd kernell in vvooll, or in the ficfh leaues of the vine, and fo put it into the carth. If the Walnut-tree difpleale you in refpect of the harme it may doe vnto his neighbour trees, you may caule it to die, and prefently drie away, if you ftrike into the root thereof a verie hot naile, or a wedge of Myrte-tree-wood, or if you pur beanes so his roots, or a cloth dipped in the termes of women.
Walnuts muf be gathered when they begin to caft their rind, and when they are gathered, they may nor by and by be layed vp, butfirt dried in the Sunne.

The profirs that the IValnut-tree yeeldeth vnto his maifter are infinite : for of is of walnuts.

The profit of the maluntotrec.

The soood,
he may gather to make excellent preferues, taking his nuts about Midfommer: is yeeldeth wood for the kitchin, by being lopt of dead boughes, wherewith it is oftentimes troubled: but in cutting off this dead vvood, care muft be had not to cut is off round, becaufe it would be a meanes for to make way for the raine to enter in, and the vvet of the night would fertle therein, and in tract of time rot it to the heart, but it muf be cut biace, and with a ridge, that fo neither raine, nor the vvet

The rind, Shell, kerrell.

The griflle of
the kerncll. of the night may get in, or reft vpon it. It giteth a rind which is good for the things fpoken of hereateer : it affordeth fhells, which make good afhes: it affordeth a kernell to be ferued at the rable, feruiceable in the kitchin, and in lampes : and furthermore, of the droffe of the kernell fome make candles, in fuch countries as where the oyle is much in requeft, as in Mirebalois, and thereabout : it affordech a griftle betwixt the two halfes of the kernell, which being dried in the fhadow (after that the kernell is once perfected) and afterward made into powder, and drunke with a fmall draught of red vvine, doth by and by afluage the paine of the colicke: as alfo, the fruit comming of it, when it is worth nothing but to make refufe and outcaftings of
The old nut. (as the nut growne old and all hoarie) ceafth not notwithflanding to doe good feruice: for and if you burne it lightly, orfqueefe it out eafily with a hot yron, the oyle that then wil come forth of it, is fingular good to take away blewnefle of ftrokes, whether about the eyes, or elfewhere in the face or other part of the bodie : the old nut

The mooad of the mabutitree. ferueth alfo for other vfes as fhall be faid by and by. The wood of the walnut tree is good and handfome to put in worke, when you would make any faire and pleafant worke, becaufe it is lifted and fmooth of his owne nature.
The fmall buds of the walnut-tree (called of the Latins Iuli) appearing in March,

The rind, of zoalnuts. being dried, and after powdred and drunke with white vvine, the weighe of a French crowne, are exceedingly good in the fuffocation of the matrix. The oyle of the nut drunke to the quantitie of fue or fixe ounces, doth cure the colicke : if you mixe a little quicke lime amongtt the oyle of nuts, it will make a fingular liniment for the fwellings and fhortneffe of the finews. The old oyle of walnuts cureth the falling of the haire called Tinea.

If you pill off the greene pillings of the walnuts, and caft them into water, and after calt this vvater vpon the ground, there will grow from thence great fore of wormes, good for fifhers: if you boyle the pillings in a caldron after they befallen ..
from
from the Tree, as opening of themfelues, and rubbe any kind of white wood whatfoeuer with this water, it will turne to the colour of the $W$ alnuterree, butmore faire and beaurifull.

Some fteepe the barke of the roots of Walnut-trees in vinegar, and after lay it vp- The barke of on the wrefts of fuch as haue the ague. This draweth out all the heat of the ague : but Walinut-treesd it fwelleth the skin of the wreft.

Somemake a foueraigne mithridate againt the plague (as we haue faid in the olithridate: chapter of rue) with two old walnuts, three figges, twentie leaues of rue, and one graine offalt.

The walnut clofed vp in a henor capon fet to the fre to roalt, caufeth the faid hen To boyle a .... or capon to be the fooner roalted.
capon.
The diftilled vvater of vnripe Walnuts, gathered about Midfommer, is fingu- Tertianaguss. lar good to driue away tertian agues, if one take abour fome foure or fiue ounces of $i t$.

The Walnut either new or drie (but yet the drie fomewhat leffe) is of hard digeAtion, caufech head-ach, and hurteth the cough and Short breath, and therefore it muft be vfed fparingly : fteepe whole wainuts, pillings and Ihells and all, in a fufficient quanticie of water, vntill fuch time as that their fhell be fufficiently foftned and moiftened, and that the kernell may be pilled eafily from the thin filme that couereth it ouer, as it falleth out in greene walnurs: this done, take the kernells fo pilled, and let them fteepe in a pot vvell couered in verie good Aqua-vitx; giue two daies after, two or three of thefe kernells whole to a woman that cannot haue her termes, for the fpace of eight or nine daies before her accuftomed time of hauing her termes, and that in the morning, and after that the hath purged. This medicine hath neuer a match in prouoking of the termes that are ftayed, and it is a thing well proued. And as for the manner of keeping and preferuing of them, we will fpeake in his fit place.

If the fame day that you haue beene bitten of a dogge (which you doubt to haue The bitingof beene madde) you put vpon the biting an old nut well brayed, and after take it a- a mad dogseo way, and caft it to a hungrie cock or hen, if the fame eating it die nor, it is a figne that the dogge which did bite you was not madde, but and if it die, then it is a figne thathe was madde, and therefore the fore muft be looked vnto as is meet within three daies.

## Сhap. XXXIII.

## of the olive tree.



Ow we come to fpeak of the Oliue-tree, which is for the molt pare fmall. thicke of leaues, and round, for there are fome forts alfo that haue great branches difperfed here and there out of order : both the one and the other fort are contented with a fhallow ground, for in many places they grow vpon the thin green fwarth or turfe that couereth the rocks, \& vpon the ground hanging vpon the fides of fome great fteeres; thus you may fee how the oliue-tree difpofeth of it felfe euerie where, how vnfirting and valikely foeuer that the ground be,prouided that it haue a warme ayre, and Eafterly or Sourherly wind at command. He that would carefully appoint it out fuch a plot, as the vine would require, mighe erre in many places : for the oliue-tree is notfo much to be regarded in refpect of his foyle and feat as the vine, for it contentech it felfe with a great deale leffe than the vine vvill. If you giue it ground that is good and fat earth, and the Sunne and Winds, which it delightech in, in other places, doubt not bur it will doe as the Spa. niard, who pleafeth himfelfe with as good as nothing, when he knoweth not how to amend himfelfe, or do better, and performeth his feruice therewithall : but if he come
where he may buit haueshe fmell of it, he is fuffed as full as she greateft glutoon in all Lymofin : fo the Oliue-tree being once feifed in his tallance of a good piece of ground, contentech it felfe, and bearech fruit handfomely. As concerning the planting of 12 vpon the North in hot Countries, and there feating it vpon the toppes of mountaines, or icficr hills, or vpon the Sourh in cold Countries, thefe are but troubles and paines withour anic greas foundation : for as concerning cold Countries, there is no talke to be had of growing of Oliue-trees in them; and as concerning hor Countries, there is neither raking nor leauing of quarters or coafls in refpet of this tree.
The Oliue-trce doth encreale it felfe by fhoors which ic putceth forth at the font: for being pulled vp vnhur,, and planted elfewhere, they grow vp verie fpeedily. And to prepare them a faire place to grow in, you muft digge chem pirs where you mind to fet them, a yeare before hand, of foure foor depth: and if you cannot haue holes made readie for them folong before, but mult be confltrained to fer them downe in new digged ones, then you muft feafon and purifie the faid holes, by burning of the leaues and fome fmall branches of the Oline-tree thercin, or elíc lome flraw at the lealf; for the fire drieth vp the evill iuice of the earth of the faid hole in the lame manner as cine Sunne fhould haue done by litele and litele all the yeare long. Some would, that is being pricke downe of a branch, is fhould not be fet in fo fat a ground, becaule the oyle would not be fo excellent, as and if it were planted in a ground betwixt fat and leane, and that not without apparance of truth. But whether it be planted in the one or the other, it wil be husband cd eurrie yeare for the fpace of a great circle round about the foor: for ind eed, he that tillech and drefleth his Oline ground yearely, doch a great deale better than he that doth not. In anie cafe it would not haue the rootes fcanted of libertic, but tof fread and lie at large. And if you beftow any manure vpon it, being the thing it louech well, then beftow vpon it Goats or Horfe dung well rotted, and that after you haue digged it about the foor, to the end that the dung way mingle well with the earth fo digged, Afrer you haur once fet it, renoue it not thence for the fpace of foure or fiue yeares: neither then mul you dare to be fo bold, if that it haue not gotten a flocke as thicke as a mans arme : and taking it vp, take vp therewithall the greene turfe of the ground where it food, and whercunto his roots flicke faft, and when you fet it downe, giue it the like fituation for coaft and quarter that it had before.
You may graft it vpon ie felfe, and it will beare more thicke and kinder fruit : or

Tograft the
Oliubetrece. elfe vpon the wild Oliue, but then the profit is noo like, as when it is grated vpon the garden and tame one. The Iralians graft it vpon the Vine, boring the Vincfoncke neere vnto the earth, and purting into this bored hole a fmall Oliue branch, that fo it may take neere at hand, and at the firfo offer, both the neurifhment and vinie qualitie of the flocke of the faid Vine: along the which muft be fet a fake or thicke prop to helpe it to beare vp the weight and burden of the graft when it is great, and thefe Oliues will taft both of the one and of the other, and become as it vverc vined Oliues. Such a proofe is not to be milliked, in as much as the variablenefle of nature is hewed thereby, which is content to fuffer her felfe to be drawne to bring forth a mungrell fruit or fecond hermaphrodite, by the coupling together of two natures in one : but the end of fuch experiments turne not to profit, neither for the preferuing of the Oliue, nor for the drawing of oyle Omphacine, nor yet any orher, for wvhich ends God ordayned and gaue vs the Olive tree. And to. fpeake the truth, the mingling of kinds and differing rootes of Trees, (ifit be not according to, and jumping with the naturall vercues of them both, and according to an agreement infome good meafure of perfection, and yet furchermore well and throughly allowed and approned by reafon: ) becommeth rather a monftrous birth, and an inforcement of nature, than any profitable impe either for the healch of man, or for the tauing and fparing of it felfe. Hercof are fufficient vvitneffes, I know noc how many forts of Apples, Peares, and Cherries, thus iumbled togecher by offering force vnto nature without judgement or reafon:and but that they become fomewhat admirable vnto the eye, they yeeld no profit vnto the bodie of any man, more
than
thaut to draine his purfe drie :except there be aduifed judgement in making choyce of that thing and way which may be both for the aduauncement of the yearely profirs of his ground, and for the good preferuation of his health. Bur leauing off thefe difcourles, lee vs returne againe to the Olive tree, which hath both more beautie in it felfe, and more profit for the maifter, ifit be contayned in a reafonable ftature for height, and fpread if felfe abroad, than and ifit fhould fhoot vp and become verie long and tall. For if it exceed the height of ten foot and a little more, it is abated and hindered in the putring forth of fo many bloffomes as it would, and hath his boughes cruihed in peeces which grow vp at that pitch, when the wind bloweth flrong, and chereupon al! o it caftech his fruit in vntimely fort, euen when it is verie full. For this caufe in many places there are fome found which perforce doe turne downeward fuch boughes as grow fo high, not regarding their fanding out like boffes and bunches, prouided that they be low and lurkingly couched : becaure that being fo truffed vp , they are free from formes and tempefts, and abound the more in fruit : and if yet the Oliue-tree would be climing higher, then you muft cut off fuch afpiring boughes or braunches, and chis muft be done after the gathering of the $\mathbf{O}$ liues is paft. It is true that the Oliue-tree mult be cight yeare oid, before you reforme it in the boughes growing ouer high, by cutting them off with a faw : bur as for the fhootes purting forth at the foot and along the flocke, you muft not refufe the cutting of them off how young foeuer they be. The profit comming both of the one and the other, is, what it aboundech more in fruit: and this is the caufe why fome commonly Cay, That hee that husbandecth and ordereth it with care and taking of paines about it, helpeth it forward in the bringing forth of his fruit; as allo he which manurech it,as it earnefly craueth: but he that cuttech downe fome boughs off from it, compelleth it by all manner of meanes to become fruiffull; feeing the nature of the Oliue-tree is fuch (as 2uintilian faith) as that it being cut off and made barc of boughs and high mounting tops, it fpreadech rounder and broader, and putting forth moe boughs, doth alfo beare the more fruit, becaufe the propertie of the Olive-tree is to be ranke either in boughs or in fruit. It happeneth fometime to the Oliue-tree, that it bringech forth but one onely bough exceeding all other in beaurie and height: when this tallech out, it mult be cut off without delay, for this is a figne that the tree in fpace and time will conuey all his whole workemanfhip that way, and will leaue nothing for anie thing elfe; and vpon this, will barrenneffe come in thic end. And whereas the Oliue-tree craucth to be left bare and thinne of boughes, and then beareth more fruit, yer if the boughes be ftricken downe with poles when the Oliues are beaten downe, it groweth much worfe, and goech backward, forfaking and forflowing his former fruitfulneffe. So that hereupon you fee, that in gathering of O liues, you may not beat them downe with poles, but rather you mult haue ladders borne vp vpon a Goats foot, to lift you as high, as that you may gather the Oliues with your hand. There are fome Countries where the Oliue-trees doe reft and give ouer bearing for one yeare after that they haue borne, and then the yeare after that they beare out of ali meafure, as in Portugale, and the oyle that is made of thofe is good in the higheft degree. You mult inany cafe looke to the inconueniences and harmes that the Oliue-tiec is fubieCt vnto. Many times in drie or moift places O . otive-trees fall liue-trees are fpoyled, and become all ouergrowne with mofle, which mutt be taken of Noffe. away with one toole or other: for elfe the Oliue-tree will neither abound in leauss nor fruit.
Sometimes the Oliue.tree, although it be faire, yet bearech no fruit, and then you The barren muft bore throughthe focke with a wimble, and put in good and deepe the graft of ofise-tree. a grecne bough of a wild oliue-tree, or offome other oliue-tree that is fruifful, and that vp.ontecther fide of the hole : then afterward, to clofe vp both the faid holes with mortar mixt with frew, and the tree as a new made thing wil become fruifful by the grafo ting in of chis graft. Ochers in fuch cafe doe vncouer the root, and renew the feat that it ftandecth in. Againe, it may be remedied, and the foor not vncouered, with the lees of vifalted oliues, with mans vrine that is old, or with the fale e vine of hogges.

The fruir $\mathrm{pog}^{2}$ led.

The withered
Oliue-tree.

It falleth out many times that the fruit is fpoyled and loft by the naughtineffe of the ground where it is planted: and then it muft be thus remedied. The Tree mult be vncouered verie low at the foot round about, and quicke lime put into is, more or leffe according to the greatnefle of the Tree: for a little tree craucth but a little. The Oliue-tree fometimes beareth much fruit or flowres, and notwithftanding by a fecret difeafe that is in it, it cannot bring them to a good end to ripen them : vvhen this happeneth, the ftocke mutt be vncouered round about, and the lees of oyle mixt with fweet water afterward applied thereto.
Sometimes the Oliue-rree becommeth all withered, and falling into a confumption, which thing may happen through wormes or other vermine which fpoyle and eat the roots, and the remedie is to water the foot with lee of Oliues. It fometimes alfo falleth out that the fruit of the Oliue-tree falleth before it beripe: for a remedie whereof, take a beane that ha th a weeule within it, clofe vp the hole with wax: afterward take a greene turfe from neere vnto the root of the Oline- tree, and put the beane in it, and fo couer it with earth, and the fruit of the oliue-tree will not fall.
Aboue all things, you mult keepe oliue- trees from Turtle-doues,Stares, and other fuch like birds which are exceedingly giuento licorihnneffe. As concerning the O -liue-tree and olives, you may fee more at large in the fecond booke, and of the oyle in this third booke.

Chap. XXXV.

## Of the Date-trec.

The Date-uree.
 Oncerning the Date-tree, it hath much a doe to beare fruit in this countrie, but and if it beare, yet it is verie late : it crauth to haue a hot ayre and councrie, or at the lealt well tempered, and the fruit which it beareth, is ripe before the Oliue-tree be good. It delighteth in a light, fandic,and vntilled or champian ground : and it is a plant either for A prill or May, to be planted of a fmall plant with the root. The ftone is fee new in October, and there muft afhes be mingled with the earth where it is planted : and to make it grow and beare goodly fruit, it mult be watered often with the lees of wine. Looke in the fecond booke.

Who fo is carefull of his health, let him not eat any Dates, or elfe as few as poffibly he can, becaufe they caufe the head-ach, obftructions, wringings in the bellie, and in the ftomach. And yer notwithftanding this, they flay the flux of the bellie, and put inro gargarifmes, they cure the frettings and cankrous vlcers of the mouth.

## Chap. XXXVI. <br> Of the Chefnut-tree.

(0)Eauing the Date-tree, we come now to treat of the Chefnut-tree, which groweth verie grear, high,and thicke, differing but a litele from the wal-nut-tree, it beareth a profitable fruit, and hath not his like, whecher you refpect the fhape, his nature, or the nourifhment it yeeldeth vnto man, as is to be feene in Auuergne,Sanoy, Perigueux, and Lymofin, and efpecially in Lyonnoyfe and Daulphinie, where the great chefnuts grow : in which countries, efpecially in Parigord, the greateft parts of the forefts are of chefnuc-trees, \& an infinit number of people liue not of any other thing but of this fruit, eating it fometimes loyled, foméimes roafted, fometimes made into bread, fometimes into broth with milke, fometimes in meale baked after another fort. Likewife, nature fecing the profit that
redounded
redounded vnto men from this fo profitable a fruit, hath fenced and armed it with ffrong harneffe and fuch mightie armour, as that it goeth for proofe both againft the tooth of the beaft, and beake of the birds, fo long as it is kept within his vppernoft cote and prickly couering; yea, and furthermore, vnder his rind and pilling, when it is taken away, with another rnid that is good and hard, and with another that is more fofte and fine, for the better preferuing of it. This tree pleafech ir telfe with fuch a ground as is ly ying vpon the North, and being moift rather than drie, orftanding vpon the South, for as much as it loucth the fhadow better than the open Sunne, the valleyes better than the mountaines, a foft ground better chan that which is hard and maffie, and a light ground, and yet not a fandie or clayic. To haue gnod flore of Chefruts, it is better to fow them than to plant them, and that in a well digged and ftirred ground, being alfo near and well bated, and chat in the monerh of March,letting them in the earth a foot deepe, the fharpe end vpward, foure or fixe of them together, taken out of great and ripe Chefnuts, and euerie hole diftant from anocher the Space of a fadome: and two or three yeares afier to plant them in fome ocher places, fortie foor afunder euerie one from another, and that in refpect of the great compaffe which they take with their branches on cucrie fide. If you would haue it to grow of a branch, it mult be fuch a one as hath root: for to make it grow of it felfe, by pricking downe into the earth fome fience, it will neuer be. Wherefore the moft certaine way is to make it grow of the fruit it felfe, pricking it downe into the earth, as hath beene faid: norwithftanding it may be propagated or multiplied; burying and finking fome of his new fhoots in che earth. It takech likewife, it it be grafted in the clefe or in the Canon or Gun-like graft, and that in March, A prill, and May, vpon it felfe, or vpon the Beechotree, or vpon the Willow, but it then ripeneth verie quickly, and bearech a fruit of a fharpe and vnpleafant taft.
Chefnuts muft be gathered in Autumne, and kept till their rindes be become of a The gathering verie bay colour, and caftout their fruit. Howbeit, if one would keepe them a long of chefnuts. time, it were better to beat them downe with poles whiles they be greene, and not to tarrie till they fall to the ground, for thofe will not keepe above fifteene daies, if they be not prefently dried in the fmoake.
The manner of keeping Chefnuts, is to couer them with common Nuts; for the To keepe chef: common Nut hath power to drie and inuade the excrementous moifture of all things nktso whereunto it is applyed: or elfe to gather them reafonably ripe in the decreafe of the Moone, and to put them in a coole place in fand, or in fome veffell; but let it ftand continually in the coole, and fo well ftopt, as that no ayre may get in, for otherwife they will be fpoyled and rotten in a horr time.
The faireft, beff fed, and moft pleafant Chefnut of aill others, is that which growect in the Countrey of Lyonnoife, and are called great Chefnuts of Lyons; or elfe I know not as yer from whence they haue taken their name. But howfoeuer it is, befides the prefir of the nourifhment and fuftenance which the Chefnut yeeldech, the Chefnuttree is of great ve to make Veifels of, as Caske to put wine and other drinkes into, to build Bridges withall, as alfo Conduit-pipes, Pillars, and infiniteother things about Buildings,Engines,props for Vines, Pales and Railes for Parkes, Gardens,and ocher fuch places.
The leaues of the Chefnut-tree, after they be fallen, are gathered vp before anie the leanes of raine come to touch them, and feruech for liteer for Cattell; which being thus surned the chefinw into dung, feruech to manure withall. Many vfe then to fill featherbed-ticks withall, tree. and call them mockingly by the nick-namie of Parliament-beds, becaufe the leaues makea noife when you lye downe vpon them, when you rile vp from them, or when you moue your felfe anie manner of way to or fro.
The afhes of the wood of Chefnut-tree is not good to make lee of, becaufe it fpor- The afbes of the sech and faineth the Linnen fo mightily, as that fuch ftaines will nexuer be got out. Chefriut-rree.
: Chefnuts with vineger and barly flowier applyed in manner of a Cataplafme vnto the hardnes of woinens breafts which are hard, doe make the fame foft : flamped with falt and ho- momenss breeffo ney, they are applyed vnto the bitings of mad dogges: the rinds or skinnes thereof
are put manie times in lees, which are made to colour the haire yellow : their red inward rind, which lyeth next vnto the white kerneil, being drunke the weight of two drammes, ftayeth all manner of fluxes of the belly, and of bloud, as alfo the whites of women, with equall quantitic of Iuorie. Chefnuts, in as much as they be windie, they prouoke men to luft: being eaten exceffiuely, they caufe the head-ach : they fwell and harden the belly, and are of hard digenion: fuch as are roatted vnder afhes, are leffe hurtfull than the raw or boyled ones, efpecially if they be eaten with pepper and falt, or fugar.

## Сhap. XXXVI. <br> of the Pine-trec.

The Pinedrec.j

(5yHe Pine.tree crauech a fandie, light, and flonie ground: and therefore if growech willingly in out-caft and contemned plots, fuch as there are manie of by the coafts of the maine Sea. It is planted in the moneth of October and Nouember, and it is not to be tranflated till after that it hath beene three yeares. planted, and then it muft be feated in a well digged place, and in an earth well manured with Horfe dung. This tree hath a nature contrarie vnto the Walnut-tree, becaute it caufech to thriue and prof per whatfoeuer is fet vnder the fhadow of it : againe, it is not fo comberfome as to kecpe away the Sunne and the wind from the things that ioyne next vnoo i, or vnder it. The Pine kerncls (for to be kepr) mult be put in new pors full of earth, together with their fhells.
Such as haue weake lungs, or are growne leane by fome long fickneffe, muft goe a taking of the ayre into the Forefts, where there are good flore of Pines, becaufe fuch ayre is verie profitable for them. Their kernels fteeped in warme water, to take away their oylie qualitie and flarpneffe, being often eaten, doe cure the ach of the finewes, the ach of the backe, the palfie, benummedneffe, trembling of the parts, weakneffe of the lungs, Thortneffe of breath, vlcers of the lungs, vlcers of the reines and of the bladder, the fralding of the vrine, and make fat fuch as are leane and wafted, flirre vp luft in fuch as languif and are weake vnto the worke of venerie. They cure the gnawings of the flomacke, taken with water of Plantaine, or iuice of Purcelane. The new Nuts of the Pine-tree diftilled in a Limbecke, make a fingular water to take away the wrinckles of the face, and to flay the excefliue great growth of womens breafts, if you apply a Linnen cloth fteeped in this water vnto them. See in the fecond Booke.

## С н я р. XXXVIII.

> of the Plum-tree.
 for the Plum_rree, it is a common and ordinarie tree, agreeing withall Countries of whatfocuer conditions : howbeit the Damaske Plum-tree is more cheerefull, and pleafeth it felfe better in a drie Countrie and hot aire than it doth elfewhere. The Plum-tree will grow eafily, and encreafe infinitely: for and if it be once brought into a plot of ground, in a fhort time it feifeth is felfe vpon the whole place : and if it be planted on the one fide of a wall, it will leape within a fhore time after vnto the orher fide of it, and fo placeth the wall in the midft. It defireth not to be dunged, becaufe the dung maketh the fruit to mould or rot, and eafily to fall downe: but $1 t$ would be oft digged at the foot round about, as farre as the compaffe of his roots ftretcheth, and watred in drie weather. It groweth vpon a fone
buried
buried a foot deepe in the earth that is fat, and that in Noucmber or Februarie, hauing fteept the faid ftone for three daies f pace before you fow or fet it inlee, or longer in a compofition of Cinnamon water, if you would haue it to yeeld anie aromaticall fmell : or elfe of a meere plant, hauing a root in a pit a lietle digged, becaufe it grafpeth not much ground with his foot, but yet it muft be geod and light and eafie to be pierced round about, for the affoording of an eafie and plentifull feat vnto it. It groweth alfo in profperous fort, if it be grafted after the Scutcheon-like fafhion, either vpon it felfe, or vpon the fweet Cherrie: or elfe in the clett, and that befides the two former, vpon the Apple-tree, Almond-tree, Peach-tree, and Ceruife-tree: of all which forts of grafts, that is the beft which is vpon it felfe, or vpon the fweet Cherrie-tree; for all the reft are but meanes to caufe the Plum to degenerate from his nature, and oo become baftardly, as well in their hhape as in their talt. The fiteeft time ro grafe them, is in Februarie or in March, and then rather in the flocke than in the barke.

There is a certaine kind of fab which doth take hold of it, and that either by letcing the gumme to fland and hang about it, and to wax old, which it cafteth forth, or elfe by reafon of the mofle which it gatherech, and for that caufe it would haue his gumme taken away at the beginuing of cold weather, and the moffe rubbed off with a rough Linnen cloth, or a molle rubber of Horfe-haire, and this at all umes.
There happeneth likewife vnto it an vndifpofednefle through the fault of the Gar- The Plum-tres diner, not cafting the ground about the foor, or cutting off the rotten and corrupt out of frame. wood; whereupon it turneth in and rowlech it felfe vp into fmall balls, fometimes in one place, fometimes in mee: and this is a dileafe which being neglected, doth fpread it felfe in the end all ouer the tree, from one end to another, and bringeth it wholly to deftruction: and therefore fo foone as you fhall fee the ficke tree in this fort to crumple and runne vpon heapes, you mult cut off verie cleane all the boughes thus difeafed, whereof it would be murdered and killed, euen to the found and whole branches, and withall to order \& husband it in all good fort about the foot, to the taking away of this euill humor, which in this maner crooketh and caufeth to turne round his wood.
There happeneth alfo fometimes, by reafon of fome fecret caufe, that it fo langui- The languighing Theth, as that it giueth ouer to beare fruit : for the putting of it in heart againe, you Plumbtree. mult lay open his roots, and caft vpon them the lees of oyle mingled with water, or elfe the fale of oxen, or mans vrine, or calt vpon the roots the afhes of Vine branches throughly boyled.
All Plums in generall are cold and moift, more orleffe, the fweet ones leffe, the fowre and Miarpe ones more.
The fweet Plums haue vertue to loofen the belly, and yet they will purge more Laxatiue Arongly, if at fuch time as when the Plum-tree is young, there be taken from ir fome Plums. part of the pith of the focke, or elfe one of his boughes, and the placefilled vp againe with Scammonie. They will in like manner procure flecpe, if you put into the faid Sleeping Plumsì emptied places the inice of Mandrakes, or Opium. Sharpe and tart Plums are giuen toftay the belly. There is great accuunt made in Prouence of the Plums of Brignoles, by reafon of their pleafant taft. In France throughout, and euerie where elfe, there is a fpeciall account made of Damaske Plums, which are of three forts, the black,red, and violet colour, all of them prouing verie excellent in the Countrey of Tourraine, for from thence are fent, throughout all France, of them dried, which are vfed at all times. The Plums of Pardigoine are lilewife greatly efteemed, by reafon of their plumpeneffe and pleafant taft. Furthermore, Dates are verie rare and farce in this Country, namely, thofe which come neere to the Dates of other ftrange Countries, which are more pleafantly relifhed than anie other. Some likewife make account of Rhemifh Plums dried, by reafon of the pleafant tartnefle and fiarpneffe which they haue.

# Chap．XXXIX． 

> Of the Pomegranate-trec.

The Pomegra－ nate－tree． clay，fet in an Ouen，and in the end fo well parched，as that it may be made into pow－ der，then fuch powder taken the weight of halfe a crowne with red wine，doth helpe the partie maruelloufly that hath the bloudie flux．The innermoft flowers of the Pomegranate made vp in conferue wihh Sugar，haue an incredible force to fay all manner of fluxes nfthe Matrix，whecher white or red，taken in the quancitic of halfe an ounce，with the iuice of fowre Pomegranates，or red wine，or water wherein ftecle hath beene quenched；as allo to fay the bloudie flux，the fhedding of nature，the flux of the guts，or of the ftomacke．The kernels of fowre Pomegranates dried， made into powder，and after mingled，the weight of an ounce，with a dramme of fine powdred Frankincenfe，and two drammes of this powder taken cueric mor－ ning，doe fay the whites．

## Chapo. XL..

## of the Ceruifeotree.

플He Ceruife-tree, as well the male as the female, delighteth in a cold, Theicwuife 10 moift, and mountainous place, but in a hot and plaine place it chriueth tree. not. It mult be fowne of the fones: and fome plant it of thoots in Februarie and in March. It is grafted in the end of March and A prill vpon it felfe, vpon the Thorne or Quince-tree, and vpon the Peare-maine-tree, in the barke or ftocke. It mult be often digged and watered : and let him that can conueniently, lay dung vnto the foot of it, mingled with afhes, and that in verie deepe pirs.

Ceruifes are gathered in Autumne before they be ripetthey are gathered by handfuls tyed together: or elfe they are orderly laid vpon fraw to ripen them: for other. wife they are not fit to be eaten, becaufe of the harfhneffe.

The wood of the Ceruife-tree is verie folide, clofe, and hard, and therefore ingireat requeft to make Tables of, and other houfe implements, as allo to make goads and whips for Neat-heards.

There is wine made of Ceruifes, as there is of Peares. Ceruifes haue force to re- The fux of the ftraine fluxes of the bellie: and for this caufe they may be dried in the Sunne before bellie. they be ripe, and afterward ved.

He who hath fometimes beene fubiect vnto the biting of a mad dogge, or otherwife, muft not fleepe or reft vnder the hadow of the Ceruife-tree: for if hee doe, it will hazard him to calt him into his former madnefle againe: Such is the force of the Ceruife-tree, to raife vp , renew, and reuiue a qualified and appeafed madneffe.

## Cíap. XLI. of the Corneile-tree.

S for the Corneile-tree, which the Latines call Cormus, (fo called, becaufe his flocke is of fuch knotrie and folide wood, as that it feemeth to be horne) as well the male as the female, delightech to be planted in a fat and fandie ground: and as for orher things, it would be planted or grafted after the manner of the Ceruife-tree. In anie cale it mult not be planted neere vnoo where Bee-hiues fland, neither fuffered to grow there of it felfe: becaure that the Bees hauing once tafted of the flowers thereof, fall into a flux of the bellie, and die thereupon prefently: but the contrarie falleth out in men, who by hauing eaten of the Corneile-tree berries, or of the conferue made of the flowers or fruic thereof, doe fall fuddenly into a coftiuenefle. The fruit of this tree is long and round, faf hioned like an Oliue, and is not ripe before Autumne, and then it becommeth of a red colour, or the colour of Waxe. This fruit containeth in the pulpe of ir a ftonie bone. Some make of the pulpe or flefh a confection like vnto. Marmalade with Sugar, and it is verie fingular in bloudie fluxes, and the flaying of womens termes.

Chap. XLII.<br>Of the Iniabe.tree.

Of the luinber tree.
 He Iuiube-trec is a tree that is verie rare, and feldome feene in France; but much in the countrey of Prouence, efpecially about Dupont, S.Efprit, and in Languedoc. This is a tree of greatreach and compaffe both for his height and breadth, and naturally it loneth to be in hot Countries, not for much feeming to regard the foyle wherein it is fet : likewife in manie places of the faid Countrey it is feene in curning waies and publike places. But and if you would haue it to grow in cold Countries, you muft not fo lightly regard it: for you mult fee that it be feated in a good fat ground, and manured with Pigeons dung, and ioyning to the fide of fonie wall, whereby it may liaue the reflex of the South Sunne, ef which you muft looke to giue it the full fruition before all other things. Sometimes it groweth of kernels, three or foure of them being put into the earth together, and their fharpe ends downeward, the holes muft be a fout deepe, and heaped full of Cowes dung mingled with ahes of Vine branches, and chat in A prill in hot Countrics, and in May in fuch as are cold. And when it is once growne vp, and become fomewhat ftrong, which will be about the terme of eighteene moneths, or two yeares after, then you fhall remoue it into fome other place, with fuch obferuations as haue beene deliuered concerning others, and concerning the Countrey, as it fhall fall out, hot or cold. Some likewife plant it of the root, when it rifeth vp into Thoots, which haue fmall threddie and hairie roots, loofing and pulling them vpgently, together with fome of the principall roots of the tree, for feare of parting them and their threddie roots, planting them in pirs prepared fome fifteene daies before, in a light ground, and that in March. As concerning their fiences, to make them grow, it is not fo certaine a thing, as that it deferueth the troubling of ones head about it: but for grafting of it in the cleft, either vpon it felfe, or vpen the Medlaretree, or vpon the Quince-tree, you may if you will : but grafeed vpon it felfe, the Iuiubes will be more grofle and thicke, and of a more pleafant taft, as generally all manner of fruit is, being grafted vpon a tree of his owne kind. Some will fay, that it reioyceth during the cime of Winter to bee compaffed abour with a heape of flones, and when Summer commeth, to haue them taken away ; and that it craueth likewife to haue Oxe dung layd vnto the roots of it: but in thole Countries where there are fuch great flore of Plants, this piece of feruice is altogether neglected, which notwithflanding is the meanes to caufe great flore of faire and good fruit.

## C н \& <br> Of the Bay-tree.

The Bayotrec.
 S for the Bay-tree, it is verie common, feeing it groweth in anie ground, as ouerthwart the Conie-burrowes and heapes of flones. It groweth manie times from vnder the foundation of walls. It is likewife to be a Countriman in enerie coaft and quarter, but yet his naturall inclination and birth-right is to be in hot Countries, or at the leaft temperate: And therefore being inticed ouer into cold Couneries, it muft be much made of and well welcomed when is commeth there : for indeed ir muft be planted in a fat, folide, and yood foyle of earth, neere vnto fome wall, where hee may haue the South Sunne to comfort him with a double comfort ; and at the approach of Winter, it mult be manured,
ouer-caft, and coucred with long ftraw in the frength of the Winter, or elfe well cafed and wrapped about with Mats. It muft alfo be vnder. digged for the firf foure or fuice yeares after his comming and bearing, and that in March and A prill. And yet, if netwithfanding all this paine and induftre taken, it fhall happen to be extreancly and rigoroully cnereated of the froft, and that the leanes fhall begin to wither away, and the wood to was blacke, then you mulf adde inore flore of earth vnto it at the foot, and ffrengthen it there, in the moneth of March, if that the cold pur forth and begin to be dealing the fame yeare: for the ding will haue kept the roors and clafpung gripes in force and whole vntouched, and to it will not fayle to put forch with fpeed new thoots and fprigges in aboundance, which will be fit to multiplic and propagate the Winter following in the faid noneth of March, at which time the fappe drawech vp varo the barke, if fo be that you defire to haue great fore. It takech alfo of a branch, forefeene that it be fet in a fat and blacke earth, which is moif. The time to fec it of root, plant, or branch, is either in Autumne or in the Spring. It is fowne in the fanie fealons a foot vnder ground, and foure berries together: and when one yeare is paft, you muft plant it where you will haue it abide. In anie calc you may not fow it or plant it seere vnto anie of the Lattice-worke or clim. bing and running frames made for the Vine, much leffencere vinto the plant it felfe, becaufe that the Bay-tree is altogether enemie vnto the Vine, as well inirefpect of his fhadow, as of his heat, which drawech away all meanes of growth from the Vine. Looke in the fecond Booke.

The leaues of the Bay-tree doe preferue, keepe vncorrupt, and make fafter the Finh that is fryed, efpecially that which is fryed in oyle, laying them by beds one vpon another. They performe in like manner the fame good vnto dried Figges, Dannaske or Frayle Raifins, if you ftrew of them amongf the faid Raifins in the Frayle.

You mult obferue, as well in the leaues of the Bay-tree, as in thofe of the Iuniper and Etme-tree, that they being caf into the fire, doe prefently crackle, and that the caufe of this is, for that they take fire before their fuperfluous and raw moiflure be confumed and fpent.
The leaues of the Bay-tree dried and rubbed one againf another, if there be pue betwixt them a little powder of Brimftone, doe caft out fparkles of fire, as doch the feele and the foure: in like manner doe Iuie leaues. The boughs of Bay-tree flucke downe in arable ground, doe keepe the Corne from mildew and blafting. Some are of opinion, that tempefts and lightning will turne away from thofe houfes and places where there are hanging anie Bay-tree boughs, whether it be a the chamber floores, or elfe at the doores or windowes.
The tender crops of the Bay-tree, boyled with flowers of Lauander in wine, doe heale hardneffe of hearing, and noyles in the eares, if the vapour be taken thereat with a funnell. The Vuula being fallen, is againe reffored to his place, if you lay the bayes of the Laurell-tree verie hot vnto the top of the crowne of the head, with equall wcight of Cummin, Hyfope, Organie, and Euforbium, mixt together wich honey. The bayes of Laurell powned with Wheat-bran, Iuniper-berries, and Garlicke, heated in a hot frying-panne, fprinkled with wine, and laid to the flankes, doe prouoke the retained vrine. If women with child, and neere their accompts, doe cat cuerie night going to bed feuen Laurell bayes, or Bay-berries, they fhall haue a more cafie trauailc and deliueric.

Снар. XLIIII. What jpace mult be left betwixt Eruit-trees when they are remoued.

The greatneffe of trees is to be conjdered.

The pace and
diftance be-
spixixt trees.
Hat you may fitly appoint the flandings of trees, and their diftances one from another, in refpect of the trees themiclues, compared one with another: you mult firft confider the height, fulnefle of the leaues and boughes, and fpreading of the fame, according as cuerie fort of tree doth ordinarily grow and attaine vnto : and befides the ordinarie, how by place affoording aboundance of nourihment, the tree may exceed and furpafle it felfe in height and breadth, for that frui--trees would not be encembred aboue head, or ouler his top, but would haue the breathing and blowing of certaine winds at libertie, and with fufficient fpace fauourably to light vpon them, and withall, the fruition and benefit of the Sunne : in all which points, the vnequall proportion of one rree vnto another in height or breadth dorh offer let and hinderance. And yet furcher, if they would haue their waggings and plyings to and fro to be free, that fo they may play at libertie when the wind toffeth them, how greatly fhould the exceeding greatnefle of the neighbour tress difturbe and trouble one another, if care and aduile be not taken in the firtt planting of them? And therefore you muff haue regard and caft an eye about you for this caufe, that fo you may well and profitably appoint out your diftances and fpaces betwixt one and another: for in good and fat grounds, where trees may grow much, you muft allow more fpace than ellewhere. And further you muft note, that one tree planted well at libertie, whatfoeuer the place be of it felfe, doth fructifie and beare a grear deale more.
If you mind to plant thicke and groffe trees all on a row, and vpon high waies, and againft the hedges of fields, then you muft leauc them fome fiue and thirtie foot diffant one from another: but and if you intend to plant manie rowes in one and the fame place, then you mult be fure to leaue fiue and fortie foot face betwixt euerie two, and as much betwixt one ranke and another, that fo the boughes of each tree may the more freely fpread themfelues cuery way vpon their emptic and vacant fides.
As for Peare-trees, Apple-trees, and others of that bigneffe, if you plant onely one row by the fides of your field-hedges, or elfewhere, it will be ynough to allow twentie feet betwixt one and another : but and if you fet two rowes vpon the hedge of your Garden allies, then you muft allow them fome fiue and twentie feer betwixt one and another euerie way fquare, in fuch fort, as that as well the alley as the fpace betwixt enerie two trees on either fide may make a perfect fquare of fiue and twentie feet in euerie line : and if the diftance allowed them be of leffe quantitie, then it muft be fomewhat anfwered and helped, by not planting of them euerie one righe ouer one againft another, but as if you thould wrap and lay them vp one within another, to let the full and planted place of the one fide fland ourer-againtt the void and emprie of the other. Some would, that there fhould fome fmall trees be planted amongft thofe great trees which you thus fet about the alleyes for the times whiles they are in groweh : bur this would not doe well, if either chey fhould be fuffered to continue there alwaies (becaule it would breake the rule and precepe deliuered before touching fuch courfe) neither yet if they fhould be taken vp afterwards; and the reafon thereof is, becaufe they draw away and eat vp the iuice and nourifhment of the earth, wvhich fhould wholly bee imployed in growing and furchering of thofe which are intended for the inclofing and defending of the alleyes.
If you frould goe about to plant a whole Field, or quarter of ycur Garden, with great fruit-trees, fuch as before named, you mult then fet them checkerwife, and allow
them betwixt twentic and thirtie foot of diftance the one from the other euerie way, that is to fay, from tree to tree, and from row to row.
Plum-trees, and ocher trees bearing ftone-fruit, and being of the like fize of big- Plumbirees, neffe, will not admit vnder fourectene or fifteene feet diftance one from another in eucrie row: but and if you will onely plant two rowes vpon the fides of your garden alleyes, then they need not aboue fix foot diftance fquare ; but you muft looke, that this proportion, or whatfocuer other that you fet downe to your felfe, doe iufly anfwere the proportion of the length of the place intended to be planted.
Sweet Cherrie-trees and biter Cherrie-trees doc looke to hauc allowance of di- Sweet cberrié, flance betwixt tenne and twelue foot : but and if they be to be planted vpon the trees. fides of the great alley of your garden, then it will fuffice te allow them betwixe nine and tenne.
The leffer trees, as Cherrie-trees, Quince-trees, Figge-trees, Hafel Nut.trees, and Common, or bbe fuch like, are fufficiently allowed, if they be fet diftant betwixt eight and nine foot leffer fort of in your greene Graffe-plot,or Orchard, and betwixt fue and fix in Alleyes and Garden rowes. When you would plant two rowes, either of them of feuerall kinds of trees, then fet the leffer on that fide that the Sunne falleth firft vpon, that fo the fhadow of the greater may not difaduantage them.

## С нар. XLV.

## Other precepts about the planting of Fruit-trees.

F, you plans Peare-trees and Plum-trees one with another, it will be better to fet the Plum-trees towards the Sunne, for Peare-trees doe better endure the want and with -holding of the fame.
When you thall take vp a tree to plant it elfewhere, take a great circle To remown round about the foot, and ray fe togecher with the root as much of the earth cleauing thereunto as you can: for befides that thus the roots doe not loofe their bed, they find themfelues ocherwile alfo infinitely better contented, when they carrie with them the earth alreadie reclaimed and familiar vnto them, than and if they fhould be conftrained in their new lodging to floupe and conforme themfelues to the earth which they fhould there find. For as for watering of the roots, in pulling of them vp to the ray- rowater, fing vp of the more earth therewithall,it is as good as nothing, bui rather doth much hurr, becaufe that this wet earth being within the new hole, becoummeth fiffe and hard, which cannot but greatly offend the roots of the tree remoued: for the verie remoue doth aftonifh and blur them fo, as that it maketh the points of their roots as it were blunt, and to have their mouths flopt, fo as that they can neither draw vnto them, or elfe goe forward themfelues : fo that if they find nor the earth of their new lodging fo light and crumly, as that they may picsce it without fraining of themfelues, and conuey themflues anie way, either the tree continuech long without taking, or elfe it diech right out. For the auoiding of which difcommodirie, you muft not either wee the new hole, neither yet the tree in remouing of it, nor fo much as remoue it in a drifling time: and it is ynough that the hole hath continued open before for the fpace of fifteenc or twentie daies, and hath drunke in of the dew and wet of the, night. Of one thing you mult take good heed, that you give it his iuft quarters of North, Sourt, Eaft, and Weft, as it had before, and that if you take it vp from a plaine ground, that then you beflow it in a plaine ground againe: and if you remouc is from a hillic place, into the like, or otherwife into a plaine: then you muft look thas the feat wherein you fee it in, be defended in like manner from the winds, boah below and on high, as it was in his firft.
You mulf not plant the trees that haue beene browfed by cattell, or have had their trees browfed ends broken off; for they grow not fo well, except you thinke it good to cut off the wiib s filbek.

The third Booke of

To plant trees without roots. Pits.

Too moijt an sarth.

Toobard an carth.

- $\quad$ 표

The roos pilled.

Small trees.
end of their tops and head, to fee if that thereupon they will take and grow againe. tame Mulberrie-tree, Hafel-trees, and other fuch like.

And as for the Pits wherein you meanero plant trees, you mult make tisem fix foor deepe in clayie plaies, bue not fo much in moift places: you mult likewife makerhem roomethie and wide ynough; for though the cree that you thall plant, Thould haue but fmall roots, yet you muft make it wide, that fo there may flore of good earth be calt in round about the root. And if the bottome of the earth where you make the pits be too foft, then helpe it by putting to it fome drie earth, or elfe ftay till it harden and breath out his moifture. On the contrarie, if it be too drie, or hard and hornie, dung it and moiften it with water, letting ir drinke in of the fame well and fufficiently: not that you fhould make it like a poole, but fprinkled or bedewed with water, therewith to cocle it. Agane, it is meet, that if your tree be old gathered, that they be watered and fteeped at the foot two nr three daies. If any of the roots of your trees proue too long, or to haue their barke hure, then you mult cut them off byas, and let the fide that is moft vnfurnifhe be vnder when the tree fhal be planted, for there will frmall roots come forth round about the cut.
It is a generall rule, that before the renouing of anie manner of tree whatfocuer, and efpecially if it be a tree growne vp of kernels, if it be growne thicke, for to cur off the branches of it firf, and to leaue nothing on it, except fuch fprigs as are not aboue a fingers length,or fomewhat more or lefle, according as the tree doth require: and this is it which fome vtter in a prouerbe, That he that will plant his father, muft cut off his head: but as for fmall trees, which haue but fome one fmall wand or rod put out of them, there is no need that fuch fhould be cut vp on high, when they be remoued. The ftocks of the Nurferic which you intend to graft, mult be verie well put forth into branches before they be remoued, as we haue faid before.
And when you fhall fet downe your trees in their pits, you mull free their roots

To gine trees
their fit places. from being intangled one with another as much as you can, and make them all to draw downeward, not fuffering anie one of them to turne their ends vpward : and it is not needfull that they fhould be fet fo deepe into the earth, for it is ynough, that the roots be laid in fo deepe, as that the earth may couer them halfe a foot, or thereabout, if the place be not verie fcorching and ftonic: and you muft not fill vp your pit, but leaue a hollow round about the cree with fome open paffage or conduit, that fo the raine water flaying there, may be conueyed vnto the roots of the tree.

When your crees fhall be fpread in the pits, and the routs thereof orderly layd at large, weigh downe vpon them eafily with your foot, and after mingle well manured earth with a part of that about the pit, and ftrew this vpon your roots, caufing the fmalleft of it to fall downe amongft them; but lay not the graffie fide of the earth towards them, for that might fet them in too great a heat : you fhall mingle the one earth well with the other, and fo fill vp the whole pit. And if there be anie wormes in the earth that you fhall put in, then you flall mingle fome lee afhes therewith, to kill them, becaufe they might doe hurt vnto the roots. Afterward, when your pit fhall be filled within halfe a foot, or neere thereabout, you muft tread downe the earth well vpon and in the places about the roots, and it is farre better if it be drie in that place, than for to haue it wet.
But and if you pricke downe or plant a tree of a prop, flake, or pole without roots,
The pricting dorme of trees. with a wooden beetle or mallet, make not way for it into his hole with another ftake, but let it make his owne hole for it felfe, not leauing it fuch a depth of earth to paffe through, as that it cannot poffibly enter without \{poyling his barke: but when you driue in the ftake, tye it in fuch fort at the vpper end, as that it may not cleaue in driuing.

Chap。

## Chap. XLVI.

## Of praning, lopping, vncouering, and makking clenne <br> of Trees.

(5)Louthfull and negligent Hinds fay, That a tree muf neuer be touched after it is planted: but a good Husbandman faith, Be fill doing one good turne or another vnto the earth and the tree, and they will doe the like to you againe. It were true indeed, that to fay that we may not touch the tree, would have fome colour of reafon, if it were to be vnderftood ot the not remouing of it from his firf feat, it being good, and according to the nature of the tree: but to fay that wee hould not touch it at all after it is once planted, would be either to proue negligent, or elfe to be willing not to receiue anie fruit of his trees : for by how much you are the more diligent about it, and procure it the more good and pleafure, by fo much the more encreafe will it repay you againe : and he fhall neuer haue good or much frut, that fhall not be diligent in cleanfing of his trees in Winter, and in the end of Aucumne. For as concerning the taking away of fuperfluous To take brazi and bad branches, and picking of them, it is moft certaine, that a tree that bufiech chesform treeso it felfe much to grow wood, muft haue his branches tamed about the beginning of December, by taking away of them fo manie as are fuperfluous, with the vnneceflaric wood, ourer tall and high boughes, and fuch as hinder it from making of manie buds to bloffome and beare flower : in doing whereof, you may not touch the principall branches. Againe, you muff free your trees of branches, and fome part of Tomake wayy the flocke alfo, when it ftandeth behind others that take away his Sunne, that fo af:- for the surne cer fuch disbranching, and loffe of fome parr of his focke, it may fet affehh vpon putting forth of new, and that fo couragioully, as that it may furmount and ouergrow thofe which before did oucr-top it, and take away the Sunne from it : for the fame reafon, if the Sunne enter not in forcibly enough amidft the branches of a trec, but that fome are flill fadowed, it commeth to pofle, that thofe fhadowed ones doe not beare anie fruit; and therefore there is caufe that it fhould be obferued and marked cuer as it groweth, what branches there be that doe ouer-hiew and drowne the other, and to take them out of the way when the leafe is fallen. You mut likewife cut the boughes that looke downeward, or which grow crooked in the midft of the tree, as thole which hinder the growth of it. This disbranching muft be done in the decreafe of the Moone, when there is not either exceffue cold wind, or raine, and that wish a good cutcing toole : and not in any cafe when the tree is in his bloffomes, becaufe that fo it might come to paffe eafily, that they fhould drie away. Young grafts may not be too foone pickr and pruned, leaft they fhould become too frolicke and luftie, putting vp ftill in height, hauing but a feeble bodic to beare fo great a head : and therefore they muft be let grow frong abour the foot before you doc any thing vnto them.
It is likewife moft certaine, that the dead wood of a tree doth caufe other braun- Totake dead ches for to dic, and fo by lietle and little che whole erree throughour: or elfe it keepech wood from the the erree from growing and rifing, which is the fame that we call bourgening. Then it appearech how neceffaric ir is to take away all dead wood, and it may be done either in Summer or Winter. This mifchiefe haunteeth old erees moft, or elfe fuch young oncs as the Sunne hath come too fiercely againf, in the place of their flanding : or Exxeding bass
clife by fome inconuenience of lightning, thunder, or tempeft or elfe of fosm veni- of fte ssmberre mous beait lurking at the foot of it, hauing bitten and wounded fome fibrous part full totreses. of the root : or elle by having had fome of the branches tainted and wronged by the fpade or pick-axe in the laying of it operiat the foot, or multiplying of it by propagation. And if it be meet that that fhould be remedied that is aboue the earth; then doe that alfo which is vnder the carth, and with greater case and diligence:
for the heat of the earth and dung doth engender vermine at the foot of the tree, which eat away the rootes: or elfe fometime dung caft about it, doth minifter fuch fore of nourifhment vnto it, as that thereupon it is forced to put forth fo grear ftore of fhoots and fiences, as that thefe doe make it to mifcarrie, without hurting or taking anie nourilhment from anie other of the trees: So that then hereby it appeareth, that there is need to digge trees at the foot in Winter vito the verie quiclse of the earth, and take away from thence whatfoeuer may threaten anie danger; and as for fuch number of fiences, to fee them planted other where, whether they be of Plum-trees, Peare-trees, Apple-trees, or fuch other, and at the end of three yeares to graft them. And here it fhall not be amiffe to note, that the fiences of Hafel- tree being remoued, bring forth the better fmall Nuts.

Toorder a tree in winter.

A dead dogse or fome oiber carrion made fafi to the foot of the tree.
The mofe of trecs.

In like manner, the tree mult haue fome recreation ginen it in Winter, after his great trauell in bringing forth of his fruit, and that in this fort: as by opening the earth, and laying his roots bare, that fo you may cleanfe them, and that the raine and the fnow may fat them, which efpecially and principally happeneth in manie places that are hot, drie, and lying verie open vpon the Sunne in his fcorching heat. Furthermore, if the barke of the tree begin to drie away, fhewing fignes of fmall ftore of nourifhment within, that chen you make faft vnto the foot of the fame tree fome dead dogge, or other carrion, for to reioyce it withall, and fome one or ochet fcuttie full of good and (mall dung to lay about the foot of it : or on the contrarie, lee ahes, if fo be that the ground be found too fat and full of wormes.

The age of the rree will make it to grow full of moffe : and if it be young, then too much moifture will make it moffic, as alfo too much drineffe. This difeafe feedeth vpon a tree, and maketh it leane, as the feab doch the beaft: and we muft not thinke, that this can happen by realon of the moffe that is put about and aboue the wreath of the grafts. The remedie for this, is to lay it open at the roots, as hath beene faid heretofore: as alfo to make it cleane in Winter with a knife of wood, or of bone, for feare that the moffecontinuing in peace, winne the countrey, and in fine deuoure the whole tree.
Tbe time to dig and cut off vnprofitable menbers from young trees.

He that will haue faire young trees, muft digge about them euerie moneth, and cur off vnprofitable and noyfome parts euerie of thofe times, after March and October, and fo long, as vntill they be growne great: but when they are become great , they mult not be digged ofter than thrice a yeare. In Winter, whether they be great or fmall, the earth muft be taken from their feet, that fo it may be mingled with dung, and put into the pit againe, to the continuall retaining of neceffarie moifture and comfortable influence of the heauens, as wee haue faid before. And in Summer, and when it is extreame hot, there muft be kept and gathered a heape of ceole earth about the foot of the faid tree, to helpe it to auoid the heat and drought of the taid feafon.
The fit time to pick andprune trees.

It is beft to disbranch and prune trees, when the fappe beginneth to rife vp into them, and when they thereupon begin to bud and bloflome in figne of approaching Summer, and this time moft commonly falleth out about March and Aprill. And in this bufineffe you muft fee, that your cut the fuperfluous boughes off clofe by the focke, and the fappe thereupon will by and by runne out at the fame cut : which thing cannot fo happily fucceed with them which cut trees in Winter. And to preuent that the thicknefle of the weightie and great branches may not rend the barke from the tree in falling, cut it firft halfe a foot from the earth, and after goe forward to faw off the refidue verie clofe vnio the tree, and laftly, caft the fawed duft vpon the cut.
To cut dorone branches from old trees.

If you disbranch and prune yourtrees in Winter, leaue the fumpes fufficient long to cut them afterward againe in March and Aprill: but and if youmeane to lop and disbranch your great and old trees, to the end they may grow young againe, when you perceiue them to loofe their luftie colour, and to begin to looke yellow, then you muft doe it fhortly after the firft of Nouember, as after that their leaues are fallen, and before their fappe put vp againe : and in curting or fawing of thefe boughs, leaue

## the Countrie Farme.

their fumps with the ftocke, that fo you may grafe vpon chem new fiences, fome lon. ger, fome fhorter, as che cree requirech, being fure in all your worke to take away the moft offending branches, fhat to che remainder may receiue the more humour and fubfance.
If the eree chrough age or otherwife become barten contraric ro his wonted cu- Anold Tree fome, you muft nor cur off all his boughes, but chufe onely that are dead. Likewife fallen barreno you mult vncouer his roots after the beg inning of Nonember is paft, and cleaue the thickeft of them, and put in the clefts forne fhucrs of hard flune, and there leaue them, to the end the juice of the earch may enter in that way: afterward, at the end of Winter you hail couer their toots againe with good earth.
When the grafis of chrec or foure yeare old are broken, brouffd, or hurt of cat- Grafts broken: tell; or when as youl fee that at fuch age they increate not nether grow greater, then you muft cut them againe, and graft them more low or more high than they were. And after you haue chus cut it, you may take the vnthriuing gratts, cut off and graft them againe, or fome part of chem in this new head, but fomewher deeper than it was before in the former; and lec it alfo be well and clofe made vp, euen from the firf fetting of it into the flocke : and when you haue thus grafted the flocke chis fecond time, you muft filll leaue remaining and not pull away the fiences which put fordh of the plants fo grafted, vncill you fee whecher the grafts doe put forth new wood or no; for peraduencure you might kill the plant, which yet being referued and kepe aliue, you may graft againe the chird time, if the fecond fhould die or mifcarrie.

After the grafts haue put forth new wood, of fomé two or three foot lengch, if they againe pur forth fiences more than need, and thofe about the parts which you defire to cherifl, and to bring to large growth, then cut away thofe fuperfle
 simeas the fap is in the wod. likewife ic will nor be gried, but lee ir beat fuch principall members of the fhoors and grafts of the firlt yeare, if there be coo the put forth, and to ingraft them in fome ocher place: and abour foure or fiuc yeares after that they haue beene grateed, and therewithall the grates well and clofe growne to the plants; yer once againe goe ourer your former worke, and take away atter the fame manner whatfocuer you percciuc of ydle remainder: for it is ynough for one tree to haue one good member for to make his fock or bodie of, and ef pecially chofe which haue beene grafted frmall vpon a graft, and thus it prouech a farrer and better tree in the end. But and if the cree were grafted after it had beene growne great, and that with many grafts, you may well afford it larger allowance, according as you hal find requifit and needfuil, for the beter couering againe of the clets and cuts made in the plant.

When your trees fhall begin to grow, you muft gouerne and guide them well for Toorder and three or foure yeares or more, namely vnill they be come to a good flape and fafhion, curcing their top on high, and their fmall branches offuperfluous wood, fo loing as till they come to the height of a man and more, if well it may be done, and drefle them well, and fee them in good order in their principall parts and members, and that in fuch manner as that one branch fand not too necre viro another : meither yee that chey may take hold one of another when they thall grow great : and fonie alfo mult be cut awwy if that the tree fhould be too thicke of boughes within, that fo the Sunne may thew his force by hauing paffage and entrance thereunto.
If it come to paffe that trees being yet young doe ceafe to grow in thickneffe, you Tres giuing oi muft cleaue the barke of the flocke in foure all along, or elfe in fiuc places, accor- -ur to grom. ding as she tree fhall be in thickneffe, and after chat, in a fhort time you hall perceiue it grow maruellounly.
You muft take from trees the drie leaues, which haue fhut vp within them the To meteawes neffs and egres of Cacerpillers, and ocher fuch like litele beafts, which are giuen to the Catsviliters confume, waft, eat, and (poylc che leaues, tender parts, and fruit it felfe from off the ${ }^{n e f s}$. tree: and befides, doc offentimes caufe to drie away, as alfo to die the whole tree, $c_{-}$ specially peare-trees, and apple-trees, as being more fubieet vnto this vermine, than
the orher forts of Fruit-trees. And it is needfull furthermore to rid the flockes of all galls and breaches which the Wormes or Pifmires haue made chere, becaufe that vpon thefeoccafions might follow cheir death and ruine.
Trees may be cut from the firft of Nouember vnto the end of March : and you

The time to cut trees.

Towater trecs: For fiences, matter of watering of trees, they muft not be watered except in time of verie great drought, and then not vpon their foot and focke, but in compafle about them: and this againe mult be moderately done, becaufe trees defire to be moiftened rather by amending of them with fat and well manured earth, than with water: allo wee fee, that the fruits which grow in places that are not watered, are ordinarily more fauorie', and keepe longer, than thole whofe earth and foyle is drencht with water, howfoeuer that fometime the drinefle thereof be fuch, as that it doth hinder and keepe the fruit from comming vino his perfect growth and accuftomed greatnefle.
much, as that for fome yeares fogether doe beare more fruit than ordinarie, inforid , as that it is as much or more in number than the leaues, you mult in fuch cafe rid them of the third or halfe part, in as much as thole behind will not onely grow fairer, but becaufe alfo, that the yeare after it will bring forth moe than and if thofe thould be let alone, it weuld doe.

# Chapo XLVII. <br> <br> Of the curing of Ervisirtrees. 

 <br> <br> Of the curing of Ervisirtrees.}


Ven as all things that draw their force and take their growth from the earth, haue fome perfeuerance of that which is good for chem, as thofe things by meanes whereof they liue : fo they have certaine fpeciall and particular difeafes growing vpon them by reafon of things that are contraric vntuthem, as either old age, or vvant, or ouer great aboundance of that which fhould nourifh them. Wherefore it is no maruell if Trees and eueric one of them doenow and thenfuffer inconueniences, and fuch as if they be not quickly helped and relieued, they will nor faile to die.

## Sliuen or Sbixe-

 red trees.weedes abowt trees.

The fmall and dwar fifb tree:

All rees vwhich through force of wind or otherwife fhall be clouen, thiuered, or fliuen, muft be cured with myre, fheepes dung, and fwines dung.
Weeds growing about trees, doe fucke the nourifhment of the earth, and they muft carefully be weeded out, and the rind of the tree mult be fmoothed with a hed. ging bill, but not in ouerthwartmaner.

When a tree groweth not in thickneffe, and is lorg in putting forth of branches, and in riling on high, after that you haue vncouered it at the foot, at fuch time as hath beene faid before, you muft cleaucafunder many of his roots, but thofe not of the chiefe and principall, and put vnto them fwines dung mixt with other earths, and fometime powre downe in the place the lees of ftrong wine, round about the roors: likewife if it be growne exceeding moffie, then you mult cleanfe it of the moffe, with a great woodden knife, taking heed that you hure not the barke. And in Sommer time when the earth is too wet, it will be good to digge the earth abous the foot and roots of thofe trees, which were not vncouered at the roots in Winter, and to mix therewith fome thing to better the earth withall, whether it be dung or fome good mould fromfome other place.

You fhall make the barren tree fruiffull, if you hang amongft the boughes a bagge The barren full of the feed of Rofes, Muffard-feed, and the foot of a Wearell.
The file is a difeafe in trees that frettech their barks : wherefore you muft cut away The file in itees this infection verie neat and cleane at the end of Winter wish a verie fharpe toole, and after put vpon the wound or cut the dung of Uxen or $S$ wine, and bind is to with old cloches, and keepe themalfo verie clofe and taft with Oziers, that it being thus faftred, may continue a long time, euen whiles the plafters can be kept on, and made cleaue thereto.
There are but a few erees but they are fubiect vnto the wormes, and fome more Werme in than orhers, as Apple-trees, Peare-trees, and all fuch as conraine within them a fweet juice: : Come others Jeffe, as the Bay-cree, and others which beare fowre and bitter truits. Somerimes thefe wormes grow of the old neffe of the tree, iometimes of hauing taken a blow. Therefore againf fuch wormes as vec ro breed in the barke of the tree, in the place where you thall fee che barke fwel!ed or houen, you muft race it with a knife, and pierce it euen vito the wood, that fo the infeet ing humour may iflue our, and with fome hooke or crouke you fhall pull out the woines and rottennefle that is within, and that with as much fpeed as you can : after this, put into and vpon the cut an emplaifter of oxe-dung or fwines. dung mingled and flamped with fage and fome quicke lime, wrap it well and tie all faft, and there let it remaine and abide fo long as it can endure.
The lees of Wine, or grounds of Oyle, being caft vpon the rootes of the Trees Theiaundijg that haue the jaundife, or elfe are otherwife any way ficke, doth them verie great in treis. good.
There breed in Trees cerraine fmall beafts almof thke to Weeuils, and chey are weevilso fomewhat blewifh or blacke, and certaine of them have long and fharpe pointed peakes or bills, thefe doe grear harmeto grafts and other youny Trees : for they cur off young fiences which are yet but tender, and put forth not paft the length of a finger: you unft at the height of the day, when you fhall fee them there, lay your hand vpon them verie foftly withour ftirring che Tree: for they let themfelues fall downe when one goeth about to take thein, becaufe they cannot quickly berake themielues to flight, and if they let not themfelues fall into your hand, then reach vp and take them vpon the fiences widh your other hand.
For Snailes and Ants, lay afhes or faw-duft of wood, or the meale oflupines at the Againsifnaikz footof the trees, and when the raine hath fallen vpon it, ftir it vp againe, and putalfo and anss, new vponit : otherwife, fer certaine fmall velfells full of water at the foot of your trees: or elfe powre lees of wine round about them.
When a tree lettech fall his fruit, you muft compaffe his focke about with Iuorie, The tree that as it were with a crowne, or elfe with a plate of lead, or, which is beft, you muft vn- toofeth hu fruit couer the roots of the erree, and piet ce them, and put into the hole the wedge made of the wood of a ceruife tree.
To hinder the ruff from hurting of your trees, you mulf fmoke them with fraw Againf inu' in the Spring time, and that round about.

The beft is to looke to Cacerpillers in the time of Winter before that the trees be Avainf catier leaued, and ifyou find any remnant or remainder of them behind, or their pallaces 8 pilers. or round gathered bunches, take them away with your Caterpiller crookes made for the purpofe before they be hatched. Cut not the wood when you cannot come by then with your hand,or, as litele as can be, and cleanfe you trees well and throtghly in eurris place, that fo there remaine not any egges, then looke vnderneath at the feet of your trees, and fee chat there be no young ones, which can fpin, and haue betaken themfelues thither, and ferled themfelues betwixt the fiences and the rootes. If there remaine any clewes or round bottomes of them in the fpring, or that fome blafing or fmall raine hach bred fome young ones, then marke at the height of the day, their repaire, in which place you fhall fee them together vpon heapes, whether it be
vpon the armes of the tree, or vpon the branches, from which you mult either with old clothes, or elfe with fome large and great leaues held in your hand, beat them and kill them euerie one, weighing hard vpon them with both your hands, and oftentimes haue recourle thither, and fpie if you haue not let fome of them fall vnto the ground; but beware there fpurt nothing from them in your face: and to the end they may not breed anie more, you fhall tie and make fatt the branches of the Sallow an bout the foot: Thefe branches will ferue likewife to make this vermine fall downe ftarke dead. There breedech likewife a little worme, which the inhabitants of Bourdeaux call Quayre, betwixt the wood and the barke, which eateth trees in fuch fort, as that it caufeth them die. Thefe you mult kill with an yron wyre, probing for them on euerie fide of the tree.
Theouerfuit. When a tree bearech too much, it muft, after that it hath beene vncouered at the fulnes of a tree, yoots, haue diuers of them (fo they be not of the principall) clouen, and the water that is within them let out, if there be anie at all in them:and this will be as good for them, or better, than lecting of bloud is for a man, for by this medicine the life of the tree is renewed.
The difeafe of The fickneffe of the barke of the tree commech of the moifture of the place where the barke of the the branch is planted: and likewife on the contrarie, trees become lame when they be trec.
Lame trees? planted intoo drie a place. To keepe tame young trees in the kernell Nurierie, and to caufe them to thriue the better, they mult be couered a mans height with ftubble, or with ftraw, but the couering muft be borne vp with poles layd long and crofte-wife.
To baften a. To haften and helpe forward a tree in his bringing forth of fruit, which is long tree his bring- before it beare anie thing,you muft make a hole with a wimble in the thickelt branch ing forth of of his root, without boring of it through, and in the hole which you haue made, put a früut. ftaffe, and ftop itwp with wax, afterward couer the foot ouer againe, and the tree will beare the yeare following.
As concerning trees ciut haue beene lately planted, and begin to wither away, if atres. you caufe them to be digged and watered, you fhall much helpe them : and withall, they muft be kept from heat, in prouiding fomething which may make them fhadow; and againft the cold, they mult be couered with ftraw.

The breeding Swines dung will kill wormes:as alfo mens vrine put in the hole where the wormes are; and quicke-lime in like fort: but and if the barke be burt, then let it be clouen in manie places, and likewife in the foot of the tree a little, in fuch fort, as that the humor may runne out.
The breeding
of poormes.
The moifture oft times will caufe wormes to breed in fruits that haue kernels: and therefore at fuch time you mult pierce the tree with a wimble, and that throughout if you doe well, and as neere the root as is poffible, to the end that the humors breeding the wormes may paffe away.
The falling of apples from the tree.
Fruits rijing sppaard.

If Apples or any other fuch fruit fall from the tree, cleaue the root, and put in the clefta great flone or a wedge of vvood.

If fruits grow vpward, walh the foot of the Tree with Purcelaine water or vinegar ; or powre about it lees of vvine: or take two parts of Oyle-oliue, and one part of blacke pitch, mingle them together, afterward annoint them, or put anhes to the foot of the cree, or elfe lome veffell tull of water about it, or fome hoope cut and annoynted with Petroleum : or a little cord dreft ouer with fwines bloud, wherewith quickfiluer hath beene mixt.
To kill Ants.
To kill Ants from about a tree, you mult vncouer the earth about the tree, and put in place fome chimney foot, and that a reafonable quantitie. Take alfo of the faw-duft of the Oake, and lay good fore of it at the foot of the Tree, and the raine when it falleth will either caule them to depart, or elfe they will die : as for other accidents which may annoy and hurt trees, as haile,fogges, or mifts, flies, frogges, and fuch other inconueniences, fee in the fecond Booke, and the fixtieth Chapter.

## Сhap. XLVIII.

$$
\begin{aligned}
& \text { To kecpe and preferue the fruit of Trees, to be taken and } \\
& \text { eaten in their due time and Seafon: } \\
& \text { and out of it. }
\end{aligned}
$$

L1 fuch skill as man is to haue, reftech not alone in the well ordering of the Fruis-tree, and carcfull maintaining of it; but he muf know withall, the keeping and preferuing of the fruit, cicher to fell it when the time is good and fit, or elfe for vfe of his houfhold and familie, efpecially in places where the moft delicate and daintie fruits doe grow, as in the councrie of Touraine, Tourraine the which for this and fuch orher confiderations, is called the garden of France : where- garidein of fore we will increat briefly of the manncr of keeping of fruirs, and we wilbegin with France....: : the Aimond.
Almonps are ripe vvhen they begin to caff the huskes. If you vvafh them in fals Ripe Almondso brine, you fhall make them vvhite, and to indure long, but yet the more if you drie them alfo: if you fee that it cannot caft his huske, lay it vpon fome ftraw a cercaine time, and fhortly after it vvill caft ts: to keepe it long, lay it in a drie place where the South vvind blowech not.
Chefnuts vvill be good to keepe vnto the Spring time, if you firt drie them in the chefrubso. fhadow, and afcer lay chemin drie places vpon heapes, or in veffells couered vvith fand: or and if you mingle them amongft common nuts, for by this mediey they will be robbed of their excrementous humour. But chiefely to keepethem long, you mult gather them vwhen they are reafon:ble ripe, in the old of che Moone, and lay them in fand infome coole place, or in fonie veffell vvell fopt. Some doe fpread them vpon hurdles, or burie them fo in fand, as that one of them rouch not another. Otherfome fet them in rankes in baskets or panniars full of ftraw. You may Sound Chefauss trie if they be found, by cafling them into cold v water: for if they go to the botrome, then they are found, but and it they fwim aboue the vvater, they are corrupted and naught.
Cherries vvill keepe long, if you gather them from off the Tree before the Sun cherrieso rife, and afterward lay them orderly m a veffell, hauing in the bottome of it a bed of Sauoric : and that by laying a bed of Sauorie, and a bed of Cherries, and a bed of Sauorie, and a bed of Cherries, and lafly, a bed of Sauorie, watering them vvith fweet vinegar. In like manner they vvill laft long if you order them ater the faid manner, couering them vvith Rofe leaues in a barreli: they are likewife either dried in the Sunne, or flewed in their owne juice, and preferued with fugar to keepe a long time.
If you annoint your Citrons, gathered with the leaucs vpon their boughes, with To keepe cis well tempered plafter, you may keepe them found a whole yeare : and if you hide trons. them and couer them with barly, they will not rot : or if you doe but clofe them vp clofe in anie veffell whatfouev: or elfe if you doe but couer them with finall ftraw.
The Corneile-berrie (commonly fo callied) nuft be put in a botle of glaffe which To kepe the hath a wide throat, and when they are in,the bottle muff be filled vp with very good corneile-berrico. and liquid honey, orelfe with fugar in fead of honey: after this, the iuice rifing of this fugar wherein they are preferued, is a fingular thing for the ftaying of the flux of the belly, and the procuring of appectic.
To keepe Quinces, dippe them an the lees of wine, or which is berter, make them For the fiaming vp in new earchen pots clofe fhut, and put the fame inco veffels full of wine, or elfe of the fux of dippe them in the wine, and by this meanes the Quinces will remaine frefh, and the wine a great deale more pleafant. Some kcepe chem in Straw or Barly, or the fawduft of Wood, or Figge-tree leaues. Otherfome couer them with leaues and loame
made of potters clay, and afterward drie them in the Sunne : and when they would vfe them they breakethe clay, and taking out the quinces, find them fuch as they

The mallynant qualitic of Quinces. put them in. Some put them all whole in honie. But note by the way, that you mult nor keepe quinces in a houfe where there is orher fruit, for what by their fowernefle, and what through their Imel, they fpoyle and corrupt the other fruis which are their neighbours, or neere vnto them, yea the verie grapes which one would keepe.
To keepe greene figes.

Tokeepe walnuts cound.
 courered, in fuch fort as that they doe not touch one another, nor yet the por it felfe : or elfe if you put them in gourds, euery one by it felfe, and hang the gourd in a fhadowed place, where the fire or fmoake cannot come: or if you pue them in a glaffe por well ftopt with Wax. Drie figs will not corrupr if you lay them vpon hurdles in an ouen, after the bread is drawne out, and after pur them in a new earthen pot, that is not glafed.

Walnuts will continue a long time found, if they be couered with Atraw, or with their drie leaues, or fhut vp in a coffer made of the wood of VValnut-tree : or if they bemingled amongft Onions, whereunto they doe this pieafure, as that they take from them the greatelf part of their acrimonic, or tharpenefle. Some fdy likewife that they will be kepe greene a whole yeare, if when they are gathered greene, they haue their coat taken from them and be dipe in honis : and thereupon alfo fuch honie becommeth fingular for them which haue vicers in their mouth or chroat to make gargarifmes of for the fame.
To keepe Poxze-
Pomegranats will keepe, if at fuch time as when they are ripe, or almoft ripe, you granats. writh thelittle falke by which they hang vpon the tree: or if prefently as foone as they be gathered, they be couered all ouer with potsers clay, tempered in water, and afterward fet out to the Sunne in fweet oyle, in a broad mouthed por cousered and hung at the floore of fome chamber in a clofe place where the frofl cannot come : or elfe fer in fome caue vnder the earth : but fee that they grow not mouldie there. In the meane time for the gathering of them, you muft touch than toftly with your hand, that fo you may not crufh them : they keepe verie well alfo in law-duft of oake woad, in falt vvater, or falt brine. Or elfe you mult dip them all ouer in boyling water, pulling them out againe prefently, afterward drying them vponfand or fmall grauell, or in the sumne for the fpace of eight daies. Some hide them ouer head and eares in a heape of corne in the fhadow, vncill that their rind be hardened.

Apples after they haue beene gathered in weather not rainie or cloudie, but faire, mutt be kept fpred vpon their eyes, nut vpon their tailes, vpon a table couered with corneftraw, in a cold place, but not in a caue (for in fuch a place they would loofe their fauour) and where the windows are turned toward the North, which likewife muft in faire weather be fer open : or vponftraw,or in barlie, or in a pot done ouer with Waxe within, and clofe couered: or in an earthen pot not pitched, but haning a hole in the bottome, and yet clofe couered aloft, and fo hung vp in a tree all Winter, in vvhich cafe the apples will continue fuch as they were put in. Some wrap them euerie one by themfelues in figge-leaues, and after couer them with lome of vwhite potters clay, and with drie lome, and fet them in the Sunne. Some after they haue gathered and made choyce of the foundeft, heauieft, and faireft apples, not being yet altogether ripe, doe fet a hog thead in the ground, round about which they fet thefe fruits, and couer them afterward with a bed of fraw, laying againe ano. ther bed of apples thereupon, and coucring the fame as before, they concinue thus vntill the veflell be full, vvhich then they take out of the earth againe, and fop it euerie where clofe, that fo there may no ayre get in thereat. The Normans lay them vpon heapes, minding to make their Cider chereof: In the countrie of Orleans and Touraine they vfe to drie them in ouens, for Winter and Spring time banquets. But the ordinarie and fafett manner of keeping of apples is, after they are got and pickt, and the bruifed ones put frem the reft, to fpread ftraw verie thin, or lay mats vpona boarded floore (for the earth floore is too moilt, and the plafter flooreroo cold) and then furead your apples vpon the fame, fo as they may lye clofe one by another,
but not one vpon another, and when extreame froft or veric hard weather fhall come, you hall lay the like layre of fraw, or the like quantitic of mats aboue chem, as you laid beneath chem, and as foone as the fro R breaketh vp , you fhall with a drie cloth rub all moifture from then, and where you find any one cainted, pprefently caft it out,for clfe they will foone corrupt one another. Now as foone as Februaric is paft, you fhall take away your fraw or niats both from aboue and vnderneath them, and lay your apples vpon the plaine boards, but yet in fuch fort that they may not toucli one another, and thus you fhall keepeapples all the yeare fafe, both from rotting, wvithering, or vurinkling of their skinnes.
Medlars are kept infmall pitcht veffells, or put in pors amongft grapes. . Tokeepemedts,
Olines are preferued in falt brine, or in a compofition of honie, vinegar, and falt : fome adde thereunto penniroyall, mints, anife, and mafticke -rre--leaues :orherfome, liusso the leaues of the bay-tres; and orhers, the berries of the bay- tree.
Peares will keepe a long time, if their tailes be pitched ouer, and fo hanged vp. To keepe peres Others put peares into a new earthen pot, and powre into them cured $W$ ine, or wine from the preffe, or common vvine as it is meet to be drunke, vnill the veffill be full: Others keepe peares conered with file-duft, or with the faw-duft of wood: fome put them amongft the drie leaues of the 1 Valnut-trec, or elfe in an carthen velfell which is fcarce baked, and powre in therento wine able to be drunke, and the new preft liquor of grapes, and fopping vp the veffell well and clofe, doe fo keepe it. Some lay them in piss, in a place neere vvhereunto there pafferh a running water. And fome diuide into quarters the Eufebian, fhodine, and bell-fafhioned peares, and taking their kernels out of them, drie them in the Sunne, that fo they may haue them good in the Spring time.
Mulberries that are clofe flope vp in a glaffe veffell, doe keepe verielong, fo that To kepe mulh therewithall they haue powred vpon them fome of their owne juice.
Citrons and Oranges are kept in fome caue vnder the earth, feparate one froma- To heep citrons, nother, or in falt brine made of verjuice, or verjuice without fall, or in maner of a pre- and oranges, ferue with falt, as the oliues are kept.
Peaches are kept in falt brine, or in fweet vinegar : or elfe their ftones being taken To kepepereaj away, they are dried in the Sunne, after the manner of figges. Some doe preferue cheso them with honie.
Ceruifes are preferued in fweetWine : or elfe vvhen they be gathered, the hardeft Tokege cere are taken and fet to foften in veffels of earth full or almoff ful, couered ouer afterward uijes, with plafter, and fee in a pit a foot depth, in a drie place, and in the face of the Sun, and after couered with earth. You may likewife cut them in peeces in the middeft, and afterward lay them in the Sunne to drie.
Datriaske.plums fhall be put in veffells, and caft vpon them new or fweet Wine, ftopping the veffells verie diligently and clofe. Or if you lay them betweene mul-berrie-leaues, or vine-leaues, one leare aboue anorher in a clofe box made for the purpofe, they will not onely keepe a long time, butalfo you may in that fort carrie them without bruifing more than an hundred milessin this fort allo you may keepe or carrie Nertarines, Abricots, Peaches, Figs, Mulberries, or any fruit of the like natures as for your grapes, there is no readier or better way to keepe them long, than to hang them vpon ftrings ouer the mantell-tree of a chimney, or where they may receiue a moderate warmth from the fire, for nothing fo foone as cold doth make them rot or putrifie,and therefore you mult by no meanes, fo farre as you can chufe, fuffer your grapes to take any frofts, nay hardly the cold dewes.

## Cmap. XLIX. <br> A briefe difcourre of making of driskes of the iuices of Eruits.

 N fuch Countries as the vine cannor beare fruit in, becaufe of the cold diftemperature and churlifh roughneffe of the aire, and whereas notwithftanding there grow fingular good fruits, and in great aboundance in recompence of the fame (as in Britaine, Normandic, the councrie of Mans, Chartraine, and Touraine) alchough there be the meanes to make Wine of a certaine kind of corne, called Bier : yet by reafon of the leffe coft and charges, as allo by reafon of the greater profit, they vfe to make diucrs forts of drinkes of truits: and to giue them their feucrall and particular names from the feueral and particular fruits whereof they aremade. As for example, that which is made of apples, cider or citer, and fo the Normans and other countries bordering thereupon doe call it, as hauing a fmell or ocher excellent qualitie refembling the cirron. Perrie which is prefied out of the Peares, and ceruife Wine, quince Wine, pomegranat Wine, mulberrie Wine, goofeberrie Wine, and floe Wine, wvihich are made of the juices of thefe fruits preffed out. And hereof yve are to obferue chat all fruits are not fit to make Wine of; but onely thofe vvhich vvill not putrifie eafily, and haue great quantitie of Wine juice vvithin them, of vvhich kind thefeare vvhereof 1 haue now fpoken. For of cherries there is notany Wine to be prefled, becaufe their juice doth eafily corrupt and putrifie verie quickly : neither yet of Almonds, Common nuts, Filberds, Pine nuts, or other fuch fruits, for they yeeld an oylie and not a Wine-like humour. But for as much as we are not determined to fpeake in this place of all thefe forts of fruit drinkes, but onely of them vvhich are called cider, perrie, and carafie, vvhich next vnto the juice of the vine, are the moft profitable and neceffarie liquor for the life and healch of man : vve vvill fer downe before hand a certaine fummarie, and as it vvere a tranfition and plaine declaration of and vnto as well the making, as alfo of and vnto the qualities and vertues of the faid cider, perrie, and carafic, and will referre the Reader vnto the Latine Booke now long agoe looked for from C Mounfier Panlmie Doctor of Phyficke at Paris, thercin to read and learne the intire and perfect knowledge of this fo pleafant and delightfome a drinke. And to begin with our purpofed matter, I intend not here to ftand about the finding out of the firf inuentour and deuifour of this drinke; onely I will fay, that as Noe carried away with the pleafant tafte of the juice, vvhich he preffed out of the grape of the wild vine planted by him,was the firf inventor of making and drinking of vvine: fo a certaine Norman hauing his tafte vvonderfully pleafed vvith a delicate and daincie tafte and rellifh of the iuice of Apples and Peares, inuented the making of Cider and Perrie: I fay, a certaine Norman, for this is in bafe Normandie cailed the Countrey of Neuz, where chis drinke had firt his beginning. The ways in gee. The way then to make thefe kinds of drinkes generally, is to gather the fruit not nerall tomake Juchwine。 them in the Sunne, for the (pending and walting of their waterie humour ; then to breake and crufh them wish Mil-ftones, or fuch orher heauic inftruments; and laftly, to preffe themout:but withall you muft obferue this fpeciall qualitie in certaine Apples, which the longer they are kept, and the riper they be,the better and greater fore of iuice they yeeld, though then indeed it be not fo durable.
On the contraric, wild Peares doe yeeld more liquor, and of a better taft,and withall of longer continuance, than doe the tame and garden ones. When the iuice is preffed our from the fruit, it muft be put into caske,for to boile therein a certaine time, and to be ordered after the manner of the ordering of the iuice of Grapes, as we intend to declare more particularly.

## How Cider is made.

THe duinkes made of fruits that are moft commonly veed, are Cider and Perrie, vvhich as they are preffed out of diuers forts of Apples and Peares, fo are they differing as well in tafte as in goodneffe. For to make your Cider, you muft fee that your Apples be not wild ones, but garden and tame ones, growne and bred in orchards carefully and diligently dreffed, kept, husbanded, and ordered all the yeare long, according to that care and diligence vvhich vve haue faid to be needfull before in lpeaking of the Orchard, and yet vvithout hauing any great regard vntu the place vvhere the Orchards are planted, and doe grow, as vwhecher they be gardens, greene-plors, arable ground, or orher fuch like places; alwaies prouided and foreleene, that the ground be yood, and vvell feafoned. And aboue all things what apples are fuch Apples muft haue a firme, folide, and faft flefh, accompanied with great fore fittof tomake of juice, of a pleafant fmell, and delightfome tafte, and of a beautifull colour: fuch arethefe that follow, the Heroet, Ruddocke, Maligar, Rambur, Fairewife, Galller, Clanget, great Eye, Greening, Curtaine, Grofegraft, Rucke, long, fower, and fweet Kennet, Barbarian, Rangelet, and Adouill. The Shortfart, Honie-meale, and Garden-globe, notwichftanding that they be rare and fingular apples, and of a more pleafant fmell, and delightome tafte, than any other forts of Apples, yeerare they not fir to make any Cider of, as well in refpect of the tenderneffe and delicacie of their flith, as for che little and infufficient fore of juice which they yeeld, not worthie the putting into the prefle to make any quantitie of Cider of. And hereto you may put another realon; namely, that thefe Apples are not fo plentifull, neither grow they in fuch ftore as others doe, and therefore ir is better to keepe them to eate, or to imploy them inbrotbs or firopeof king Sabor, and de /uccis pomsorwm, than about the making of any common drinke.

The moft common time to gather $A_{\Gamma}$ ples is about mid-September, after they The time to gan haue beene partakers of Sommers heat, and receiued fome fmall raine and gentle ther appleso vvinds from September : fome being verie ripe; others yet not altogether ripe; principally thofe which haue a fafter and leffe delicate flefl : the greateft pare vvhereof (being kept fome time) yeelderh greater ftore of juice, and betrer concocted and digefted by the vvorike and operation of their owne naturall heat. In the gathering of them there is neceflarily to be vfed cudgels and poles, except it be that wee lay our hands to them, wwhich vvee haue a purpofe to keepe : chere muft in this bufineffe alfo be chofenf fuch a day as is faire, drie, cleare, beautifull, and fullof Sunne-fhine, for if they ghould be moilt with any raine or dew, they would rot in their garners.

Being gathered, they mult not all of the fodaine be taken in hand to be made into Cider, but they mult be fuffered to take a heat in heapes, (as the Normans call it) and be kept fome three vveekes or a moneth, more or lefle, according totheir confiftence and kind, feeing vito it in the meane time (at their owne perill) that they rot not ; as alfo, they may be layed on great heapes in Gardens, or vnder fome roofe open to the ayre vvhen ir freezech not, or vvhen it freezeth, to couer them with ftraw newly threfhed, or elfe vvith fome Mattrefles or Featherbeds to keepe them from the froft. Some during the time of the froft, couer them vvith linnen Clothes fteeped in water, and vvrung out, and thefe being frozen once themfelues; doe keepe that the ayre cannot paffe vnto the Apples to freeze them : the beft of all is to prouide them warme garners, the floores being layed neither with plafter nor tiles, but with ftraw, haning the windowes verie clofe, the dopres firme and faft thut, and all the creuifes or chinkes perfectly ftopt to refift the entrance of the cold ayre. And notwithftanding all this, yet you muft not tarrie and waite vntill they be throughly ripe, and almoft vpon the rotting efpecially : but you muft take your time fomewhat before that they be come to this exact maturity and height of ripeneffe, for clle your cider will nor proue durable, but withall will gather great quanticie of lees,
and grow couered with much vwhite mother fwimming aloft : if they be frozen, then trouble not your felfe with going about to make Cider, for hauing loft their naturall and accuftomed fmell and culour, they haue alfo loft all their force and vertue, and fo it is not poffible to make any thing of them but a raw, weake, vnpleafant, yvacerifh, vndurable, and foone fowring licour. When as therefore the apples thall be vvell prepared, and come to a good licantling of ripeneffe, not fuch a one as is exact, but rather of the firft or fecond degree of ripenefle, and that they fhall yeeld and breath out a verie pleafant and fweet fmell : then it thall be high time for you to goe in hand vvith making of your Cider. Which oportunitie if you forellow and Itill Itay longer for their further and exact ripening, they vvill vither and fall away, and the Cider that you fhal preffe out of them, wil become waterilh, weake, and owre out of hand.
There are diuers wayes vfed in prefling out this drinke made of Apples in the countric of Neuz : Sone doe flampe them, putting them in fats, and afterward fill drimbe made of Apples. them vp with great quantitie of water, letting them tement, boyle, and purge, to long as vntill the water haue got the force and ftreng th of the Cider. Others itampe them in a morter, and afer powre them together. with a great quantitic of water into fome fat, not giuing them any time of concoction and purging: but thefe two wayes are not fo much worth; this third is better than them both. Firft, you mult breake your Apples in peeces, and after preffe them our : the way to breake them in peeces, is to pur chems in a prefler made round, and containing in compaffe fome feuen or eight tadome, the faid compaffe and round being contriued after the manner of a trough of two foor broad and deepe at the leaft, in the!e troughes fhall be put and contayned the faid apples for the better flaying and keeping of them in clofe together. Within thefe troughes there fhall turne abcut one or two grear nilftones of thone, or of fome hard, maffic, and weightie wood, fathioned like a wheele, carried about veithone Oxe or Horfe, or two, loas thall be fufficient for power and ftrength, as we haue faid in the making of Oyles. Whenthe Apples fhall be fufficiently broken, you muft gather into heapes the fame, and caft them into tubs for the purpofe, and there let them worke for a time as Wine doth, and when it hath wrought, then you mult draw out the juice or liquor (call it as you vvill) which fhall haue runne out of the fubftance without being preft, and turne it vp into veffels, whether they be pipes or hog fheads, old, or altogether new; provided that they have not taken any ill tafte of any vnfawourie liquor : the beft veflells or caske of all other, is that wherein there hath beene Wine, and efpecially white Wine, for the fauour of the Wine doth make this juice more acceptable, and more affected. The Cider that commeth voluntarily without being preffed, is the beft and fweeteft, though not alwaies ftronger than that which hath abode the preffe: that likewife is better and more excellent which is made without any mixture of vater: It is true indeed, that when apples haue a verie faft and folide pulpe, and haue not fo much moifture, but withall fome fharpe relifh, that then it will not be amiffe to mingle fome fmali quantitie of vvater with them to make them breake the better, as alfo, after that they be broken by force of the turning fone, enen whiles they are working in their fats, or before they be put into their fats a working, euen at their going to the preffe, there may vvater be mixt with them, to preuent that the Cider may not be too ranke, neither yet too fowre or greenifh. The grounds of the vvorking fat thall be layed vpon the prefle interlaced with long fraw, to keepe the faid famped Apples fteedie and ftayed, that they flip not to and fro when they are preffed, (the Apples by reafon of their roundneffe, not being able to ftay and abide vnder the doore and other boards of the preffer, except they be kept in vpon the fides with fomething) and that which fhall run out vpon the preffing of them, fhal be tunned vp into caske, and put to the former: or elfe, which is better, cunne it vp by it felfe, as is done by wine, without mingling of it with that which did run out vnprefled, the preffed being the ftronger, though the vnpreffed be the more pleafant and fweet. The drofle or grofte fubitance remayning after the prefing, thall be put againe into the
fat, and ftamped, and fufficient quantitie of water powred in amongft, and it fhall be let foreft, fteepe,and boyle together for the fpace of foure and twentie houres : after which, there fhal be made chereof fpending Cider, or fmall drinke for the houfehold. For the making of this hourchold drinke, it fhall be after the rate nf gathering of one veffell thereof from fo much drofe as made foure veffels of the beft.

When the Cider is tunned vp into caske, you muft let it boyle within the caske by the bung-hole of the caske left open, and thereby to purge it felfe of all his froth, fcumme, and other impurities, after the manner of wine: and when it is thus well purged, you muft bung it vp very clofe, and fo leaue is to boile againe within his veffell: but you muft fee that aa chis time the veffell be not top full, leaft in the boiling it breake the veffell. And indeed this kind of Cider is a greaa deale more ftrong than that which boileth all his boiling with the bung of the veffell open, but fomewhat more fuming, and not fo pleafant as the ocher: and it mult lye in iome cellar for the Winter time, but in fome cauc in the Summer.

Cider, as concerning the caft, doch refermble and become like vnto Wine : for at the firft it is fweet; afterward, being fined, it is fomewhat fharpe; and when it is altogether fined, it hath then a fharper rellifh, but yet altered from his former verdure: cuen after the manner of Wine, as being more pleafant when it is in fining, than when it is fined.

The Cider is better to keepe than Perrie : and there are Ciders found of two or three yeares old, as grod, in their place, as anie Wine that is made. It is true indeed, that it is fubiect vnto the fame accidents chat Wine is,and it muft be as heedily regarded in the piercing of it, as if it were Wine, not giwing it any ayre in thedrawing of it, if it be poffible, or if you giue it any at all, to giue it when che toflet is halfe our, caufing the ayre to recoyle before che fountaine be ftopt vp and fhut. So foone as che Cider veffell is emptie, you muft looke chat the lees be not let fand in it any long cime, becaufe that it would breed an infinite number of wormes, which would make it to haue an ill fmell and flinke, in fuch fort, as that it would neuer be good afterward to keepe any Cider. And thus much for the making and keeping of Cider. Now we will rpeake of the making of our choife of the Apples.
To haure excellent Cider, you muft make it of fweet Apples, and that but of one or $t$ wo forts, and both of them in his kind verie good, of a pleafant taft, and fweet fimell: and you muff breake and flampe them euery lort by it felfe, but put them together vno der the preffer. That which is made of fweet Apples mixt amongft fome fowre ones, is not alto gether fo excellent good, and yet in the heat of Summer to be preferred before the moft excellent Ciders, in that it is more cleare, heatech leffe, and quencheth thirft better. And of a cerrainetie experience hath taught it, that the Cider made of fweet Apples, hauing a foft and tender flefh, is more apt to fowre, if that there be not fome fowre ones mingled amongft them, becaufe thar fuch fweet Apples haue but 2 weake heat, and eafily ouercome and watted. But fuch fweet Apples as haue a faft fiefh and thick iuice, t tand not in need of hauing any fowre Apples mixe with them, to the helping of them to make good Cider. It is crue, that fweet Apples yeeld leffe Cider than fowre ones: but yer, in as much as the fweet haue the lefle iuice and the thicker, therefore their Cider is the better, laftech longer, nourifheth the body more, and is a longer time in fining: But on the concrarie, thofe fweet Apples which haue much iuice, doe make much Cider: but this Cider is not fo good, nor making fo good niourifhment, notwithttanding it be fooner fined and readie for drinking. Sowrihh Apples doo yeeld much iuice, that is waterie, thinne, and foone fined, but nourifhing
verie litrle. verie little.
The Cider chat is all neat, and of it felfe, without any mixture of water, doth fine and become cleare more flowly than that which is made with water: In like fort it retainech his fmell and taft a longer time, and all ocher the verues and qualities of the Apples whereof it was made : for water added but in fmall quantite, after fixe moneths once paft, or if fomewhat longer, yet after one yeare it caufech the Cider to fowre, and then fo much the fooner, as chere fhall be the greater quancicic in the

Nn3 mix,
mixture, as in the houmold or ordinarie drinke. Wherefore fuch Ciders as you would haue to laft long, muft be made without water, and vfe rather to mixe your vvater vuith them vvhen they are drawne out of the veflell to drinke, if then you find them tooftrong for you: and this alfo is the fame courfe taken with Wine, elpe cially when fuch a licknefle hath feifed vponthe partie, as craneth a thin, weake, and vataterifh drinke.
Ciders differ one from another, efpecially in colour, and fanour, or relifh : for as for their colour, fome reprefent the fcarlet as it were like vnto Claret-wine, and fuch is that vvhich is made of Apples that are red vvithin and without: fuch allo will laft long, and fine, nor vider the colour of high Clarets, and have a tafte relembling the fame fomewhat a tarre off, but afterward comming neere to the refembling of Hyppocras. Others are of the colour of Mufcadel!s, and refembling the fame allo in relifh. The greatelt part of the reft draw neere to a yellow colour, and fome of them cleare as the rocke vvater.
As concerning their reliih and talt, all Ciders, if they be good, fhould be fweet, or a little bitter or lowre, whether they be new or old : and it is as true, chat fome of them haue no more relifh than vvater. Some are of an euill tafte, and that either of themfelues, or of the ground, or of the veffell, or of the ftraw, or of fome other fuch ftrange caufe. Thefweet, as well the new as the old, and fined, are che beft of all, and nourifh moft. But it is true withall, that the new doe fwell vp a man, and caufe obftructions: The fined Ciders, are youd for fuch as haue weake lungs, or thofe which are fubje? to the itone, or haue vlcers in the reines or bladder. Such as are bitter, and hold out bitter, are naught: Butfuch bitter Cider as after becommeth fweer, is the beft of all, and latteth long. Such as are greenifh, if they continue the fame colour alwaies, are not of any value : but if in time they change this greeneneffe into a maner of tweetnefle, then they proue good, and lant long.

Youmay alfo make Cider of vvild Apples, but fuch Cider although that it laft longer than that wuhch is made of tame andgarden apples: yet it is not fo pleafant nor profitable for the fonmacke.
Good houfholders doe not loofe the droffe of their preffings, but (as we haue faid) caft them into veffells, and wvith a fufficient quantitie of fountaine vvater, make Ci der for the hounhold: many make no account of $s$, but caft it out to the dunghill, af furing themelues that it drieth and maketh barren the place where it commeth. In fuch places as vvhere they haue not the benefit of mill-ftones, preffers, \& orher imple: ments for to make Cider, they flampe applés, but not of all forts, but onely wild ones with a ftamper, and afterward purthem chus ftamped into veffells with a fufficient quantitic of water, and this is called Cider- pinet. according to their tafte, age, continuance, and abilitie to laft, anid the manner moe taftes than one, or vvithout any tafteat all: bur liet or fowre, or harth, or of e, together vvith the time, and get ther relifh, after that is fined diuers from that vohich it had, wve infining, or that it had vvhen it began to fine, after the manner of new vvine, which when it commeth to beold, purchafeth and getteth diuers qualities together vvith the time. Such Cider therefore as is fweet, becaufe of the fweetneffe which commeth of temperate heat, heatech in a meane and indifferent mainner; but cooleth leaft of all ; and againe, it is the moft nourifhing of all Ciders, and the moft profitable to beived, efpecially offuch as haue cold and drie fomackes, and on the contrarie, but finatly, tiofofing them which hatie a hot ftomacke, whether it be more or leffe, or ffomákes that are full of humiditie, verie tender and queafie, and fubjea vnto cholericke vomits : to that in fuch complexions as are hot and cholericke, it is needfull as with Wine, fo vvith Cider to mixe water in a fufficient quantitie; vvith fweet Cider when they take it to drinke, elpecially when fuch perfons haue any ague vvithall? meirs:
or and if it be the hor time of Summer: forefeene, that he that fhall then drinke it thus, be not fubieft to the paines of the bellie, or collicke; becaufe that fweet Cider, prefled new from fweet Apples, is windie by nature, as are alfo the fiweer Apples chemfelues. This is the caufe why Phyfritians counlell and adurfe, that fweet Apples fhould be rofted in the afhes for them which fhall ear them, that fo their grear moiltnefle and waterifhnefle, which are the originail tounnaine of their windinefle, may be concoeted by the meanes of the heat of the fire. V pon the fame uccafion it tallech out, that neither fweet Apples nor fweet Cider can be eood for them that are fubie to diftullations and rhewmes, becaufe of their windinefle, and for that likewife, that as the Arabian Phyfitians doe iudge, they breed great flore of windinefle in the znufcles and finewes, which cannur be difcufled but with great paine and continuance of time. Amongit the fweet Ciders, the beft and moft whelefome are thofe which are made of thefe Apples, the Heroet, fweet Kennet, Curraine, and Rangelet, becaufe thefe Apples are verie fweet, of a golden colour, good fmell, and long lafting.

Sowre Cider, whether it were made fuch by reafon of the fowreneffe of the Ap- Somze cider. ples, or become fich by reafon of the fpace of time, in as much as it is verie watrie, and fomewhat earthic, as alfo verie fubtill and piercing, and yet therewithall fomewhat aftringent and corroboratiue; becommech fingular good to coole a hot liuer and flomacke, and to temper the heat of boyling and cholericke bloud, to Itay choler and aduft vomiting, to affwage chirf, to cut and make chinne groffe and flimie humors, whecher hot or cold, but chiefely the hot. Such drinke falleth out to be verie good and conuenient, and to ferue well in place of wine, for fuch as haue anie Ague, for fuch as are fubiect to a hot liuer and hot bloud, for fuch as are fabbed, or itchie, for fuch as are rheumaticke, vpon occafion of hor humors, and it needech not that it fhould be tempered with warer. Of fowre Ciders, thofe are the moft wholefome which are made of fharpe fowre Apples, as of Rundockes, Ramburs, and fowre Kennets.
The Cider that is harfh and rough, in as much as it is verie cold and drie, is not cider thet is good, but after a long time, as nainely , not before that it haue lof his harfhneffe, changing this his great coldneffe and drineffe inro a meane and middle coldneffe, accompanied with fome moifture, drawing thereby neere vnto fome kind of fweetneffe or tart and pleafant fharpeneffe: as we iec it come to pafle in fruits, which yet, whiles chey are not ripe, haue a certaine kind of harfhnefle in them, but comming to be ripe, change by little and little their harfhneffe into an eager tartneffe, and after into a pleafant fweetneffe. Wherefore fuch Ciders would not be drunke till of a long while after they be made : or if that great neceffitie fhould compell, then to allay them with a fufficient quancitic of water; for otherwile, they would but caufe coffiueneffe, the frangurie, fhortneffe of breath, and an infinite number of obftructions: yca, they would procure manifold crudities in the ftomacke, guts, and principall veines : yca, they would ouerthrow a weake ftomarke, beget a groffe, cold, and flegmaticke bloud in the liuer, fend vp manie chicke vapours vno the braine, which voould offend the head, and hure che finewes and ioints : but it is as true, that they bring this commoditie with them, as to comfort the languifhing ftomacke, the queafie fomacke, and that which hath altogether lof his appecite, fuch as commonly betidech womeri hauing newly conceiued; and flrange appecties, for which ehis Cider is veric fit and conuenient : as alfo to flay exceffiue vomiting, all forts of fluxes of the belly, all diftillations alfo, falling downe vpon the ioints: it quietech the beating of the heart, and curtech off faintings : it helpeth digeftion, drunke at the end of meax, fo that (as we haue faid) it be allayed with a litelce water, to dimininh and reforme the heauineffe and flowneffe to pierce and pafle away which is in it; following the counFell of Galen; who teacheth three mainer of waies to vie fowre and binding Apples and Peares, without anie preiudicing of the health: the firf way being to boile them inwater, that fo they may, get more moifneffe and foftneife : the fecond, :o fer them inchebreathand vapoưr of boyling water, to moltenand ripen them: and che chird促ins:
being
being to cut them in the middeft, and to take away their core, and in place thereof to put honey or fugar, and then afterward to roaft them amongt the hot athes. Thefe kinds of Ciders are made principally of the Apples called Imall Ruddocke, of wild Apples, not grafted nor husbanded, of Apple Bequer, Rellet, and fuch other, hauing their coars diuernly fpotred.

Ciders without anje taft.

Ciders withoutall taft become fuch by reafon of their great waterifloneffe, and are eafily corrupted, and that notonely in their veffels, but alfo being drunken and vfed for drinke; and therefore there is no reckoning to be made of fuch.
As concerning Ciders hauing feuerall tafts, as cager and fweet, harfh and fweet, or anie fuch other medley; the cager fweet are much better and more wholfome than the harfh fweet, becaufe they are not onely more pleafant, but alfo more fpeedily paffing, piercing, and cutting, than the other; which by reafon of their harinneffe, ioyned with fome fweemeffe, and caufing a thickneffe and heauineffe in them, abide and ftay long about the principall parts, where they may caufe crudities and manie obftructions.
As for the age and lafting of Ciders; fuch as are new made, and continue as yet troubled, not being fined, are not wholefome, and cannot be drunke without hurt vnto the fomacke, withour head-ach, and an infinite companie of obftructions and other accidents, tedious to the health. For fuch as are veriefowre, and begin apace to turne tart and eager, they are not leffe hurtfull than the former, and therefore they muft not be vfed but when they are well fined, and intheir middle age, as wee fee is obferued in winc.

As concerning the compounding of them; thofe are the beft, moft wholefome, and eafielt to be digefted, which are made of verie ripe Apples, gathered in due time, and not ouer-long kept, which are likewife made of one onely kind of Apples, or elfe of manie kinds, but cither agreeing in taft; or elfe being of a diuers taft, yet are fuch as may be tempered together, and make a more pleafant taft, than if they were alone and feuerall : as for example, if one fhould mingle amongtt fweet Apples fuch as were eager and fharpe, fuch a medley would make a farre more pleafant Ci der, and more profitable, than if either of the faid forts were alone. The Cider likewife that is made of Apples onely, is better than that which is made of Apples and Peares ftamped and preffed together : better in like manner, and more wholefome, are thofe which are made without water, than that which is made with water, feeing water makech it to lofe his naturall taft, maketh it fowre and corrupt, and that it will not laft or endure long: wherefore it is better not to mix any water át all with it when you make any, but rather at the time of drinking of it to dilay it, and powre in fome water, if neceffitie require it, and according as there fhall be any of the occafions lately mentioned.

The worft of the Ciders is that which is made of wild sipples, ftampt and caft into a veffell with fountaine water in fufficient quantitie: and yet worfe than this, is that which is made of the droffe remaining of the firft preffing; as that alfo which is only caft into a veffell with fufficient quantitic of water: Wherefore, feeing that Ciders; how pleafant and excellent foeuer they be, affoord no fuch nourifhmentrynto the bodie as is verie profitable for them, as we will handle more at large hereafter; hee that will be carefull of his health, fhall vfe none but the beft Ciders. Wee will fpeake againe of the faculties of Cider in the fixt Booke, in the fame place where wee fhall ipeake of the faculties of Wine.

## How Perrie is made.

PErrie is made of diuers forts of Peares: fometimes of rough, harfh, fowre, and wild ones, neuer husbanded, planted, grafted, or otherwife hauing had anie labour or paines taken with them : fuch Perrie will keepe long, euen three or foure yeares, and be better at the end than at the beginning: Sometimes of Garden, tender, and delicate Peares, fuch as are the Eufebian and the CMaric Peare, the Rolet,

Hafting, Rimolt, Mollart, Greening, butter Peare, the Iagues du four Peare, the lictle Conie Peare, the perplextd Peare, the Alablafter Peare, the two-headed Peare; the dew Peare, and the wood of Hicrufalem : and fuch Perrie is pieafant for a certaine time, but after it is once come to be fiue moneths old, it becommeth void of all taff, and dead. The beft and moft excellent Perie is made of hetele yellow waxe Peares, and fuch as haue becne throuyhly drefled and husbanded, as the litte muske Peare, the two-headed Peare, the Peare Robart, the fine gold Peare, Bargamot, Tahou, Squire, and fuch orher Peares, which haue a falt and folide flefh, and hard coat.
The Anior Pearc is commended aboue all the reft, whereof likewife is made che Perrie, called waxen Perrie, becaufe it refemblech the colour of waxe, but which otherwife is called Carrfie, very pleafant and delightfome, b:er notwrehftanding indifferent hard, and not fo cafie to be corrupted as the later. Some doe alio fometmes mingle diucrs fors of Pcares togecher to make Perrie of. But of what fort of Peares fuewer the Perrie is made, the -eare-crees muft be caretully and diligently husbianded and ordered, according to our former deliuered precepts, in what ground focuer that the Peare-trees grow, as whether it be in Orchard, Garden, arable ground, or other fuch like, fo that the faid ground be fuch and fo well feafoned as is requifite to bring forth Peares in aboundance: and fuch as be good Peares, mult be gathered to make Perrie of, fome before Apples, and fome after, with cudgels or poles: fome when they are ripe, as she Anniot, the Ta hou, and the Squire,and to breake and grind the fame with a turning Mill-fone fo loone as they be gathered, in fuch manner as hath beene faid of Apples. Otherfome muft be gathered before chey be ripe, as the Peares of Grofmcuill, and ochers, which hane a hard flefh, rough cote, and are heauie, as thofe whi ch by reafon of their hardneffe and heauineffe cannot ripen well vp. on the trce. Such as thefe are not to be employed to make Perrie of, till they haue layne to ripen and mellow, that fo they may become the tendrer and fofer, to get the greater quancitic of inice out of them.
Whether they be Peares to be gathered early or late, preffed they muft be, and the like implements and meanes vied abourthem in making the Perrie, that were vfed in the making of Cider: for after the fame manner muft you proceed, in fometimes mingling water with it, when there is niced, as alfo in the manner of the vfing of it in the working, boyling, and purging of tt , in the tunning of it vp into veflels, in appointing it a place to be kept in, in the goueriing of it, and fuch other neceflarie care for the defending of it from all things chat might hurt it, and that it is fubiect vnto, cuen in as great meafure, or rather greater, than you ved about Cider, efpecially in refpect of the cold and froft, which Perrie cannot in anie fort endure: infemuch, as that all Winter long you muft keepe the windows of the cellar or caue vnder ground where it lyeth, clofe fhut, and well fopped with fraw, or fome fuch other thing, to driue away the cold : befides that, Perrie is not fo good for keeping as Cider is, except it be che Carifie, or that which is made of the Peare Grofmentil, or fuch other Peares as haue a hard flefh and skinne, the Perrie whereof may be kept two yeares vndrawne, and after they be pierced or drawne of, fix weekes, forefeene they be well ordered and gouerned. Perrie makech as great, yea greater fetling than Cider, whereof you mult tree the veffell prefendy after the $\mathcal{P}$ errie is drawne forth, tor otherwife there will breed an infinite number of wormes in the veffell, which will infeed it. The gnod houfe holders doe make a fort of Perrie for the houlfelold, of the droffe of the Peares comming from preffing, and that by cafting of them into fome velfell with l. fificient quantitic of fountaine water. Some others caft away the faid droffe, as a thing altogether vnprofitable. In all othier things Perrie is to be ordered after the manner of Cider.
The fa culties and qualities of Perrie muft be confidered of and weighed in fuch The vertwes at manner as we haue fand of Cider, that is, by his caf,age, and making. The taft of the Petrice Perrie dependetif for the moft part of the rellifh of the Peares out of which it is preffed, and thofe are cither fweet, or fowre, or harfh, or of mixt tafts, or elfe alcogether
withour taft, aciording to which rellifhes you are to find out the vertues and qualities of Perrie, following fuch forme and manner as we haue largeiy laid downe in the handling of Cider. It is strue, that to fpeake particularly of the yood qualites of Perries, the mof wholefome, profitable, and of befl juice, are chote which are made of the Peares called the waxen Peares, the fame being prefled our in the Summer time, and forefeene alfo that it be drunken fo foone as it is fined, becaufe it is not to be keps, being a verie delicate and tender iuice; and therefore aptto corrupt eafily and verie foone. Next vito this in goodneffe is che Perrie made of Pcare Robarr, and Mufcadel Peares, prouided that chey be drunken allo fo toone as shey be well fined, and their lees fetled, bur then alfo they mult be diunke with water, and but in a reafonable and meane quantitie, for otherwife by the piercing fmell and fubtilneffe thereof it caufeth great paine of the head oftentimes. The Perrie called Carifie, or made of the Kerfey Peare, though it be one of the beft and moft excellent, and of thofe which are laft preffed, is yet to be drunke after it is well fined in a mediocritic, and allayed with water, to repreffic the fuming fimell of the fame, which eafily would take hold of the braine. There is no caufe why you fhould greatly elteeme, in refpect of your health, of the Perries which are preffed out of wild Peares, and all fuch as are vnhusbanded, vneamed, of a fharpe taft, fat, reddifh, or of chofe which are preffed out of diuers forts of Peares, not agrecing together cither in taff, or ohherwife; neither yet of fuch as are made of Apples and Peares mingled and prelfed togecher; as neither of that Perrie which is newly put vp into the veffcls, and not fined, or that which had water mixt with it when it was made; or that which is made of the Pcare called the Wood-Pcare, being flampt and put into veffels with a fufficient quantitie of water. To be $\AA_{\text {horr, }}$ whatfocuer we haue laid of Cider, it may be applyed vnto Perrie for the mof part : and yet notwithftanding all this, we ase nor on confeffe the Perrie to be anie whit inferior vnto Cider: for alchough in fome Countries, as in Britaine and Normandir, they make fpeciall account of Cider, and doe more efteeme of it both for the taft, lafting, aboundance, and profit thereof, than they doe of Perrie ; notwithftarlding, if neceffrice fhould driue a man to conferre the one iuice with the other, comparing the fweet Ciders with the fweet Perries, the fowre with the fowre, the fharpe with the fharpe, and the mixe tafts with the mixt taffs, it would be eafie ro iudge, that che Perrie is more wholefome and profitable for the flomacke and whole bodic, than the Cider : for befides the aftringenr, binding, ftrengethening, and corroboratiue vertue that it hath to benefic the flomacke withall, and that comming from his terreflrious and earthie cemperature, which all forts of Peares doe moft confift of, whecher they be fweet or fowre, rough, or otherwife rellifhed; there is yet further in the Perrie a certaine fecret and vnlpeakeable vertue for the ouer-comming of poyfon, and principally the venime engendred in the ftomacke by eating of Mufhromes, which indeed is che Perries naturall qualicie, as left it of the Peares from which it is prefled. Againe, wee fee by experience, that the vfe of the Peares is euerie where more commended than the vfe of the Apples, and that for this caufe chere is more carefull heed and charge enioyned for the keeping of the Peares than of the Apples,as thofe which for that caufe are wont to be preferued in fugar or honey. They are alfo dried in the Sunne, dricd in the Ouen, and made vp in compofition to ferue in time and place. Ic is true that Cider moiftenech more than Perrie: bur in recompence of that, the Perrie doch relieue and refrefh a man more, and in cooling of him, comfortech withall, faue that it ftirrech vp more oft the paine of the bellie and the collicke than Cider doth, efpecially the fowre or harih Perrie, in fuch as are fubię vnto the collicke ; and the caufe is, for that it paffecth not away fo fpeedily by vrine through the bellie, but fayech longer time in the flomacke, and about the principall parts, than Cider doth, as wee haue declared in the Treatife of the Peare : For which caufe, it is better to drinke of it at the end of meat, than at the beginning, fo that the partie haue not anie vomiting, or flux of the bellie; following the counfaile of Diofcorides, who faych, That Peares eaten fafting bring harme and inconuenience.

## the Countrie Farme.

Loe here, in my opinion, what wee are to indge of the qualities of Cider and $\mathrm{Per}_{\text {- }}$ ric, as well in particular, as in comparing of the one with the other.

It remaineth, that we examine what kind of drinke the Perrie and Cider are, and whether there be anie fuch excellent qualitie in them as may match them and make them equall with Wine, that fo famous and highly efteemed drinke, feeing that a Phyfitian of our time could not content himfelfe with matching of them together, but went further, and preferred them before Wine in euerie thing: but this mighe happen (poffibly) by his being more affected tnwards his Country, or by being carried away with a paradoxicall uudgement, than vpon any fincere mind to find out the rruth of things. But for the deciding of this controuerfie, we have thought good to fet downe our iudgement thercot in our Booke, written in Latine, and entituled De Salubri Dista, that fo wee may not in this place pafte the limits of our Farme and Countrey houfe.

## The making of Ceruije drinke.

CEruifes muft be gathered when they are halfe ripe, euen fo foone as you efpic anie of them to tall from the tree : Suffer them not to mellow and ripen, except it be a verie little, for when they be throughly ripe, they are not worth a farthing to preffe out to make drinke of. You mult breake them lightly in the trough of the Preffer, let the iuice worke together in the fat, after it is preft, and when it hath wrought, tunne it vp, and lay it, in fome cellar, or caue, and keepe it long; for the Ceruife drinke the longer it is kept, the better it is. You fhall know his goodneffe, by his hauing loft his tharpeneffe and vnpleafantneffe, and curned the fame into the taft of Wine which is of a white colour : Or if you will not ftay the full ripeneffe thereof, then dilay it with fufficient quantitic of Fountaine water, when you will drinke it.

This drinke, though it be the firft of that kind that was put in practife, as the patterne after which all other forts of Fruit-drinkes haue beene made, and of which, and not of anie moe, Virgil maketh mention in his Georgickess notwithltanding, it is fo cold a friend vnto the health, as that it is not to be much fet by. It is verie true, that for want of other remedies, in cafe of neceffitie, the Countrey-man may ferue himfelfe with this Wine, when hee findeth himfelfe heauily oppreffed with the flux of the bellie, whether it be that which is called the bloudie flux, or anie other kind thereof.

## Drinke made of. Sloes.

THe good Houfcholders of the low Countries of Normandie, being fuch as will not loofe anie thing, and thereupon being more carefull to ger goods, than to keepe their healch, fo foone as Autumne is come, caufe to be gathered by their people great quanticie of Sloes, whether they be ripe, or not : which done, they powre them into certaine Veffels with fufficient quantitie of water, and fop vp the Veffels, without touching of them. Before a moneth be at an end, this wap ter thus infufed doth reprefent the colour and taft of a fharpe, vnpleatant, and wild Wine, which notwithftanding ferueth the thirftie Labourers and Hindes of that Councrey to quench their thirlt withall in the great heat of burning Agues. This drinke is called Pignette.

## Сияр. L. <br> Of preferuing of Eruits.

Marmalade.

18Or to make Marmalade, prouide your Quinces verie ripe and yellow, make them cleane, and the feedes taken out, boile them in frefh water in fome Skillet, fo long, as till they begin to open and burft (if you thinke it not better to cut them in quarters:) afterward force them through fome Searce or Strainer that is verie clofe and cleane, and fo long, as till nothing remaine but the groffe parts : to eight pound of pulpe thus paffed and forced through, put three pound of fine powdred Sugar, boiling them together at a litele coale fire, mixe them well by ftirring them diligently with a broad fpatule of wood, and let that your boiling continue till they be fufficiently boiled; which is, when you fee that it leauch altogecher to cleaue vnto or hang vpon the fides of the veffell, as being the verie marke of the perfect and fufficient boiling. If you be difpofed to put any fpice into it, as Cinnamon, Cloues, Nurmegs, and Ginger, you muft doe it in the end of the boiling of them, and then alfo ftirre it well about with the fpatule. After the fame manner you may preferue or make Marnalade of Peaches, Peares, and other fruits.

Marmalade of
Oranges, Lio
mons, or citrons.

Yet there is another Marmalade which is made of Oranges, which defirech a greae deale of more curiofitie in the working, and is exceeding pleafant to taft, and indeed more wholefome than anie other Marmalade whacfocuer, efpecially for thofe which are ficke and weake: for it fortifieth the fomacke, and encreafeth appetite, it expelleth wind, and comforteth the vitall fpirits. This Marmalade of Oranges is made in this manner: Take of the faireft and beft Oranges you can get, not thofe which are called Ciuill, and haue a fweet talt, bur thofe which are of a cleere, high, and brighs colour, and are fowre in taft : then with a very fharpe knife pare away the vpper yellow rinde, I doe not meane to the white, but fo exceeding thinne as is pollible,taking away (as it were) but onely the fmooth thinne skinne, and leauing the Orange as yellow as before, onely looking a little more blanke and rough : this done, you hall lay them in faire running water, preffing them fo downe, that they may be all couered ouer with the water: then at the end of euerie fiue houres fhift them into frefh waters, till (hauing layne full fiue or fix houres in each of them) you cannot taft anie bitternefle in the water, but that it is fweet and pleafant as when it came out of the Fountaine, then you may be affured that they arefteept ynough; fo that then you fhall take them forth of the water, and drie them with a fine cleane cloth : then to cucrie pound of Oranges you thall take a pound of refined Sugar well beaten and fearced, and fix or eight fpoonefuls of Damaske-Rofe-water, and in the fame you thall boile the Oranges till they burft, and become like vnto pappe, or pulpe, which you thall the more occafion, by continually ftirring them with a fpoone or fpatule: then when they are fully broken ynough, you thall take them from the fire, and prefently ftraine them through a cleane Strainer into your boxes, and fo let them coole and ftiffen. In this fort you may make Marmalade of Limons, Citrons, or anie other whole fruit, whofe rinde is bitter, or vnpleafant. You may alfo, after this manner, preferue either Oranges, Limons, Citrons, or anie other fuch like fruit, obferuing not to les them boile vntill they breake, but keeping them in a verie moderate and gente temper.

If your would make a laxatiue Marmalade, fuch as they vfe at Lyons, looke into the 26. Chapter of this Booke.
To make good and excellent Gellie of Quinces, cleanfe your Quinces that are verie ripe and yellow, taking out of them their kernels, then cut them in fmall quarters, without paring of them, for the skinne doth encreafe the fmell : whiles you are thus making of them cleane, and cutting them in quarters, caft them prefendy into a bafim
bafin full of vvater: for ifthey be not caft into vvater fo foone as they be chus chopt in peeces, they wvill become blacke : boyle them in a great quantitie of water, vntill fuch time as they be almof become like pap meat: vvhen they arefufficiently boyled ftrayne this water through a new limuen cloch that is good and thicke, and that euen all the decoction, and fo flrongly as peffibly you can. Tothis decoction thus ftrained, adde che fourth part of fune lugar : caufe all to boyle vpon a reafonable coale fire, fo long as sill in the end you perceiue it verie neere perfectly boyled, then make a fmall fire, that Io it may nor burne to the fides, for that would make the gelly to be of an euill colour : and you thall know when it is perfectly boyled, if you find it cleauing like glue vnto the oyle,and therefore you nuft then pur it in boxes.
To precerue Walnurs : Gather vvalnuts whiles chey are fmall, tender and greene Topreferres vvith their rinde and all, and make many fmall holes therein, and after lay them to Wathusts. fteepe in vvater elenen or twelue dayes, more or leffe, cleanfe then from dhe skinne that lyech vpon the fhell, vvithout fhaling of them, and boyle them in clarified $\mathrm{Su}_{-}$ gar a long time, ftill putting vnto them more and more clarified Sugar, becaufe the long boyling vvill make great vvaffe : in the end put them into veffells with cloucs, ginger, and cinnamome, but leffe of cloues than of any of the reft, becaufe they would make them ouer bitter. Another vvay to preferue them, is to take greene Wainuts about the nionech of May, or of Iune, before that their pilling become hard, pull them, and let them feepe inine dayes (more or leffe according as you fhall perceiue them to become tender) in pure water, wvhich muft be changed euerie day threcor fourctimes : boyle them yec afterward to make them more cender: being boyled, drie chem in the fhadow of the Sunne, or vvipe them drie with a linnen cloth, afervard pricke them with cinnamome and cloues: In the end, fet them a boyling in clarified fugar, fo long till the fugar be boyled vp to the confiftence of a firope, afterward pur them in tinne or earthen veffells made for the purpofe, together vvith the firope vvierein they were boylcd. Ochers doe them otherwife : They gather the Walnut whiles it is greene, they pricke it vpona fpindle or fome fuch like inffrument of wood, not of yron (for yron vvould make it more blacke) and let it fteepe in water often changed, and then boyle it till it betender: being tender, they caft it by and by into verie cleane cold water: being cooled, they cleanfe if froma little skin which thewech it felfe aboue the fhell, and drie it with a linnen cloth, and finally, pricke it about with cloues and cinmamome : they put it thus in veffells, and couer it with firope to kecpe it in : if it happen that atter fome frall time the firope become too thin, then they boyle it againe, and put it againe into the veffell : this is the way to keepe walnuts al waies greene, according to their naturall colour. In fteed of fugar or honie to make liquid preferues, you may for need vec cute, fuch as we will intreat of in the fift Booke : vuhich cute or boyled vvine is of no effe weetneffe and goodnefle than honic or fugar.
To preferuc pills of Cytrons or Oranges : chufe great pills of Cytrons or of Oran- Preferwes of o: ges, or of Aflyrian Cytrons cut in foure or fix pecees, cleanfecheni from their inward range pills, skin and pippins, feepe them in cleare vvater for the fpace of ninc daies, changing the water the fifth day : vvhen the nine daics are paft, put them againe in cleare vvater to fteepe vntill they become fwect,and have lof their bitterneffe, and withall appeare cleare and tranfparent, which is a figne of cheir fufficient watering: afterward, boyle them in a veffel of braffe that is cleane, or in a leaden veffel fo long as tilthey be tender; vvhen they haue caft out all their watcrifhneffe, put them to fleepe in a Iulep made of one part of fugar, and three of water, for the fpace of foure and twentic houres, afterward make them to boyle at a litele fire fo much as is fufficient: take them out of the Iulep, and put them in a glaffe veffell, and putting vpon them the Iulep of Rofe-vvater thicke ynough of confiftence, that fo it may affoord them as it vvere a cruft, you may if you vvill aromatize them with a lietle Amber and Muske.
To preferue whole Peaches, you muft pill then and cleanfe them as carefully as The prefertue ot may be, and after boyle them wholc or cut in quarters, in a fufficient thin Iulep, not to Peafbes.
boile them to the full, but onely to boile out their waterifhneffe, wherewith they abound: and then after this, in a better boiled Iulep to boile them vp to the full, till they be become through tender and fote: and finally, to put them $v p$ into fome earthen veffell, and to couer them with the firrup wherein they haue boyled. For their

Preferued Abricots. Small Peaches. Peares. Apples. Timely Peaches.

## To preferne

 cherries, ceruifes, Goofeberries, ér.Topreferue
Barberries. longer keeping, you may aromatize them with Cinnamon or Muske. This manner of preferuing of whole Peaches, is generall tor the preferuing of all other groffe fruits, as Peares, Quinces, Apples, Abricuts, Imall Peaches, and cimely Peaches.
To preferue Cherries, you muft chufe the faireft fowre Cherries that you can, full ripe (for if they be not full ripe, in boiling them toward the end, you fhall find nothing but skinne and bone)cutting off their ftarts at the halfe, and afterward boile them in their owne iuice with fugar, in fuch proportion, as that for euerie pound of Cherries you have halfe a pound offugar, taking away the fcumme ftill as it Thall rife in boiling of them: when they fhall be fufficiently boiled, you muft put them in glaffe veffels, and powre vpon them the firrup wherein they haue boiled: notwithftanding, if the firrup fhould Atill feeme waterih, boile it more perfectly. Otherwife, and better : put apart fome quantitie of your faid fowre Cherries which you fhall preffe to haue a fufficient quantitie of iuice : in this iuice fo foone as you haue preffed it out, melt your fugar, and (not in anie other liquor) boile them together prefently, and in boiling, fcumme them: when the iuice is well fcummed, clarified, and become red, without taking it from the fire, or making it loofe his boiling, put the Cherries thereinto to boile, as long as needeth, withour anie ftirring of them, but looking well to the fcumming of thein with a fpatule: firre them not from off the fire vntill they be perfectly boiled, and that you hall difcerne, if you fee the firrup dropt vpon a trencher to fall into drops that doe not fpread abroad, forthen it is exactly boiled : and you muft put vp your Cherries into their glaffe veffels good and hot for to be kept. In this manner you Thall preferue Plums, Ceruifes, Goofeberries, and fuch other fmall fruits.

For the preferuing of Barberries, you thall take the faireft and goodlieft bunches of Barberries that you can find, being gotten verie drie from the tops of the trees, and as neere as you can from the Sunne fide thereof, being fully ripe, and of one entire colour : then with a pinne or needle you fhall open the fide, and pick out all the fones or kernels from the fame: then to euerie bare pound of thefe Barberries thus ftoned, you thall take a pound downe weight of fine fugar well beaten and fearced, and fo boile them on a gentle charcoale fire, till the firrup be thicke : then let them coole, and afterward por them $v p$, being fure to couer them all ouer with the firrup: But if you intend to make Conferue of them, then you fhall not need to fone them, but onely picke them cleane from their branches, taking all the found berries, and cafting away all that are vnfound or fpotted, and fo boile them in their fugar ouer a hot fire vntill they burf, ftirring them continually with a fpatule of wood or ftecle made for the purpofe : and then fraine them through a ftrainer, not exceeding fine, and fqueefe them fo foone as is pofible: then being cooled, pot it vp, and vfe it as you fhall haue neceflarie occafion. This Conferue is moft excellent againft burning feauers, or other peftilent difeafes, growing from inflammation or corruption of the bloud: it comforteth the fomack, and begets an appetite : it chearethall the fpirits: and being drunke in Iuleps, bringeth the bloud to his true qualitie, and taketh away all thirf, inflammation, or roughneffe in the throat or mouth : it is alfo good for anic heat in the liuer.
Pafof Plums and otber fraits.

For to haue pafte of Plums: firt boile the Plums with a little water, ftirring them oftentimes, that they may not burne too: afterward ftraine and force them through a fearce, and weing them, that fo you may put thereto for cuerie pound foure cunces of fugar: fetall vpon the fire to boile againe, and ftirre them well, not giving ouer vntill all the frumme be confumed and fpent : which done, make them readie as they are where you will: afterward lay them in the Sunne to drie three daies, and then thut them vp: and in cafe that they grow moilt, or that there f pring forth anie water cut of
them, you mult lay them in the Sunne againe. This patterne of making this pafte, may ferue generally for the making of palte of anie otherfruits, as Peares, Apples; Cherries, and Peaches, faue that you muft haue refpect vnto the quantitie of Sugar, which fhall be more or leffe, according to the more or lefle moiftneffe of the fruits which you are determined to make vp in pafte.

To keepe Peaches, or other fruits: take Peaches, or other fruits which you would keepe, when it is faire weather and drie, and opening them in the middelt, take our the ftone: then lay them all one day to drie in the Sunne, or in an Ouen after that the fruis. bread is drawne out: afterward take fugar well boiled and purified, and annoint them ouer, and lay them againe the day following in the Sunne, and fo annoint them ouer againe, and fo of as they fhall drie, and vntill they have gotten a fufficient cruft, and after keepe them at your pleafure.

To make Oliues readie againft a day : Take greene Oliues, and cut off a little from the one fide, after lay them in water with lime and good fifted afhes (but take withall, that you mult haue twice fo manie athes as lime, and let them ftecpe in that fort the fpace of 24. houres:) after you fhall take them out, and wafh them foure or fiue times in warme water : afterward you ihal put them in a ftone or glafle veffell with falt water, and this you fiall change cucrie three moneths, and mingle amongt them common Thyme, wild Thyme, Annifeed, or the ribbes and boughes of Fennell:and thus you may kecpe them a long time.
To preferue Oliues: lay white Oliues to ftecpe fix daies in a veffell of Sea-water, and vpon them powre the iuice of Grapes as it commeth from the preffe, but fill not the veffell too full, to the end that the fweet wine, when it fhall boile, doe not fhed ouer, and when it hath boiled, you muft ftop the veffell: Some doe put a handfull of falt in firft, and after it the Muft of new wine, and laft the Oliues, and when the new wine hath boiled, they fop vp the veffell. Otherwife, drie them in the fhadow, in a place that is open for the wind to enter, then put them vp in an earthen veffell filled with honey, nixing therewithall fome Spices.
Filberds or fmall Hafel. Nuts may be preferned two fenerall waies, that is to fay, ei- To preferue Fin ther in the fhell, or without, by the kernell onely. To preferue them in the fhell, and to haue them verie full, large, and pleafant in eaft, you fhall take a large earthen pot, as
To keepe Pedi-
ches and other ches and other



Torkere OHene:
$\qquad$
 wide in the bottome as at the mouth, and then firft lay therein a pretie thicke layre of Nuts, and then ftrew vponthem a handfull of Bay falt, then lay another layre of Nuts and an handfull of Bay falt, and thus doe layre vpon layre, till you haue filled the pot vp to the top: then couer it with leather \& parchment exceeding clofe: which done, lay a fmooth fone on the top of it, and then dig a hole in the earth in fomedrie vaule or cellar, and fet the pot therein, and couer it all ouer with the earth, and this wil keepe them all the yeare, or diuers yeares, in as good ftrength, fulneffe, and fweetneffe, as if they were but newly gotten from the trees. Some vfe only to burie thefe pots thus filled in red or yellow fand: and fome vfe not to burie them at all, but to keepe them in. a low, coole, and moift vault: and furely anie will doe well, bur the firft is the beft, and makech them moft full, and to haue the pleafanteft rellinh. But if you would preferue them withour the fhels in the kernels only, then you fhall open them, and picls off the vpper red hull or skin, and in all points doe to them as was taught you before for the Walnut.
To make Quince-cakes thin, and as it were almoft tranfparent, you fhall take your Quinces and pare chem, and cut then in flices from the chore, then take weight for weight of refined fugar beaten and well fearced, and onely moiftened with Damaske Rolewater, and in it boile your Quinces till it be thick, and then take it forth, and drie it vpon a flat plate-difh ouera foff fire, not leauing to firre it with a fpoone or flice till it be hard: then put it into a fone-mortar, and beat it very well, and if you find that it wanteth fugar, then as you bear it, ftrew in more fugar, till it haue the raft you defire: thcis being come to a pafte, takc it out of the mortar, and rowle it forth into verie thin cakes, and fo print it: and in this manner you may make thin cakes of anie manner of fruit you pleate whatfocuer.

If you will make your Paftes, Cakes, Marmalades, Preferues, or Conferues of diDineeflitiof coo uers colours, as red, wvhite, or betweene both; you fhall doe as followerh: firf, if dowiss. you vvill haue your pafte or marmalade red, you fhall take your Quinces, Apples, Peares, Oranges, or what other fruit you pleafe, and after you haue pared or rined them, you fhall cut them in halfes, and chore fuch as are to be chored, then take weight for weight of retined fugar, and to cuerie pound of fugar a quart of faire run. ning water, and boyle them in the fame ouer a verie foff fire, and turne chem ouer many times, and couer them verie clofe with a pewter-difh, obferuing euer, that the longer they are in boyling, the better and more ruddie will the colour be; then when they be foft, take your knife and cut them croffe ouer the tops, that the firrop may paffe through them, and make the colour entire, then take $v$ f fomze of the firrop and coole it vpon a fawcer, and when you fee it begin to be chick, then breake your Quinces with a flice, or a fpoone, as finall as is pofibile, then flrane it, and boxe it after you haue flrewed fugar in the boxes: or if you will haue it in pafte or cakes, then vfe it as is before faid of the Quince cakes, and fo mould it, and roll itforth. Now if you will haue it of a pure white colour, you muft in all points vee your Quinces, Apples, Peares, Oranges, or other fruir, as is beforcfaid, onely you mult take buir to cuerie pound of Sugar a pint of water, and you muft boile them as faft as is poffible, and not ceuer them ar all, but fuffer the ayre to paffe away as freely as may be. Now if you will haue it of a carnation, or more pale colour, then you fhall cake a pint and a halfe of water to a pound of Sugar, and a pound of Fruit, and you fhall fo couer it with a Pewter difh, that at one corner of the fame a little of the ayre or fmoake may palte away, and no more : and thus obferue, that the more ayre you fuffer to goe away, the paler the colour will be: and in this cafe you thall neyther fuffer it to boile exceeding faft, nor verie flow, but of a temperate and indifferent manner.
cinnazyon
ficks.

If you will make artificiall Cinnamon flickes, fo like vnro the true Cinnamon it felfe, that the one can hardly be iudged from the other, and yet the counterfeit to be a mof delicate and pleafant fweet meat, and wholeforme and foueraigne to be caten: you fhall take an ounce of the beft Cinnamon, from which no water hath by anie meanes beene extra\{ted, and beat it into verie fine powder, well fearced: then take halfe a pound of refined Sugar alfo well beaten and fearced, and mixe them verie well togecher : then take gumme Dragon the quantitie of a Hafel Nut, and fteepe it in Rofe-water, fo as it may be thicke and verie glewie : then with it temper the Cinnamon and Rofe-water, till you bring it to a fine pafte : then worke it out with your hand, after that rowle it forth with your Rowling-Pinne, then print it, and laftly, fold it vp in the fame manner that you fee a Cinnamon fticke is folded vp. Now, if where you diffolue your gumme Dragon, you alfo diffolue with the fame a graine or two of fat Muske, and alfo twice as much Ambergreece, it will be a great deale the better, and adde more pleafantneffe and delicacie of fmell vnto the flickes.
To make Conferue generally of anie fruit whatfocuer you pleafe, either fweee or fowre, you thall take the fruit you intend to make Conferue of, and if it be fone fruit, you fhall take out the ftones; if other fruit, take away the chore, parings, and feedes, and then boile them in faire running water, to an ind ffferent good height: which done, you fhall draine them away from the fame, and put them into another cleane Veffell, either with white Wine, or claret Wine, according vnto the colour of the fruit which you conferue: and then boile them to a thicke pappe, breaking them with a Slice, or Spatule, as they boile, vntill all be brought into one fubftance: then vnoo euric bare pound of pulpe, if the fruit thereof be fweet, you fhall takea bare pound of refined Sugar, beaten to fine powder : but if it be fowre fruit, as Cherries, Goofeberries, Barberries, Bulleys, Sloes, and fuch like, then vnto euerie bare pound of pulpe, you fhall take a pound downe weight of refined Sugar in powder, and fo flirre the Sugar and the pulpe verie well together vpon the fire : then taking it from the fame, you muft immediately, hot as it is,ftraine

## the Countrie Farme.

it through a middle ftrainer cleane wafhed, and fo letting it coole, then you may por it vp.
But if you will make Conferue of Flowers, Hearbes, Leaues, or fuch like; as are confrrue of Rofes, Violecs, Gilloflowers, Mints, Bafill, and fuch like : then you fhall take the fovers. flowers or leaues from their falkes, and with a paire of fheeres cut away the tippes of the vpper ends of them, and the white ends at the roots thereof, leauing nothing but the heart and middle part thereof: which done, you fhall put them into a thone Mortar, or into a rowling Mill, or woodden Brake, and there cruh, grind, or bruife them, till they come to a loff fubftance, and be fo like vnto a foft pulpe, that no pare of the leanes or flowers may be ditcerned : then to cuerie pound of that pulpe, as was before faid, take a pound of refined fugar, beaten and fearced into fine powder, giuing the fweecer the leffe, and the fuwre the more, and fo beat them exceedingly well togecher, till the fugar be gencrally difperfed; and then pot it vp , and keepe it for your occafions.

If you will make an excellent Leach of Dates, you fhall take your Dates, and ope-. Leach of Datesh ning of them, take forth their fone, and the innermof whire rind, and beat them in aftone Mortar with Sugar, Cinnamon, and Ginger, till they be well incorporated together : then take it forth of the Mortar, and worke it like a piece of pafte, and then rowle them forth, and print them : and either ferue them moift, or drie them in a ftooue, for either kind is excellent.

## C нар. LI.

## The manner of making of Oyles: that there are thrce forts of preparing of Oyles, and bow you must <br> make oyle Oline.

Netreating in the fecond Booke of the Oliue-tree, wee promifed a briefe difcourfe of the making of Oyles, a thing certainely verie profitable for our Councrey Houle, in as much as Oyle is no leffe profitable for mans life, nor of leffe fruit and encreafe vnto a good husband, than Wine : then it fhall not be from the matter, if (after wee haue fpoken largely of Gardens and Orchards, and efpecially of the ordering of Oliue-trees, and other hearbes and trees whereof Oyles are prepared) we briefely doe (pecifie the waies of making of Oyles.
And to fay fomething of Oyle in generall, Oyle may be made chree waies: The firft, by exprefion, which is moft common, and the chiefeft amongtt the reft: The fecond, by impreffion : and the third, by diftillation or refolution, after the manner of diftilled waters : Wee will onely fpeake of the two firft in this place, referuing the chird for the Difcourfe which wee intend to make concerning. Diftillations in this Booke; although, in verie deed, wee hance not purpofely refolued to fpeake exactly of the making of Oyles, becaufe it is a thing that properly belongech not to the Husbandman, or his Hinde, but onely vnto a good Apothecaric.
To fpeake then firft of Oyle which is mof veffull and feruiceable for the Hus- ojk of oats. bandman, becaufe it not onely benefiteth himfelfe and his familie, but alfo curecth his catell of all manner of dangerous and corrupt difeafes : you thall virderftand, that it is the Oyle of Oats, which may be made cither by expreffion, impreffion, or diffillation: yet for your greacer eafe and readineffe, to haue it vpon anie fuddainic occafion; you fhall make it in this manner: Firft, you fhall take halfe a pecke, or a quarter of a pecke, of the goodlieft, beft, and fulleft Oates you can procure, of which, the whiteft are the beft, and thele you thall hull and breake from cheir huskes
as cleane as is poffible: then take a pottle or three quarts of new milke, and fetting it vpon the fire, as foone as it is readie tofeeth, you fhall put into it halfe a pound of Allome beaten to powder, and flirre it about, and folet ir ftand an houre or two, in which time it will gather vnto a curd : then with your hands you thall preffe downe the curd into the bottome of the Veffell, and then fraine the Whay from it into another cleane Veffell, and preffe the curd verie much, not leauing anie Whay in it that you can wring forth: then take that Whay, and put your Oates therein, and fet it ouer a verie quicke fire, and boile it vnill you fee the Oates breake, or be as foft as pappe: then take it from the fire, and powre it gently into a femall Cullender, fo as the Whay may foftly draine from the fome, without anie force or pref. fing at all : then when ic hath almoft left dropping, take a cleane Frying-panne, and put the Oates therein, and hold it ouer a gentle fire fo long, as you fhall fee the fmoake of the Oates afcend vpward : but fo foone as you perceiue the finoake to ftymmer or runne about the edges of the panne, you fhall torthwith put the Oates into a fine cleane bagge of foft old Linnen, or Boulter, and folay it into the Oylepreffe, and preffe it with all the frength you can, and that which runneth from the fame, is the Oyle thereof, which you thall receiue into a Giaffe-veffell, and keepe it clofe and well ftopped vp. In this manner, and with this Whay, you may alfo extract Oyle from anie hard fubflance either of Trees, Seedes, Leaues, Flowers, Graines, or what elfe foeuer, which hath anie concealed moifture remayning within it.
This Oyle of Oates is moft excellent for the fmoothing of the skinne, and taking away of itch, fcabbe, or litcle puftules about the bodies of men or children: It alfo purgeth moft gently and fweetly, and expelleth out of the bodic all manner of venimous and infective humours: it is alfo verie foueraigne againft the fone or difficultie of vrine, being drunke with white Wine and a corroded Nutmeg: Alfo ic feedeth much, and maketh a man ftrong and luftie. It is moft foueraigne for anie inward difeafe in Cattell, or anie furfet taken by too violent labour: but efpecially is cureth all inward difeafes in Horfes, being given either with Beere, Ale, or Wine: but aboue the reft, it curech the Glaunders, mourning of the Chyne, confumption of the Liuer, or rottenneffe in the Lungs: and as it cureth thefe inward difeafes, fo alfo being inwardly taken (as aforefaid) it cureth all outward grieuances which come of inward corruption, as the Farcie, Maungie, Scabbe, Leprofie, Hidebound, the euill habit of the bodie, and fuch like. And as for this manner of making of Oyles, although it be precifely none of the three wayes before rehearfed, but fomewhat more groffe, yet feeing it fauoureth of the two firf, which is expreffion and imprefion, and being fo readie, perfect, and eafie a thing for anie mans practife, it is no leffe to be embraced than anic of the other: for there is no place nor no neceffitie void of thofe helpes and furtherances which are needfull in this Worke.
Oy'e by expreffic The manner of making of Oyles by expreffion, belongeth not onely to Oliues, but alfo to manic other fruits and feedes, as common Nuts, Almonds, Nutmegs, Line. feed, Hempe-feed, and fuch other, whereof we will fpeake hereafter. Notwithftanding, in as much as the Oliue doth yeeld more Oyle than anie other fruit or feed, is hath deferued the name of excellencie aboue all the reft : for the fat and vnctuous liquors of other fruits and feedes are not like to haue anie other name beflowed vpon
oyle the proper name of the it gubir of Oiness. m, than that which of right appertaineth vnto the liquor which is prefled out of the Oliue : for which reafon, when we fpeake of the Oyle of the Oliue, we onely fay, feed whereout it was preffed; as Oyle of Nutmegs, Oyle of fweet Almonds, and fo of the reft: Wherefore we will begin to deferibe the manner and fafhion of making the Oyle of Oliues.
What is neceflarie before the making of the oyle.

When therefore you haue firft gathered your Oliues, and difpofed of them in fuch manner as we haue fooken of in our fecond Booke, entreating of the Oliue-tree, confider diligently, if the place where the Oyle is to be preffed and made, be furnihhed
of all neceffarie things, that is to fay, of fats or veffells to put your diuers forts of oyles in: of fcoopes of yron, to draw and empric out the oyles: ©ouers to couer the veffells; great and fmall fpurges : pors to carrie out the oyle in bands and cordes of hempe and broume barkes, and of many other things which muft be prepared and made readie before you come to the making of the oyle, in like manner as is vfed before the gachering of grapes. The milfones, oyle mills, and preflers muft be cleane, as all the efft of the inftruments feruing to make oyle : you mult likewife hauc made fufficient prouifion of vvood to make good fires, therby to chafe and heat the roome a good vvhule before hand, wvhere the oyle fhall be preffed, if fo be it be not warmes ynough by his naturall fituation : for all oylie liquors doe diffolue and run the more freely by the helpe of heat, as they do keepe in and ceafe to depart through cold. And for chis caufe it were requifite that your preffer ftood vpon the light and cleareneffe of the South Sun, that fo you may fland the leffe in need offire and candle, when you goe about the preffing out of your oyle.
All thefechings thus prepared, caule your feruants and vvorkemen to cull out and cleanfe your oliues : when they are cleane, let them be carried forthwith to the preffe, vnder vvhich they fhall put them vvhole in new Willow baskets (for the Willow giuech great beautie vnto the oyle) to the end they may be preffed with as much leafure, and as foftly as may be. Ie is true that it would be good before they were put vnder the preffe to haue thein troden vvith feet, in as much as the oyle troden viith the feet is al waies better, fiweeter, clearer, and inore delightfome to eat in falades, than that vwhich is prefled out : bur feeing the treading of them is harder to doe than to preffe them, the common making of oyle is in the preffe : vvherefore before you pur your oliues vinder the preffe, it will not be amiffe to breake their skinne and flefh with turning milfones, and that but gently, to the end that the kernell which fpoyleth and corruprech the tafte of the oyle be not firred: and afterward to foften and grind them moff ftongly in the prefle, puting in thereto of falt foure pound to euerie bufhell of oliues, and after to preffe the bones or fones of theoliues by themfelues. He that fhall emptie the oyle out of the veffell vvhereinto it runnech from the preffe, Thall make three forts of oyle, feperating fo many one from anlocher : for it would be Thref forts of great loffe to mingle the firft preffing with the fecond, but yet more to mingle it with oile ofolius. the third, becaufe that that which runneth from the preffe being yet farce ftrayned or moued, is of a farre better tafte than the fecond, and is called Virgines oyle, being verie beautifull and goodly, and fit for to vee with meat: the fecond being fitter for oyntments, and fuch other like ves : and the third for to burne in lampes. And yet further it will be verie good when the oy le fhall be a litele fetled in his tubs, to powre je our of them into orhers : for the more that oyle is ayred and ftirred, fo much the more cleare it is, and without lees.
The tunnes and veffills wherein the oyle is to be put, muft be well dreffed with pitch and gumme, made verie cleane (if they be old) with warme lee,and dried with a fpunge, receiving the oyle not till thirrie daies after that it is made, that is to fay, at the cime when the lees are fallen to the bottome : in like manner the veffells and fackes of Goats haire muft be well mended for the receiving of the oyle into then, according to the manner which we haue fer downe in the firft Booke, in the Chapter of the Goat-keeper.
The cellar where the veffells for oyle are to be fet, fhall be in fome cold place; for as all liquors doe difilulue and become more fluent by heat ; fo they keepe faft and clofe in, and flay their courfes by the working of cold: and fo oyle of it felfe is kept vertie well in a cold and drie place, becaule heat and moifture are his vtter enimies. This is the caire why the oyle.makers giue in charge aboue all things that there be no fire nor fmoske made neere vnto the preffes and cellars of oyle; becaufe the tafte of che oyle is fpoyied by fmoake and foote: : o then it is meet if poffibly it may be The North is: that the oyle cellars be firtuate towards the North, quire on the other fide from the futefff for oyle hot winds, as alfo that the oyle be put into glaffe veffells or earthen pots, fuch as are
the pots of Beauuais, efpecially the oyle that is made of greene oliues that are not Oile Omphacine ripe, and is called oyle Omphacine.
Frofenople: If in the time of IVinter vyle doth frecze to gether with his lees, you muft put into it twice boyled falt, for it diffolueth and thaweth the Oyle, and cleareth it fromall manner of mifchiefe that can happen vnto it : neither need you feare that it fhould be falt : for though you fhould put much falt into it, yet the cyle would take no tafte of it.

To keeps oyle frombecoma ming ranke。

Troubled oyle.
Filchie oylc.

## Stinking oj le:

Putrifed oyle. o keepeoyle from becomming ranke, melt vvaxe with oyle in equall quantitie, and therein mingle fried falt, then put it all in a veffell of oyle; and this fame compofition feruethalfo to mend it if it be alreadie ranke. Anife caft into the veffell performeth the fame.
If the oyle be troubled, purifie it at the Sunne or fire, or elfe caft into the veffell boyling water; prouided the veflell be not weake and in hazard of burfting.
It the oyle be full offilthineffe, frie falt and caft it hot into the veffell; the pine not burned, or the lees of oyledried and parched and caft into the veflell of oyle dorh the like.
If oy'c haue gorany ftench or other cuill fmell: poune greene oliues, and caft them into the oule without their fones : or elfe caft in the crums of barley bread mingled with grained falt : or elfe infufe in the oyle the flowers of melılor.
If the oyle be corrupt and purrified, hang in the venell a handfull of the hearbe coriander, and calt in befides of the fame diuers times, if you perceive that the pus. trifaction is not taken away: or which is better, change the oyle his veffell: you fhal likewife amend this fault, if you take grapes, and atter you haue taken out the kernels, ftampe them, and make them into lumpes to put into the veffell, and ten daies after change the oyle his veffell.

Oyle will be veric cleare, if you ftampe the barke and leaues of an oliue-tree with falt, put in all in a little knot or nodule, and hang the fame in the veffell.
To make fweet fmeiling oyle: take Virgines oyle, which is that which firft runneth downe from the preffe without the weight of the preffe forcing it: into it caft of the fine powder of bay-tree-leaues, the rootes of aller and cypres, the roots of cornflag, or fome other fweer fmelling things, fuch as you are difpoled, all being dried and made into fine powder, flirring the veflell well : afterward, put infale finely powdred, and fet out the veffell in the Sunne for the face of fiftecne daies: or elfe fet a veffeli well couered (for feare that the oyle fhould feend it felfe) in a caldron of boyling water, let it flay therein the fpace of three houres to boyle at a little fire: after take itout, and let itreft feme time, vntill you perceiue all to be incorporated together, thenflraine the oyle, and referue it in fome veffell well ftopped for your vfe.

Good cyle in the opper part of the veffell.

Furthermore, you muft know that as the bottome in honie, and the middeft of Wine, fo the vppermoft part of the oyle is alwaies the beft : the reaton thall be deli-. uered in the treatife of Wine in the fixth Booke.
The vertices of oile.

As concerning the properties of oyle, it hath a fingular vertue applied outwardly as is to be knowne by the anfwere of Democritus, vvho being asked of the meanes to liuc long, and to preferue ones bodie in good eftate and plight, faid, If you arme your felfe without your bodie with oyle, and within with honie. And this is the caufe vvhy Hamibell gaue in charge vnto his fouldiers paffing the mountaines, that they fhould arme their bodies vvith oyle, to keepe them from the injuries of the cold: in like manner the men of auncient time to make their bodies the more nimble and readie to all actions and motions, caufed all their bodie oucr to be annointed with oyle before they were to goe into the bathe: in like fort alfo, their vvrafters and champions, before they entred the combate, did annoint all their bodie over with oyle, not onely that they might not be fo eafily taken hold of in wraftling : but alfo to haue their whole bodie the more nimble and obedient, and their members che more luftic and ftrong.

As concerning within the bodie, oyle hath no lefle vertue than vvithout; for that Toloofen bhe if it betaken inwardly, it foftenech the bellie, fubducth the malignite of venimes, bellifo and caulech vomiting fpeedily : furthormore, if any venime or burning haue pitcht and fetled it felfe vpon the skin, and begin there to exulcerate or worke his further milchiefe; for the flaying of the fiercenefle and malignitie thereof, there is nothing better than to lay a little liniment of new oyle thereupon.
Oyle powred vpon vvinie or any other liquor, keepech it from fpending it felfe: $\mathcal{A}$ 象ent windo In like manner the Vintencrs, wife ynough to keepe white IVine from waxing red, are vvons to caft vpon it a pint of Oyle-oliue.
Oyle is altogether enemie to plants, efpecially gourds and cucumbers, which dye oilean enemie prefently if a man place neere vnto them any veflell of oyle; or if that he which dref- topiants. feth them be oylie, as vve hauefaid in the lecond Booke.

The lees or grounds of oyle are good to make a mortar with to lay the floores of The vertees of corne garners, becaufe fuch a morter chafeth away Mife : lees allo are good to keepe the lest of ofllo. inftruments and yron tooles from rufting : oxen are helped to a good appecite, by hauing their fodder befprinkled with oyle lees : oyle lees are good to annoint the bottomes of chefts wherein clothes are to be laid, for they driue away mothes: they are good alfo to giue light vnto the familie with fome wood : to keepe fheepe from being fcabbed, tit they be annointed with the lees of oyle, as alfo to heale fuch as are alreadie fabbed : to caufe vvood to burne and flame without fmoake.
and

## CHAp. LII.

## How the Oyles of other Fruits and Seedes are made by expreffion.

(2)Here are many other feeds and fruits which doe yeeld an oylie liquor by Oyles made by expreffion, and that after the mariner of the Oliue, that is to fay, royall expreffion of Walnuts, Filberds, Nutmegs, Almonds, both fweet and bitter, the Indian nut, Anacardies, Peach kernells, the kernells of pine Apples, Abricots, Cherries, Plums, Piftaces, Linfeed, Rapefeed, Multard-feed, Hempe-feed, thefeed of Poppie, Henbane, Burnet, Citrons, Oranges, Apples, Peares, Cucumbers, Gourds, Melons, Citrulls, and other fuch like, whereuf vve will feake particularly, to the end that we may giue to know what courfe is to be taken, and what maner and order is to be kept in cuerie particular.

The oyle of fweet Almonds is thus prepared: Pill the Almonds after that they Themaking of haue fteept fome time in warme water : pound them in a moter of fone or marble the oile of fweet? with a woodden pefte, and make them vp in lumpes cr litele loaues, which you fhall almondse knead and vvorke with your hands at the vap Jur of vvarme vvater a long time, if you like it not better to warme them vpon hot afhes, or hot fand for the fpace of an houre, or in the Sunne the fpace of fiue houres : or elfe put them in a slaffe veffell vwhich fhall be vvarmed at the vapour of boyling vvater in a caldron: after put them in a haire cloth or hempen bagge, for to prefle in a preffe that hath his planke hollow and bending duwneward: or betwixt preffes whofe plankes you haue heated: but here in this you muft note, that the Almonids are not alwaies blanched before their oyle be drawne, becaufe many times a mans leafure will not ferue him to doe it: though indeed it be the beft way to pill or blanch them, that fo the oyle may come the more neat and pure: and to pill them rather vvith a knife than by the meanes of water, either warme or cold, for feare that through the mixture of vvater, there be cauled to come forth great fore of vvaterifh and vnpleafant oyle. After that the Al- The droJe of monds hane beene thus prefled, you may bake the droffe vnder afhes, and vfe them freet ahononds. in feed of bread: you muft obferue, that fuch manner of preparing of oyle of fwect almonds is onely to be veed vehen fuch oyle is to be taken at the mouth, to ftay and

## The third Booke of

womens throws take away the chrows \& gripes of women newly deliuered of child :or elfe to mitigate

Paine of the colicke ard kid. neyes.

Oile forsomake liniments. O)le of fweet
almonds for
perfumers.
the paine of the collicke,or of the reines, taking it in a drinke of two ounces of vvhite Wine, or with Aqua-vitx : And this oylc is drawne oftentimes without fire or any other heat whatoeuer: f fometimes the almonds are fried to giue them a light drying, and after the oilc is preffed out.
The oyle of bitter Almonds is made of almonds fried in a frying-pan, and flirred offentimes that fo they may not burneto, after which they are to be prefled out fo ftrongly and long, as till they will yeeld no more: After this manner a man may prefle out two ocher forts of oyle out of fweet alr onds : one appropriated vnto liniments to be applied vnto the outward parts of the bodie that are pained: the other feruing for perfumers: vvhich ewo are made of old fweet almonds found and whole, and veric oylic by reafon of their age : they muft befried in a frying-pan, and after preffed with weight or pieffes being clofe wrapped in a bagg, or haire cloch. The oyles ofPiftaces, common vvalnuts, fiberds, Indian nuts, the kernels of pine apples, cherries, feeds of gourds, cucumbers, melons, Palma . Cbrifti, the feed of hemipe, line, pionie, henbane, wild faffron; flauefacre, and other fruits and oylie feeds, are preffed out after the fame manner that the oyles of fiweet almonds be : euermore looking to it that the expreffion be not wirhout the heating of the ching preffed, either by chafing and warming it felfe at the fire, or elfe by heating the plankes betwixt, or the weights vnder which they are to be preffed.
Oyle of Bayes is thus prepared: Take ripe bay-berries and new,pound them,and make them into maftes or fmall lumps : boyle them a fufficient long time in water in a caldron, ftraine the decoetion, and let it coole, gather the fat that (wimmeth aboue, and keepe it for oyle; or elfe lee all the water run out at fomc hole which fhall be in the bottome of it, and the fat which flayech behind is the oyle. Some doe not boyle the maffes of bay-berries, but preffe them from vider a preffe, and let the oyle fall downe into a veffell ftanding vnderneath with vvater: Otherwife, mixe an equall portion of bay-berries and oliues, pound them together, and preffe out the oyle. The

Collicke. : cold swellings. Oyle of myytles, iuniper, malick tree, turpentine treesaxd inic berries. oyle of bayes is foueraigne to put in clyfters for the paines of the cholick, and to make oyntments of for cold tumors, the palfie, fhaking of quartaine agues, and cold affects of the finews. After the fame manner you may make the fimple oyle of myrtles, Iu-niper- berries, of the fruitof the mafticke-tree, turpentine-rree, and Iuie : which is alfo verie fingular for cold diffillations, and benummed members. Sometime men take an equall portion of Iuniper and bay-berries, and fteepe them in Wine, preffing out the oile e hereof afterward. You may likewife boyle bay-berries in oyle, and preffe them out after : or elfe without any other mixture or preparation, you may putripe and greene bay-berries in a baggc, and by weight or prefling draw out their oyle. Oyle of nutmegs is thus made : lay numems on heapes, bray them with a woodden flamper, afterward preffe them out from betwixt the plankes heated: or elfe diuide them into little heapes, and fteepe them three daies in verie good Wine, after drie them in the fhadow of the Suntwo whole daies, then heat them reafonably in a fry-ing-pan vpon the fire,fprinkling them with rofewater, and prefently prefferhem out. You muft note, that in this manner of drawing of oyle, which is done by expreffion, men are forced many times to prinkle the matter with water or wine, to draw out the oyle both more eafily, and in greater quantitic: fo we fee it practifed fometimes in the expreflion of fweet almonds, that when they are too drie, there is fome fmall quancity of water pur vnto them : but vnto other things fome Wine, as in oyle-de-baies, nut-megs,Iuniper-berries, and fuch like.

## Chap. LIII.

## Hons to make Oyles by imprefion.

He Oylesmade by inupreffion are commonly compounded of Oyle o- oyle made by liue, becaule at is nore temperate than ochers, eafilier to be getten, and imprefions. retayning more exactly the quantitie of ingredients whether hote or cold. It is true, that veric ofren in place of Oyle oliue fome take the oyle of fweet Almonds, Filberds, Cammonile, or fuch other, according as the occafion of things require, as you may know and vnderfland by particular defcription of fuch oyles. Whatfoeuer it is, there are three chings so be confidered in the making of oyles by impreffion : the heat, which is the efficient caufe of the making of the oyle the quaitre of the ingredients; and the quantitie of them. As concerning the heat, vvhether it be of the fire, or of the Sunne, or ot other things which yeeld heat, it muft be meafured according to the qualities of tendernefle or hardneffe which fhall be in the fubftances and matter : for flowers doe not crave fo great a heat oyles of fowers as fruis or roots; whereupon it commeth to pafle, that for the compofition of fuch oyles, men are ofentimes contented with the heat of the Sume, or with the heat of boyling warer: orherwife called CMaries-bath, or the double veffell. And I for To make oyles mine owne part am of this mind, that for the making of thefe oyles there ought not by amprefion in any coale fire to be vfed, nor yet any other kind of fire, but rather the helpe of © Ma- Marics.batho. ries-bath : For as by the gentle and milde heat of Maries-bath, all the parts of the ingredients are kept, and the oyle well prepared and digefted: © by the heat of a violent and forciblefire, there followeth rather the exhalation or combuftion of oylie things, than any digeflion. The preparing therefore of fuchoyles as haue need of a greater heat than that of the Sun, will be a greater deale the better, if you put the matter, out of which you draw the oyle, in a glafte or tin veffell for to be infufed in oyle mingled with Wine or v vater, or other conuenient liquor, or without liquor, according as the nature of the ingredients, and the prefent thing requireth. After that this veflell borne vp with the fmall flips of broome or ftraw, hath infufed thee whole daies incMaries-bath, that is to fay, in a caldron full of water fomewhat boyling; or (which is better) the veffell not infufed or ftanding in the water, but rather receiuing onely the vapour of the boyling vvater that is in the caldron, thofe three daies being fpent, you may preffe out the things, which you thall haue infufed, frayning and forcing them through fome ftrong ftrainer and thicke linnen : and afterward to put in other new ingredients if it be needfull (that is to fay) vntill the liquors which you haue mingled with the oyle, or the humiditie and moifture which may rife of the ingredients be confumed, and that the oyle may feeme to haue gotten out all the frength and vertue of the ingredients, and then to fraine and force them as before. This is the way that is to be taken for to prepare oyles well by impreffion. It is true that with leffe coft and a great deale fooner they may be prepared, in purting the matter into fome great brafle pan vpon a coale fire, caufing it to boyle with a finall fire vntill the liquor put vnto the oyle or the moifture of the ingredients be confumed : and after Atrayning of them after the manner that hath beene fayde befres.

Furthermore it vvill be difcerned that the oyle hath exaftly drawne out the ver- To hnowif the tues of the ingredients, and that the liquor mingled with the oyle or moifture of the oyle be madeg ingredients is confumed, if with a fatale or fticke of voood you caff fome few drops of the faid oyle into the fire : for if they be all on a flame by and by, it is a figne that it is pureand near, but and if it fpatter, there is yet fome waterifh moifture remaining in it : furthermore as it is boyling in the caldron, it will be fpatering and cafting vp bubbles, fo long as there remayneth any of the liquor or morfture: but after that it is fperx and boyled away, it will be quiet and peaceable : likewife a drop ofoyle drop-
ped vpon your hand, if there be any moifture in it of waterifhneffe, it will thew it fufo ficienty, for it will fwim and ride aloft vpon the fame.
The qualiitie of As concerning the qualitie of the ingredients, it confifteth principally in this, that the ingredientss, the ingredients are either hot or cold, or tender, or rough, and hard. It they be cold, Cold oples. there is need that they fhould be often thifted and changed in the oyle, for the betHot.
Tender. Hard.

Bot oyles. ter imprinting of their cold qualitie in the oyle, for although that oyle oliue be temperate, notwithftanding it inclineth more vnto heat and a firie nature, than otherwife : fo that it is requifite to change the ingredients often, and to put new in their places for that caufe; yea, and in regard thereof to wath the oyle in fome common water, as we will further declare in fpeaking of oyle of rofes: if the ingredients be hot, it is fufficient once onely to change them for the compofition of hot oyles, and that by reafon of the affinitie and agreement betwixt the Oyle and the hot things.

If the ingredients be hard, and not eafily digefled, and imparting their proper-

Of the tender. neffe or hard. nefle of the ins gredients. ties vnto the oyle, they muft be infufed before they be boyled, and allo there muft be put vnto their decoction fome liquor, as Wine, or fome conuenient iuice or other liquor, as well to helpe their digeftion, as to keepe them from burning, or getting fome luathfome fimell : bur and if they be tender, they craue fomecimes a fimple infufion in the heat of the Sunne, or vpon a flow fire withour any boyling : and this way fittech flowers : fometime a light boyling without any infurion, as many aromaricall things.
And as concerning the qualitie of the ingredients, you muft obferue that oyles by impreffion are made, notonely of the parts of plants, but of liuing things, their parts and excrement, vvherein there muft not be any fhifting, changing, or renewing: and befides thefe, there is no other thing to be obferued; exccpt that if the beafts be fimall, that then they be killed in the oyle, as is veed in oyle of fcorpions, ferpents, frogs, and pifmires: but and it they be great, they mult be firft killed, then bowelled, and laflly, boyled in the oyle, as is done in the oyle of Foxes.

Touching the quancitic of the ingredients, by which the oyles made by imperffion are called fimple or conpound, you mult haueregard to fee that when the oyle is compound, that this order be followed, that is, to ake the ingredients of greateft and hardeft fubflance, and to infure them three daies: afterward thofe of leffe fubftance two daies: and thofe which are the moft tender, fubtile, and aromaticall one day, and one night : and then afterward to boyle them in order, ftrayning them but once, and referuing your Gums to mise and diffolue with the faid fltayned oyle, according as it fhall be requifit, if fo be that any gumis doe goe into any fuch oyles.

## Сиар. LIIII.

## $\triangle$ defcription of the Oyles made by imprefion.

Oyle of Rofes.

The quantitic
of the ingrydients.

Oyles made of liuing things or their parts.

Ahing of the oyle, then the veffell Dhall be kept in fome warme place, to the end that the oyle and water may be the fooner feuered: and you mult note chat the oyle is not to be wafhed on this fathion, except it be for cooling oyles, as oyle of Rofes, Violets, and fuch like: it is verie true, that there will be no need to walh any oyle at all, if you haue the oyle of greene oliues called Omphacine. This walhing of oyle being finithed, hauc in readineffea fufficient quanticie of blowne Rofes, purthem to intufe in this wa/hed oyle, in a veffel hauing a narrow mouth, like a pitcher or a glaffe botcle, or fume one of Tin , and filled vp within a quarter of the top, and afterward well clofed and fopt: : fer them in this fort in the Sunne, or forre warme place, for the fpace of feuen daies, boyle them afterward in a double veffell in boyling water, as we haue faid, or elfe boyle them in a braffe ketle vpon a frall fire without any flame for the fpace of two or three houres: vvhen the oyle hath boyled and wafted one part of the moifure that was in it, it will be conuenient to ftraine it through a flong ftrayner, and thicke linnen cloth, and after to put into it new Rofes againe, doing as you did before, and that for three fcuerall times: in the end, after it hath beene flrayned, fome put into it as much water of che infufion of ocher Rofes, infured in water, as there is Oyle; then you flall fet it in the Sunne for the fpace of fortie dayes, which infufion may be feuered from the oyle afterward as the water wherewith the oyle was vvafhed. Notwithftanding it may be fufficient to take the infufion of the Rofes in oyle onely, vvithout the putting of other vvater in the infufion. Some mingle now and then in the decoction of Rofes a litete vvine, or juice of freh Rofes to keepe che oyle from burning, or that in boyling it fhould not get any loathfome fmell. You mult further note, that fome prepare and make wo forts cfoyle of Rofes: one oyle of ripe
oliues, and rofes all opened and fred oliues, and rofes all opened and fpred, wvhich are the better if they be red : theother oyle is made of rofes being yee in the bud, with the oyle of greene and vnripe oliues: or if you haue not any of this oyle Omphacine, you fhall make it with common oyle and verjuice boyled togecher, to the confumption of the juice. This is more cooling, aftringent, and repercuffiue : the other more digeftiue, dicuffue, and anodine or affuaging of paynes.

Some there are which fomecimes make this oyle of Rofes without oyle of oliues, putcing red, carnation, or muske rofes to purrifie in a veffell fer in dung for one whole moneth being clofe couered. And this kind of oyle is verie fragrant and fweet.
This manner of making of oylcs may be followed in the compounding of oyles, either cold or cemperate and fimple, fuch as are the oyle of violets, cammomile, melilote, yellow or red violets, of the leaues and flowers ofdill, lillies, the yellow taken away, of corneflag flowers, of elder tree flowers, white mulleine flowers, jefamine flowers, poppie flowers, or of the leaues and heads of poppie, of lecture leaues, and white water lillie flowers, to the compounding of which oyles, you muft note that for want of oyle of greene oliues, you may take the oyle of fweet almonds newly drawn, or of filberds, if it haue beene firt waiht.
Oyle of Quinces:Take whole Quinces with the rindes when they are verie ripe, but caft away their kernells, then flampe them, and infure them in oyle Omphacine in che Sunne fiue dayes, or elfe in oyle wafhed as vve haue faid before: afterward, boyle them with equall portion of the juice of Quinces in a double veffell the fpace of foure houres : renew the flefh and juice of Quinces thrce or foure times, the old being made away, fee them in the Sunne againe, and boyle them: afterward ftrayne all, and keepe it in a veffell for your vfe: you fhall draw greater ftore of the juice of your Quinces, if you crufh them well, and bruife chem, racher than if you cut them in peeces.

Oyle of Mafticke : you muft take oyle of Rofes, or oyle Omphacine, or of Quinces, three pound, of good wine eight ounces, of mafficke powdred and put vnto the reff toward the end (for it will not endure much boyling) three ounces: boyle them all together to the confumption of the vvine in flirring it off, to the end that the mafticke may be melted and mixs with the oyle.

## oyle of Elder-

 tret.
## Oyle of S. Iohns

 poort.
## Oyle of Thue?

Oyle of SMytletree,worme. wood, Maric* rom, Southeris. poood, thyme, and Aller. Oyce of Spike:

## Paine of the

flomack, yeines
bellie,and ma. trix. Q)le of Foxes.

Rbeumes.
weakneffe of $\sqrt{3}$ rewos.
Paines of the
Oyle of Wormes.

Stiffe finews.
patnes of the
joynts.
Oyle of ferpents

Oylc of the flowers of the Elder-tree: Fill a glafie bortle full of vvathed oyle, or oyle Omphacine, put therein a fufficient quanticie of Elder-tree flowers, fet the bottle in the hot Sunne fixe dayes, after that preflec chem out, and pur in others new; continue this all the time of Sommer vvililes the flowers of Elder-tree are in force: this oyle is fungulat to comfort the finews, affuage the paine of the ioynts, and to cleanfe the skinne. Oyle of S. Iobns-wort : Infufe for three dayes the crops of S. Iobnss-wort in verie fragrant Wine : after that, boyle all in a foft and gentle fort in CMaries- bath, and afo ter this fome fmall fpace, frayne them out lighty : infure againe in the fame Wine as many dayes as nights the like quantitie of the tops of S . Iobnss-wort, boyle them, and flranc them as before : afterward, put vnto the liguor of Venice-Turpentine three ounces, of old oyle fixe ounces, of laffron a frruple, mixe them, and in the faid Charies-bath boyle them vnto the confumption of the Wine: you fhall keepe that which remaineth in a glafle or lead veffell, for to vfe as hot as you can applie it in maligne vlcers, efpecially thofe of the finewes, and in the leane and cold parts, in the prickes of the finews, paine of the ceech, conuulfions, tumours, and diftillations.Some doe make this oyle after the fimpleft and fingleft fort, making onely the flowers of Hypericum, vwhich they infureall the Sommer in wafite oyle in a glaffe veffell, and fetting it in the hot Sunne, keepe it.
Oyle of Rhue: Take the leaues of Rhive fomewhat dried, (becaufe they are fubject to a fuperfluous kind of moifture) fet them to infule in oyle a whole Sommer: Or better, change and renew them euerie eight dayes, frayning and prefling them outac eurie change: Sommer being gone, boyle them not, but fraine, prefle out, and keepe chem ina veffell: after his manner ate made che oyles of the Myrte-tzec, Wormewood,Marierom,Sourhernwood, Thyme,Cammomile, and fuch like: vnto which there is fometimes added the like quanticie of juice, or flowers, or leaucs mingled with oyle : ond fo they are fet in the Sunne.
Oyle of Spike : Take true Spike, or for want of it, latander, to the quantitic of three ounces, of marierom, and bayc-tree leaues two cunces: of the roots of Cypres, Elicannpaine, and Zyloaloë of each an cunce and a halfe: of nutnegs, three ounces: infufe euerie ehing by it felfe in an equall quantirie of Wine and vvater : the infufion acconuplifhed, boyle the whole togecher in a fufficient quantitic of oyle in a double veffell, the fpacc of foure or fiue houres : this done, frayne it all and keepe the oyle for your ve: that is to fay, for the cold ach of the fomacke, reines, bellie, matrix, and other parts.
Oyle of Foxes: Takc a liue Fox of a middle age, of a full bodie, well fed and fat, fuch as Foxes be after vintage : kill him, bowell him, and skinne him : fome take not out his bowells, but onely the excrements in his guts, becaufe his gurs haue much greafe abour them : breake his bones fmall, that fo you may haue all their marrow: this done, fet him a boyling in falt brine, falt water, and fea vvater, of each a pint and a halfe, of oylecthree pints, of falt three ounces: in the end of the decoction, pur thereto the leaues of fage,rofemarie, dill,organie, maricrom, and Iuniper-berries affer that he fhall be rotten Iodden, that is to fay, fo as that his bones and flefh doe part cleane afunder: ftrayne all chrough a ftrayner, and keepe it in a veffell to make liniments, for ache in the joynts, the fciatica, difeafes of the finewes, and paines of the reynes and backe.
Take Earth-wormes halfe a pound, vvafh them throghly in vvhite Wine, then boylc them in two pound of Oyle oliue, and a little red Wine to the confumption of the Wine, frayne and preffe it out all, and keepe the oyle : yef further, it vvould be good to put into chis oyle fome other wvormes, and leaue them there as long as the oyle laftech. This oyle is fingular good to comfort the fuffe finews, and for theache of the joynts.
Oyle of Serpens: Take whole Serpents, put them in an earthen veffell well leaded, fill the fame with May-butter, and couer the fame with a couering, the joynts being vvell luted, but notwithfanding hauing afmall hole abouc: : fet the por neere
vnto the fire, shat it may boyle halfe a day, to the end that all may be throughly boiled : then fraine it through a linnen cloth, afterward pourid it vvell in a morrar, and make an end of flrayning that wvhich fhall be in the bottome of the limen cloth: mixe togecher both thele expreffions, letting them coole, and referuing them in a glafie veifell to ferue your vfe for diffullations or rhcumes, and for palfics. Some take $V_{1 p e r s, ~ a n d ~ c u t t i n g ~ o f f ~ t h e i r ~ h e a d s ~ a n d ~ t a y l e s ~(a s ~ i s ~ d o n e ~ i n ~ t h e ~ m i a k i n g ~ o f ~ T r e a c l e) ~}^{\text {a }}$ they boyle them in oyle, and vfe the oyle for rebcllious Ringwormes, and firt buds of the leprofie.

## Сняр. LV.

## A reuicm or Suruay of Oyles made by distillation.

(8)Vt the third manner of making of Oyles hath beene faid to be by diftillation or refolution, of which vve vvill fpeake, after vve haue fpoken of the diftilling of vvaters : but befides that, there is an other manner of drawing of oyle (though in certaine things it be done by expreffion) vvhich commeth verie neere vnto this third kind of making oyles by dittillation: and $i t$ is practifed in egges, vvheat, mulfardfeed, haye, barlie, tarrar, brimftone, and others.
Oyle of Egges : Take the yolkes of egges roafted hard in water, or which is betcer, oyleof eggeros vnder the hot affes, about thirtie, rubbe and chafe them a long time betwixt your hands, after frie theen in leaden pan, or in an carchen one vvell leaded ata foft fire, ftir them and turne chem of with a ladle of vvood, vncill fuch time as they begin to be of a fad red, after preflie then wvith the backe of the faid ladle: or, which is better, put them betwixt wwo preflics, to force out their oyle, as is done with oylc of $A$ monds : you fhall haue grear flore of oyle to run out; vvhich is verie good to take away the lpots of the skiin, to heaie ring wormes, to caufe haire to grow againe, to cure fiftulaes, and maligne vlcers, afluage paines, take away the roughnefle of the skin, to cure che chaps of the lips, hands, feet,and fundament : to take away the fcarres ileft after burnings, and principally for the vicers of the membranes of the braine. Some in the making of this Oyle doe not boyle the egges hard, but frie them raw, and after by preffing them together in a bagge betwixt two prefles, or vnder a preffer, they preffeout the Oyle.
Oyle ofWheat: Preffe IVheat together betwixt two plates of Yron reafonably The ogle of glowing and fire red, or verie hot, or betwixt a Marble-fone, and a chicke hot whata plate of Yron : receiue the Oyle into fomething vvhich dititlech from it: or elfe take away from Wheat his pill or rinde, and diftill it after the manner of the Philofophers Oyle: this Oyle applied hote, takech away the fpoes of the skinne, healeth ringwormes, fifulaes, and chops in the skinne, and the fcail or skurfe in litete Tingzorman children: the oyles of barlie, muftard-feed, and other oyliefeeds are thus prepared
and made.

Oyle of Haye: Set on fire a quantitic of Haye, after quench it againe by and by, shinnce. then lay it vpon coales, and vvhiles it is fmothering and fmoaking, fpread it vpon a ayle of Bayzei plate of yron, and there will gather vpon it an oy le liquor, vvhich is called oyle of Haye: and this is fingular good for ringwormes, and $S$. Antbonies fire, fcabbes, and roughncffe of the skinne.
Oyle of Tartar : Take Tartar, that is to fay, the dried lees of Wine which flicketh vnto the feames or hollow places that are within the $W$ ine veffell, not that which is in the bottome, becaufe it is verie dreggifh and filthie, neither yet that which is aloft on the vpper part of the veffell, for that is too frothie and fcummie, but that vwhich cleaueth round about vnto the faues of the veffell wherein there harh.

## The third Booke of

beene verie good white vvine, rather than red: make it into fine powder, and make it faft in a limnen cloth, infufe it in verie good vvhite Viriegar : or not infufing it, calcine it, and put it in a Hypocras bagge, or in an oxes or fwines bladder: afterward, roaft it vader hot embers, vntill it become vvbite : you fhall know if it befufficiently burned, by the growing of it cleare, and a little burning of your tongue, if you touch it therewith. Nowwithlanding you may blanch or whiten it, if (as fome hold it for a great fecret) you boyle it a long time in vvater,frumming it often : powder it yet once againe, or (which is better) calcine it : then put it in the botrome of an hypocras bagge, that is to fay, of a bagge vwhich hath a fharpe and narrow botome, and this you thall hang vp on high at fome flaffe in a caus or other cold place for the fpace ofeight dayes, vnetll it be refolued into Oyle: and if the Oyle doe not drop of it felfe, then grafpe it hard, and preffe it ourt, puteng voderneath fome glaffe viole, to receiuc the liquor that fhall diftill, vvhich is not indeed preperly on Oyle, but a verie fharpe vater, or a reddifh kind of humour. This humour is good for all forts of itchings, Ring-wormes, Scurfes, Scalles, and other fuch difeafes of the skinne: It maketh the face vvhite, cleane, and feeming young: it taketh away vvrinkles and fpots, comming of a melancholicke humour : It maketh the haire of a ftraw colour: hindereth the falling of the haire, and cauferh it being falne to grow againe: it whiteneth copper and filuer: and taketh away the fpots of linnens, if they be rubd with this oyle hot.

## Oyle of Brim. fone.

axgyenes.
Fifulaes.
Vicers.
Ring-wormes.

Oyle of Brimfone : hang in fome high place vvith a vvire, or doues-tayle of yron, a glafle veltell in fathion like a Bell or Bafon, conered aboue with Potters earth of a cubice vvideneffe; vnderneath vvhich neere the length of a cubite you Thall place another veffell of glafle, being broad and verie large, able to hold much, fuch like as is the difh or bafon vfually ferued vvith Ewers: in the middelt whereof there flall be a little veffell of earth in forme of a little pot, which thall contayne the Brimftone, wvhich muft be of that vvhich is called quicke and Virgins Brimfone, and not artificiall Brimftone : wvhen you incend to make your Oyle of Brimfone to diftill, you thall take a theete of yron of foure fingers thickneffe, and fire red : this you thall caft into the fmall pot vvith Brimftone, to make the faid Brimftone burne and flame: the fmoake comming forth of the Godet vvill afcend vp to the veffell hanging aboue, vvherein after a fhort time it vvill be turned into Oyle , vvhich Oyle willthence diftill into the veffell below. Gather this Oyle, and referue it in a veffell well ftopt, for to vfe for the curing of Gangrenes, Fiftulaes, vlcers of the mouth, and Ring-wormes, if you doe but touch them vvith this Oyle vpon the end of a feather. It is fingular good againft rebellious vicers comming of the pockes: fome giue it to drinke with balme water in the morning vnto fuch as are but farce cured and recouered of the pockes, to the end it may driue out the difeafe. The oyle of Brimftone may be made otherwife : boyle Brimftone in Aqua-vitx, vntill there begin an oylie fubftance to fwim aloft : gather this liquor with a woollen or linnen cloth, or with a little fpoone : you mult fometime renew your A qua-vitæ, vntill you hane gathered oyle ynough : if prefently after bathing your felfe you annoint withthisoyle your bodie infected with Quick-filuer;, you fhall expell and draw forth the faid Quick-filuer.

But concerning all thefe Oyles, fee more in our Booke of fecret remedies and medicines.

## Снав. LVII. .................

 A defcription of certaine artificiall balmes.(2)$V$ tit is vyell and fufficiently knowne, how that now the true and naturall balme is no vvhere to be found, and that in place thereut the induftric and skill of man hath inuented Oyles which approach and draw neere in vertues and faculties vnto the crue balme : now therefore be it in like manner knowne that thefe Oyles are made either by diftillation or impreffion : and that vve will fpeake onely of fome certaine ones which are made by impreffion, ceafing to fpeake of thore which are diftilled for them which meddle in drawing out the quinteffences of things, as you thall further perceiue by our Booke offecret remedics.
Balme of the maruellous apples: Take the maruellous apples either with or with- Balme of ithe out kernells, but verieripe, put them in à veffell full of commonoyle, either old or marruelons new, or of the oyle of fwcet Almonds or Linfted, and intule thèn along time in the apples. Sunne, or in CWaries- bath, or in horfe-dung that is verie hot,or in the earth in a vef. fell that is well couered ouer with fand, and let it remaine there one whole yeare, or elfe two, vvhich is the better; you may likewife make this oyle of the leaues and little cods without the fruit : fome with the apples pur mgether with the oile of fweet almonds or linfeed oyle, doe joyne of liquid varnifh one ounce for cuerie pound of oyle : fuch an oyle is a fingular balme for all wounds, inflammations of the breafts, and tor the appeafing of outward paines and ache; for the burfing of young children; the vicers of the matrix ; and to procire conception, if aterctiat the wonann is come out of the bath made for the fame purpofe, fhe annoint her fecret parts there-with, and drinke of the powder of the leaues with vvhice Wine : at is allo fingulars good for the paine of the hemorrhoides, being mingled with linfeed dyle or the oile of fweet almonds. We haue fpoken of the maruellous apples in tlie fecond Booke, where we haue declared howw that the hearbe whereupon they grow is called Balf aimina, becaure it hath the vertue of balme:. The oyles of the flowers of Rofemarie, white mullein, Paulcs betonie, Nicotiais;and ground Iuie, being thus prepared as we
 Another balme : Takeche fruit of thbeime; the flowers of Hypericum, and the buds of Rofes, put all togecher in a glafle botrlei with oyle of Oliues, , Rop vpithe bottle clof, and leaue it in the Sunne, vntill. joulfe the fäme all ofit in fuch mannes confumed as though it were roten : afterward, ftrayne it and keepe. ehe oy ie for your
 if Another : Take Gummeelemie foure ounces, oyle ofvvormes, oyle of R ofes, and Hypericon, of eachitwo ounces, of Venice Turpéntine two ounces, mix alrogecher
 YrA nother balme : Také the flow'ers and feeds of Hyptricon foure händfulls, bruife them throughly; and fee therri inithe Sumne the fpace:of ten daies inv a glafle boitle, with foure pound of old Oyle of Oliues;afferward pecfe ehem out carefully, and pinit againe as many moe flowers and feeds of Hypericon into the botite, fet it in:the Suin againe tenne vvhole dayes: after preffe it out all againe, and put thereunto as followeth; of oylc of dill, and of Venice Turpentine, of each a pound and a half, of A-qua-vitx halfe a pound, of Mummia,vvood of Aloës, mafticke, myrrhe, and furegum, of each an ounce and a halfe, of the rofen of the pine-tree three ounces, fiffron balfe an ounce, cloues, nummegs, cinnamom, of each chrce drams : mix all together, and boile them three houres in CMaries-bath in a glafle botte clofe fopped, that nothing may breath out: Then fet the b betele in the Sunne the fpace of ten daies, refertin st the oyle afterward for pains of the eares, wounds, fiftulaes, cankers, Nooli me tangere, \& to
annoint the backe bone a litele before the fet of the ague come, vvhich beginneth of cold.

Another balme : take the fruit of the elme, visthin which you fhall find a liquor

Abalme of elme flowers. like vnro oyle, put it whole into a ftrong viole, which viole you flall fop verie clofe, and burie for the fpace of fifteene daies in horfe dung that is verie hor by reafon of his being verre rotten, then fer it in the Sunne for a certaine time, and after gather the cleare part that fhall fwimme aboue, and this vvill be viro you a fingular balme. Otherwife : gather all the liquor that you find in the fruit of elmes, put it ina ftrong viole, adding of the flowers of Hypericon and common oyle: fop vp the viole verie clofe, and burie it in horfe dung that is well roted, leane it thereina fufficient time, and afterward taking it out, you fhall haue a fingular balme. See further in our Booke of fecret medicines concerning balmes.

# A briefe difcourfe of the diftilling of Waters. 

 $\cdots \quad \ldots$ (ind С $\mathrm{h} \boldsymbol{A}$ д. LVIII. Of the profit and commoditic of distillation. thereof is fo great, and the vfe fo taudible and neceffarie, as that we take modities as vve deffire, if he lacke che knowled ge and pratife of diffillation; not modities as vve défire, if he lacke che:kndwledge and practife of diftillation; notthat I.vould hane him to make it a matter tocrouble himfelfe much withall, and to be at much coft and charges therewith, as many (not well aduifed) men be now a-
daies : but onely that he would take his iime thercto at his beft leafure, and without abe at much coft and charges therewith, as many (not well aduifed) men be now a-
daies: but onely that he would take his time thercto at his beft leafure, and without any great expence; or elfe to leaue the fatne to his wife or his farmers wife; for indeed fuch occupation is farre better befeeming either of them than him; for as much as the fuch occupation is farre better beleeming either of them than him; for as much as the
maiftreffe or dairie-woman hath the pettieiaffaires and bufineffes belonging to this our countrie Farme, and lying vvithin the doores, refigned and put ouer to her. Therefore let it not feeme ftrange in this point; if after our briefe intreatic of Oyles, Therefore let it not fecme ftrange in this point, if afer our briefe intreatie of Oyles,
vve difcourfe fomewhat briefely, and according as a countrie thing requireth of the manner of diftilling of vvaters, and extracting of oylie quinteffences, out of fuch materer as our Councrie Farme fhall affoord;vvhich we would fhould ferue for the $v$ fe of the Farners.vvife, as well to relieue her folke withall, as to fuccour her needie treighbours in the time of ficknefle; as we fee it to be the ordinarie cuftome of great neighbours in the time of ficknefle; as we fee it to be the ordinarie cuftome of great
Ladies; Gentlewomen, and Farmers vviues well and charitably difpofed, who diftill waters and prepare oyntments, and fuch other remedies, to fuccour and relieue the poore. Otwiehflanding that diftullation bethe vvorke rather of a Philofopher or Alchymift (otherwife called an extracter of quinteffences) than ofa farmer or maifter of a Countric Farme: notwithflanding the profit or che chiefe Eord of our counerie houfe to be furnifhed vvith all fuch fingular com-


## Снар. LIX.

## What Distillation is, and bow manic forts there be of <br> Distallation.

8 5Will not trouble my felfe here with fetting downe the partie which was the inuestor or fun Ander ous of dijizilation. the firt inuentor of Diftillation: as namely, whecher it were fome Phyfitian of late cime, who hauing a defire to eat ftewed Peares, fer thenia ftewing betwixt two difhes vpon the fire, and hauing afterward taken of the vpper difh, and finding the bottome thereot all fee with pearlle fweat, recaining the frell and fauour of the ftewed Peare if Celfe, inuented thereupon certaine inftuments to draw out from all forts of hearbes clecere and bright airie waters :it is teter that we fet our felues to worke abour the declaring of what Diffillation is, and ,hat things they be which may be diffilled.
Diftillation,or the manner of diftilling, is an art and meanes whereby is extrâted ne liquor or moifture of certaine chings by the verue and force of fire or fuch like heat (as the ehings themfelues doe require:) no otherwife than, as we fee here below, that by the force and power of the Sunne manie vapours are lifted into the middle region of the ayre, and there being turned into water, fall downe in raine. True is is, that the word, Diffill, fomeetimes reacheth further, and is taken not onely for things that are diftilled by the meanes of heat, bur without heat alfo: as wee fee it done in fuch chings as are diffilled afice a ftrayning manner, that is to fay, when the purer and thinner part of certaine waters or liguid iuices is 'eparated and extracted from the more muddie and earthie part by the meanes of a Felt, or by pirne the meanes of a piece of Cloth, fafinioned like a little songue, or border: or out of Sand and frmall Grauell : or out of earthen Pots not yet baked : or out of Veffels made of the wood of Iuie: or out of Glaffe made of Fearne. Sometimes likewife things are not only diftilled without hear, but with cold: as namely, when the things which you would haue diftilled are fet in cold and moift places: as Oyle of Tartar is wont to bemade, as alfo Oyle of Myrrhe, Drasons bloud, Oters, and other rodifiliby things. But howfocuer, yet I would not haue the Miffreffe of our Countrey Houfe to bufie her braine with all the forts of Diftillation, but that fhe fhould content her felfe onely with that which is performed by heat. True it is, that it is. meet and requi- Diners forts of fite that fhee fhould know the diuerfities of heat, to the end hie may procure fuch a beato heat as will beft fic flich matter and thing as fhee is in hand withall, or to goe about: forf forme things craue the heat of a clecre fire, or of coale, or of the Sunne, or of hoe embers, or of fmall fand; or of the filings of yron, or of the droffe of Oliues: orhers craue the heat of Horle dung, or boiling water, or the vapour of boiling water, $\partial \mathrm{Or}$ of Wine boiling in the fat, or of vn'quenche Lime, or of foime Barke, orother putrified thing. And for this caufe fhe fhall marke and obferue foure degreces of heat: the firft whereoffhall be called warme, like water when it is lialfe hor, or the vapour of boi: ling water, and in this shere is no feare of anie hurt it cin doe : the fecond is a litele höter, bur yetfo, as that it tmay be well endured withour antie annoy yance or hure, fuch as the heac of afles or embers : the third is yet hoter than the feconid, and fo, as that it may annoy and hurt one gricuoully, if hee fould hold anie part or member therein anie long time, fuch is the heat of frall fand. The fourth is fo vehement, as that it cannot withour grear paine very hardly be endured, and flich is the heat of the fcales of filings of yron. The firf degree is fic to diftill fine, fubte, and moift things, as flowers and cold fimples, as Endiue, Lettuce, and fuch ocher: The fecond, for diftilling of fine, fubtle, and drie things: of that fort are all fragrant or fmelling things, as Pepper,Cinnamome, Ginger,Cloues,and manie fimples, as Wormewood,Sage, 8 sc. The third, for to diftill matter that is of thicke fubftance, and full of iuice, of which fortare manie roots. The fourch is proper for the diftilling of mettals and ninerall
things,
things，as Allome，Arfenicke，\＆c．By this meanes it will come to pafte，that the Miftreffe of our Councrey Houfe fhall not haue anie thing brought vnto he，out of which thee will not be able to draw the waterie humour，and to diftill clere and bright waters．

## C н a p．LX．

## Of the fit and conuenient time to diffill in：and of the facsities；

 vertues，and durablemese of diffilled waters．Difililing time．
The tnowledge of the ripeneffe Qf the mater to be diflilited．
 Verie thing is to be diftilled in the time wherein it is beft difpofed，ind beft fit，that is ro fay，rootes，hearbes，flowers，and feedes when theyire ripe；but living things，and the parts of them，when they are of midlle age，as wee Mall hane occafion to declare in his place．Now as concr－ ming the ripencfle of rootes，hearbes，flowers，feedes，and fruits，we referre you to ar fecond Booke，where wee haue fufficiently at large laid open at what time euerie ore of thefe things is to be gathered．But it is to be noted，that neceffitie fometimes com． pelleth vs to diftill dric plants，and then it will be good to macerate and feepe then in fome conuenient liquor or decoction，anfwerable vnto the vertuc of the things，by that means in part to renew and bring againe their youthfulneffe，and to endow them with fuch moifture as they brought with them when they were firft gathered from off the earth，as we will further declare by and by．

As concerning the vertues of diftilled Waters：it is moft certaine，that fuch as

The vertites of difililed waters． are diftilled ineMaries bath，retaining the taft，fmell，and other qualities of the matter whereof they are diftilled，hate not onely equall vertues with the Plants and whereot they are diftiled，but become much more pleafant vnto the talt，and alfo more delightfome vnto the eye，than the iuices or decoetions of the faid matter would be．It is true，that the waters diftılled through Leaden，Tinne，Brazen，Cop－ per，or fuch other like mettall，like a Limbecke（as we fhall by and by fecake of）doe loofe the beft and moft fubele parts of the fubftance of their matter，by fuffering the fame to vanim，away in and into the ayre，and for that caufe they doe not prome of fo great vertue as their Plants．But howfocuer it is，diftilled waters are a great deale more pleafant vnto ficke perfons，more readie for vfe，better for medicines for the eyes，to make epithemes of for the heart and liver，to make painting colours of，to put into perfumes，or other fweet things，as well for the vfe of Phyficke， as alfo for the delight and decking of the bodie，than the decoctions and iuices of Plants：and therefore there is great reafon they fhould be diftilled with greater heed and care．
The lafting of difilledwaters．

It is moft certaine alfo，that Waters diftilled in Maaries bath，efpecially thofe which are diftilled in the vapour of boyling water，are not of long continuance， and hardly will laft aboue a yeare：likewife you muft renew them euerie yeare by diftillation，circulation，or by diftilling of them againe，putting them alfo into the Still againe wuth fome new matter vpon the cake or droffie part，left vpon fome former diftillation：or elfe to diftill them by a Filtre，whereof wee thall haucocs cafion to fpeake hereafter．

## Chap. LXI.

## What manner of veffels and instruments they must be whercin watiers are to be distilled.

[ilisWo veffels are needfull in diftilling, which may be called by the com. mon and generall word, Limbeck: the one of them is properly called the contaning veffell, becaufe it receiueth and containeth the matter that you would diftill; fome call it the bodic, or corpulenty yffell, or the gourd: The other is ordinarily called the cappe, head, or bell, being that whereinto the vapours are gathered and turned into water. This veffell hath fometimes a pipe, in fhape like the bill of a bird, through which the water paflech drop by drop into a violl, or other like veffell: and femetimes it hath no beake or fout, and thofe are vled in circulation. But thefe inftruments doe differ much, as weil in forme and Ihape, as in matter. It is erre, that the firft that were inuented were of Lead, like vnto a Bell, what difililing and did coucr another velfell of Brafte that was full of matter to be diftilled : this fa- veffels weere fhioned one is well ynough knowne and vfed euerie where, becaufe it draweth out more flore of water than anie other. Afterward there was another fafhion inuenred, by which manie veffels (euerie one hauing his Leaden head or couer feuerall) are heated together wish one onely fire, fet in a furnace made after the fafhion of a vaule, to the end, that with lefle coft and labour there might be drawne and difilled a great quanticie of water; the figure and forme whereof you may here fee and behold.


But in as much as waters diftilled in Lead doe not retaine their fmell or talt atall, neither yet anie of the reft of their qualities of the things whereof they are diftilled; but doe ratherfmell of the fmoake, or of a ftinke of burning: as alfo, for that waecrs diftilled of fharpe, biting, and bitter plants, doe no whit refemble the fame in the taft of their bitterneffe and tharpeneffe, but rather become vnfauourie fweet. Furo ther, in as much (as Galen witneffech) as the water which runneth through pipes of

Lead

Lead doth firre vp oftentimes the bloudic flux in thofe that drinke it, becaufe of his nature, which is of the fubftance of Mercurie : adde vnto thefe, that in as much as wee ordinarily fee the waters diftilled through Lead te become oftentimes (with the Pharpe and vehement vapour which it makech by the reafon of a certaine falt diffoluing it felfe from the head) (poyled and made white and thicke as milke: Ifay, for and in refpect of all thefe reafons, there is inuented another inftrument, called the Bladder, whofe vnder veflell and cap couering the fame, are both of Braffe, and both of them ftanding ouer one furnace: which inftrument is not onely good to diftill Aqua vitr in, made of Wine, or of the lees of Wine, or Beere, bur alfo of all other forts of Plants powred in thereto, with a good quantitie of common water. Moreouer, it is requifite that the head hould bave a great beake or fpout, which muft paffe through the inner fide of a great caske full ot water, to the end that the vapours breath not out, but grow thicke, and turne into water; The fafhion of it is as you may fee here.


The later and better aduifed Phyficians haue deuifed a fafhion much better than the former, which is, to diftill waters in CMaries bath, that is to fay, in the bath of fome boyling water, or ouer the vapour of the fane: for it is verie certaine, that fuch waters are without all comparifon better, in as much as they doe exactly retaine, not onely the fmell, but alfo the taft, and other qualities of their plants : which happeneth, becaufe the bath of the boyling water, by his moifture, retaineth, keepeth in, and preferueth the more fubtle parts of the plants, and by this meanes hinder and ftay them from refoluing and breathing out: as it conmeth to paffe in thofe which are diftilled by a violent fire of wood or coale : which is the onely caufe that there is fo great difference betwixt the waters diftilled in a Limbecke of Lead, and thofe that are diftilled in CMaries bath, as is betwixt Gold and Lead: becaufe they doe not onely retaine the proper qualities of their plants, that is to fay, their fmelland taft; but likewife they become cleare, pure, and bright, without fmelling anie thing of fmoake, or burning : on the contrarie, the other alwaies hath a taft of fonie ftinke of the fmoake, which doth not onely prouoke a luft to vomir, as well in fuch as be healthfull, as in them that be ficke, but allo procureth great hurt voto the parts of the breaft, ftomacke, liuer, and other inward pares, by reafon of fome ill qualitie wherewith they are infected by the veffels in which they are diftilled. Which is eafily per-
ceiurd
ceiued by the water of Wormewood diftilled in a Leaden Limbecke, for it becommeth fweet and not bitter, like vite the plant: Aand in like fort in all other manner of waters that are diffilled of plants, and are of a hot tempecrature, and fharpe or bitcer of taft: For the Leaden Limbecke receeiuing vpon his fuperficiall part the vapours of hearbes which are hot in effcet and opeciacion, is cafily corrupted in that his fuperficiall part, and turned into a verie fubtle Cerufe, which afterward mingleth it felfe with the water, and beflowech vpon them an vnfanourie fweennefle : which is eafie to be gathered and knowne by the white refidence that fetech in fuch waters, efpecially if the Limbecke wherein they are diftilled, be new: for the veffell which hath ferued a long time, hauing gotten by long face, and being much diftilled in, as it were a plafterie cruft or hardneffe ouer all the parts of ir, is nor fo eafily altered by the vapours, nor turned into Cerufe. And indeed it is no maruell, if the vpper face of the Lead be changed into Cerufe by the fharpe vapour of the plants, feeing that Cerufe it felfe (as $D$ iof corides teflifieth) is made of plates of Lead hanged ouer the vapours of vineger, and fpread vpon hurdles made of reedes: but there befalleth no fuch accident to waters diftilled in CMaries bath : for the bitterneffe of their taft is manifefly perceiued, as alfo their haarpeneffe, fowreneffe, tartneffe, harfhneffe, eagerneffe, fweetneffc, and taftlefneffe, if they be diftilled of bitter or biting plants, or yct of anie orher tafts and qualities: and this fallech out fo, becaufe the head of the CWaries bath is of Glaffe, which cannot infect them with any frange or vnnaturall qualitie. Moreouer, the waters that are diftilled in the veffell called a Bladder, which is made (as wee haue faid) of Braffe, as well the head as the bodic, but yet ouer-laid within with Tinne, are much beter, and of greater vertue, thars thofe which are diffilled in a Limbecke of Lead, becaufe the fire of the furnace cannot burne nor infect with anie fmoake the matter that is within, feeing they are couered ouer and boile in water : but notwithflanding they doe not throughily retaine the vertues thereof, becaule of the mixture of the water, which fmotherect and dullech their force and vertues. Wherefore wee mult needes commend as beft the waters which are diftilled in the double veffell, or ouer the vapour of boyling water, efpecially when as cherewithall they are of a hot faculcie. It is true, that amonght them, that fort is better which is difilled ouer the vapour of boyling water, than that which is diftilled by puting the bodie containing the matter, into the boyling water, becaure it extracteth and draweth out the fubtle parts therein a great deale better : albeit that both the forts thereof are excellent good, neycher is there anie hurt at all in them, faue onely that they are not of fo long lafting and continuance as others: but to helpe this in fuch things as need fhall require, it

Amold Leaders
Limbecke is
better than \&
new.
The making of

The caule that maketh maters dijhluted in Mas ries bath bore= saine thir vertures.
waters dilitiled in the inflirno. ment called the Bladder.

The waters dis. filled ourer the zapcur of bop: ing zwater, will be good to diftill one and the fame thing often, that fo you may alwaies haue ries bath, them good.

But to come to our third kind of Inflrument, which wee haue called the double veffell, or Maries bath, it confifteth of two parts : the one is a great veffell of Braffe, made in manner of a Beefe-por, verie great, and rayfed high, furnifhed with a couering, and it is fet in a furnace, and containech in it boyling water: The other is the Limbecke, whofe bodie is likewife of Braffe, fo fet within the couer of the Cauldron, as that the one reffeth vpon the other, and that the one cannot be put in or taken away without the other: The head therreof is of Glaffe or Tinne, or of baked earth : in the couering of which, there muft be a hole made in that fors, as that it may be alwaies clofe : it would be at one of the corners thereof; and the vfe of it is, to powre boyling water into the Cauldron, when the water within the fame is diminifhed after long time of boyling: The fafioion of it is as you may fee here ouer the leafe,


There is another fort of double veffell, which containeth foure Limbeckes, whofe bodies fee within the bath, may be either of glaffe or tinne, and their heads of glaffe: befides thefe foure, there is another fanding higher than the reft, and is heated onely of the vapour of boyling water, which rifech vp on high vnto it through a pipe, and this Limbeck makech a better water than the other foure. All thefe veffels being well coupled and incorporated together, doe refl vpon the Caldron, or great Braffe por, being fufficient large and wide, and tinned oure within, and fo clofely fet ene with another, as that there may not anie vapour breath out : in like manner, all thefe inftruments and veffels be fo well ordered and contriued, as that they may feeme to be bue one bodie, fauc onely that the heads of cuerie one muft be fo, as that it may be feparated from the bodie, and put to againe, when you hauc anie need to difill water : the fahhion of it is fuch as is here to be feene.


There are fome that haue yet feene another fort of double veffell, and that a verie excellent one, whofe bodie is Tinne, like vnto a great Vrinall, of the length of three good feet, veric wide and large below, and fomewhat narrower aboue : The bottome or bellie thereof is fet two good foot in boiling water, and the top ftandeth out of the water a foor good, and that in a round hole made in the middeft of the coucr of the Cauldron. Vpon the top of this bodie is placed a head of Tinne,coucred and compaifed alfo with another veffell of Tinne likewife, and much more large: this is to containe cold water, running into it through a Brafte pipe or cocke: it is to fland vpon the top of a fhanke, and that for to coole the Limbeck continually, that forthe vapours rifing vp thither, may thicken the better, and be the fooner turned into water. And becaufe it is not poffible, bue that the water which is conrained in the veffell that compaffech the Limbecke, fhould become hot in fucceffion of time chrough the heat of the Limbecke: this veffell hath a frall pipe or fpout, at which the water fo heated is vfed to be lee runne out, turning the lietle pinne of the cocke; and it is filled againe prefently with cold water, which is made to runne down into if from a veffel on high. But to the end the labour of emptying it fo oft of his hot water, and putring in againe of cold, may be remedied, things may be fo carried, as that from the velfell which flandech vpon the top of thie piliar there may be cold water continually running into the veffell companfing the Limbecke : and then it being once become hot, may be let out, as is faid before. And to the end that the cauldron which containeth the bath may alwaies keepe full at one meafure and quantitie of water, which otherwife is fure to diminih by the continuall and vehement heat of the fire of the furnace; there is at the foot of the pillar another veffell full of verie hor water, which is to be conueyed into the bath by a cock,or pipe: and this water is heated in his veffell by the fame fire that the bath is heated, in as mucch as the wall of the pillar is hollow and emptie euen as low as the bottome of this veffell. This fort of double veffell is fit ro diftill waters withall in great fore and aboundance, by reafonoof the cold water which thickenech and turnech by and by the vapours into watcr. The fhape and falhion is as you fee.


The Venetians diftill their water in fuch an Intrument: The furnace is eound and containeth on cuerie fide, round about it, inanie cathen veffecs, glafed withing
and fafhioned like Vrinals, well luted with mortar of Potters clay and eueric one co. uered with a head of Glaffe, or baked earth : to their fnouts there is faftened a violl with a good thicke ehrcad, to receine the water that diftilleth. This furnace is heated, as we fee, after the manner that the Germanes doe heat their Hot-houfes, and we our Stoues. And it it happen, that the fire mould be too hot, you mult not put any thing into the veflels, vnilll fuch time as the heat be fomewhat abated, for feare that the plants, flowers, and fuch other things fhould be burnt. The mouth of the furnace muft be alwaies ftopped and faft fhut, to the end that the heat may beat inward for the heating of fo manie veffels. For the attending and ordering of this furnace, there are required manie feruants: fome of them to looke vnto the fire ; others to caft the hearbes into the bodies; and others, to put the heads vpon the bodies. By this likewife there may great ftore of waters be diftilled, as fome hundred pints in a night and a day: and thefe waters are a great deale better than thofe which are diftilled in Leaden Limbeckes or Stillitories, or yet of other mettals, becaufe they are not infected with anie fault or infection, which is a common companion of thofe which are made of mettall. This is the fhape and forme of it.


There are other Inftruments, the bodies whereof are of Braffe, Iron, or other mettall, hauing a long, thicke, and ftrait necke, on the rop whereof refteth alfo a head of Braffe, made after the fathion of a broch fteeple, and is compaffed round about as it were with a bucket of coole water, to the end that the vapout may be conuerted the fooner, and in greater quantitie, into water, and that the water may not taft or fmell of the fire. Some in ftead of this long necke and head, have a pipe of Plate,or other mettall, verie long, and wrythen or wound about in forme of a Serpent (and for this reafon is called a Serpentine) or made of manie parts, confifting of direct angles, and there paffing through a bucket; orfome fuch veffell full of water.

There are manic other forts and fámions of Intruments to diftill wirhall, whereof I meane not to (peake at this time, contenting my felfe with thofe which I haue mentioned, as being of more common ve,and fitonely co diftill waters: of which, it isour


Furchermore, fccing the water doth take his effence and confiftence, and other chusing of the like qualities, from the head of the Stillitorie, it is yood to make choice of the beft heade heads shat one can : the beft, are of Glaffe : next, thofe of earth, glafed within and without : thirdly, thefe of Tinne: fourthly, thofe of Copper, laid ouer with Braffe: fifthly, thofe of Braffe laid ouer with Tinne: (but the veffeis of Copper and Brafle hanc thefe two difcoimmodities, the one, that they make their waters reddih and halfe burnt, and the fecond, that in Copper and Braffe there is a venimous qualicie more than in anie other mettall) fixtly, thofe of yron, efpecially when a man would diffill anie thing that is hard to be difilled, and which muft be applyed outwardly; and not taken inwardly. Such as are not afraid of the coft, doe vle veffels of Gold or of Siluer: but feeing all are not of one and equall efficacie, it is beft tu reft contented with Glafte-veffics, or earthen ones well leaded, cither with Glaffe, or the fat, which is called earth of Beauuais, rather rhan with Lead, or anie other mettall : notwithflanding, thofe of earth are che beft: the fecond, thofe chaa are leaded or glazed, or of thicke fat earth: next, thofe of Tinne. Thofe of Glaffe mult not be of brake met- Howto ordar tall, but of Cryftall earch well armed : which, fecing they ceafe not to be brittle, how Gaffe-fillso well fouer they be armed, muft be heated by litele and litete, whether is be inc Tharies bath, or in hot afhes, or in a furnace firc : And in like fors, when your diftillacion is ended, to lee then coole by litete and lietle. And for as much as the head is loofe from the bodie, it will be good to fer them together with a hempen cloth which hath beene dipped in the mortar of Wifedome, which for the moft part is made of the whites of Egges, Beane flower, and a little Mafticke. The veffell whereinto the water is receiued, and thereupon called the Receiuer, fhall be a Glaffe-violl, hauing a long necke, and the beake or fpout of the head muft goe into it; and thefe two, in like manner, may thus be faftened and clofed togecher with the faid mortar of Wifedome, leaft the water which fhall diftill, fhould cuaporate verie much : notwithfanding, that we fee fometimes fome Receiuers of the fafhion of Vrinals, which are not made faft vito the beake of the head at all.

## C н a p. LXII. <br> What manner of Eurnaces must be prepared for the <br> diffilling of Waters.

 He fafhion of the furnaces for the diftilling of waters is diuers, as well in For the difitic refpect of the matter to be diftilled, as in refpect of the veffels which are ling of waters: vfed in the diftilling thereof. As concerning their matter, fome are made of vnburnt bricks, onely dried well in the Sunne, becaufe they are better to be handled than thofe that are throughly burnt, and befides, they may be cut with a toole, and brought into what fafhion one will; and fitted with fat earth; otherfome are made of plafter onely; fome of fat earth onely; but the beft are made vvith cement, vvhites of egges, fat earth, and flockes of vvooll; others of bearen bricks, hards, horfe-dung, finewes of oxen, and fat earth. But as for their fafhion, it mult be anfwerable vnto the veffells that are fer therein; and fo fome be wholly round, and thofe are the beft and moft profitable ; others are foure fquare; others are raifed high like fteeples; others after the fafhion of vaults; fome after the manner of fones: all which you may find out by the fight of the eye in the patrernes fet downe before, and from which you may gather more inftruction and more certaine direction, than by all the defcriptions that wee can poffibly make. Such furnaces as you may fee with your eyes, mult haue two bottomes; the one lower, to receine the afhes of the coales, or whatoeuer other matter that the fire is made of; the other higher, which mult containe the burning coales, and mult be made after the falnion of a Gridyron, hauing barres or roddes of yron paffing

Qq 2
shrough
throughout from the one fide to the nther, quite ouerthwart the furnace; or elfe diulded into manie frmall holes, that fo the ahes and fmall coales of fire may fall through to the bottome below the niore eafily, and not flay behind to choake vp the fire that fhould heat the Still. The vnderfloore may haue one or manie mouthes, for the more conuenient taking away of the a fhes which fhall be gathered there on a heape: but as for that aboue, it muft haue but one onely of a realonable bigneffe to put the coales or wood in at ; but in the roofe of it, it muft hauc two or three fmall holes, to giue aire and breath vito the fire at fuch time as you mind to amend it. Euerie one of the mouthes fhall haue his flopple. For want of a finnace or matter for to make one, you may fit and fet your Veffell, Cauldron, or Bowle, vpon a brandrith, and kindle your fire vaderneath.

## Снар. LXIII.

How the matter must be prepared before the maters be dijfilled.

5ifT is not ynough, that the furnace and inftruments for diftillation be made readie in fuch fort as wee haue faid: for the matter to be diffilled muft in like manner be prepared before that it be put into the Still. This preparation is of three lorts : that is to fay, Infufion, Putrifaction, and Fermentation. Infufion is nothing elfe but a macerating or feeping of the e thing intended to be diffilled in fome liquor, not onely that it may be the more apt and eafie to be diftilled, but alfo to caule and procure greater flore of iuice to be in it: or elfe to helpe them to keepe cheir finell: or elfe to beftow vpon them fome new qualitie: or to encreafe cheir force and vertues: or elfe for fome other ends, as we will handie them in particular, and onely one. It is true, that this preparation is net neceffarie for eurrie matter: for fome there are that need not anic infufion or fleeping, but rather to be dried before they be diffilled, by reafon of their too great and exceffiue moifture : otherfome content themfelues with being watered or fprinkled ouer lightly with fome liquor, as is done in the diftilling of drie Rofes and Camomill, which are wont to be fprinkled onely with common water. Some fpread them all a Summeis night in faire weather vpon a Linnen cloth to take the dew, and after they be moift, to diftill them. Such as are feèped and infufed, lye in the Sunne, or are held ouer che fire, the fpace of fome halfe houre, or manie houres, a whole night, a whole day, two daies, three daies, one or moe moneths, according to the naturc of the medicine, the diuers intention and purpofe of the Phyfician, and the prefent neceffitie. Sometimes we preffe and wring out things, which we infured before the difillacion; and making our diftillation afterward of the juice onely that we preffed forth: fometimes againe we diftill the whole infufion, that is to fay, both the infufed matter and

Troo ithings to be confidered in infuficr. The time of infurion. the liquor wherein it was infufed. Wherefore in this preparation, which is made by infuifion, you muft diligently obferue two things : the time of the infufion, and the liguor in which the infuffion is made. The time of the infufion mult be meafured according to the diuerfitic of the matter: for thofe things which are hard or folide, or drie, or entire and whole, deferue a longer time of infufion than thofe whichare tender, new, or bruifed: whereupon it commeth to paffe, that rootes and feedes require double time to infufe: the leaues and flowers a fingle and leffer time, and fo confequently of fuch other matter or things. The liquors wherein infufions are to be prepared, muft not onely anfwere the qualities of fuch matter as is to be difilled, in fuch fort, as that hot mater and chings be infured in hot liquors, and the cold in colds but likewife the fcope and drift intended in the thing diftilled, which is the onely caule of the vfing of varictic of liquors in the making of infufions: and thefe
are for the moft part Raine water, Fountaine, or Rofe-water, and they either raw or difilled, crude or difilled iuices, diftilled waters, Aqua vitx, raw or diftilled Vineger, Wine, taw or diffilled Vrine, Whey raw or diffilled, mans bloud,Swines bloud, what tind of and Goats bloud diffilled or undiftilled. For this refpect, things that haue fmall things are infirs flore of iuice, as Sage, Betonie, Balme, and Wormewood, or which are veric fra- fed in wine, grant, as all fors of Spices, all forts of odoriferous Hearbes, all aromaticall Rindes or Woods, as Cinnamome, would be infufed in Wine, to the begetering of fome reafonable flore of iuice in them which haue but a litele, and to keepe the aromaticall fragrantneffe in thole which fmell fweet, which might otherwifc enaporate and fpend, through the hear of the fire, their beft and moft precious parts, they being of fo thinne and fubtle a fubffance. It is rrue, that the beft and fureft courfe is not to in. fufe Spices, or aromaticall things, neither in Wine, nor in Aqua vicx, but rather in common water: becaufe in diftilling of them, as proofe will make triall,the vapours will rife too foone, and leaue behind them the vertues of the aromatucall things; whereas water will not goe vp before it hane them with it. Such matter and things as are hard and mettallous, as Pearles, Corall, hells of egges, Cryftall, Emerald, Iacynths, and other fuch, are infurfed commonly in raw or diftilled vineger, or elfe in vrine diffilled or vidiftilled: but fuch waters are not to be taken inwardly, but onely to be applyed outwardly: In like manner, when is is intended that a water thall haue an opening qualitie, and pierce deepe or fwiffly, the matter thereof may be infufed in raw and crude, or in diffilled vineger: as for example, the waters diffilled againft the floie, or grauell, or to take away the great obftructions of the liuer? rpleene, and matrix. When you defire that the water fhould retaine and keepe in good fort the vertues of the matter whereof it is difilled, it may, for the better infufing of it, be diftilled in his owne iuice, or in fome juice obtaining the like vertue: Things are likewife fometimes infufed in bloud, either of Men, Swine, or Goats; for the encreafe and frengethening of their vertues; as the water vfed to be diffilled for to breake the flone, whether it be in the reincs, or in the bladder, may firt hauc receiued an infufion made in the bloud of Goats: As much, in like fort, is to be thought of the Whey of Goats milke, wherein things are wont to be infufed to draw waters off, which are to ferue in the cleanfing of vlcers of the reines or bladder.

Generally, regard muft be had, that all infufions be made in fuch liquor as will frengthen and encreafe the vertue and force of the things intended to be diftilled: as alfo, that fuch matter, before it be fet to infure, be fhred, flamped fmall, or bruifed, puting into it fometime the twelfth part of falt, as vnto thofe that are too moift, as flefh, bloud of men, or other beafts, as well to keepe chem from corrupting, as alfo to helpe forward the feparation' of the humour that muft be diftilled.

Sometimes the things which are to be diftilled, are fuffered to putrifie, and $P_{\text {utrifitionori }}$ then afterward they are difilled : yea, and fometimes the verie putritaction it felfe is the way and whole worke for the diftilling of fuch things, as wee will declare hereafter.

Fermentation is accomplifhed and performed vpon the mater of infufion alone, or the whole infufion together, in the heat of the Sunne in the Dogge-daies, or elfe in fome Furnace, or Horfe-dung: it requireth manie daies continuance, as foure, or more: and by how much this fermenting and preparing of the thing is the more fubflantially performed, by fo much the greater quantitie of water will be diftilled and drawne out.

# Chap. LXIIII. <br> Generall precepts about the distilling of Waters. 

Furnaces muf be fes in a place robere they may not doc or take burt,
When we are to fland farre off from the sililes, and not to come neere them.

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- . That quanitite tobegut in the fill.


## the Countrie Farme.

that haue beene fifted, or with fand, or with the filings of yron finely powdred, in fuch fortas that the afhes may be higher about the glafle than the matter is within by a halfe foor good. The afhes fhall be placed in the vpper part of the furnace, or in a place of hold made vpon the furnace, and heated witha coale fire which hall be below in the bottome of the glaffe. The waters fo diftilled indure much longer than thole which are diftilled in Maries bath :but in all other poines they refemble and are like one vnto another.
If you haue not the leafure to make your diftillation in a ftill, and that yet you To make afpes: would gladly diftill fome certaine juiceor liquor : then caufe your juice to boylc in fome veffell, and ouer this veffell fer a glaffe: in this glafle the vapour will turne into water : by this meanes vinegar is turned eafily into a vvater vwhich is verie profitable fur the fpors and flayne of the eye, efpecially if before the diffllling of is you Vied legar difiticaufe fome few flps of $R$ hue to be boyled in whire vinegar.
Hor things, that they may proue effectuall, would be diftilled three or foure times, putting \& adding vnto eurerie time new matter,or elfe to rectifie them by theurfelues: but as for cold things, fuch as the rofe is, once diftilling is fufficient: for by chis means it holdeth fill his cooling qualitie in better Yorr, fering the force of the fire begettech heat and 位peneffe in things.

When you would diftill one vvater three or foure times, you muft at euerie difillation diminilh the heat of your fire halfe a degree, and afterwarda whole degree, and fo confequently vntill in the end you come backe vnto the firft degree fpuken of before, and called fucla heat as is but vvarme, the reafon is, becaufe that the marter becomming more and more fubtile at cuerie diftillation, cranech not fo grear of heat at the end as it did at the beginning when it is in his groffeft flate and condition. Bur it is contrarily practifed in the extracting of quinteffences out of any thing: for then the heat is to be increafed and augmented more and more.

In all manner of diftillations of vvaters, you muft carefully fee to the feperating of the flegme, that is to fay, the grofleft, thickeft, and moft waterie pare of the humour diftilled: and for the doing hereof you muft carefully confider of the matter which you diftill : becaure the flegme comineth forth fometime firt, fometimes the laft in the diftillation, as in the diftlling of Aqua-vitx it ftayeth the laft, notwithflanding that it be diftilled diuers times: in the diftilling of the moft part ofother things it commech forth frift, as in vinegar, honie, and fuch things: and thethisg is difcerned by tafting of the firft and laft diftilled waters. And ifit happen that the flegme be not feuered in this fort, as indeed it is not in fome fuch, as with which it is mixt: then the next courfe is to fet fuch vvaters in the Sunne certaine daies in veffells couered with linnen clothes, or parchment pricke full of fmall holes, that fo che excrementous part by fuch meanes may be confumed and wafted : or if the Sunne faile, as in Winter time, then you mufl fet your veffell contayning your diffilled waters in other veffells full of vvater, and caufe them to boyle to the confumption of the third part.

The diftillation is to be judged to be in good ftate and cafe, if betwixt the fail of when the fillitis euerie drop, you can account to the number of tweluc: and hence alfo is the judging ing gaod temper, $\begin{gathered}\text { and } \\ \text { filletb }\end{gathered}$ of the force and quantitie of the fire to be learned and fetcht.
If any man defire chat waters fhould haue fome fmell, tafte, or other qualitie of fome thing, as of honie, cinnamome, carnphire, muske, or other like fweet fmelling thing, (whether it be to giue fuch fmell to the thing that hath none at all, or vito fomeching that hath a bad and vnpleafant fmell, as we will feake of by and by in the water diffilled of mans dung) it vvill be good to annoynt and befmeare the head of the flill wvith thefe things, or elfe to tie vp the fame in fome little knot of linnen cloch, and hang them at the verie poynt of the fpout or pipe, to the end that the vvater diffilling through this matter, may retaynethat fmell orother qualitie inrended.

And vvhereas diftilled vvaters by force of the fire are euermore feene to recaine fome impreffions and printes of the heat, it will be good prefently after they be diftilled,

## The tbird Booke of

ftilled, tolet them fand fome time vncouered in the veffells wherein you meane to keepe chem, hauing yet therewithall regard, that neither their fmall nor any part of their force doe vvafte or fpend : and therefore to take the fitteft courfe, it will be beft to fet your veffell clofe and faft fopt in fome cold place in moift fand to dinainifh and take away the great heat of the fame. Notwithftanding you mult marke and know that cold waters, vvhich fhall be diffilled in CMaries-bath, will haue no great need to be fo vncourered, but that they rather muff be fet in the Sunne in a glaffe veffell not altogecher full: or elfe that they with their veffell be fet ouer head and eares in hot fand for the fpace of fortie daies, to the end that their flegme and thickeft humour may be confumed.
If your diftilled vvaters become troubled, you fhall reftore them to their cleareneffe by putting thereinto fome one or two drops of Vinegar for euerie pint of water.

## Chap. LXV. of the particular manner of dijililing of Hearbes, Rindes, Flopers, and Rootes.

Itilled vvaters are of diuers forts and vertues: fome are phyficall or medicinable, as the water of rofes, fage, marierom, and fuch like. Others are nourihhing, as refloratiues, and many both medicinable and nourithing, as nourifhing refloratiues : vvhereinto are put medicinable thers are purgatiue, as the waterfor liquor of rhubarbe if it were new and greene. Others ferue to grace the face and hands, and to make beautifull. Others for to gratifie the nofe by yeelding a fweet fmell, as thofe which are drawne out of fpices and fweer fmelling fimples, vled alfo to vuafhtlie hands, face, and whole bodie, and againe all thefe waters are either fimple or compound : but we will firft feake of the

Water of worm wood.

Watcr of wival rut.trce leases berries acaint venime spots. Toprocure termes.
Todry the weeping cye. The 2bater of Aghotree.
fimplemedicinable ones.

Water of fram- To diffill frawberries, you muff tect them purrifie in a glaffe veffell, putting chereto
Wormewood mult be diffilled in Charies-bath to draw out his vvater in fuch fort as that it may expreffe by fmell and tafte from whenceit came: and for the betrer doing of it, you muft fee that you diftill it not verie new, bur fomewhat dried, and afterward infufing it a lietle in wine to diftill it in CMaries-bath, or in hoteaThes: Mugwort, Agrimonie, Sorrell, and fuch other like plants, are thus diftilled alfo, butwith obferuation laad of the generall things fpecified before. Thus the water of Winter cherries is diffilled, feruing againft the fone and grauell as well of the reines as bladder.
The vetermoft pilling of common vvalnuts, whecher it fhale willingly or no; may be diftilled in the moneth of September: and the water drawne from them, drunke in fmall quantitie with a third part of Vinegar, is a certaine remedie againft the plague, if before drinking of it you caufe the partie to be let bloud : it is fingular good alfo to make gargarifmes of,for the vicers of the mouth: it is good alfo to foment goutic places withall, and good to colour the haire blacke. Water diftilled of the leaues of the Walnut-tree in the end of the moneth of May is fingular for to drie and cicatrize vlcers, if they be wafhed evening and morning with alinnen cloth moiftned therein, verie fouerningar, and then afterward to extract and drawo the their water, which is and drie vp weeping eyes : it will performe all thefe vertues in admirable manner, if there be mingled with it a little A qua-vitx.
The inward rinde of the afh-tree being diftiled, doth yeeld a fingular water againft the plagus, ifit be drunke in equall quantity with aqua-vite, as threc ounces of either,

## the Countrie Farme.

cither, efpecially if the fame drinke in the fame quantitie be drunke againe within three houres atiter: it is good alfo being dropt into the eares for the noyfe in them.
The flones of blacke cherries, being broken, or the kernells alone difilled, make a vvater wvhich doth quite take away the fit of the Falling.fickneffe in young children, prefently afer that there hath beene put into their mouth about anounce.
The diftilled vvater of new filberds, drunke che weight of two drams, is a prefent remedie againft the collicke and gripings of the bellic, a thing shat will not falle, hawing beene proued and $t$ riicd.
The vyater vvhich is diftitled of the barke of Danewore, or Elder tree, being ofeencimes drunke, doth cuacuate and draw the vvater out of fuch as haue the dropfie.
The vvater of betonie: You muft ftampe the leaues of betonie and infure them a The sater of cerraine time in Wine, and after diffill then!. The vvatce of balme and fage is di- Betoric. filled in like manner. The vvater of betonie is good for the difeafes of the head, reines, and bladder. The water of balme reioy ceth men, keepech àway the fits of the Apoplexie, and Falling-ficknefle, it caufech a good memorie, takech away the paine of the tecth, breakech the ftone, healeth the dropfie, preferuech from venime fuch as haue fwallowed any fpider, if it be drunke prefently afer.

The water of $G$ entian : Take foure pound of the new rootes, or rather of the dri- The zater of ed roores of Gentian: chop them frall, infufe them in wine, or befprinkle them on- Gent:an. 1y, then afterward diftill them. This water is fingular againft the plague, all forts of The phague. venime, the fone as well of the reines as of the bladder, and to heale inward Apoflumes and vicers.

The vvater of pellitorie : Take the rootes of pellitorie new or old, cute them fmall, The mater of and infufe them in verie good Wine : the water is good for to appeafe the ach of the Paine of the teeth,to ftrengehen them, and keepechem cleane, if the mouth be wafhed therewith $t$ eetho in the morning, or elfe when ie feemech good to doe it.
To make water of eye bright: Take che leaues and flowers of eye-bright, diffill water of efco them: the water thereof doth cleare the fight.
The vvarer of Nicocian is diftilled as the other going before : but of this vve haue largely difcourfed in the fecond Booke, and haue hewed that it hath maruellous effects, againtt the Noli me tangere, cankers, ringwormes, fcabs, fhortneffe of breath, and che dropfie.
-In this fort alfo you muft diftill Paules betonie : the vvater whereof is fingular to heale wounds, fcabbes, and other difeales of the skinne. The vfeot this vvater is verie excellient for the leprofie, peflilenc feauers, obftructions of the liuer and fpleene, and exulceration of the lungs. In this fort alto is Moufe care diffilled, whereof vve haue fpoken in his place in the fecond Booké.
The vvater of hylfope muft be diftilled vpon hote afhes: it is excellent for the The water of paine of the teeth, to prouoke vvomens termes, for the cough, and other difeafes of the lungs.
The water of turneps : Take whole turneps with their skins and all,orelfe che skin The watere of alone, you thall difillla water (efpecially of the pilling or skin) which will be profi- ${ }^{\text {tureps. }}$ table to prouoke vrine and fweating.
Warcr of lymons or the juice of them doth heipe verie profitably in the flone of water of Ly: the reines.
The water offennell : Take the rootes and leaues and diftill them, or elfe boyle The zoater off them in water, afterward put them all hot into a tin or copper platerer, and couer the Fenell, fame vvith another platter : the liquor vwhich fhall be vpon the vppermof platter Shall be kept in a viole, to put a drop or two thereof into the corner of the eye,for the difeafes of the eye.
Water of parfley of the garden: Stampe in a morter the leaucs of parfely, then di- The yasier of fill them : it cleanfect the fomacke, and comforteth the reines. - -

## water of fonal

 lage, bafile, mants, bugloffe, oss
## The water of

 simnamsome.After the fame manner are diftilled the waters offmallage, bafill, bugloffe, mints, cammomile, marigolds, Carduus benedietus, clarie, fuccorie, capillus Veneris, cheruile, endiue, aller, fumitorie, broome, Iure, horfe-taile, lanander, marierom, melilor, mallowes, holihocke, vvaterlillies, nigella, organie, pionie, poppie ${ }_{2}$ pellitorie of the wall, burnet, planaine, purcelaine, penniryail, rue, iofemarie, madder, fage, fauorie, fcabious, fcolopendrium, nighthade, houfcleke, willow leaues, groundfwell, thyme, white mulleine, tanfey, valerian, veruaine, of che flowers and leaues of the flinging nette, as well as of the dead nettle, and of many other plants, obferuing the generall precepts, which we haue fer downe before.

This is the manner of diftilling cinnamome : Take a pound of fine cinnamome, breake if lighty, and infufe it a certaine time in the diftilled water of Rofes the quantitie of foure pounds, and of verie good white wine halle a pound, after put it all into a glaffe-ftill to be diftilled either vpon hot afhes, or clfe in Maries-bath: fuch water
A bad Romache is forcible againft all cold difeafes, efpecially of the ftomacke, Ipleenc, liuer, braine, matrix, finews, faintings and fwounings, to prouoke the termes of women, and retay-

## Tojerater.

 the veliuerie of women that are in trauell of child.Rofe-water is diftilled either of new rofes or of drie rofes, and they are either white or carnation. The fafhion and manner of difitling of ir is diuers : for fometimes it is diftilled by defluction rending downeward, whhich is called in Latine Diftillatio per defeerifum, according to the matter which we fhall declare in the feuentie firft Chapter hereafter following. Sometimes it is diftilled by infolation, as we will likewile fhew in the fame place: fometimes, and that of feft, as alfo beft, in Maries-bath, and before the diftilling of it, if the rofes be dric, it is good to moiften them vvith the vapour of fome boyling water, or fome Rofes. The water which is diftilled of red Rofes, is more cordiall and corroboratiue, as that which is made of white rofes is more cooling. Then to diftill good rofe-water, you mult infufe rofes in diftilled Rofe-water, or elfe in the juice drawne from them, and that by the face of two or three dayes, your veffell being well luted and ftopt, and afterward put them in a glafte-ftill, couered with his head, and they both well luted and ficted one to another, and finally, fet them thus conjoyned in your veffell of Mariesbath.
water of orange Water of Orange-flowers, called water of Naffe, being diftilled by a bell, is good fowers. to procure vomit, as alfo to make a good frnell.
Water of woild The water of vvild Apples, and of Oke Apples vnripe, of chefnuts, and of verapples.

## face.

The water of juice that is halfe ripe, is goud againft the red pimples, and hard knobbes in the

The vvaters of flowers (as of Rofemaric, vvhich is good to rejoyce the heart: elder, rofemary, of Elder-Tree, vvhich keepeth the face cleare from Sunne-burning : of Mariand marigolds. golds, vvbich comforteth the eyes : and fach others) are diftilled after the manner of Rofe-water.

## Chap.LXVI.

## Of: the manner of diftilling liquers.

E haue heretofore declared that the fingular and rare efficacie and vertue of things difitiled, haue in fuch fort rauifhed and carried away the fpiriss and fudies of men, as that there is fcarce any thing to be found vvhich hath any good propertic and fpeciall qualitie in it, but it hath beene brought vader the yoke of diftillation. But in chis place I call liquor all that which hath a liquid confiftence, vvhecher it be juice, humour, excrement, or any fuch likefloting thing, as vvine, vinegar, honie, vrine, juice of hearbes or fruiss:
and you cannot bur thinke that the juice of hearbes or fruits being diftilled doth afford a farre better water, than that which is diflilled of hearbes,yea or of fruits cither. We will begin therefore with diftilled vvine.
Aqua-vira is thus diftilled: (notwithfanding that all manner of Wine is fit to make Aqua-vitx of, fo that it be not fowre, fpent, or otherwife tainted, yet indeede the ftrongeff and nobleft Claree vvine is the beft, vvhecher pallet and inclining to vvhice, or high coloured and inclining to red:) Take then of claree vvine a certayne quantitie, according to the bignefle ot the veffell whercin you diftill it (which is called the bladder, as we haue declared before, namely, in that it is fafhioned like vnto a ftreight gourd) euen (o much as may fill it within one third part of the rop, that fo the vapours may haue fpace to rife, then fet the head vpon it, hauing a long fnour, and this muft be well clofed with the mortar of wifdome (being the fame which we haue before def(ribed) to the end that no vapour may paffe out there by : and chus caufe it to diftill with the heat of hot, but not boyling water : or elfe at a reafonable heate in afhes, or infmall fand, increafing the fire continually by little and little, and yet taking heed that the wine doe not boyle : and to the end that you may haue excellent good Aqua- vitx, you may diftill it ouer foure or fue cimes: for by how much the ofter it is diftilled, by to much the better will it be, as we haue faid al readie. For the firft diffillation, it fhall. be ynough to draw the tenth part, that is to fay, of ten pintes of vinine one pint of Aqua-vitx, more or leffe: for the fecond halfe of that which you fhall haue put in, hhat s so fay, halfe a pinte: for the third likewife, the halfe ora litele leffe, vvhich fhould be a quarter of a pinte: infuch fort as that the ofter it is diffilled you mult have leffe in quantitie, but more in value and worth; and therefore in the beginning you mult either take a greas quantitie of $W$ ine, or elfe have many vefo fels. It is true, that if the diftillation be well made, the fourth will yeeld the like quantitie of water to that it receiued, and there will be no loffe in it : and herewith likewife it is to be wilhed, that eurric man would be contented without going ouer it any more : becaule fo many repectitions and redifillations is a nutter of great labour and coft. In the meane time this muft be remembred, namely, to leffen the fire at cuerie diftillation halfe a degree, and afterward a whole degree, that fo in fine you may come to the firit degree called bloud vvarme. And cruely by mine aduife, the firf diftillation fhould be in the fire of athes, and the other in Maries-bath. This repeating and going ouer with it by diffillation after diftillation thall be to take from it his flegme, that is to fay, his groffeft and moft waterie humour, which reftech in the bottome, and is accuffomed to come forth laft, after that it is well digefted by being of diftilled. Finally, it may be gathered that the Aqua-vitę is fufficiently diftilled by thefe fignes; If there come backe the like quantitie of water; ; f being fet on fire, it confume and vvafte all away, not leauing any figne of moifture behind it in the bottome of the veffell : ifa linnen cloth that hath beene dipt in the Aqua-vite, being fet on fire doe not burne any jote at all; if a drop of oyle being put into it, go to the bottome; if drop of Aqua-vitre being powred in the ball of your hand; doe waft away and vanifh verie fpeedily; ifyellow amber being fet on fire doe burne in the Aqua-vite; and likewifc if camphire being put into Aqua-vitx be diffolued of it. You muftalfo note, that Aqua-vitx is fometimes diffilled of lees of verie good Wine, being neither fower, nor fpent, nor otherwife tainted; and fuch Aqua-vitx fometime is not inferiour burfuperiour in goodneffe vnto that which was diftilled of the Wine it felfe: Againe, if ic be often diffilled ouer, it becommeth more hot and drie, then that which is made of the verie. Wine : but yee indeed that which is made of Wine is more pleafant vnto the tafte, and of a more delightfome finell: Aqua-viRę isallo fömerimes diftilled of beere, bue that is not fo good as the other of Wine. The veflells for the diftilling of Aqua-vita are diucrs, that is to fay a good fill, fit- Vefrells fort the ting in afhes orfand, or a recort in Maries-bath,or che bladder: A qua-vię may alfo be diffilted in a caldron or pot of Copper or Braffe, made in mianner of a Beefe-pot, coudred with a couer, and hauinga fraight nofe comming out of is, and rifing vp on high, and turned downeward againe with a direct angle, and fo paffing through a

Dertues of aqua-vita.
bucket full of cold water;: Afer that the Aqua-vitx is difililed, you muft fet it ous into the Sunne a certaine time to make it yei more and more fubte. After this fort you may diftill all iuices and liquors, as mans bloud, vrine, vineger, the deaw, milke, whites and yolkes of egges, mans ciung, or beafts dung. The vertues of Aquavitre are infinite: It kecpeth off the fits of the Apoplexie and Falling fickneffe, in fuch fort, as that they which are fubiefi vnot that difeafe in the time of. Winter, muft enery morning take a fpooneffull of A qua-vixx fugred, and eat a little bit of white bread: it driucth away venime: : keepech Wines fiom fending themfelues, from purrifying, and from growing thicke and troubled: ji curcth feeedily all the cold difeafes of the finewes, mulcles, and ftarued members, if they be fomented therewithall: it killech wormes, and afluageth the paine of the teeth; \&c. See more in our Booke of fecres remedics.
Difililed vinen ger:
 bervixt Aquan vite and $V$ ine ger in their ma wer of fijililing. For the diftilling of Vineger, you muft vnderffand, that there is fome difference becwixs the diftilling of Aqua vitx and Vineger: for feeing that Wine is of a vaporous and ficrie fubftance, the chiefeft and principalleft parts in it doc runne at the firf diftillation, that is to fay, with the water that firft commeth forth : infomuch; as that that which remainech and flayech behind in the veffell, tafteth no berter than common water, hatiing in it no force or vertue. On the contrarie, the firft that diftilleth of Vineger tafteth minthing as all, faue onely that it fiewerh it felfe fomewhat more in his earchie paris by the alceration of his qualitie (for Vineger is no other thing but a corrupted Wine, madé cager by putrifaction:) for indeed histrue, naturall, and proper qualitic of eagernefle and fowreneffe, as alfo the force and frength therieof, itaycth behind witti thar in the veffell, till after the firft water be paft. And by chis it appeareth, that that which remainech in the Wine after the firf diffillarion of it, fhould be called fiegine ; as thac fhould allo which comineth out firft in the diftillation of Vineger, be called flegme.of Vinegei. Wherefore, to haue good diftilled Vineger, afier you haue pur it in like quantitic (as we hauc faid of Wine for to make Aqua-vitx) into he Seillitorie, you mufl let the flegme (that is to fay, the watric humour) diftull, and fer it afide in fome veffell by it felfe: afterward, when the Vineger Thall be confumed vnto the third or fourth part, and that it fhall rellifh in tafting of the diftilling drops, that the eager parts of the Vineger begin to come, it will be good to fet that afide to ferue for infufions: and then afterward to encreafe the heat of your fire a littic, atid fo continue your diftillation, vntill fuch time as the water begin to looke red, and to haue che confiftence of Honey or of Pitch, and then you may be bold to fet it alide for your fpeciall vfe, not in medicine, but otherwife in all things concerning mettals and corrofiues : for this water making the third alteration in diwould be difilled in fhe fane velf ill Rof languine part of Vineger. Vineger a/hes or hot fand, rather than inc Maries baith. In like mannier, and afeer the fame fort, you fhall diffill Vineger of Rofes, of Elders, of Cloues; and other things. Di-

Fionty difilited, The manner of diftilling of honic is fuch. When the honie is once well purified, put it in fmall quanticicinto a ftillitorie (for in a great quanititicie vvould fwelloyer, after that is thould orice feele the heat) diftill it in Maries-bath with a gentle and warme heat : the water that commeth firff forth, is the flegme, which mult be kept by it felfe for to colour and make long the beard and haire. Afterward increafing the hear a little, there will come fortha watcr of a yellow, and as it were a golden colour',
which you may keepe in another veffell, feeing it is goud to cleanfe vounds both Ballow and deepe ones: your diftillation continuing, there will come another vvater high coloured and more red than the former, and then if you doe veell, you fhall change the heat of the vvater into the heat of the afhes or fand, that is to fay, that you fhould remoue your Still, and fet in a thes or fand cuen almoft vp to the verie mouth, and that there be not aboue three inches in bredth betwixt the fire and your Still, continuing to increale your fire, and to make it bigger than it was before, and by this meanes there will come forth a water more clammie than the former, and may be called the oyle of honie. After this manner you may diftiill turpentine, and fuch other Tarpentine dex. thicke and clammic liquors. Indeed to diftill fuch thicke liquors, vvere better to be fillud, done by a retort, rather than in Maries-bach, as we will manifeft when we come to Speake of the diftillation of oyles.
For to diftill the bloud of a male Goat: Take the bloud of a young male goat be- The lloud of a ing vvell fed, but not that bioud vvhich fhall come forth firft, nor that which thall male Goast dis be laft, but that which flall come forth in the middeft: let it ftand and feetle for fome time, and then caft out the vvater that thall fwim aboue: after vvith a tench or twelfth part of falt,ftir it vvell a long cime, and worke them together very throughly; this done, put it vp into a veffeli well fopt and luted, and bury it in a dunghill of horfe-dung for the fpace of fortie daies: afterward diffll it ofientimes ouer, powring it ftill againe and againe vpon the droffe or bottome of the diftillation flaying behind. After you haue thus diftlled it foure or fue times, you fhall have a maruailous water, and yes it will be better if it be fet in horfe-dung fortie daies moe after that it is diftilled. This water is fingular for the breaking of the ftone.

The bloud of a young man is diftilled in the fame forr, but the man muft be of a good complexion, and found bodic, of the age of twentie yeares or chereabouts, of a vvell fed and flefhie bodic : and if feruech in fteed of reftoratiues vnto thofe vvhich are in a confumption: it is good likewife againft rheumes and diffillations faliing vpon the joynts, if the difealed places be fomented therewithall. Howbeit I do nor greatly approue the diftilling of mans bloud for any fuch end, fecing it is an vnworthie and heynous thing, and not befeeming Chriftians, and a ching likewife which in themiddeft of fo many other helpes may eafily be fpared. See more amongft our fecret medicines.
The bloud of a Drake is in like maner diftilled againft poyfon : and after the fame fort may the bloud of a Calfe, Badger, or Hare be diffilled.
You may diftill milke alfo after the fane manner that A qua-vitx is diftilled. It is reporred, that in Tartarie, the water of diftilled milke makeeth men drunke:fuch milk therefore muft be good and fat, fuch as is the milke of a heyfer. Some phyfitians hold that diftilled milke is good againft che jaundife, as alfo againft a quartaine ague, if it be diftilled with the like quancitie of Wine.
The milk of the the goats is of diftilled, to ferue for the cleanfing of the vicers of the reines and bladder, whereunto the milke it felfe would ferue a great deale better, if they be fed for the moft part with burnet.
Mans dung is diftilled in a glaffe fillitorie in fuch manner as A qua-vitę is diftilled : the vvater that it diftilleth (efpecially if it be of the dung of a red or freckeled man) is foueraigne good to heale and cicatrize deepe, hollow, old, and rebellious vlcers, and to take away the fpots of the eyes. Takenalfo in manner of a drinke, it deliurerech from the Falling-fickneffe: and in like fort if the head be rubbed therewithall, ir deliuerech alfo from the ftone of the reines and bladder, and from the dropfic, and doth them verie much good that are bitten of a mad dogge, or of other venimous beatts. Notwithftanding whereas fuch water fimplie and without any manner of mixture diffilled, doth retaine the fmell of che faid excrement, it will be good, to the end to giue it fome good tafte, to clap to the end of the nofe of the Still fome nodule or litrte knot of linnen cloth contayning muske in it, or elfe to annoint the head wvithin vuith the faid muske or fome other fuch like thing that is of a good fauour,
$\qquad$

The foine: Mrans blond de filled.

bebloud of a Drake dijilikeds Disilied milles The vertues of dijitiled millgo.

And thus may the dung of kine or pigeons be diftilled; the diftilled water whercof is good to breake the flone.

> C н A P. L XV II. Of the manner of distilling of liuing creatures, or their parts.

To difill liuing thingso
 O diftill the bodie of any bealt, you muft firft ftrangle it, that fo it may not fhed any bloud, and atecr take away all his fat (if he haue any) and the entrailes: then chop the flefh fmall, and caft vpon it the tenth or twelfth part of falt, and to diftill it in Maries-bath, or vpon hot afhes

Thewater of a forke. after the manner of Rofes. Thus the young and render ftorke which did neuer flye a dram of amber : the water that commeth thereof is excellene to make liniments and fomentations in palfies and conuulfions. After the fame fore is the pie, frog, fnailes, ants, liuers, and lungs of calues, of a Foxe, and other fuch like beafts difflled : howbeit, vvithout any fuch long and teadious preparation they may be diftilled by and by after the manner of other vvaters, as vve vvill forthwith declare in the diftillation of reftoratiucs.

The vvater of $S$ wallowes: Take $S$ wallowes the weight of fixe ounces, and cafto-
water of Swal. lowes. reum an ounce, let them infule a whole night in vvater, and put into a E Embecke, be diftilled : This vvarer is fingular to preferue one from the Falling.ficknefle, ifit be taken butonce a moneth to the quantitie of two fpoonefulls, and that in a morning fafting.
The flefh of beafts is diftilled on this manner : Cut and chop the flefh fmall, incorporate and ftampe it vvith a tenth part of corrmon falt: after put it in a veffell (like visto a gourd) vvell fopped, that fo you may burie it in the carth, fee and compaffed round about with vnquenche lime, and dung of horfes halfe rotten, to be digefted in the fame for the fpace of a monech, or thereabout, during vvhich time you fhall vvater the faid vnquencht lime and dung often with vvarme vvater to ftire vp their heat, and you fhall renew the lime and dung three or foure times euerie weeke: for you mult thinke that for vvant of heat, the flefh might putrifie in fteed of digefting. And after they haue beene fufficiently digefted (which you may know by feeing the groffer parts feperated from the more thinne and fubcile) the veffell Thall be taken out of the dunghill, and the head of a Still fet therelspnn, the nofe or fnoue bcing vvell luted, and lo it thall be difililed in Maries-bath diuerstimes ourr, powring the diffilled vvater againe vpon the erfidence or droffe remay wing in thc bottome, ,o of a s you redifitili i.. And after the fifth difililation, you fhall fe fafide the
 of a quinteflence.
wazer of Egges. As ivell the vvhites as the yolkes of egges are diftilled after the manner abouefayd: but they muft not be digefted in the dung aboue fiue or fixe dayes at the moft.

The vvaters thus diftilled are more than reftoratiues, hauing the vertue to encreafe the fubftance of the bodie and members, as naturall flefh and nourifhment doth.

## Снар. L XVIII.

## Of the manner of difflling of restoratiwes.

(1)Eftoratiues are prepared afer diuers forts, notwithflanding the moft v- Tgiporatiusti fuall and beft is thus: Take che flefh ofa Veale, Kid, or Weather, cut and chopped as finall as poffibly may be : or elfe take muifculous flem, which is called the vvhires of capons, pullets, fat and well fefhed hens, after they haue beene well hunted and tired, cut likewife and chopped fmall : put vnto this flefh, calues feet, peeces of gold, or rather the thin bearen leaues of gold : pue all in a glaffe Still well luted with mortar made of flower, whites of egges, and a little mafticke : into this Still, you fhall caft (for the giuing of fome grace vnto the diftillation, and fomewhat to mitigate the heat which it might get by the fire) halfe a handfull of cleane barley, a handfull of dric or new red Rofes, which haue beene infured in the juice of pomegranates or rofe. water, and a litele cinnamome : place them all in the Still, as it were after the manner of lietle beds, and frew thercupon the powwder of the eleçuaric of cold Diannargarion, or of precious fones, and a litele coriander prepared and finely powdred to difcuffe and wafte all windie matter. If you would make your reftoratiues medicinable, you may adde thereunto things concerning the difeafechat preffeth, as rootes and hearbes refpecting the head, in the difeales of the head, as betonie, penniryall, ftechados, organie, fage, and others fuch like: for the difeafes of the reines, the rootes and planes that are good to breake the flone : for the Falling. fickneffe, the feed of pionie, and mifletoe of the oake : for the quartaine ague, polopody, folopendrum, and the rootes of Tamariske : for the French difeafe, the roores of gentian, enyla campana, and the wood guajacum, and fo of other things : yet it feemeth vnto ime that it were better that the cordial powders Thould nor be mingled among the reft, for feare that their force, which is thin, fubtile, and verie fragrant, fhould euaporate through the heat of the fire, and that it would be farre better to fraine the difillation through a linnen cloth that is verie cleane, and which fhould haue the cordiall powders in the bottome of it : there may likewife be added a quantitie of Treacle,with fome conferues, as occafion thall be miniftred : the matter chus difpofed of, it fhall be difilled in a flillitoric of glaffe well luted (as we haue faid) and in Marics-bath; or eife in afhes, grauel, or hor land: for by this meanes the diflillation vvill tafe leaft of the firc. It will be good before the flefh be put into the fill to be diffilied, that they fhould haue boyled a boyle or two in a new earthen pot, to take from it the grofle excrements hanging about the fame. Againe, it muft be remembred, that tif therebe any gold put into the diftillation, that it will be better to put infuch as is wrought into leaues thin groffe peeces: becaufe that groffe peeces in refpect of their folideneffe confume bues verie little, and with nuch adoe. This is called a diuine reftoraciue, and muft be giucan vnoo che ficke The dinine erês partie prettie and warme.
A nother manner of refloratiue afer the Italians fafhion:Take a Capon,or a good Henne, which yet neuer laid egges, let her or him be pulled aliue, that fothe bloud may be firred and difperfed throughout the bodic : after you haue pulled them, take out the guts, and afterward ftampe bones and all togecher in a Mortar, putting thereto as much crummes of new bread as there is flamped flefh,pound all together with a liandfull of Scabious, either greene or dric, and the weight of a French crowne of the leaues of gold, Ice it all ferte a whole night, atter diffill it, add ing thereto three pound of verie good Wine, fuch as is of a ripe Grape.
Another manner of reftorative: Boile a Capon, or fome fuch other flying fowle, Another refing whole and entire, with Borage, Buglofle, Scariole, Endiuc, Lettuces, or other fuch like, ratike, hearbes, as fhall be neceffaris in refpect of the difeafe: and when it hath boiled till it feme as rotten with boiling, take the broch or fupping, and put it inso the ftillitorie,
after
afterward put thereinto alfo the flefh of parrridge, hen, or other fuch flying fowle cut and chopt fmall, and adde vnto thefe fuch other matter, as you fhall know to be neceffarie for the prefent difeafe, as conferues of rofes and bugloffe, damaske raifins, the powders of the electuaries of precious fiones, aromaticum rofatum, and fuch like things: and finally, diftill them afier the manner aboue fpecified.

Anosher reflo

Some there are vvhich vvill not make any reftoratiues buc of capons-flefh, the oldeft they can gee, fuch they ftrangle and plucke by feather and feather, not vfing the helpe of any hot $v$ vater, then they take out the entrailes and chop them fmall : adding thereto flowers or conferues of buglofte, burrage, damaske raifins, mundified barley whole, coriander-feed, pearles, powder of the electuarie diarrhodon, or fome other like vnto it, and the leaues of gold, they diftill all together, and caufe it to be giuen to ficke perfons, women in child-bed, and old folke.

To make a reftoratiue in florter time, and that vpon the fudden, with leffe coft, Sently. charges, as alfo paine and labour : chop your flefh fimall after the manner alreadie deliuered, put it into a glafle viole or bottle of a fufficient bignelle, and in fuch fort as that all your pecces of flefh be flrung or put vpon a double threed and hold one by another, and the double threed vvereupon they hang be vvithout the bottle, which muft be well fopt aboue with alinnen or cotten cloth, wet in a mixture made vwith whites ofegges and barley flower: fet this bottle in a caldron full of water, boyling at afmall fire, and there let it fland foure houres more or leffe, vntill fuch time as a good part of the flefh bee conuerted into moiflure: See that the bottle fland in the vvater vp to the necke, and that it touch rot the bottome of the caldron, and vvithall vvell flayed vp on euerie fide, that fo it may not llip or bend more one vvay than another. When the foure houres are fpent, rebate the fire gently, that fo the bottle alfo may coole by little and little, , vvhich if fo bee that you fhould take all hote out of the water, it vvould breake prefently. Afterward, vnfop the bottle vith vvarme vvater, if you cannot vvell otherwife, and then draw forth the ftring and the flefh foftly, that fo the liquor may remaine alone: fraine the vvater after the manner of Hypocras, and aromatize it vvith Sugar and Cinnamotne, that fo it may be giuen to the ficke thatat are vvafted. You may after this mantner make reftoratiues fuch like as you thall thinke good, either cheaper or dearer, more or leffe pleafant and delicate, and more or leffe medicinable, as occafion may require.

## Chap. LXIX. <br> The manner of diftilling compound waters.

Compornd rad. ters.

Thre forts of commoncom. pound waters.

Sage water compounded.

Turnep watey compounded.

Water ojangelica componnBed.
will diftill from them a fingular water againft the Falling-lickneffe, if it be taken in Falling fickneri: the quantitie of two or three fpoonefulls.
Water of Celandine : Gather in the beginning of the moneth of May the leaues of celandine, veruaine, rue, and fennell, pound them, and draw from euerie one of them three ounces of juice, vvhich you fhall mix together : pur vnto them fome buds of rofes, of fugar-candie chree ounces, of verie good Tutia foure ounces, and as much of dragons bloud : diftill them all in a fillitorie: This vvater takech away the redneffe and fpots in the eyes.
Water of the Vine: Takethe vvater chat difillech from the vine-flockes at fuch time as they are cut, vvhich is in the Spring-time, diftsll it with like quautitie of honie : this vvater healech itchings, heat, and redneffe of the cyes: the verie vvater of of the vine alone vadiftilled soch the like.
Rofe-water : Take rofes chree parts, fennell, and rue, of each one part, fhred them Tofe mater fmall, and mingle them veris well together, afterward diftill thein, and lee the diftulling vvacer fall into a veffell wherein is a hand full of the forefaid hearbes, this vvater preferuech the fight, if the eyes be vvaffod therewith in Sommer.

Fater of clelan. dize compound Water of Eye-bright: Take Celandine, Fennell, Rue , Eye-bright, Veruaine, the fight red Rofes, of each halfe a pound, Cloucs and Long- pepper, of each two ounces: compournded. bruife chem all, and diftill them in a glaffe fillitiorie. This vvater is fingular good for a vveake fight.
Water of Rofemarie : Take Aqua-vitæ diftilled of white Wine, the difilled vvater of rofermaric and fage, of each fiue pound, of fugar two pound : in thefe infufe of the flowers of fage and rofemarie for the fpace of cight daies, of each two ounces, fraine chem, and keepe the water to heale che fiftulaes of the eyes.

Rofémaric wa: ter crmpounded - Water of Treacle : Diffill in a glaffe fillitorie Treacle, with a like quantirie of A. qua-vitx and Vinegar : This vvater is good to touch the vlcers and rawneffe of the mouth vvithall, efpecially if there be added vnto it a lietle bule-armoniacke.
Anocher Treacle water: Takeold Treacle a pound, of che roores of Enula campana, Gentian, Cypers, Tormentill, of each an ounce, of bleffed Thiftle halfe an ounce, of conferues of Borage, Bugloffe, and Rofemaric, of each an ounce, infufe them all together in three pints of white Wine, a pint and a halfe of Cefterne water, and two pints of Rofe-water: diftill them.
Water of Cloues: Take equall parts of Cloues, Ginger, and flowers of Rofemaric, infure them in verie good Wine the fpace of eight daies: diftill the whole: This vvater comfortech the ftomackc, affuagech the paines and vvringings of the bellie, killech vyormes, and makech fat folke to become leane, or maketh fat the leane, if they drinke it mixt with fugar.
Water of Saxifrage: Take of the juice of Saxifrage two pound, of the juice of Pearlewort, Parlley, Anife, and Clotburre, of each halfe a pound, of vwhite Vinegar eight ounces', diftill them all : This vvater drunke in the morning, breaketh the tone.
Water of Swallowes: Take Swallowes and driechem in an ouen, make them into water of Swash powder : mixe it vith a lietle Caftoreum, and a little Vinegar, diftill it all : thiswa- cowes, ter curech the Falling-fickneffe if if be drunke foure mornings.

Water of horfe-taile : Take horfe-taile, plantaine, red roles, Winter-cherrie.ber- Horfe-taile mas ries, rootes of holihockes, and fcraped licorice, of each an ounce, oŕ bole-armoniacke ${ }^{\text {ter. }}$ halfe an ource, of the feed of yourds and cucumbers, of each three drams, of the feede of white poppie, fix dramis, of the feed of quinces halfe an ounce: Infufe them all in vihay made of goars milke the fpace of two daies, aferward diftill the vvater: which will Lerue for the vlcers of the reines and bladder, it thure be foure ounces of it taken Vleers of the vvarme in the morning.
Water of corncflag : Take equall parts of corneflay, hy flope, and fouthernewood, cormefag mex flatnpe them throughly, and leaue them fo a certane time, afterward diffill them: ${ }^{\text {ter. }}$ this vvater prouoketh womens termes, and killeth wormes in young chiidren. Burnet-water: Take che feed of burnct, parfley, fmallage, the leaues and rootes of Burnsswaserd
clotburre and fmallage, of eueric one equally: ftampe all together, after put thereto of draggons bloud anounce, and a little good vinegar : let all ro infufetogether a certaine time, afterward diftill it: this water hath a meruailous vertue againft the fone and grauell.

Stone
Gravell.
$\mathcal{A}$ water for the eyes.

A fingular vvater for the grauell, wwhich the deceafed CMonfieur. de Tillet had great vfe of vvith happie fuccefle: Take the rootes of parfley and tennell made verie cleane, and the vvooddie part taken ont, of each foure handfulls, boyle them in twelue pintes of riuer water : vvhen they are halfe boyled, put thereto of the tender buds of Mallows, holihockes, violers, and fea-weed, of each foure handfulls, boyle all together to the confumption of the halfe, after fraine them through a white napkin: diftill them, putting thercunto two pound o! Venice curpentine.

A fingular water for the eyes: Take celandine, vcruaine, beronie, eye-bright, rue, and fennell all new and frefh, of each two handfulls, ftampe them together, fprinkling them with halfe a pound of white Wine, preffeout the juice, and afterward infule in the fame pepper and ginger made in powder, of each halfe an ounce, of faffron three drams; of myrrhe, aloes, and farcocol, of each one ounce; of verie good honie a pound : diftill them all in a glafe ftilliterie at a fmall fire, and keepe the water for the fpots of the cyes.

Take foure otinces of the pills of Oranges dried in the fhadow of the Sunne fixe dayes: nutmegs, and cloues, made into powder either of them by themfelues, of each fourc ounces, infufe the faid aromaticall powders in a glaffe viole with refewater the fpace of feuenteene dayes in the Sunne : afier caft vpon the faid powders, the rindes of oranges, which you fhall lee fteepe there a certaine fpace of time. Afterward, take of new red rofes gathered two daies before a pound, of the roote of cyperus halfe a pound, of the leaues of rofemarie, hy flop, balme, rofes of the buhh, of each two handfulls, of bay-leaues a handfull, lay them all to drie in the Sunne for two houres, after infufe them in rofe-water the fpace of three houres: this done, put them all into a Still after this manner. In the bottome of the Still make a bed of one pound of new red rofes, then next a bed of aromaticall powders and the rindes of oranges, in the third place a bed of Violet flowets, and in the fourth place the laft and fourth bed of the afore named hearbes : diftill them all in Maries-barh with a gentle fire. Adde vnto the diftilled water two pound of rofe-water or thereabout, fo that it may be in proportion equall to the third or fourth part of the water drawne out by diftillation. This vvater taken in the morning the weight of a dramme, keepeth the bodie found, luftie, and reneweth youth. It is fingular for the paine of the head, ttecth, bellie, gripings, palfie, conuulfions, apoplexie, faintings, and other fuch cold difeafes. This is the vvater that is fo much efteemed in the courts of kings and princes, and amongft the great and renowned ladies.

An Ailome wa. ter.

## Purging200.

 ters.Catholicum and Diaphoenisom difitlued.
water of Rhus barbe diffilled.

An Allome-water: Take Verjuice, the juice of Plantaine and Purflaine, of each a pound, feuen whites of egges, ten ounces of Roch-allome, mingle them together, and diflill them. Otherwife, take plantaine,'purflaine,forrell, gourds, nightfhade, and yerjuice, of each a handfull, poune them grofly, nixe therewith ten or twelue whites of egges, pur them all in a glaffe ftillitorie to diffill, mingling amongt them halfe a pound of Allome, as you lay bed vpon bed: this water is good for cankers, for the redneffe of the face, and for vlcers, applying linnen clothes thereunto, that haue beene wet therein.
You may likewife diftill purging waters, in infufing purgatiue medicines both fimple and compound, fecing that they be as new as may be, and that in Aqua-vite, wine, milke, whay, diftilled waters,or conuenient decoctions, and fuch waters vvill haue the like vertues as the purging medicines haue ; thus you may diftill Catholicum,Diaphoenicon, confectio Hamech, and EleCuarium de fucco rofarum: Thus you may diftill rhubarbe, agaricke, hellebor, fcammonic,and fuch ocher purgatiues that a arefound and new.
The maner of diftilling rhubarbe may be chis : take a quanritie of new and greene Rhubarbe, vvhether it be a pound, or halfe a pound, more or leffe, make it into fmall
pieces, or make it into grolfe powder, and vpon it caft of the iuice of Borage and Bugloffe, of each two pound, for one of Rubarbe, infufe them ail together for the〔pace of foure and twentie houres vpoin hot afhes, then diftill them in Stillitorie in CMaries bath.
This diftilling of purgariue Medicines, is for fuch kind of people as are verie delicate, and cannot abide the fmell of the purging medicine to be miniftred otherwife vnto them.

## Chap. L XX.

 Of $\int$ wocet waters particularly deforibed.(5ysWeet Waters ferue ro wath the hands, face, haire of the head, and beard: Sweet sateer. as alfo to make Linnens, Garments, Gloues, and fuch other things, to fmell weec.
Water of Lauander : Take the flowers of Lauander new or drie, be- Lakanderwas Iprinkle or infufe them in Rofe-water, Wine, or A qua-vitx, afterward diftill them. ter. The water will be fweeter, if you drie the flowers in the Sunne in a Glaffe-violl clofe fopped, and caft vpon them afterward fome white Wine. And if in the time of want and lacke of diftilled water, you would haue a water prefently made which fhould refemble the fmell of the water of Lauander; caft a drop or two of the Oyle of Spike into a good fufficient quantitie of pure warer, and fwill them well together in a bottle or Glaffe-violl with a narrow necke : This water, though it be not difilled, yet it ceafech not to hane the fweet fmelling fent and fanour that the diffilled hach.

Water of Cloues: Take halfe an ounce of Cloues well bruifed, fet them to infuife water of clowes. in a pound and a halfe of Rofe-water the fpace of foure and ewentie houres, after diftill them in CMaries bath.
The water of fweet Smells: Take. Bafill, Mints, Marierome, rootes of Corne- The water of flag, Hyffope, Sauoric, Sage, Balme, Lauander, and Rofemaric, of each a hand- fwect fmellso full: of Cloues, Cinnamome, and Nutmegs, of each halfe an ounce: then take three or foure Citrons, and cut them in fufficient thicke flices: which done, infufe all this in a fufficient quantitie of Rofe-water for che fpace of three daies, diftilling it all afterward in CHIaries bath at a fmall fire: the diftillation done, put thereto a fruple of Muske.

Water of Rofes musked: Take the buds of Rofes, and cutting out the white, put Refe-mater them into che Stillitorie, and in the middeft thereof, vpon y our Rofes, puta little knot mukedo of Muske, and fo diftill them.
Water of Spike : Take Spike before the flower be altogerher blowne, and ta- water of Spike king away all the wood from it, lay it on a bed within the Stillitorie : afterward, lay vpon that bed a bed of Rofes almolf blowne; and thercupon fome dozen of Clours: but and if you haue not Spike, then you may put Lauander in his place: diftill it at a moderate fire, and with as litele ayre as pomibly you can giue it : And when the diffillation fhall be as good as finifhed, befprinkle the matter with a lirele verie good white Wine, and fo finifhing your diftillation, keepe your water in viols well fopped.

Damaske water: Take two handfuls and a halfe of red Rofes, Rofemarie flowers, Dammash woterr? Lauander and Spike flowers, of each a Pugill: of the fprizges of Thyme, flowers of Cammomile, flowers of fnall Sage, of Penyryall, and Marierome, of each a handfull: infufe them all in white Wine the fpace of foure and ewentie houres: then put them into the Stillitorie, fprinkling it with verie good white Wine, and Icatter thereupon this powder following: take an ounce and a halfe of well chofen Cloues, an ounce of Nutmegs, of Beniouin and Styrax calamita, of each two drammes, make
them in poiwder : The water that fhall be diftilled, muft be kept in a veffcll verie well It topped.
water of There is alfo made a verie fweet water of cleare Myrrhe, if it be new, gummie, myrrbe: and divided inro fimall gobbets, and fet to fteepe in the juice of Rotes fix times as much in quanticie as the Myrrhe : It muft be diffilled vpou hot affes at a fmall fire; for and if you fhould encreafe ir, there would come forth oyle with the water. Such water being dropped but onely one drop of it into an hundred of.well or fountaine water, makech it all to fmell mof fwecely.

Rofe-water fweetened with Muske : Take a Glaffe-veffell of the fafhion of an
Rofe-mater
Muskik. Glaffie-Stillioriie, or in an earthen one verie well baked and glafed, hauing bus
a fmall fire : you may alfo puts vnoo them the flowers of Citrons, if you thinke good. The water muft be kept in Glaffe-bottles couered with firic Mats, and well fopped.
The counterfeit swaterof Orange flowers. the Stillitorie, and aboue it another bed of the flowers of Lillies : afterward againe another of Rofes, and then another of the flowers of Lauander, and then another bed of Rofes againe: and betwixt cuerie one of thefe beds caft and fow fome bruifed Cloues, and in the middeft of all make a litele pit, in which you fhall put certane graines of Muske, or Ciuet, or Ambergreece, or fome fort of perfume : afterward diftill them all at a litele fire : Referue the water in litele boteles, couered with fine Mats, and well fopped.

A fweet frmelling water: Take Marierome, Thyme, Lauander, Rofemarie, fmall A maset fincl. ling water. Vrinall, that is to fay, wide below, and ftraight aboue; thercin put twelue graines of Muske, or more, and ftop it clofe with good Parclimenc, fetung it in the Sunne for foure or fiue daies: then take another vefliell of the fafhion of the firft, which you fhall fill with Rofes dried a verne little, and flamped : then ftop that veflell alfo with a verie thinne Linnen cloth, or wih a Strainer: afterward put the mouth of the veffell whercin the Rofes be, into the mouth of the other wherein the Muske is, lute them well together, and fer them in the Sunne, in fuch fort, as that the veflell with the Rofes may fland aboue that wherein the Muske is, and that in fome window or fuch other place, where the Sunne fhineth verie hot: and by this meanes there will a water diftull downe vpon the Muske, which will be good cither to be vfed alone, or mingled with fomte other. Orherwife: Take twentie graines of Muske, Nutmegs, Cloues, Galingall, Schxenanthum, graines of Paradife, Mace, and Cinnamome, of each an ounce, bray them all togecher, and put them into a Stilliorie with a pound and a halfe of Rofe-water, then let them ftand fo foure or fue daies, and afterward diffill them.
Water of Oranges : Take the pilles of Oranges and Citrons when they are greene, of each halfe an ounce, of Cloues fiue or fixe, of the flowers of Spike or Lauander newly gathered, fix ounces, infufe all togecher in fix pound of Rofe-water the fpace of foure or fiue daies, afterward diftill chem.
Water of Orange flowers: Take flowers of Oranges, and diftill them in a

The counterfeit water of Orange flowers: Take the buds of red Rofes, the moft double that can be found, but take their yellow from them, make a bed thereof in Penyryall, red Roles, flowers of Violets, Gilloflowers,Sauorie, and pilles of Oran- ges, feepe chem all in white Wine, fo much as will fwimme aboue the faid hearbes: afterward diftill them in a Stillitorie twice or chrice : keepe the water in bottles well ftopped, and the droffe or refidence to make perfumes.

# the Countrie Farme. 

## Chap. LXXI.

> The fafbion of distalling water for Fukes.

(is)Ow, albeit that a good Farmers wife muft not be too bufie with Fukes A water for and fuch things as are for the decking and painting of the bodie, be- Fukes. caute her care muft wholly be imployed in the keeping and encreafe of her houlfholdd-Auffe; notwithfanding, I would not haue her ignoranis of the manner of difilling of waters for Fukes : nor that thee fhould make vie of them for her felfe, but that finee may make fome profit and benefir by the fale thereof .... vnto greas Lords and Ladies, and other perfons, that may attend to be curious, and paint vpthemfelues. Now all fuch waters in generall ferue for three purpofes : The The v/ss of was one is to fmooth and keepe neat the skinne, as well of the face as of the other parts of ters for Fwhes. the bodie : The other is to colour the haire of the head and beard : and the third, to make white the teeth. Some of thefe are fimple, as the water of the flowers of Beanes, of Strawberries, the water of the Vine, of Goats milke, of Affes milke, of whites of egges, of the flowers of Lillies, of Dragons, and of Calues feet: others are compounded of manic ingredients, as you fhall know by the briefe collection that wee fhall make of them.
Water of Strawberrics: Take ripe Strawberries, fer them to putrifie fome cer-w water of Straw: taine cime in an earthen veffell, putting thereto a liettle falt or fugar, and afterward di- berries. ftill them: This water will cleanfe away the fpots of the face and the fpots of the eies, caufed either of hot or cold humours: it will be more effectuall, if you infure the Strawberries in Aqua-vitx before that you doe diftill them.

Water of Beane. flowers: Take the flowers of Beanes, infufe them a day or two in water of Beanes. white Wine in a Glafte-violl in the Sunne, afterward difitill them : This water cakech flower. away the fpots of the face, if if be wafhed therewith morning and cuening.
The rootes of great Dragons diffilled, makech a fingular water to take away the The water of prints and marks which the pocks haue left behind them: fo doth likewife the diftil- Dragonso led water of the root of wild Vine, of Corneflag, Sowbread,Coftraarie, Angelica,EJicampane, Turneps, wild Cucumbers, white Onions, Gentian, Capers,Lillies,Madder, Alkane,, Cinquefoile, Crowfoot, Tafell, and manie other hearbes:

Water of Guaiacum: Take Guaiacum, and cut it in fmall pieces, infufe them a cer- water of taine time in the decoation of other Guaiacum, and a chird part of white Wine, after- Guaiacumb: ward diftill them in a GlaffeStillitorie:The water that fhall diftill thereof is fingular for the taking away of all fpots out of the face, efpecially if you ioyne with it, in the diffilling of it, fome Lillic roctes.

The water that is diftilled in equall quantitic of the leaues of Peaches and Wil- The water of lowes, taketh away che red ( pots and rubies of the face.

The water that is diftllled in equall quantitie of the whites of egges and iuice of Limons, fcourech the face,and makech it faire. In fead of this water, if you haue not Water of whites the fit meanes to diftill $i t$, you fhall take feuen or eight Limons, or Citrons, which you of egges. Thall cut into quarters, and after infufe them in whire Wine in the Sunne.
Another water: Take fix ounces of the crummes of white bread, infufe them in water of crums two pound of Goats or Affes milke, mingle them diligently together, and afterward of breado diftill them.
Water of Snailes: Take white Snailes about thirtie, of Goass milke two pound, of water of the fat of a Pigge or Kid three ounces, of the powder of Camphire a dramme, diftill Snailes. them in a Glafte-Stillitorie.
Water of the whites of egges : Tike the whites of new egges,about twelue, fine water of sts Cinnamome an ounce, and Affes milke twelue ounces, diftill all in a Glaffe-Stillito- mbites of egges rie: This water maketh a woman looke gay and frefh, as if thee were but fifteene yeares old.

Awater mas. sing white.

" to make chem into fine powder, afterward infufe chema a night in an equall portion to make ehem into fine powder, afterward infufe chema night in an equall portion

of the diftilled water of fweet Almonds, Snailes of the Vine, and whice Mulleine, and put chercunto likewife the like weight of white Honcy: diftill all together in a Stillitoric.
Water of crums
Water of bread crummes compounded: Take che crummie part of Barly bread, of bread.
$\begin{aligned} & \text { indifferent betwixt white and blacke, two pounds, of Gaats milike three pounds, of } \\ & \text { white Wine halfe a pound, of the foure great cold feeds of each wo ounces of the }\end{aligned}$ - white Wine halfe a pound, of the foure great cold feeds of each two ounces, of the flowers of Beanes, or dried Beanes and Cich Peafe, of each two pound, of Rice halfe a pound, of the flowers of water Lillies and white Rofes of each two pugills, the a pound, of the fowers of water rillies and white Rofes of each two pugills, the
whices and yolkes of twentie egges : diftill them all in CTharies barh, and the water will be a greai deale more excellent, if you pus vnto the diftillation fome Venice Turpentinc.
Water of the broch of a Capon: Take of the broch of a Capon,Henne, or Pullet,

Water of the
broth of a ca pon. three pound, of the iuice of Limons one pound, of white vineger halfe a pound, of the flowers of Beanes and water Lillies of each three pugills, the whites of two or three egges, the weight of two French crownes of Camphire, diftill them all: This
water is of maruellous vertue to take away the fpots and faines of the face, and other three egges, the weight of two French crownes of Camphire, diftill them all: This
water is ofa maruellous vertue to take away the fpots and faines of the face, and other parts of the bodie.
The water of Branne: Take Branne the beft that you can find, fiff it diligently, and afterward temper it with frong vineger, put them into a Still, and caft vpon them tenne or twelue yolkes of egges : diftill them all : This water maketh the face cleane, gliftening, and verie faire.
Afwet pazer.
Another water: Take the flower of Beanes and water Lillies of each a pound, of bread crummes, Rice flower, flowers of Corneflags, of each fix ounces, of Honey a pound, of white Wine and water of the fountaine of each chree pound, let all be well mingled toyehher, and afterward diftill them in CWaries bath.
Axother water.
Take the rootes of Corneflag and wild Cucumbers of each three pound, of the rootes of Holihockes and Lillies of each two pound, of ripe Grapes halfe a pound, of Beane flowers and leaues of wall Pellitorie of each a pugill, of water Lillies and Mallowes of each a handfull, of the crummes of Barly bread a pound, infure it all in white Wine or in the hourchold flore of Goass milke, putcing to the infufion halfe an ounce of the rootes of Turneps, and of the foure great cold feedes another halfe ounce, of che vrine of a litele girle halfe a pound, let all be difilled together : This water is fingular good to take away freckles, fcarres, the prints of the Imall pockes, and all other fpots of the skinne.
A water vfed amongft the Ladies of the Court, to keepe a faire white and frefh in their faces: Take a white Pigeon, a pint of Goats milke, foure ounces of frefl Butter, foure pugills of Plantainc, and as much of the roots and leaues of Salomons feale, one ounce of Camphire, halfe an ounce of Sugar candie, and two drammes of Allome, let all fette together, and aferward diftill it.
Another water: Take of the crummes of white bread two pound, of the flowers of Beanes one pound, of white Rofes, the flowers of water and land Lillies, of euerie one cwo pound, of Goats milke fix ounces, and of che flowers of Cornflag an ounce, dintillall: this water is good to keepe che hands cleane and white.
water of comes milks.

A fingular water to make one white: Take the dung of fmall Lizards, or of the Cutte fifh, the Tartar of whire Wine, the Chauing of Harss-horne, white Corall, the flower of Rice, as much of one as of another, beat them a long time in a Morrar, three pound, of the iuice of wimons one pound, of white vineger halfe ap of two or Take Cowes milke in the moneth of May (in other moneths it is not worth anie thing) two pounds, foure Oranges, and fiue Citrons, Roch Allome and fine Sugar hooues of their hoofes) cut the reft in pieces, that is so fay, the bones, finewes, and marrow, and fo diftill them: This water maketh the face Vermillion like, and takech away the blemifhes of the fmall Pocks. of each an ounce, cut che Oranges and Citrons into fmall quarters, and infufe them in milke, afterward diftill them allithis water is good to keepe the colour neat \& frefh

Take

## the Countrie Farme.

Take a certaine number of egges, the neweft you can get, and lay them to fteepe wateroje egges: in verie ftrong Vineger chree whole dayes and nights : afterward pierce them with a pinne, in fuch fore, as that you may caufe all the water that is within them: to come forth: and then diftilling this water, you fhall find it excellent to beautifie the face.

- Likewife to wafh the face with the water of Almonds, or Sheepes or Goats milke, A water to coi or elfe to lay vpon the face, when one goeth to fleepe, a white Linnen cloch dipped: loart or paint in thefe liquors, is auaileable for the beautifying of the face.
A nother water : Take cwo Calues feet, boyle them in Riuer water to the confumption of the one halfe of the water, put thereunts a pound of Rice, of the crummie part of one white loafe, kneaded with Goats milke, two pound of frefh Butter; the whites of tenne new layd egges, with their fhells and skinnes, diffill itall, and in the diftilled water puta inete Camphire and Roch Allome:this watce makech the face verie faire.
Water of Lard: Take fuch quantitic of Lard as youl fhall thinke good; and The water of fcrape it as cleane as poffibly you can: a feerward flatupe it in a Marble Morcar, fo Lardo long, as that in become like pafte, and then diffill it in a Glafle-Sillitorie : The water will be white, and it is fingular to make the haire of a Straw-colour, and gliftening.

Water of Honey difilled, as wee haue faid before, makech the haire beautifull Water of Hioney)? and long.

Water of Capers: Take greene Capers, and diftill them : This water dyeth water of cas. haire greene, if after they haue beene wafhed with this water, they be dried in the pers. Sunne.

A nother water: Take a pound of verie good Honey, and of the leaues of male Sothernewood two handfuls, mingle them, and diffill them : This water is good to A painting and make the haire of the head and beard faire and beautifull.
A water to cleanfe the teeth: Take Sage, Organte, wild Marierome, Rolemaric, A water to and Pennyryall, of each a handfull, of Pellitorie, Ginger, Cloues, and Nuemegs, of cleanfe the each the weight of wwo French crownes, put ail together, and water thenn with white tecth. Wine, afterward diftill them.

Another water for the fame effect: Take long Pepper the weight of ewo French crownes, of Pellitorie and Staucfacre the weight of one French crowne, fprinkle them all ouer with halfe an ounce of Aqua-virx, after put an ounce and a halfe of white Honey thereunto, and fo diftill hem.

## С нар. L XXII.

## The manner of difililing per afcenfum and per defcenfum.

L1 manner of diftillation which is made by vertue and force of fire, and Todifitit (wsis fuch like hear, is of two forss: the one is made by raifing vp of vapours vp is called) pers on high, which the Alchymifts call per afcenfum : and there is another afcenfum. which is after the manner of falling ot fweat, or defluxion of humors defcending downeward, and this is commonly called per defcensum. Waters are for che moft part difilled by che way called per afcenfum; as Oyles are for the moft part diftilled per defcenfum: I fay for the moil part, becaufe that certaine Waters are fometimes diffilled per def cenfum, as alfo iome Oyles per afcenfum, fuch as are the Oyles drawne of leanes, flowers, fruirs, feeds, and other fuch like marter.
The waters that are diftilled per defecinf fum, are chiefely fweet waters, fuch as are what mammer: made of flowers and leaues of a good fmell, which being fo difilled, doe not euapo. of olles are rate or fpend their beft vapour fo quickly by diffillation, and thereupon they retaine defliled pers in better fort, and for a longer time, their naturall firiell.

## The tbird Booke of

The way is his: Take new Rofes, or other fuch flowers, and put chem in a Linnen Tofe-water di- cloth, fpread and ftretcht ouer a bafon of Braffe, or earth, well glafed: aboue chis bafiilled per def- fon fet another veffell of Braffe, or of earth, in manner of a round Frying-panne, hacenlum. defcenfum.

## Tokill Rats and

Mice.

Another man-
ser of difilling zoaters per def cenfum, and that without beat.

## Water of the

 yellow parts of Violets. uing the bottome couered with hor coales; but therewithall you mult looke, that you let not the fireremaine anie long time vpon the veltell, for feare it fhould grow too hot, and that the water fhould-fmell of burning. This way is better than anic other, to make a great deale of water in a fhort time, and without great charges, of flowers and all fweet fmelling, cooling, and aftringent matter.Afterfuch fort is the Sea-Onion diftilled: Cut in flices the Sea-Onion, put it into an earthen veffell which fhall haue manie fmall holes in the bottome, let the bottome of this veflell goe into the mouth of another veltell made of earth, and lute them both together verie well, and let the earthen veffell be fet in the earth vp vito the throat, and then lay it round about with coales of fire, thus giue fire vnto the vpper veffell for the fpace of tenne ortwelue houres: it will diftill his water downeward, which if you mixe with flower or bread, you fhall make Paftils, which will be good to kill Rats or Mice, and that quickly, if you mixe therewith a fmall quantitic of Litarge.

You may make your diftillation of flowers per defcensum otherwife, without the heat of anie fire: Take two veffels of Glafte one like vnto another, both of them be-. ing made large in the bottome, and narrow at the top(after the manner of an Vrinall) and fee that the mouth of the one will fit and goe into the mouth of the orher, and then lute them well and clofe together, hauing pur betwixt them a fine thinne Linnen cloth : the vppermoft mult be full of Rofes, or other flowers, fomewhat bruifeds the other muft be emptie: fet them in the South Sunne where it is very hot, and fo it will diftill a water that is very pleafant and fweer.
Thus is Rofe-water (fweetened with Muske) diftilled, whereof wee haue fpoken before in the Chapter of fweet waters : And thus are the yellow parts of Violets diftilled; and the water thereof is verie fingular for the redneffe of the eyes: And thus are the tender buds and thoots of Fennell diftilled, being gathered before the Fennell doe put forth his flowers; the water whereof is very foueraigne for to cleanfe away the filth of the eyes, and to comfort and amend the fight.

## C н a p. LXXII. of the manner of distilling bv the Filtre.

Todifill by the Fithre.

(27He caufes of diftilling by the Filtre we haue before declared, as namely; that they are either the feparation of liquors in generall, or elfe the feparation of liquors, of fuch or fuch qualities, as the feparating of muddie and earthie from the finer and fubtle parts; which is the proper and ordinarie way to diftill iuices which haue a thicke confiftence prefently vpon their cooling after their firt prefling out ; as namely, the iuices of Citrons, Limons, and Oranges: againe, the prudent and expert Apothecarie, when he makech fyrrups of the iuices of Citrons, or Limons, doth firft diftill and ftraine the iuices by a Filtre, before he goe about to difpenfe the fyrrups.
But the manner to diftill by a Filtere, is to haue three difhes, bowles, or bafons, or other veffels, of fuch fafhion as the matter or liquor that you would diftill doth require, and fo placed and feared, as that they may cither ftand higher and higher, or lower and lower, enerie one abouc or vnder another, and the higheft to containe that which is to be diftilled, and the lower that which is diftilled. In the vppermoft fhall be one or moe pieces of Cloth, or of a Felt of fufficient length, and dipt into the iuices, and thefe muft be broad at the one end, and fharpe at the other: the broad end fhall lye in the iuice, and the narrow-pointed end fhall hang without, by the which
the Countrie Farme.
the thinner part of the liquor thall rife and afeend, running downe drop after drop into the veffell below, in fuch fort, as that the muddieft and impureft part fhall fay behind in the other vefliell: and fometimes you muft wring out this piece of cloth, when it beginneth to become blacke, or that che drops diftill but flowly, becaufe of the chicke matter that is carried into it along with the thinne: and having wafhed them, to put them afterward againe into the veffell. If a man be difpofed to diftill one liquor manie times, he may place manie veffels after the manner of fayres, and in euerie one of them, except the loweft, put a Filtre, in the fame fort as we haue faid: for the laft and loweft muft ferue onely to receiue from all the reft.
In ftead of a piece of Felt, the Apothecaries vfe offentimes flecues of Woollen cloth, otherwile called fharpe-pointed Hofe; through which, they purifie and make cleare cheir Sirrups, Apozemes, and Iuleps: Thefe manners of diftillations may fupply the place of that long,redious, and painefull circular diffillation; which fiteeth the Alchymifts beter, than either Councrey people, Phyfitians, or Apothecaries.

Virgins milke is thus made with a Filtre: Take Litarge of Gold made into pow- Vivgins milhei der three ounces, infufe them in fix ounces of white vineger, either raw, or diffilled, or elfe in Squils vineger the fpace of three houres, in a veffell by it felfe : in another veffell fer likewife to infule Sal nitrum, or common falt in common water, or in water of Plantaine, Nighthade, or fome other fir for the purpofe: diftill them by Filtre each of them apare, and after that they be diftilled, mingle them together. This virgins milke is good to heale Ringwormes, and fawcie and red faces.

# A briefe Difcourfe of the diftilling of Oyles and Quinteffences. 

Снар。 LXXIIII.

> Of the profit of dijfilled Oyles and Ouinteßences: and what manner of Ousinte Sences गhall be bere entreated of.

(zatyOw, after our fhort difcourfe of the diffilling of waters, limitted by the matter which Farmers fore will affoord, it fhall not feeme ftrange, or wandering from our fcope and platforme layd downe alreadie; to make fome filight and briefte defription of the difilling of Oyles, to ferue as a patterne and guide to the Miftreffe or good wife of our Countrey Farme, fecing wee are defirous to haue her qualified with all thofe good parts and vertues which Xerophon the Greeke Author doth fo highly efteeme of and commend in a good Hurwife: and namely, that of readineffe and charitable prouifion to relieue her folke and familie, as allo her neighbours, when the cafe of neceffitie, through fickneffe, requirech, by fuch remedies as her Gardens or Orchards may minifter vnto her, with the helpe of a little ordering of them, which fhee by her skill and knowledge may beftow ypon them. And feeing that diftilled Oyles, amongft other reniedies, are found by experience to be the moft forcible and effectuall, the pleafanteft, and of moft fpeedic operation, in the ouercomming of all forts of rebellious difeafes, but chiefely, wounds, vlcers, aches, fwellings, and orher outward accidents; it fhall be verie commendable and befeeming for the Farmers wife, or Mifteffe of our Countrey Farme, to have fome infight into this kind of Diftillation : not that I would haue her to bufie her braine abour the matter much, or otherwife frequent and accuftome it, but euen as a pleafure and recreation,

## The third Booke of

and fo farre forth, as the matter of her Gardens and Orchards onely, or not much more, doe minifter vnto her. For as for the diftilling of Mettals, Minerals, Stones, and other fuch things, which are not gouerned and husbanded with mans handieworke, labour, or skill, they belong rather vnto the Alchymift and extractor of Quinteffences, or other idle or rieh perfons, than vnto a good Husbandman. Now the things that thee may extract and diftill, after the manner of: Quinteffences, are thele.
Of Hearbes: Rofemarie, wild Thyme, Rue, Calamint, Organie, Lauander, $\mathrm{Ca}-$ momile, Sage, Hy ffope, Bafill, Smallage, Mints, Stcechados, Sauoric, Wormwood, Louage, Thyme, Penyryall of the mouncaine, Iua Arthritica, Sauine, and generally all hearbes which are of a hot and drie temperature, and which haue a good and ftrong fmell. nicum, or Wormefeed, blacke and wlitite Nigella, Sauine, blacke Poppie, wild Carrer, and manie other forts of Seedes, which are of good or ftrong fauour and fmell. things that are of a hot and drie temperature.
It is true, that of cold things, fuch as are the hearbes and feedes of Poppic, Henbane, and other fuch: or of moift things, fuch as thofe are which haue a fat iuice; one may, in fome manner, draw an oylie Quinteffence, bur not without great painestaking, and in a long time, and fuch alfo, which in the end will not have the naturall and true force of the hearbe whereof it was made : for it will be cither lefle cold or leffe moift than his fimple, by reafon of the impreffion of the heat and drineffe, fuch as it is, which the fire hath left in it at the time of the diftillation; as alfo for that the Oyle which is gathered of cold or moilt fimples, is rather a waterie, eager, falt-Peter-like, or falt liquor, than an oylie fubftance: Wherefore it is better to diftill cold or moiff fimples by purrifaction, than by refolution made by the worke of the fire.
To make an end therefore in a word, the Oyles drawne of things by Quinteffence, or refolution made by force of fire, are an vnctuofitic or radicall humour, which is, as it were, the life and forme that giueth being vnro the fimple whereunto it-belongech, and that no otherwife than the naturaill forme giuech being vnto all particular things whatfoever; and wherein alfo lyeth the principall force and vertue of she fimple : Io as that if it be once feparated by diftillation, there remainech no other thing of the fubftance of the fimple that is diftilled, but onely his lees, carth, and impurities.

Chapo

## Снар. LXXV.

## What manner of Eurnaces muft be made for the extracting of Chymicall Oyles.

He Furnaces which ferue to diftill Chymicall Oyles, are of diuers fafhions, according vnto the diuerfitie as well of the matter which is to be diftilled, as of the veffels which are to ferue to diftill them withall : and yet the moft common and commodious or profitable fafhion of all is this.

Build vp a Furnace of Bricke, or of Tyle, and fat Earth, or Mortar, or of Playfter alone, and make the fame of a round thape (or at the leaft lee it be fo within) to the end, that the fire being carried $v p$ on high, may difperfe it felfe all ouer in a more equall meafure : and withall, make ic of a reafonable length and thickeneffe, and not more chan three foot high; and bearing a foot round of compaffe and euerie way within at the leaft. There Chall bee allo three feucrall fpaces or roomes in the whole height: the firft, of one foot; the fecond, of a foot and a halfe ; and in the third, all the reft of the Furnace. In the firft roome there fhall be a grate of yron to lay the coales vpon for the making of the fire: in the fecond roome, or loft, there fliall be two roddes of yron, which fhall be diftant the one from the ocher about foure fingers, whereupon fhall reft an earthen veffell of the fathion of an earthen pot or panne, and afterfuch forme and manner as wee will declare by and by. Vnderneath the firf diftance, and alfo aboue the grate in the fecond diftance, you mult make two opening places, fquare, and hauing their couers to thut them, after the manner of the mouth of an Ouen : by the lower of thole two mouthes you fhall emptie and take-out the afhes which are made therein, and at the higher of them you fhall pur in coales, and kindle the fire allo. Furthermore, in the higheft part of the Furnace, and likewife in fuch place there as may be moft commodious, there muft be left certaine other holes for the fmoake to paffe out by. See the picture and draught of fuch a Furnace before in the diftillation of Waters. Sometimes, for a need, the Furnace is omitted and let paffe, and a brandrith made to ferue, fetting vpon it the veffell for to diftill in, and that in a por, bowle, or panne of earth or yron, and making a fire voderneath the fame.

## Снар. LXXVI.

## What manner of Veffels must be veded for the distilling of Oyles.

(9yntErtaine it is, that manie doe vfe diverfe forts of Veffels for the diftilling of Oyles : but leauing the examination of this varietie for fuch as propound vnto themfelues to entreat exactly of Chymicall matters, as intending imy felfe onely to giue fome inftructions vnto the good Hufwife, being Commaundreffe of this our Countrey Houfe; I will here fee downe bue two forts of Veffels for the diftilling of Oyles: The one being fit and Two forts of veric conuenient to diftill Hearbes, Fiowers, Seedes, Fruirs, Rootes, and Bealts, or veffels for the parts and excrentents of Bealts: And the other, for Woods, Gummes, gummie droppes, and other thicke and vnetwous Liquors. And now for to fpeake of the firf,

Let there be made a veffell of verie choice carth, fuch as is verie cleane and verie well kneaden, made vp with like paine and induftrie as the Potters make vp theirs; let it be of the thickneffe of a finger, or thereabour,
 fafhioned like an egge, and yee not like an egge when it is whole, but when if 15 cut round away, almoft to the one halfe : it muft be great, and contaning much, after the greatnefle and widenefle of the Copper veffell : and yee notwithttanding fo great onely (efpecially in re(pect of his height) as that it may agree with the third and laft loft of the furnace, and the wideneffe euen and iumpe with the nouth of the furnace wherein it muft fand: and in like manner the bottome muft beare fuch breadth, as that it may be a littleflater than the fpace which is betwixt the two rods of yron, made faft and fet ouerthwart at the end of the fecond diflance of the furnace, to the end that it may reft vpon them the more firmely. And therefore to doe well herein, the furnace would be builded before that the veflell be made. When there is need of a great fire to diftill withall, then it is prouided, that the por, in chis place, be not of earth, but of yron: as I my felfe haue feene at the Apothecaries.
This fecond veffeil fhall be of Copper, or of Latten, and Shaped alfo like vnto an egge, or a gourd, hauing a wide mouth, whereunto there mult be firted a long or ftretched-out necke, being at the leaft a foor in length, comming downe from the head, by the which necke the vapours in the gourd hail rife vp into the faid head. This veffell thall hold twelue or fifteene pints, or otherwife fhall be made of greatneffe anfwerable vnto the quantitie of the matter which you meane to diftill, which generally is (as wee will declare by and by) that for enerie pound of matter, as of hearbes or feedes, \&\&c. there be put into this vefiell nine or tenne pound of water. Befides this, there muft be fuch an agreement betwixt the greatneffe of this Copper veffell and capacitie of the earthen veffell which fandech within the furnace, as that they may be free one of another fome two or three fingers, for the filling in of fand, as we will hereafter declare: And as concerning the height thereof it, together with his head, mult fland aboue that of earth a foot and a halfe at the leaft.
The third veffell fhall be the head, which fhall be round aboue, and not fharpe pointed, to the end that the vapour arifing out of it may not fall downe againe: and it mult be fet about (as it were) witha little Stand, or Tub, wherein muft be put coole water, for the eafier thickening and fixing of the vapours: at the one fide of this little Tub there fhall be a fpout, or pipe, which fhall come out of the head, and by this the Oyle fhall drop downe into the veffell receiuing: on the other fide of this little Stand mult be a tappe with a fpiggor, and it muft come from the capacitie of the fame, that fo it may emptie it of the water which it holdeth when it is become too hot. This head thall be ioyned with the orifice and throat of the laft afore-named veffell, by the meanes of a large and wide pipe, which thall come downe from the head, and fee it felfe in the mouth and throat of the faid Copper veffell verie clofely, to the end that no vapours in rifing may paffe out thereby anie way: and for the better perfeeting of this inarticulation, there are two edges or brimmes, that fo they may the better ioyne together. This thanke may be called the necke of the bladder, by which the vapours Chall rife vp into the head.
The fourth veffell fhall be the receiuing veffell; which fhall receiue the Oyle diftilled, and it muft be of Glaffe, becaufe of the clearencffe and cleaneneffe of the fame.

This is the proportion and Chape of the firft fort of the veffels, and it is to diftill Oyles of hearbes, feedes, flowers, and fo forth.


A Doth reprefent the bladder, containing the matter from which you meane so draw your Oyle.
B The mouth or throat of the bladder, which is articulated or clofe ioined with the fhanke that commeth downe from the head.
C Is the fhanke, which mult be a foot long at the leaft, and is otherwife called the neck of the Stillitoric, which feteeth it felfe as into a ioint vpon the mouth and throat of the bladder.
D The round head not fharpe pointed aboue.
E The litele Stand or Tub which compaffeth the head, and containeth cold water for the cooling of the head.
F The veffell which receiueth the Oyle, and is made fomewhat long.
G The fpout or pipe by which the oilie liquor droppeth downe into the receiuing veflell.
H The tap, which with his fpiggot emptieth the water out of the litele tub when it is too hot, that fo there may frefh and cold be put in his place.

The wwo diftilling veffels, that is to fay, the Gourd and the Head, for as much as The Gourd and they are of Copper or Latten, mut be tinned within, to the end that the Oyle may the Hcad. not get anie ftrange qualitic by thefe mettals, feeing efpecially that the Copper being heated, and not tinned, may caufe the Oyle to fmell ot the Braffe, or of fome other euill qualitie. It is true, that beffides the helpe comming by this tinning of the veffels, the verie action of the fire, which worketh and difpatcheth fpeedily and violently where as there is great quantitie of water, doth keepe the Oyle from being tainted with anie euill fmell, or other accident that is not naturall, and therefore there needs no feare to be taken for the vfing of Copper veffels in the diftilling of Oyles for the occafions aforefaid, although that earthen or glaffe-veffels would be farre better and more naturall (feeing in them there refteth no iot of mettall-like matter) than either thofe that are of Copper, or molten, or of anic other mettall, faue onely there is fome danger of breaking or cracking of them, being the things whereunto earthen and glaffe-veffell are verie fubiect when they are hot, yea, though they were armed with mortar, fat earth, cement, or anie other matter of defence; and then fuch breach or cracke proueth a matter of no fmall dammage or confequence in the diftillation of Oyles, efpecially thofe which are precious. Notwithftanding, it is free for euery man to veverfels of earth or glafe, vpon paine that they be carefull to keepe them that they neither cracke nor breake: and the racher, feeing that in the extracting of fome Oyles there muft needs be vfed glaffe-veffels, or earthen ones, vernifhed and leaded, and not Copper or Latten; as which will veric hardly let runne anie Oyles from things that confift of an eager tafte, whether it be that the Copper hath the like it felfe, or of fome fecret vertue and faculcie which is in it . And this thing wee fee fufficiently tried in the feedes of Grapes, whofe Oyle conuertech and turneth rather into a greene ruft in fuch veffels, than into anie airie or thinne exhalation, doe a man what he can either about the fire, or anie other way whatfoeuer : but in the diftillation of fragrant and aromaticall things, as allo thofe which are fweet in tafte, or haue a diuers qualitic from the Copper, it might feeme that a molten veffell might be more cons uenient:

## С нар. L XXVII.

## At what time Oyles would be diftilled: and how the matter and things whereof they arc made must <br> be prepared.

區He matter of euerie Oyle is to be diftilled at fuch time, as when it is beft dilpofed : that is to fay, feedes and aromaticall things, when they are treflu and new gathered; for the frefher and newer that they are, fo much the more excellent Oyle will they yeeld, efpecially the things that are of a fwees imell and aromaticall. And as for hearbes, they mult be gathered when they are come to their full force, that is to fay, when they are in flower: for and if they be deferred longer, the Oyle that commeth of them,for the moft pare, will be more full of fcumme and ranke, as alfo there will not fo much be gathered of them. Being gathered at fuch time, they muft be dried in the fhadow for the fpace of a moneth or two, to the end, that fome portion of their moifneffe and feeding humor may be diminifhed and taken away, and that the oylie and radicall humor may be extracted more pure and fincere: and thirdly, that the hearbes themfelues may be the more eafily crufhed and bruifed. But on the contrarie fide, if the hearbes be new and frefh gathered when they are diftilled, they will yeeld fufficient fore of $O y l e$, in as much as their naturall moifture will abound : but the Oyle will not be of fuch efficacie, nor yet fo odoriferous, as when the merrie and good meane betwixt both is kept.

But as concerning the preparing of fuch matter as you meane to make your Oyles of, there is not anie need to vfe infufion, or purrifaction, as is done in the diftilling of waters, as we haue faid before. For if one fhould beftow an infufion vpon them, ei. ther in water, wine, or Aqua-vitre, it would but breed a confufion and mixture of the naturall favor and fmell of the Oyle with that of the liquor: and againe, it would make them wore moift than need would require, in refpect of the pure and fincere excracting of the Oyle. Againe, if you fhould take the way to purrifie them in Horfe-dung, earth, hot afhes, or boyling water, the better to diftill and draw out your Oyle afterward, and following the way that we will fpeake of by and by, yet thereby you fhall giue occafion of infecting your Oyle with fome ill vice. For the matter being purrified, it is not poffible, but that the Oyles fhould haue a fmatch of it, feeing it is one part of the matter. That ic fo falleth out with Oyles that are fo diftilled of matter aforehand fo putrified, although it doe not by and by corrupt, appeareth fufe ficiently: for in fome face of time it is without all doubt corrupted, and that in a great deale fhortertime, without comparifon, than other Oyles which are drawne without putrifaction of their matter going before: by which it may appeare, what my aduice and counfaile would be to euerie man ; namely, that the matter whereout you would extract your Oyle be not infufed or putrified, but onely crufhed, bruifed, brayed, and brought into fmall pieces, fo as that afterward they may befifted through fome wide fieue : which courfe fhall doe as well, yea, rather better, than your infufing or putrifying of them without ftamping, braying, and bruifing of them; befides that; the bufineffe is fooner difpatched: yea, and if you would infufe and putrifie the matter,you fhould not thereby gaine three drops of Oyle more, than you thould hauc by. onely beating and ftamping of them.

## Снар. LXXVIII.

## Of the manser and order that muft be kept in diffilling of Oples. <br> of Oyles.

Hen you hauc prepared the matter whereof you meane to make your oyle, that is to fay, bruifed it, and brought it into fmall cornes, then paffe it grefly through a fearce, cafting it into the veffell of copper with certaine meafures of fountaine water, that is to fay, to match two pound vverghe ut matter, with eighteene pound of vvater, and for that caufe it is meet that the vellell hould containe betwixt twelue and fifteene pintes, and yet the third part remaine void and emptie, vohen the water and matter are both in. This vvater flandeth in fteed of a coach or waggon vnto the matter to be diftilled, for the carrying vp of his vapors, and to feperate the humours by the decoction and boyling that it there maketh. You may adde or diminifh of the quantitie of $\dot{v} v a t e r$, according to the matter his quantitie vvhich you are about to diftill, vpon paine notwithftanding that you put in nine or ten times as much water as you doe matter, and that your veflell of copper, glaffe, earth, or any fuch matter as thall feeme beft, be of bigneffe, proportionable, and agreeing with the quantitie of matter which you would diftill, for being too great or too little, it would proue but coft caft away. It is true, that the two pound of matter, and eighteene of water here mentioned, is the mont certaine rate that we can fticke to, for the moft eafie and plentifull maner of drawing of oyle: for if you put in more, the longneffe of time will become teadious: and if yout put in leffe, you thall hardly draw ten drops of oyle. And yet in this point Ladie experience mult be more than quarter maifter, in as much as there is fome matter which yeeldeth not any oyle, except it be put in a great quantitie, fuch as is A nife-feed and others, as vee vvill declare hereafter more particularly. Againe, you muft obferue and marke this one poynt, that hearbes require a farre larger veffill and quantitie of vvater than feeds and fpices when their oyle is to be extracted: becanfe that weight for weight they take more roome than the feeds and fpices doe: for hearbes lye not fo clofe and round together, and therefore they require alfo in proportion a greater quantitie of $\mathbf{v} v a t e r$, for feare that they fhould beconse parched and dried away with. in the copper veftell.

After that you haue put the vvater and matter together into the veffell of co pper, let them infufe fue or fixe houres, more or leffe, according to the nature and fub. flance of the matter: or without infufing of them at this time (forafmuch às their boiling within the bellie of the veffell, vvill ferue in fteed of an infufion vnto the matter) couer the veffell, and fit the head vnto it, lute them verie well together with whites of egges and meale kneaded together, and fpead vpon a cloth in the place of their joyning and articulation. This done, fet your earther veffell in the furnace'vp-: on the two yron barres, and make it falt to the furnace with potters-clay or cemient well beaten and wrought about the edges and brims: after fet the veffell of copper well ftopt into the earthen one, and yet in fuch fort, as that the bottome of the one ftand from the other tome two or threefingers : and this void fpace mult be filled vp with pure and cleare fand, euen fo high as there is any fpace and diftance betwixt velfell and veffell, yea, and further if one befo difpofed euen to the necke of the copper veffell : prouided, that the nofe of the head by which the oyle defcendeth doe ftand either to the right hand or to the left of the furnace: and yet this one thing commeth heere to be marked, that in diftilling of arematicall feeds onely there is vfe and need of the faid fand betwixt the faid rwo veffells, and not in diftilling of hearbes: for feeds and (pices are of a more fubrile and delicate fubftance? (as their great heat do tefifie) and the matrer they yeeld is more delicate allo and firme: For which caures it might fall out that the force of the fire might fomewhat trouble their diftillation,
that is to fay, mighe canfe their diftillation to come forth a litele troubled, and that euen in the verie beginning, it the fire be not moderately kept, and brideled by the fand put in the void place hetwixt the faid two veftels: but in the diftilling of herbes youmuft fic the veffell of ropper and the furnace together without the earthen veffell and the fand in the emptie face : for as much as the hearbes in refpett of their

Noople cay be dravene in :31a ries-batb.

gather, ganer, that no oyles can be extracted by diftillarion in a caldron for to the to fay, cion would be longer than it were meeris fhould, and yetneuer a whit the more commendable : for Maries-bath, that is to fay, boyling water, doth not afford a well proportioned and fufficient tempered heat, but is long in doing, and the oyle doth ftill draw vnto it fome corruption if the vvorke be too long in doing, efpecially if the matter be not moift of it felfe : for thercupon and by that meanes can the oyle hardly rifefo high as that it may find the way into the veffell that fhould receive it, and becaufe alfo that it wanteet force and might, in as much as the boyling water cannot lift it vp fo high of it felfe alone, as she cleare fire, carthen veflell, and fand, all vorking together.

The copper veffell being thus fited in the furnace, make faft vnto the nofe or
The order that pusulbe hept in dijililation. pipe thereof, the receiuing veflell, refted vpon fome prettie ftoole, in fuch fort as you fee aboue in the figure: flop and clofe vp the joynt ot the faid pipe and receiuing vef-
fell vvith pafte, and bole armoniacke, or the white of an egge and flowre fpread vpon a cloth. Then kindle your coales that you haue layed vpon the grate, and make a foft and gentle fire for the beginning, to the end that the matter may gruw hot by litele and littie, and rhat folong as sill the matter within the copper and the fountaine water doe boyle, but yet fo gently as that it boyle not vp, to fticke and hit againft the head with the vvalmes chereof, as vve fee it fometimes to happen in fome feedes, as anife feeds, vohich by reafon of their thinfubftance, as alfo of their vifcofitie, do caft vp their vvalmes and billowes with greas nighte and force, and in fuch cafe the fire muft be rebated: or and if that yet the rebating of the fire cannot flay the furie of the billowes or boyling, then you muft take off the head, and with a ftaffe firre abour the matter, for fo the fcum will vanih away in vapours, and after that it may be gouerned, ftayed, and dried vp by a reafonable fire, putting the head vpon it againeafterward, and lucing it as before. Feed and continue the fire in an equall degree, vntill you perceiue by feeling, that the head ot the Still is growne hot : then, or fooner if you pleafe, you may fill the little tub at the top, which flandeth round about the head vvith cold vvater; for it cooling the head, will make thicke and fixe the van pours and fpirites of the oyle, wwhich are verie fubtile and hot, and turne them into oyle : vvhen this cold water thus powred in fhall become hot, it muft by and by be let out at the top of the cooler, and freth putinto his place. It is true, that fome doe not allow of cooling the head with cold vvater, becaufe the vapours by this cooling of the head doe cóngeale too foone, as being before that thcy come into the pipe, and thercupon fall backe againe into the veffell, from vvhence they breathing the fecond time, and congeated, and falling backe againe as before, doe in fine by thefe manifold rifings and fallings, feend and vvalte vnto nothing; or at the leaft by continuall boyling, it falleth out that but a few vapours doe come into the veffell of receit, and againe, thofe fame vapours fo congealed doe not eafily and prefently come forth, and fo there is leffe oyle gathered of the matter than would be, and that which is drawne, is fomewhat tainted with burning. And therefore in fteed of this cooling of the head for to congeale and fixe the vapours raifed yp thereinto, they fet verie neere vnto the furnace a veflell vvith one bottome, hauing a pipe of tin pafing ouerthwart the faid bottome through holes bored floping in the fame veffell : and this pipe is fhut vp into the pipe comming downe from the head, and both thele being well luted together, then the forefaid pipe croffing through the veffell aforefaid, is faftened to the veffell that is to receiue the diftilled oyle: this forefaid veffell hauing this pipe paffing through the fides thereof, and clofe faftened therein, muft
be filled vvith coole vvater, by the cooling whereof the vapours fent or carried from the head in thus pipe of tin are cong ealed, fixed, turned into oyle, and fo drop downe eafily into the receiuing veffell with greacer profit, and in greater quantitie, and better, than and if they had beene turned into oyie in the head by the cooling thereof with cold vvater. Who fo is minded to vet this meanes of cooling the vapours, may doe it, but notwithflanding that former of curs is no lefle bencficiall, comnodious, and profitable, neither doch it worke that difcommoditie afore charged vpon it, as experience reacheth; and put cafe that it did fo, yet the inconuenience is taken away, if in feed of cold water you put in that vvlhich is vvarme, or elfe by onely couering the round of the head with cloathes dipt in cold vvater, vfing torenew chem often. times.
Continuc in chis fort your diftillation without ccafing, and keepe your fire in the farr e degree, or if need be, augment and make it greater, vnill fuch time as all the vapors be conscaled one after another, and that all the liquor wvhich carrieth them, and which is within the copper veffell be runned into the receiver: the figne and marke whercof is, vvhen hauing put in eighteene pound of warer or thereabour, you haue receined backe about ten, as alfo, when as the drops diftilling fiall not any longer rclifh any thing of the matere : then you muff giue ouer your diffillation, for feaie the matter within your copper veflelil fhould eifher be inflamed, or elfe fer faft to the bottome of your veflell, ceafing to flote aboue. It flall be judged to difill in good fort and order, and in reafonable remper, if betwixx the drops diffilling, there be not as it were any fpace from the falling of one drop to the following of another, in fo much as that a man haill hardly beable to account the number of one or two, and from hence (as before) is gathicred the quantiric and force of the fire. By this meanes the whole copper veffell is emptied in a fhort time, for verie feldome is it longer in doing than fixe or feuen houres, if fo be the matter agree in heauineffe and veeight vvith the vvater of the veffell, as from two pound of mater to cighteene pound of water.

You muft note in this place, that the oyle commerh forth now and then with the waser; and that the water which diffillech with the oyle, commeth not onely of the fimple, but alfo of the water which was pur in for the vfe of the diffillation : which, by the force of the boyling which it hath had with the faid fimple, during the timie of the diftillation, ss become mixr by the force of the fire vvith the braycd mater, and fo hath brought along with it the whole ftreng th of the fame, as may be judged by the fuell and tafte thereot, being no other than that of the fimple. Wherefore this warer which diftillech oyic therewith, is not leffe effectuall, yea rather more forcíble, powerfull, and of better effeet, than that which is diffilled of fimples by a fillitorie, becaufe it taftech more ftrongly of the fimple, than the others which were drawn by a fillirorie: betwixt which there is no other difference, but that the wäter diftilled by a limbecke or fillitoric is that which the Sunne (heating the earth) hath brought in for the growth, nourifhment, and nature of the fimple: and the other which is mixed with the fimple, from which the oyle is drawne, is fo deepely ingaged, incorporated and mingled in and with the brayed mater by the force of the fire, as that it carriech away, obtayneth and noldeth all his vertue, as the tafte and fmell doe fhew which is in it, for borh she finell and tafte doe draw verie neeie vnto that which the oy le hath in it felfe, howfoeuer it may feeme that the oyle fhould contrine and keepe all the fauour and fmell vnto it felfe, feeing the oyle is as it were the foule and forme which giueth being to the faid fimple: but in the vehement boyling of the faid fimple and water, there is fucha great diffolution and relaxation of the diffimilar parts of the faid fimple, as that the fmell and tafte thereof is communicated with both, fo that as well rhe water as the oyle doth retaine (though yee not equally) the tafte and fmell of the fimple. Furthermore, you fhall be aflured how this vvarer hath feifed vpon the vertue of the fimple, vvherewith it hath beene mixt in the diftilling of his oyle, by this, that if you vvould diftill it once againe, or many times, you fhall find collected and gathered togecher in it the whole fmell and tafte
of his fimple, as if fallech out in Aqua-vitx, which hach init the force of a great quanticie of Wine. For the doing of this, make cleane the copper veffell, powre in thereto all the vvater which was diffilled with the oyle, difpofe and fee in order alls things necellary, in fuch tort as is wons to be done in the diffillation of oyles of herbs: when you fee that of feuenteenc pound you haue receiued one, that is to fay, the firft running, that you mult keepe : for into it will be gathered all the vertue of the whole mater, and fo as shat the vertuc of it will be little celfe than that of the oyle.

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C_{\text {hap. }} \text { LXXIX. }
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## Of the meanes how to Seperate the oyle which is runned with the water in diffiling.

(205 (exT is verie cercaine that the oyle vvlich fhall haue beene diftilled, is a liquor vuhich by the meanes and force of the boyling water wherewith it is mingled, hath beene feperated and forcibly drawne from his matter, and held off che fame, and with it alfo conueyed along into the receiuer. And for this caufe she oyle vvill be alwaies wvith the water, but notwithflanding not alwaies fwimming vpon the water : for fometimes it vull be in the botcome, and fomerimes mingled all amonof the wacc: : if the oyle be more beauie meafure for meafure than the vvater, it vill be in the bottome: but if if fall out that the oyle by coldnefle be congealed as it werc into cloudes and frnall sufs of vvooll, then it vvill be mingled amongft the vvater. Againe, the oyle will goe to the bottome, if it be made of a thicke fubftance and well compact, as is that of cinnamome, cloues, and other fuch like. The oyles which confuredly (for the time that they are congealing through the cold) goe croffe che water, are the oyles of anife and fenell-feed, and that by reafon of a certaine proportion which they haue with the weight of the vvater. Therefore for the feperating of the oyle wvhich the water hath carried along vvith it, it were good, firt that the receiuer fhould haue his bottome fonewhat fharpe pointed, and hat in the faid bottome therewichall there fhould be a fmall hole, which hauing beene flopped during the eime of the diffillation with Waxe or cemens, fhould now after the diffillation (the water and oyle being growne cold by the operation of the ayre) be vnftopped, if fo be that after atentiue beholding of the receiuer, it appeare that the oyle is gathered into the bottome of it : for fo, the cemens or vvaxe taken away, the oyle vvill come out, and the vvater flay behind in the veffell, if by flopping the hole in time it be your mind to keepe it there. If the oyle fwim aloft vpon the vvater, if you vnftop the forefaid hole in the botrome, the vvater will run our below, and the oyle vvill ftay behind in the receiuer, if by mifhap it doe not fall downe into the bottome of the receiuer firlt, before it come into the viole prepared for it, but chis you muft take heed vnto: but and if the ovle be mingled amongft the vrater in manner of a cloud, flrayne che water through a fine linnen cloth, vvhich afterward vvil be eafily gathered togecher wvith a knife, in fuch fort as that you may purit vp in a viole, wherein afterward if need be, you may curne it into a thin liquor by afmall heat fet in the Sunne, or vpon hot afhes: if the oyle fwim vpon the vpper face of the vvater, you fhall feperate it in a furnace of digcflion vvith a filuer fpoone:
 you may alfo vfe other meanes to feperate your oyle from his fellow vvater, as for example, by a funnell of glaffe, putcing your finger toward the poynt of it and vnderneath, and doing the like ofentimes vnto that, wwhich hath been done by the receiuer, that is to fay, by powring ofliquor into the faid funnell. You may likewife doe thefame by the fucking of the vvater out of the recciuer; for fo you may fucke outall the water and leauethe
oile in the botrome, vwhich fucking may be performed by pipes of plate made after the falhion of thofe vvhich you fee pictured 'iere : vvhich vvill draw ali the vvater in a fhort time out of the receincr,', as you fee them vfed in France, to caure vvater to runne in manner of a fountaine, out of any bucket or other veffell wherein water is contayned.

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\begin{aligned}
& \text { Cи а р. LXXX. X. } \\
& \text { Of the faculties or properties, continuance, and } v \sqrt{e} \text { of di- } \\
& \text { gilled Oyles. }
\end{aligned}
$$

Eeing that diftilled oyles, as vve haue before declared, are the radicall humour of cucrie matter : and dhat fich radical himmour, is as it were the foole and forme which giuch being vnto all matter, and vvhereupon depend the vertues, powers, facuities, and aCtions of the faid matter: you ineed not doubt, but that the vyhole and intire vertues of fimples difulled is imparted vite the Oyles drawne from them, and that in a purer and molf fubtile manner, in as nuiuch as by fuch cliymicall refolution, the moff fubtile fuidfances are feperated írom the grofler, by being mingled vvherewith, they vvere greatly weakened and hindered from doing their effects: and fo it alfo conumeth to paffe; that looke vvhat vertue vvas in a pound of the fimple, is conteyyned in a dram more or leffe of the oyle : befides shis, fuch oyles haue this propertie amongft others, that by a meruailous fubtileneffe of fubflance vvhich they haue goten by the fire, they doe flylic pierce into the moft profound and deepe parts, and quickly vvorke their effects.
As concerning theirlafting and continuance, they vvill keepe long, cfpccially if (after they haue beene recififed, that is to fay, yee once more diftilled vpona hes vvitha finall fire in a retort) you fop them vp in bottles of double glaffe, and fuch as are armed and clofe fope vvith Cement or Mafticke, or Waxe and Mafticke mixt togecher, without giuing them any ayre, except at fuch times as you vvould vfe them, and which then you cannor doe vvithout damage done vnto them : for feeing they be all ayrie and firie, they cannot chufe but eafily euaporate and fpend, and that in fuch fortas that it may be euidently feene and difcerned, as amongft the reft will eafily be found true in oylc of camplire.

As for the vfe; that is in drops, if yout ake them fimplie and alone by themfelues, The r/fo vvhecher it be into the bodie or vvithout, as you thall vnderfand hereafter. But to vfecthen to the moft profit inwardly, you mufd diflolue fugar in violet, rofe, cinnamome or other fuch like waters, and into it caft one or two drops of the oyle which you would vfe, and fo make vp lozenges therevf.

## Снар. L XXXI.

## Aparticular defcription of cirtaine Oyles that are diffilled ascording so the former methode.



Vt the oyles of Seeds, as of Anife, Fennell, Elder-tree, Cummine, and others are diffilled after this manner: Take fuch quanticie of Seeds as you pleafe, as flue or fixe pound at the leaft, and for the better bruife them grofly, feeing carefully to it, that not fo much as one feed concinue vvhole, put them into the veffell of copper : pourc in vpon them of cleare fountaine
vrater fiue and twentic or thirtie pound, mingle them diligently together, couer the veffell vvith his head, and doe in manner as hath beene faid before.

The oyle vvhich diftilleth firft, is of greater efficacie than any one; for vvhich caule, the receiuer may be twice or thrice changed.
This thing is vvorthic obleruation, that oyle of anife-feeds in the time of Sommer cannot well be diftilled, becaufe that the fpirits thercof are too fubtile, and much more fubtile indeed than thofe of Fennell: vvhereupon it followeth, that at the heas of the fire they doe eafily fend by eunporation, though it be guided and kept verie low and fofe : But the fiteft time to diftill them is Winter; for how much the colder that Winter is, fo much the more it becommeth coagulate and refembling the camphire vvhen it runneth downe into the receiuer. After that you have flrayned it through a cleane linnen cloth, all the vvater paffeth away, and the oyle tarrieth behind in the linnen cloth, and vohich you muft diffolue fhortly after in a great glaffe by the heat of a fire-pan, and fo the flegme is eafily feperated. This is a finguiar oile, whether it be taken alone by drops with wine, or broth, or fugar Lozenges, for to comfort the ftomacke, helpe digettion, and difcuffe winds; for rhewmes alfo, and difeafes of the lungs; as allo for the mother; whercupon it commeth, that it flayeth the whites of women.
Fruids?
Fruits, as of Iuniper berries, \&cc. by reafon that they are fomewhat more oylic than hearbes and feedes, doe not require fuch quantitie of water as hearbes and feedes: fo that for a pound of fruits, fiue or fix pound of water will be ynough. They muft bee brayed fufficiently fmall, put into the gourd, and dealt with as feedes and hearbes are deale withall: The Oyle commeth forth firff, and afterward the water.
spices and aros. Spices and aromaticall things are diftilled after the fame manner that feedes are: maticall drugs. but in their diftillation mingle not Wine or Aqua-vitx, as fome doe, bur onely pure fountaine water : for Wine and Aqua-viæx rife vp prefently, without carrying with them the vertues of the aromaricall things; whereas the water rifeth not vp , without taking with it the aromaticall things. The Oyle of Nutmers fwimmeth alofyand fo doth that of Mace.
oyle of cinnas. mome.

For to diftill Oyle of Cinnamome in excellent manner: Bray a pound of Cinnamome in fuch fort as that it may goe through a fieue, but beat it not all to powder, put is in a gourd, and powre vpon it water of Bugloffe, Borage, Endiue, and Balme, of euericone halfe a pound, let themftand together foure or fiue daies in the veffell well ftopt: then out of this gourd powrethem into another gourd, and fet this gourd in an earthen pot, with fand betwixt the pot and it, and fo fet them both in the fur nace : firft make a foft fire, but after make ir greater by little and little: after that there is a meafure diftilled out after this manner, take it away as the beft, for that which followeth is of a great deale leffe vertue than the firft, bur yet may be kept to infufe new Cinnamome in. After the fame fafhion you fhall diftill Cloues, Pepper, Angelica, Galanga, \&c. See in our fecret remedies.

Снар. LXXXI. Of the manner of extracting oyles out of Wood.
 Or as much as the oylie fubftance of wood is more tenacious and clams mie, by reafon of the flymineffe thereof; therefore the extracting of the fame is diuers from that of hearbes and feedes, and is not made but with greater coft, and drawne and gathered with greater paine, difficulte, and induftrie, than thofe of feeds and planes, which we haue entreated of before. I know well, that fome doe accuftome to draw Oyles per def $6 e n / w m$, as they vet to call
it, in two veffels of carth fec one vpon another, and a plate of yron with a hole in it, betwixt them both: but fuch Oyle is nothing worth, and taftech, for the moft part, of I cannoi tell of what aduftion : but the bett is to draw it per af cenfum, that fo you may haue that which is excellene good, faire, and penctratiuc ; the manner is fuch: Make your furnace of matcer and forme as abose, fauing that in the vppermoft part of it you mult haue a cleft or open place, for the more eafic placing and difpofing of the necke of your veffell. The veflell fhall be falhioned like a Bladder, Corner, or bagge of a Shepheards Pipe, called of the Chymifts a retort: ir muft be of glaffe, or elfe of earth, and varnifhed and leaded within, and of tuch bigneffe, as that it may containe a dozen pound of water, hauing a necke of a foot and a halfe long, or a foot long at the leaft, and bending downeward: It is to confift of ewo parts; the one of them ftretching from the bellie of the faid bladder forward, fome fix fingers long, and for thickneffe fo made, as that ones hand may goe into the orifice of it, to make cleane the faid veffell wirhin : and the other growing euer leffe and leffe, euen vnto the end, muft be made to ioyne with the former part by the meanes and helpe of fome faftening matter, as glue or cement of Bole-armoniacke ; and yet in fuch fore, as that they may be fet togecther, and taken afunder, when need hall require. This is the figure and Ihape.


A The Retort of glaffe, or carth, vernifhed within, and leaded.
B The orifice of the Retort, for the raking in of matter into the bellie and bodie, and for to giue way alfo for the making cleane of the faid bellie, and which for that purpofe muft be made larger than it is piEured here, for elfe the hand cannot enter into it.
C The other part of the Retort, into which muft be inferted the nether part of the Retort, which muft haue a ring about, in the place where the two parts fhall be cemenced and luted together.
D The Pipe, which muft be narrow and fharpe-pointed, to the end it may be inferted and put into anie fort of glaffe-violl, or bottle.

If you haue not the benefit of a furnace, you fhall place che Retort in fit and conuenient fort within an earthen panne : or in ttead thereof, in a veffell or por of yron good and wide, and filled with fand or afhes, or without anie ching in it, and that vp. on a brandrith, if there be need of vfing a verie great fire, as we fee it daily practifed amongft the Aporhecarics.
Whicrefore, to draw oyle out of oylie wood, you muff firf make is fmall, and The preparims bring it into pieces, in fuch fort as Turners doe, with turning of wood, and not with of woiod for to to anie Saw, or anie other edge-toole: neither yet muft you make it like powder, for in boiling it would tou lightly and cafily rife and fwell, as alfo thofe gobbets and lumps which are cut by edgc-tooles, or other inftruments, doe hardly and with great diffcultic yeeld anie oyle: put into the Retort two pound of this wood, diuided into pieces after the manner of the Turners, and as much Aqua-vitx, for the fteeping and infufing of ie, lee them infure together certaine daies. This A qua-vicx, by reafon of his fubtleneffe, piecrceth more cafily than any other liquor, and likewife without any difficultie feparatech and forcibly drawech the oyle from his proper fubiect,and yet in the meane time it neither changech nor corruptech, any manner of way, the nature of the faid oyle, becaufe it draweth neere vnto the temperature of oyles; which is the caufe why we mingle with the wood Aqua-vitx rather than common water: howfoeuer, I do not any thing doubt of the maner before defcribed about the diftillation of oyles, hearbs, \& feeds, in which is vied the veffell of Copper with a head, powring thereinto
fome cleare fountaine vvater, as though it could not be verie certaine and profitable for the extracting of oyles of voood : vere it not that vve doe feare more than any thing elfe, the ouer great and vehement boyling thereof, proceeding of ehe diligreement of the drinefle of the matter, and mofture of the vater vohich might hinder the courfe of our diftillation. Adde hereunto alfo that fuch kinds of oiles can hardly rife to the inner top of the head, if we fee this fathioned copper veffell.
The placing of
When as the vvood hath beene fufficiently infufed, place the carthen pan in the the vefellus. vppermolt part of the furnace vpon the barres of yron, fee the rerore within this earthen pan with fand in the emptie fpaces betwixt, as alfo couered ouer vvith fand, caufe the necke to pafle chrough the cleft made in the vppermofl part of the furnace, and to turne downeward towards the receiuer, into the encuth vvereof it nult be clofe joyned, and as carefully and firmely luted vvith cenient as may be : afterward by little and little put the kindled coles vpon the grate, and lomecimes it will not be amiffe to lay them vpon the retort v wherein the matter to be diflilled is inclofed: if it like you not better to fet an earthen pan ouer it in forme of an head, and that to reuerberate and beat backe the heat againe vpon che fatd retort. Thele chings a ccomplifhed, you muft fee to the ordering and continuing of your fire, increaling it by little and little as reafon fhall require, euermore carefully looking vano the fequence and fuccelfrof the vvorke, vitill fuch time as the Aqua-vitx before infufed be all of it diftilled, for this is it vwhich commeth forth firft in the diftullation, and is gathered into the recemer: then after this commeth the oyle pure and all alone, vvithout any thing mixt with it, and that in fuch fore, as a man conld not looke for the like of any manner of purrifying of the matter vvhatlocuer: keepe vvell this A qua-vitæ to ferue you againe for the Lame vle, becaufe it flill is getting fome pat of the facultic of the matter wherewith it is mixed, and there is sorhing to let vvhy it may not ferue twice yea thrice. When the receiuer is taken away, you mult pur another in his place halfe full of cleare water that the oyle may diftill inno it : this vvater vve allow in the receiuer, in refpect of the impreffions vwhich the fire may have made by too vehementa boyling in the oyle, that by the meanes of this vuater the fame may be correeted and taken away, and the oyle alfo kept the better fromenaporation, vvhich thing is yet the more filly atchieued, if you fet your receiuer in a bafon or other veffel full of cold vater, changing and renewing the fame from houre to houre, till the diftillation be finifhed. You may aifo change your receiuer if you thinke good, once or twice, the better to know the differences of your oyles. The diftillation accomplifhed, wvhich you thall gather by the markes before fet downe, you fiall feperate the oyle from the vvater by the meares allo aboue fet downe, and at the fame time or before any of thefe things done, take your retort from the fire, and take off his necke, emptying the bellie of the drofle and excrements fetled and flaying behind: vvhich afterward you fhall eemper with vvater fo of, as that hauing ftrayned them and boyled them againe, they come forth thicke and fmall like pap-meat, which is alfo good for the fame difeafes, that the oyles are good for. After this order is the wood Guaja-
Oyle of cua-
iocum zrood. oyle of $\mathcal{A}$ B. tree wood. cum diftilled, which is fingular good for the vlcers and paines happening in the French-pockes. The oyle ot the Afh-tree : and this is good to be vfed in cold diftil. lations, and to the helping of the morphew and palfie: taken alfo inwardly, it is fine gular good for the difeafed of the fpleene : the oyle of Iuniper-wood is a fpecial good thing in the comforting of the reines and matrix.

## Cqap. LXXXIII.

## Of the manner of drawing Oyles of Gums, and for, tof thofe that are liguid.

FerOr the diftilling of Oyles of Gummes, you mur vee the fame furnace and retort wherein you diftilled your oylie vvoods: butco ell you the truth, they are nor diffilled without much paine, by reafon of their glutinous clammineffe, giuen to hold faft there tadicall humour and moifture. And vwhich is more, there are as many wayes of drawing oyles of Gummes; as there are differences of Gummes. For forme are liguid, that is to fay, in fubflance like birdlime, wvhich vvill hardly be kept within his bounds, fuch is Turpentine, liquid Storax, and fuch other like, vvhich participate more of an oylic qualitie chan of an earchic, and fo are eafily refolued with a frnall fire. The orhers are hard, as is incenfe, benjoune, and mafticke, wwhich require a reafonable heat to be mollified vvith. Some againe are refolued with a vvaterie humour, as Myrrhe, and Gum arabicke.
Therefore to diffill liquid gums, and to draw out their oyles, there may two waies be taken: the one is fuch as hath beene vfed of long time, and the other is new; after the firft way, you may diftill oyle of Turpentine thus : Take cleare Turpentine as much as you pleafe, and for cuerie pound take of the afhes of fome hard and frong vvood two ounces, or fmall fand, vvafhed grauell, or the powder of brickes, to keepe the Turpentine for rifing high and fwelling, put all thefe in the retort, vvhich you fhall fet within the earthen pan in the furnace, as you did in oy lie woods: in the beginning you fhall haue but a gentle firc to draw out the vvater vwhich vvill frift come forth, and after make it bigger for the diffilling of the Oyle. It is like- Thusis oyle of wife diftilled another and chat a new vvay. Take two pound of Turpentine, and Waxedfluluddo eight pound of fountaine vvater that is verie cleare, put both into the retort together, and diffill them at a reafonable fire, following the order fet downe for oylie vvoods. The Oyle wwhich you fhall gather, vvill be mofl pure and fine, of a verie cleare and bright colour, of a fweetfmell and pleafant taf, vvhich properties are not to be found in the oyle which is drawne after the common and ordinarie farhion: and this commeth to paffe by reafon of the vvater tempering the qualities conceiued and begotten in the matcer diftilled by the force of the fire and heat of the veliell, wvhich otherwife would haue begotten fome fierie impreflions, herein had not the refifing qualitie of the vvater $\mathbf{v}$ vithftood the fame by his moifture, and that fo much the more, for being likewife receiued intoa receiuer halfe full of faire and frefh vvater, vvhich affordeth another good helpe likewile vino the fame : of all which helpes, the common manner of diftilling this oyle with fand and afhes hath not one, as is too apparant in the vnpleafant tatte and blackifh or fad yellowifh colour, and that it is not fit to be vfed about che bodie outwardly, fo farre is it off from being worthie to be taken inwardly, wvithout the endangering of the ficke partie; befide the vnpleafantneffe of the taft : but this which is diftilled vvith vvater is fingular good for all manner of difeafes, for which it is fo highly commended of all men, as namely for the Thoreneffe of breath, ftone, colicke, and difeafes of the lungs being taken inwardly in the quantitie of two drams : as alfo, to take away fcarres remaining, freckles, thaines, and other fpots of the skin, being applicd ourwardly.

But and if you defire to know vwhen your Oyle is all diftilled, then you muft when the ahitit marke and fee vvhen it ceafech to runne out of the retort into the receiuer, for then lation iseneadd she diftillation of the beft and mof excellent Oyle is finihed. And in cafe you yes defire to draw fome more oyle out of the reft of the matter remaining wishin the retort, you may doe it veric eafilie, if you caft into the faid retors fome littic lumps of load wo the qquancicie of an ounce, and chat by the orifice of the firt part of the retorts
which muft be verie well fitted and luted againe with the other part as it was before; for the lead being molten, doth refolue the gum remaining, in fuch fort, as that whatfoeuer is oylie, will diftill as oyle, and you fhall gather it in another receiuer. All vvhich finifhed, you fhall take the recort handfomely out of the furnace, referuing the fame to ferue you againe in like time of need.

## Сиар. LXXXIII.

## Of the manner of extracting Oyles out of hard gums.

䙄Ourhard gums, fuch as is frankincenfe, benjouin, mafticke, and waxe, feeing they are of a more earthie fubftance, haue a fafter and firmer confiftence, and are refolued morc hardly than the liquid ones, and fo aske not onely more labour to haue their oyles drawne from them, but ftand in need alfo to haue fome fort of oyle, and a realonable fire to mollific and foften them, to the end that afterward they may the more freely yeeld their owne Oyle. It is true, that cuen of thefe there are fome of them more tedious and fiflyer relifting to be diffolued, as Frankincenfe, and Benjouin : and otherfome more eafie to be molten, as Wax : and there are others that are indifferent betwixt both, as mafticke. So as that all thefe gums, according as they are more or leffe hard to be refolued, muft be more or leffe mollified and melted before hand, by the meanes aforenamed in the dinitling of liguid gums: the vvater only excepred, which mult neuer be put into the retort with any thing to be diftilled. It is alro to be confidered and veeighed, how that hard gums doe verie hardly indure and abide any vvater, vvhiles (inclofed vvithin the retort) they fuftaine the violence of the fire, but in fteed of fire, one may put thereto of oyle of Turpentine, to the quantitic of three ounces, as well becaufe this oyle is moft pure and diftilled with a reafonable hear (as we haue faid before) as becaufe it hath a property drawing necre vnto the nature of thefe gums, whereupon it feemech the more fit to be vfed in the diftilling of thefe gums, as feruing notably to correct their hardneffe: againe, this vvay more oyle will be drawne, than by vfing of vvafhed fand and grauell caft vpon the matter : and according as vve fee commonly practifed of Oyles of all forts of gems. And in cafe you haue not syle of Turpentine in readineffe, you may vfe fome other fort of oyle; prouided, as much as poffibly may be, that it incline not notably either vnto any colour or fmell: notwithftanding by this meanes you fhall not doe more good than by the former. For there is fome kind of gum fo troublefome to be refolued, as frankincenfe, as that you muft be faine to draw the oyle thereof after the fame manner that you $v$ fed in the extracting of oyles from the drofle and refidence of Turpentine, that is to fay, by cafting into the retort amongft it fmall morfells or lumps of lead, and vvith raifing of the necke of the retort a little higher than is vfuall in the diftilling of Turpentine and oylie vvoods. By this meanes vvithout all doubt you fhall fee fome ounces of oyle fwimming on the top of the water within the receiver, after that the matter hath growne hot : vvhich (for as much as they would be tainted with fome ill fmell and vnpleafant tafte, becaufe of fuch qualitie as they hane gotten through the vehementneffe of the fire, then inclofed with the retort) muft be corrected by the changing of the water in the receiuer, that fo you may keepe them for the vfes which flial! hercafter be declared.

Thefe things aforefaid well vnderfood, when you defire greater quantitie of oile, and that more cleare and excellent ; you fhall take two pound of the faid matter and gums, whereof your referued oyles were made: you fhall put them in a cleaneretort, which you fhall fet ouer the fire, hauing the necke langing downe fomewhat morelow, and in a fhorttime (and that vvithout any great force of fire) there vvill be wrought a certaine kind of butter, vyhich will run out in great plentie, being as it
were of a middle confiftence betwixs the gum and the oyle before diftilled. Againe, you fhall take this butter-like materer and put it into the retor, hauing firtt made is verie cleane, and then fec it vpon the furnace the fecond rime, with cerraine ounces of purged oyle vvhich you thall hauc drawne before from the fame kind of gum. By thefe meanes, and the helpe of a reafonable fire giuen vito it, you flall draw as much oyle (and that moft exquififie) as Art and Nature could joyntly giue together. And thus much for the fure and certaine way of extraCting of oyles ot hard gums, which though it be coftly, ought nowithflanding for the excellencie thereof be rather practifed than the other common way which is by grauell, athes, or wafhed fand, caft into the ectort with the matter. By fuch meanes you fhall make oyle of amber, jet, brimftone, and other fuch kind of things, being firf made inco powder, and putting thereunto common oyle, which hath beerie fiftecleanfed and purged in a leaden veffel or warme water.
Oyle of W axe is thus prepared after the common manner : Take a pound of new oylcofwaxs. Waxc, you fhall walh it thus: melting ic at the fire you fhall caft it by and by into a veffell full of vvhice $W$ ine, worke it well with your hand after the manner of pafte, fometimes drawing it out at length, fometimes breaking of it, and fometimes doubling of it : melcit once againe, and caft it into the fame Wine, then allo worke is with your hands as before, and chus you fhail doe three or foure times, till you fee che wax to hauc Ipentabout the quantitic of a pint of vvine; this done, put is thus preparcd into a retorr, and caft vpon it grauell, wafhed fand, or powder of brickes, notwithflanding that it may be diftilled withour grauell, fand, or brickes, as is tried by expertence : lute che recortall abour, cuen vnto the middeft of the necke, and fei in an carthen pan full of fmall afhes vpon the fire, which mult be but foft and gente as the beginning, but augmented and made greater afterward from degree to degree, the oy le will diftill and come forch verie cleare.

Others preparc it after this manner: They fet an earthen veffell full of white or red wine vpouthe fire, whereinto after that the Wine is become hote, they caft the Wax diuided into many morfells: after they caufe the veffell to boyle being clofe couered, and when the wine is fpent, they powre in other, vnail that euerie pound of waxe haue wafted ten pound of Wine : and when they fee chat there is yet a little wine with the Waxe, they take away the Wax from the fire, that fo it may not burn, and prefently caft the Waxe into another veffell whereinthere is a litete white wine: after that it is cold, and the moifture chereof taken away, they diftill it in a retort. In any care theremult heed be takenthat it boyle not in diftilling, as in Turpentine and honie, for fuch liquors being heated, doe eaflie fwell and rife vp. Wherefore there muft be made buta foft and gentie fire at the firft, and then afterward increafed, and the fillitoric cooled: againe, to hinder the boyling vp of it, you may cafl in fome fmall lumps of lead wrapt vp in paper, or the leaues of Iuic or fmall grauell, \&cc.

This oyle is fingular good for to fuppurate and ripen Impoftumes, aff wage paine, comfort thehard and frayned finews, and for the palfie. The water diftilled before the oyle doth meruailoully heale all forss of wounds, if they be wafhed therewith, and a linner cioth wet therein, laid vpon them.
You may diftill after this manner, benjouin, ben, ladanum, and other fuch like gums : you muft alfo note here in this place, that hard gums may be diftilled with water, as the oyles of hearbes, and feeds before fpecified.

## Crap. LXXXV。

> Of the manner of extracting oyles out of ©ryrrbe, Sto. rax Calamite, Gum arabicke, and fuctit other like.
Oft certaine it is, that the liquor which is extracted and drawne from Myrrhe, Storax calamite, and Gum arabicke, is not an oyle, but a grofe, flymie, and glewie mater: wvhich is perceiued and knowne, becaufe they take not fire, yea and if you meet vvith any of them at any time that vvill burne, shen know that it commeth by the mingling of fome ocher oyle cherewith, and Aqua-vitx.
Take therefore verie new egges, and make them veric hard in hote vvater, afterward cleaue them in the middefl, and rake outche yolkes : and in their place putting as much Gummes, and chat before they be cold, joyne the two parts of euerie one of them together againe, and making a hole through the peeces of the fmaller end, hang them in a caue, to the end that the moifture of the place may caufe the Gumme (wherher it be Myrtle or Storax calamite) therein inclofed to refolue the more eafilie : fet vnder euerie eggea viole, and there will drop downe into it a matter much like vnto honie, or thinner. This done, gather that which is diftilled into a viole, and fet the fame verie vvell fopped, deepe in the horfe. dung, to the end that by his heat(being good to alcer and purrifie the flymie qualitie of this matter) it may be corrected, and made more moift and like vnto oyle.
Fiorouanto, an Iralian Empericke, in the feuen and fiftiech Chaprer of his fecond Booke, and the thirreenth Chapter of the fourch Booke of his Vexations, prepareth the oyle of Myrrhe after this manner : Take of elected and crue Myrrhe fix ounces, of Aqua-vitx withour any flegme twelue ounces, mingle them rogether in a retort of glafle, vvhich you thall fee vnder horfedung veric hore he fpace of fixe dayes, afterward diftill them in Maries-bath till all the water be rifen and wholly gone : then you fhall fee in the bottome of the retort, oyle, vvhich you flall fraine through a linnen cloth, and keepe it to preferue the face a long time, and concinue it in his young and yourhfull brighteffc and frefhneffe. This oyle is a verie fit balme to conglutinate and heale wounds fpeedily, as alfo to cure all other inward difeafes in taking two drammes thereof inward: it is good alfo for the deafeneffe of the cares. Looke for the larger handling of the diftillacion of oyles in our Booke of fecret medicines.

## The Silke-worme.

Chap.LXXXVI.

## Of the profit comming of the Wormes that pin 今ilke.



He good Hufwife, wvhich hath the ouerfight, gouernement, and dte fpofing of the catecll, muft not make leffe account of the Silke-worme than of the Honie-bee. For, befides the pleafure which the may cono ceiue of the meruailous induftrioufnefle of this little beaft in making and fpinning of Silke, The may alfo reape an incredible profic of fo excellent a worke,
worke, which honourech and makech men glorious, being attyred with the pompe of this workmanthip and piece of cunning skill: infomuch, as wee fee, that Kings, Princes, Gentemen, Prelares, Iuftices, and orher grear and notable perfonages are vfually decked and apparrelled with the trauaile of thefe prettie creatures. And which is more; the filke feruech not onely for the apparrelling of men, but alfo for a fingular remedie to comfort the heart that is ficke, and to reioyce and recreate all the heauie and troubled fpirits of anie one : as wee may well vnderfland by that faimous confeation, called of the Phyfitions Alkernies ; which being compounded, for the moft part, of the decoation and infufion of Silke in the inice of Kermes, and being taken inwardly, it is a verie fouieraigne remedie againft faintings and fwownings. Wherefore the good wife or Miftrefle of our Courrery Farme fhail make great account of the keeping of Silke-wormes, to the end that Thee may reape the profit of the fale of the Silke which fiee fhall gather from them yearely : which profitable practife is verie well knowne amonght the wiucs of Tourraine here in France. gouernment of Silke-wormes, and for the making of her beft commoditie thereof, doe chufe out fome conuenient place about the Faime for. the better ordering and keeping of them : and it muft be rather high than low, hauing a good ayre, and without moifneffe, being fo prouided of Windowes, as that the Sunne may come in at them both morning and euening, if it feeme good vnto fuch as haue the charge to gouerne them. Thefe Windowes muft be fuch as will fhut clofe, or elfe are glafed; or paper Windowes, or of fine Linnen Cloth, to the end, that when it raineth or bloweth, in cold weather, or in moift, they may be kept verie clofe and fát fhut: 'for who fo failecth to gouerne and pronide for them in this fort, it commeth to paffe without doubt, that thefe prettic creatures being tender at all times, canriot efcape, but die", when anie hard weather commeth. He mufl likewife have Nets and Cords Before the Windowes, to the end, that the paper-Windowes being opened, the Sparrowes, Swallowes, and fuch hurffull birds, may not get in, to feed vpon thefe Wormes. Neither Cocke nor Henne muft come in hecre : for they would fo rauenounly feed vpon this lietle Worme, as that they would be readie to burf. The floore mult be kept veric cleane; and the walls without holes or creuifes, by which neither Crickers,Lizards, Rats, or other like vermine, may enter and get in, to kill and fpoyle thefe little things, either night or day. In it there muft be ouerthwart partitions with pillars, and vpon them fhall be faftened manie boords or hurdles, made of the flalkes of Rofe-trees, for to pleafure this fmall wretch withall: and thefe, before you fer anie. Wormes vpon them, mulf be fprinkled with a litele vineger, and rubbed with fweet hearbes, becaule they loue fweet fmels.

# Снар. LXXXVIII. <br> Of the goucrning of silke-roormes. 

(n)He carefull Hufwife, fo foone as the Spring drawech neere, and that the Thall fee that the Mulberrie-tree beginnech to bud, fhall make in readineffe egges of Wormes, which fhee hath keptall the Winter before, to be brooded and fit vpon. And if fhee fee that the Mulberrie-tree is flow to bud, fhee fhall lay frefh dung vnto the rootes thereof during the new Moone of March, thereby to bring ic forward : for otherwife, for lack of the leaucs of the Mulberrie-tree, if it fhould come to paffe that her Wormes fhould be hatched or bred, fhe fhould be conftrained, for their food, to haue recourfe to the heare of the Thorne; Elme leaues, the tender branches of Nettles, and others. And as concerning making of choice of fuch Wormes as are to be breeders; you muft take the feed which is but a yeare old, and which being bathed in Wine, fallech to the bottome, and floteth not aboue, and withall, hath the markes which fhall be fpoken of hereafter : The time of brooding them, is the fifteenth or twentiech of Aprill, from the fourth vnto the tenih day of the Moone, bue neuer in the decreafe: for wrapping their filke round about it, they will bring is forth the fourth day, as fuch time as they are ftrong, in fuch fort, as that their ends and huskes will bee greater, harder, and more finely haired, than anie other that are bred at another time: for thofe which are bred in the decreafe of the Moone, are alwayes febble, and yeeld no profit. The meanes to make them breed, is, after that you haue watered and bathed them with white Wine, radher chan warme water, to lay them neere the fire, vnill they be a litele warmed; then to lay them betwixt two pillowes ftuffed with feathers, and made likewife fomewhat warme, or betwixt the breafts of women (prouided that they haue not cheir termes at that time) and fo, as she Wormes doe breed, to take them away with Mulberrie-tree leaues, making choice of thofe which are moft tender: and then to lay them vpon boords, or papers, that haue beene rubbed ouer with. Wormewood or Sothernewood, or fome fuch like hearbe. When they are once bred, they fhall haue the leaues of Mul-berrie-trees given them euening and morning, encreafing them euerie day, as the Wormes fhall grow greater and greater, vnto the fourth change: for then alfo they will ftand in need to be fed at noone, becaufe they eate more at that time than they were wont : but you mull bee admonifhed, that when they mue, or change, you muft giue them fomewhat fparingly, becaufe as then they are weake and feeble: And in anie cafe lee not the leaues be rotten, moift, or wet: but if it frould fall out, that they fhould be moift, then you muft wipe them throughly with

The gathering
of the Mulberrieotyec leases. cleane Linnens, and drie them at the fire. They muft allo be gathered of Mulber-rie-trees planted vpon the toppes of hills, and flanding open vpon the Sunne, and of old trees, rather than of young ones, and fuch as beare a fruit fomewhat red and blacke, and not to gather the faid leaues in the morning, fo long as they are wet with the deaw, or other thing, vnill the Sunne haue gone ouer them : and further, to picke the bad from the good, before you giue them vnto the Wormes to eate. Thefe litele beafts may not be touched with your hands but as little as may be : for the more they are handled, the more they are hindered thereby, becaule they are verie exceeding tender -and daintie, efpecially at fuch time as they doe caft, or change. And yet notwithfanding, they muft bee kept verie cleane and neat, and all their little dung taken from them eurrie three daies. The place muft likewife be perfumed with Frankincenfe, Garlicke, Onions, Larde, or broyled. Sawfages, that you may minifter matter of pleafure vito thefe litete creatures: and againe, if they be weake and ficke, thefe fmells refreth and recouer them againe.
the Countrie Farme.
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They muft alfo be marked whether they fleepe, or no: for fecing they are wont to Ileepe foure tiries, efpecially when they caft and change; if it happen, that anie of them be ftill eaing, and fleepe not, they mult be put apart, without haning anic meat to ear, that lo they may fall to fleeping, for elfe they would all burft: and is is as true, that if they be breeding of young, they mulf be foberly dicted. After that they haue caft and changed the fourth tame, within three daics after they will eat betrer than euer they did, vntill fuch time as their bodies begin to fhine, and that they make manifold hew of the filke thread that is in their bellies: which if it be siznes that the to come white from them, their head is as if it were filuer: if that it be to come yels make filke.
low from them, their heads beare the colour of gold : if greene or Orange colour, their heads fore-tell the fame. Thus they feeling themfelues well filed and fedde colomesthe fils they feeke out fome refting place for the purpofe to faften themflues vnto, and there orderly to auoid therrfilke, euerie one fluming vp himfelfe in his fale or huske, which they make and build vp in two daies, or a little more. Then you mult be carefull to have in readinuife for them, round about the Tables, good ftore of Broome, Brakes, branches of Vines, Oake-tree boughes, Chefnut-tree boughes, and other things : and withall, let them be verie drie; for moifure is their enemie: and then not to give them over, vntill they be all faftened and hanged vpon thefe branches, there to make cheir worke : whereof they be fo eager, as that they grow madde vntill they be packed vp in their little clewes and bottomes, and that infuch fort, as that a man would thinke that they would be flifeled : then they mult haue fome helpe, and order muft be taken, ciat they may not fall downe vpon the earth: and if they doe fall, to put them vp againe into fome place for the purpofe. They haue finifhed their worke in two or three dayes, more or leffe, and as the weather groweth hot or cold at that time: And as it is eafie to perceiue when they are all at worke, fo they make it to be heard verie well when they ceafe and make an end of their labour. They dwell thus, and abide altogether, for the moft part, in their huskes twentie dayes, more or leffe, according vnto the tenderneffe, foftnefle, or hardneffe of their bottomes of filke. As concerning the choice of their huskes, or cods, the Orange coloured are beft, and not the yellow, and leaft of all, the white, or greene: and as concerning the taking of the fingle, or of the double, the fingle are more worth, becaufe that the male and the female are within the double: which female layeth her egges no fooner in the morning than fhee coupleth with the male againe. The fcales or huskes being thus chofen, thofe which are good for encreafe, The choice of muft be put into a place where no duft is, and well couered : the donble allo mult breeding be feparated from che fingle, to the end, that they may make the fairer filke: and ef. wormeso pecially there muft choice be made of fuch people as are the beft workefolles, both for to know the filke, as alfo to draw it out with fuch difcretion, as that there may come the moft profic of it. When the VVormes fhall be out of their huskes, then you mult make clooice of the beft for encreafe and breeding : thofe which are the groffeft and blackeft, are the ftrongeft, and affoord better egges than anie of the other. You muft likewife take more females than males : and for the knowing of the one from the other, the eyes of thefe creatures doe fufficientiy teftifie thereof; for the females hare , muft alfo be pur afunder, and white Linnen clothes fpread, or rather leaues of Pa - and female per, vpon little Tables, for to receiue their egges : The Paper is more naturall and commodious than the Linnen, becaufe it may be the better raked ouer with a knife, to draws together the egges thercupon, without making of anie fpoyle
As concerning the difeafes whereunto thefe little creatures be fubiect: When they rete difeafes of hate not beene fo carefully looked vnto as they floould, to be kept cleane; when the filke-wormese cold Northerne wind, or the hot Southerne Sunne hath molefted them as alfo when they haue caten too much; then they becone ficke: wherefore you muft keepe them cleanely: fop the windowes and holes by which the cold windes doe enter
and get in, and carrie coales of fire that doe not fmoake, into their lodging, fetting thereupon Frankincenfe or Sawfages cut in flices (for they fo loue this mell, as thas it prefently curech them) as alfo befprinkle them with a littie Malmefey or Aquavitx. If they haue beene troubled with too great heat of the South Sunne, there mult be forinkled vpon them Rofe-water: If they haue ouer-eaten themfelues, the contrarie diet will cure them; as the keeping of them three or foure daies withoue eating anie thing: If there be anie of them that are fpotted with anie duskifh, blewifh, or yellowihh colour, and that there appeare withall vpon their bellies a certaine humour that doth wet them, they mult be fpeedily taken from out of the companie of the reft, and carried out: and in the morning, before the Sunne rife, fet the whole and found in the ayre for fome fmall rime, and afterward put them in their places againe : and then it will be good to fprinkle them with good and ftrong vineger, and to annoint them with Wormewood or Sothernewood, and alfo
to giue them ayre, making them likewile to feele the force of the
Sunne, prouided, that the beames thercof doe not touch
them : and you mult looke alfo, that the windowes
bee fo placed, as that the morning ayre
may feafon and fend his breath
throughour the whole
houle.

The end of the third Booke

#  THE FOVRTH BOOKE of THE COVNTRIE 

H OVSE.

## That there are two forts of ©Medowes.

Chap. I.<br>Of CMedowes : and their difference.



N our former Treatife wee hane runne through thofe things which belong vnto the husbanding and ordering of Gardens and Orchards, and now it requireth, that wee fpeake of Medow Grounds, wvereupon confifteth the greateft meanes of feeding and bringing vp of Cattell, to the end wee niay perfeat and accompliñ, our fore-appointed purpofe. The thing therefore, called in our Frencli tongue Pré, may feeme to be borrowed from theold word Prat, and both of them to fignifie and point out a thing that is readie and preft to doc the Mafter of the Farme and Farmer feruice, viithout purting him to anie paines, in refpect of the labouring or husbanding of them: but this muft be vnderfood of Medowes hauing their prey and maintenance about them; namely, fuch as are thofe which are fed anid watered with the Marne on the one fide, and the Riuer Aube on the other, which is about fome hundred and fiffie leagues of fquare Countrey: as alfo thofe about the Riuer called Vefclle, which of allothers dnth moft abound in Medowes. It is in like manner in the free and reclamed grounds from Barle-duc to Virrye in Partois, and from Louemont to Vaffie in Thicrache, all along the litele Blondelle, as allo along the great and frall Morin, in our Country of Beauuoifis. Such medow grounds doe not feare formes and tempefts, as Gardens and other arable grounds doe : bue with little coft and charges they y yeld their double reuenue and profic enerie yeare; the one of Hay, the other of Pafture. Medowes arc of two forts: the one drie, the other moin. The drie crauedh not the helpe of anic water to be watered withall, except the raine, becaure it is in a fat place, and where it hath full fore of refrefhing iurce: and in fuch places Hay dorh grow of his owne accord, and that a great deale better than where it is forced by cafting of water vpon it. The moift medowes have alfo feldome anie need of watering, becaufe, moft commonly, they lye alongf the bankes of fonse great or fmall Riuers, which feedeth and nouriheth them: as thofe which lye here in France, by the Riuers of Marne,Aube,Blondile,and Morin: and in England, by the Riuers of Thames, Trent, Seauerne, Auon, Tcame, Ouze, Wye, and fuch like: and thefe medowes are, for the moft part, plaine and leuell grounds,
becaufe the inundations of thefe Riuers walhing theri ouer at leaft once or twice euerie Winter, the Moales, and other filchie vermine, which hurr the earth, are deftroyed, and thefe Medowes are cuer more fruiffull and more aboundant in their encreafe than the higher Medowes are, but che graffe is nothing neere fo fweet and fo pleafant, neither feedech fo foundly, nor fo fuddenly: Whence it commeth, that the husbandman keepeth his high-land hay for his cattell which are to be fed, and his low-ground hay for thofe which workc.

## Снар. II.

## What grounds are good for Medones: and bow to make new Medowes.

 He ground that is fat and full of iuice, although it be nothing at all helped either by fmall Riucror Brooke, is good to bring forth hay, fo that fuch place be not exceeding farre from fome fmall Brooke, ftanding water, or litele Riuer : or, at the leaft, that it be moift ar the bottome, and fuch, as wherein, if that one make a reafonable deepe ditch, he may find good fore of water: for moifture is one of che nurfes of hay. Where fuch fat and iuiceground is not, there may Medow ground be made, of what manner of earth foeuer it be, whecher it be a frong, flight, or leane earth, fo that you haue clofe by it but this one commoditie of a lietle Brooke to water it, and that the field lye fomewhat floping or defcending, not veric low, nor verie Hat, as wherein the raine water, or other of anie fmall Riuer, taking fometimes ouer the fame, doe not vee to dwell and ftand anie long time, but palfech and runnech away faire and foftly, withoue anie tarrying. Wherefore $I$ agree and muf needs confeffe, that fome grounds are not fo fit and profitable as otherfome for the recciuing of Hay-fecd, as thofe which thirough the necreneffe of fome grear Flouds, and Pooles, Lakes, and great large Waters, are offentimes onerflowne and couered with aboundance of water, which in Winter drownech the grounds: Whereupon it commech to paffe, that the hay is nothing fine or delightfome vnto beafts, bur great, and full of fumpie ftalks: a broad graffe alfo, and nothing pleafing their cafte. But howfoeuer it is, the hay of fanding waters, ill husbanded and corrupted, as alfo the hay which naturally groweth thereabour, and by the large borders of Lakes, is not fuch as the fine mouthed beaft can delight in, as neither that which is gathered in grounds bordering vpon the Sea; as with the falt and nitrous rellifh whereof the appetites of Cattell are ouerthrowne, not being accuftomed thereunto : befides that, the verie graffe ir felfe is more ranke and vnfauourie than the common fort of graffe is, and in tafte verie vnlike it.
Salt Mathts.
Yet this holdech not generally : for thefe low Medowes, and thofe which border on the Sea, are oftentimes the beft of all orher, and feed with greacer expedition than any orher hay whatfoeuer: as witneffech manie of thofe falt marifhes, which are the moft chiefe nurceries and bringers forth of far cattell that are knowne, and efpecially Sheepe, which neurr are knowne to rot vpon the fame. And of all cattell which feed vpon hay, none is fo daintie and choice in its tafte, as the Sheepe is : for hee muft haue it both fweet, fhort, and foft : So that by that beaft onely it may be fene, that thofe low Medowes are not euer vnprofitable. And indeed to conclude, there is not any ground which will beare graffe, bur by induftrie, mancre, and much reft, may be brought to beare reafonable good hay, if not to feede, yet to keepe catecll in good plight, and make them goe e through with their labours foundly : which is as great a profit to the husbandman as the office of grazing, and more properly belone. ging to his profeffion.

Wherefore

Wherefore if you would make new Medowes, maike choice of the beft ground Tomake nere you can : this ground you thall lay fallow, and let lye idle a wholeSummer: then in medom Autumne after you fhall turne vp and plow the fame ground, often fowing therein, groundse for the firt y care, Turneps or Naues,, Miller, Beanes, or Oats, and the yeare tollowing with Whear : shen the third yeare you thall labour it diligently, and fow it with Fetches mixt with Hay-feeds:and after this, you fhall mow andorder it as otherold Me. dowes, as we will declare by and by.

Yet for the fowing of thefe manie Graines fo manie yeares one after another, it is not altogether fo neceffarie: for though it may be vfed in fome barren Countries, becaule Turneps, Nauets, and Fetches are enrichers, and (as it were) manurings of the ground, and the Oates a great breeder of gratie; yet if you onely, when you intend oates agreat to lay a ground of graffe, doe but the laft yeare caft downe the furrowes, and lay the breeder of lands as flat as you can, and then onely fow cleane Oates vpon the fame, it will be as graffe. fully fufficient as all the former labour, and altogether as fruitfull, if the husbandman flacke not his labour herein, but giue it fuch needfull feconds as the foyle flall require.

Chap. III.

## What manner of Husbandric is required about Clledomes.

8Vch as obftinately defend and maintaine, that there is not anie paines or To fow ones labour to be vfed about Medowes, feeme vnto me (vnder correCtion) dowes. void of all found iudgement: for euerie where, in proceffe of time, the earth becommeth wearie, and fandech in need to be refrefhed in fome parts of it, yea, to be fowne againe, and fahioned, if need be, efpecially in feeding grounds, and Medowes, appointed for pafture for horned beafts: for fuch cattell as beare Wooll, doe not defire watrie places (as Medowes would be) but being conrented with Shepheards, graze along by the wayes, and vpon the plowed grounds And as for your heards of young Horres and Afes, they feed maturally and commodioufly with your other catell. Yea furthernoore, I haue feene in Campaine, as is fhould be about Pone vpon Seine, a Medow countrey, the Geefe and Turkies daily and ordinarily driuen tn the pafture, for the fauing of charges at home : which thing would not agree well abour the places of Monfort ${ }^{\prime}$ Amauryc, where is kept fome part of the Kings breed of Horfes and Mares; for the downe, and other feathers of thofe fowles, as alfo their dung, would make thefe forts of beafts ficke, cuen Horfe, Mare, Mule, or Afte.
Befides, according to the opinion of all good husbandmen, thefe fowles are of all creatures the moft preiudiciall that may be, not onely to Medow grounds, but alfo io all manner of Pafture grounds whatfoeuer: for befides the annoyance which their fcathers and downe make, their dung is fo poyfonous vnto the earth, that it makes it barren, and forceth it to bring forth nothing but Goofe-graffe, which is fuch a fowre and vnwholefome weed, that no beaft will touch it, and which, in fhort fpace, will ourer-runne a greac deale of ground, and make it vterly vfeieffe : thereforc eurric husband mult be carefull to keepe chefe fowles boch from his Medowes an:d his feeding Paftures.
But whatiocucr ochers fay or doe, fure I am, that a good Farmer muft not neglet To weed it and his Medow ground, feeing the husbanding of them is a matter more of care than kefece is cleareed of paine and labour: For the firfe care muft be to kecpe it that it grow not with bufhes and thornes, or grear high falkes of other hearbes, all which would be pulled vp by the rooss in Autumne, or before Winter, as bufhes, brambles, and rufhes: fome other of them in the Spring, as Succories, Heralocke, and fuch ocher weeds,

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Bettomes of Hay-mowcs.

Sluces and Draines.
which are vnprofitable for the feeding of the heards of Horfes and Mares. Likewife there muft nor be left in them anie flones, nor yet anic other thing, that may hinder the digging of them, when the earth is to be niirred. The yround being freed of fones, thall be made euen and fmooth verie handfomely in the Winter timc, and after thar, tilled and turned oucr verie diligently and finely with the plough, and after harrowed!, efpecially that which is leane, and ly ying with tome defcenr, but not watred otherwife than the raine vfech to water it It muft be dunged alfo in Ianuarie aud Fe bruarle, wlien the Moone is in the encreale, that fo it may be fatsed, and fore of iuice brought into is for the growing of grafle. The beft manuring that can be beflowed vpon ir, is fine crumbling earth mixt with dung, which will doe it more good than the beft and purefl dung that you can find in your Neat-houfe. For the making hereof, you muf gather in Summer the duff that is by the high wayes mof haunted, and mingle the fame wich the dung of catell, the filth and fwcepings of the houfe, the dyrs of the ftreets, the parings of the houle, and the great and littic Court, the dung of Hennes and Pigeons, Oxe-dung, Horfe-dung, and all other fuch excrements, which muff be let incorporate and mingle together the whole Winter, vntill fuch time as this matter, watered with water, and throughly pierced with the froft, be fufficiently ripened. This mixture when it is fpread, entrech betrer below into the earth than dung alone, and alfo incorporatech it felfe better with the earth. But abouc ali, there is nu dung more excellent for Medow grounds, than the rotten faddell or bottomes of Hay-mowes, or Hay-flackes, which, purrified with the moifture of the earth, lookes mouldie biacke, and moff filthic ; and with chis, if you mixe the fweepings of the Hay-barne floore, and the fcatcered feedes which fall from the Hay when is is fhaked vp or bound into bottles, it will be a grear deale the better, and the earth will put forth his encreafe in much more plentie. Thefe Medow grounds mult alfo be verie well drained from water, it they be fubiect thereunto, and fluces and draines made either by plough, fpade, or other inftrument, which may conuey it from one fluce to another, till it fall into fome ditch or riuer : for as the fiudden wafhing of the earch fatteneth and enricheth the fame, by reafon of the mud, flime, and other far fubflances which it leaucth behind is; fo the long abiding of the water vpon is, fealds the foyle, rots the reots of the graffe, and either makes it vterly barren, or conuerts it to a bogge-myre: Nay, where the water lyes long vpon the ground, there it will turne the grafle to reed, rufhes, or other vnprofitable weeds: therefore by all meanes preuent the continuance of flouds, and one!y eftecme of a gencle wafhing, and no more. Againe, in your Medow grounds you mult be exceeding carefull to know the goodneffe or badneffe of the fame: as, which is fruiffull, which barren, which quicke of growth, which flow, which will beare bur one entire crop, and which two, and accordingly you mult lay them, that is, giue chem time of ref for growth; as shus: If your ground be veric fruiffull and rich, yet through the coldnefle of the clyme will not beare aboue one crop, it fhall nor be needfull tor you to lay it before May day: but if it be but of a reafonable fruiffulneffe, then you may lay it at the Annuntiation of our Ladie: but if it be verie hard and barren, then it is belt to lay it at Candlemas, that it may haue che veternioft of the Spring \& Summer to grow in : al:o, if it be exceeding fertile, and fo warme and slofe couched, shat it will beare two croppes, then you fhall lay itat Candlemas, that you may cut it at the end of May and the midfo of September; for to cut it after that time, is both ill husbandrie, and profitleffe: for howfocuer men may be opinioned, either through cuffome, or the imitation of their neighbors, yet they hall find it moft certainc, that the hay, how good foeuer the growth be, yet if it want the Sunne and kindly withering, it can neuer be good either to feed or fufaine nature with: but hauing the iuice rotung and not dried within is, becommeth black, vnpleafant, and vnwhoiefome, infomuch, that the wort ftraw is better than the beft of fuch hay: therefore let euerie husbandman haue a great care to the good and kindly withering of his hay, and efteeme cuer the qualitie before che quantitie.After Medowes are laid, then the husbandman fhall haue a great care to his fences, leaft either his owne, or other mens cattell, by day or night breake into she fame,for chey may
doe him more iniurie in an houre than they can doe him profit in a moneth: for the young and tender graffe, if it be nipt or bitten at the firff fringing, hardly after profperecth, till the fythe haue cur it: for it is with graffe as with fronger plants, which if they be nipt or bitten, forthwith loofe the beauric of their flourifhing, and groweth not fraightior vpright, but low, crooked, and ill-faueredly, neither fo faft as before it did, buit verie flowly, and manie times withour feed : therefore by all meanes preuent che cropping of your Medowes by catell at their firf f pringing. Alfo, if you haue anie riuers, ditches, or fmall rundics, which bute vpon your Medowes, you fhall at fuch time as you lay your Medowes, be fure to cleanfe and fcoure them both of weeds, mudde, and other filth, hat haall anic way cloy or fill chem, that the water may thereby haue a more free paffage and a larger receit to receiue and conuey away anie floud which fhall happen: for after your Medowes begin to grow, if anie floud hall come vpon them, the fand and othre filch will faften to the rootes, and lye vpon the graffe in fuch manner, that not being able to be cicanfed by anic husbandrie, it will make the hay veterly vnwholefome, fo that lying in the fomacks of tie beafts, it will engender manie mortall and pentilent difeafes, And herein is alfo to be noted, that the mudde and other compaffe which you hall take ous of thefe riuers or ditches, would be fpread vpon the Medowes, and when it is drie, with frall clotting mayles be beaten as fmall as duft; for chis is alfo an excellent maner of manuring your Medowes.

## С нар. IIII.

## What nuyf be fonnve in the Medowes.

(27eHe way then to reforme cheold and drie confumed places of your Me- To fow mes dow, if they be become hoarie \& rotten, mult be by fowing them in the dowes. Spring with good Hay-feed, which is the Medow Clauer, which is called in fome places Sops in wine, by reafon of the flower, which is an sops in wime, on. hearb which men in times paft made great account of,fowing it by if felfe as the Fetch Snailecolauktry is wont to be fowne, and they did fow it in Ianuarie, as Cato and Palliddiuss doe report. Cato. The maner of fowing is flal be fee downe in the fifth Buoke, in the handling of Pulfe. Palladius? Likewife the feed of Gallion or petty Mugguet, wild Fetch,and Hauer-graffe, which the Latine Poet calleth properly barren Oates. A gaine, he frnall wild Mallow is noe amiffe, neither the litele Crowfoot, forefeene it be not that with the bulbous root, that is to fay, the Crowfoot hauing a round root like an Onion, becaufe that is venimous for the beaff, but it muft be that Crowfoot which hath a hairie and threadic root. The two-fold Satyrion is good in fome place where it groweth naturally:fol likewife is the Hyacinth, the one of them being of a blew flower, the other of a purple, hercin differing from the Saryrion,which is more cut\& diuided into fmall buds, as likewwife more fragrant. It is nor good that there fhould be any great fore of Plantaine, except it be that of che leaf fort, called Birds-toong, The wild Carret,efpecially chat, which in the Plannaines. midft of the white flower, in the round broad tuff, beareth a fweet imelling feed; being rubd in the hand, like vnto graines of Paradife, \& of the fame colour:as likewife wild Wound-wort(which Diof corides calleth Hercules his wound-wort) is very good, fore. Wound-worto feene that it grow not too great. Germander likewife is good, being called of the Gre- Germander. cians fmall Oake, by reafon of the figure of the leaf. Litrle Rampions likewife is very good, becaufe of the rcor, which helpeth forth Lent fallads as wel as the Creffes:wild Saffron is not good, becaufe of his flower, feeing both the root and it doe kill beafts, pions. Saffion: euen as Hemlock doth, which is callcd Birds-bane:neither yet water Pepper, as being venimous through his heat, and vfing to grow only in flanding \& ftinking waters, as laughing Smallage doth, called Herbar. Sardonica, becaule it makeeth men and beafts to Laushings Smatis feeme to laugh when it killecth them: in like maner, wild Woad, Bucks-beard, Harts- lage? tong, wild \& low growing All-good, boch forts of Violets, the leffe Centauric, all the three forts of Dailies, and efpecially thofe which are called Gold-cups,orlitele Crowa
foot, and the three-leaued graffe of the Medowes, are all of them fingular good hearbes for the fruitfulnefle of the Medow ground. The Garlicke, which is called Great and/mall Serpentina, and which a man would iudge to be a little fmall rufh, of a reafonable water German- length, doth not amiffe, no more than the true and fmall water Germander, which der in the Me- is often found in che Medowses of Cheles, and elfewhere : but great ftore of it madowes of cheles. keth the hay to fmell ill : as on the contrarie, Penyivall maketh it fmell fweet, and fo likewife, Organie of both forts, the chrce forts of Balme, and Coftmarie : but Mints, and that Hore-hound, which is wild Camontile, are nothing worth. Great quantitie and ftere of wild Ferch cauferh the hay to be verie full of nouringment for cattell: the leffe Plantaine, Siluer-grafle of both forts, Peachwort (fo called, becaufe it carrieth a flower like a Peach-tree) and Burner : che three forts of Shepheards needles, called of the ancient Writers Storks-bills (by reaton of the fathion of the peake that followeth in place after the Hower) whercot hearbe Robert is one, doe verie weil for cattell, and cure them of the grauell, caufing them to make their vrine in aboundance. Millefoile and Pruncll (called the Carpenters hearbe, becaufe it is good for cuts) are alfo good, and verie fweet of (nell : but Quitch-graffe (called Dogs-grafte) doth deftroy the Medow as much as Balme doch mend it, and encreafech milke in Kine, as great Hares-foot doth in Goats, and in like manner as Veruaine and Groundfwell are good hearbes for Conies. Looke well, that Thiftles fer not their foor within your Medow, except ir be the bleffed Thifte, with the yellow flower, or elfe the liecle Thiftle, and that but about the borders or edges of the Medow, and that it haue the leaues of Sow-thiftle, though it be fmaller, and fotted (as it were) with drops of milke, and therefore it is called (Waries Thintle. The red and blew Pimpernell, becaufe of their flowers, as alfo the white, are as good there, as either the male or female Mercurie, though thefe hearbes delight rather to grow in the wayes, and amongt Vines, as doe alfo the Bindweed and Nighthade. Flax-weed, which differech from Efula, in as much as it hath no milke, and growech high as Line doth (faue that it hath a yellow flower) is good : but Efula or Spurge is nanght, as is alfo Hypericum, for theferwo are both of them verie hot and hrewd fellowes. Melilot the fmall and the great, Myrrhis, which hath leaues like Fermell, and diuers diuided white flowers, is of great vertue, and fweet, after the fmell of Myrrhe. To be fhort, the Carret and Cheruile doe ferue greatly for the nourining and goodneffe of the

Saxifrage a
hay. But aboue all, there is no hearbe nor feed more excellent to be nourifhed or Cowne in the Medowes, than Saxifrage is: for among fall hufwiues it is held an infallible rule, That where Saxifrage growes, there you foal! neuer hauc ill Cheefe or Butter, efpecially Cheefe. Whence it commeth; that the Netherlands abound much in that commoditie, and only (as is fuppofed) through the plentie of that hearb only. And for the better affirmation or proofe chereof, you thall vnderftand, that all good hufwiues, which will carrie any reputation for good Checfe making, doe euer dreffe their cheflep-bags and earning with Saxifrage, as the only hearbe that giueth a moft perfit feafon to the fame.
Now albeit I haue hore deliuered you a particular collection of the feeds of all thofe hearbs which are molt neceffarie to be fowne in Medows, yet I would not aduife you to be fo curious as to beftow your labour in culling thefe feeds fiom the reft, or to fow them in your Medows with that care and refpect that you fow feeds in your Garden; for leffe paines will ferue: only I would winh you, when you intend to fow your Medowes(which would be either inthe Spring, or in Autumne) to goe(if you be vnprouided)to fuch a neighbor or Farmer neere vnto you, as is owner of fome fine and delicate piece of Medow, void of groffe \&ffilthie weeds, ftump-graffe, knor-graffe,penygraffe, fpeare-graffe, or Burnet, and from him you fhal buy the fweepings or fcatrings of his Hay-barne floore, as alfo thofe fweepings which fhall be vnder thofe windows or holes, in at which the husbandman puttech hay when he vnloads it , and thefefweepings you fhal fow vpon your Medows as thick as you can frew them, for thethicker is euer the better: and you muft forefee, that when you thus fow your Medowes, you caufe your ground to be as bare eaten before as is poffible, elpecially with Sheepe,
becaufe as they bite the necref of all catell to the ground, fo they befow vpon is their manure, or dung, which is the fatecf and moft hurffullef of all ocher, and makech the feeds inftandy to fprout afer the firf fhower. You fhall alfo obferue when you fow your Medowes (whether it be at the Spring, or at the fall) to fee and if the dung of the cattell which laft grazed vpon the fame, lye vpon it ftull in hcapes, as whien it fell from their bodies : and this dung you fhall raife from che ground, and with beetles made for the purpofe, beat them into verie fmall pieces, and fo fpread thean gencrally over the whole Medow, and then fow your feeds amongft them, for by this meanes your feeds will quickly take root.
There is alfo another way of enriching of Mcdowes, efpecially fuch as lyc high, Fodderimg of and out of the dangers of flouds, which for the moft part are cuer dle barrenneft; great celletho and that is by the foddering or feeding of catell vpon the fame in the. Winter feafon, as thus : The husbandman fhall in the barrenneft pa:t of his Medow ground, which is lafeff from waters or flouds, make yp his hay in a large and handfome Scacke, or Recke, either round or fquare, according to his pleafure, or the quantitic of the hay: and this Stacke thus made, he fhall fence about wish thorne, or other hedge-ware, to kecpe cattell from tearing or foyling the fame, till fuch time as the Farmer himfelfe Thall thiske it meet to cut downe the fame : Thes when the extremitic of $W$ inter fhall come, as either when the graffe is cleane confumed, or that by reafon of long Frofts or Snowes your catcell cannot come by anie food, then is the time to cut downc your Hay-reekes, and to fodder your catell therewith morning and cuening, cutting no more downe at a time chan fhall conueniently ferue to fodder your catell!; for fpoyle herein is the vildeft husbardrie that can be. This hay thus cur downe, you fhall not lay in one place, but in diuers places of your ground, in litete tufts or hillockes, featecring an armefull thereof in manic places: becanfe, if you fhould lay it in one place, or in a verie fmall circuie neere together, your cattell would difagree and offer to gore one another, af leaft, the flronger cattell would euer beat away the weaker, and fo rob them of their food : whereas being fcattered into diuers remote places, thofe which are beaten away from one place, will goe to another, and fo take their food without trouble : in which, you fiall euer obleruc to lay more tufts or heapes of bay than you haue cateell. Neither yet doe I meane, that this manner of foddering fhall oulcer-fpread anie great piece of ground at one time, burt according to the number of your cateeli, be clofe packed together, boch for the eafe of the fodderer, and for the well husbanding of the hay, which to be carried vp and downe too farre, would make much waft by lcatcering ; fo that to lay one foddering within two or three yards of another, is fufficient. And this I fpeake of great cattell, as Oxen, Kyne, Steeres, Horfes, or fuch like: for if you fodder Sheepe, then you muft lay your Foddering of hay in long rowes, one row three or foure yards from another, vpon the dricft and sheepee cleaneff ground you can find, becaufe the trampling and treading of the cattell will el!e maze nuch fpoyle of the hay. And herein is allo to be noted, that you muft not by any meancs lay your fodder aboue twice in one place, bur change and alter your ground, finding out fill a drie and vntrodden place to fodder in, as well for keeping the ground from two much foyling and tearing vp with the feet of cateell, as alfo for the lauing of the hay, which would be halfe loft, if if fhould be layd in wet and myrie places. And thus you may in one Winter runne ouer a great piece of ground, and not onely fow it plenteoully with the Hay- Ceedes which will fall from the Hay in the carrying, butalfo manure the ground excellently, by this drawing together of your beafts into one place, making their leare, and dunging moft thereupon. Now fome will fay, that this manner of cnriching of grounds carrieth with it a difcon:moditie which equalleth the goodneffe which is reaped from it, and therefore not fo much to be cfteemed; alledging, that the trampling of the cattell teareth vp the greene-fiwarth, and (as it were) ploweth vp the ground in fuch fort, that it will hardly beare any good croppe of grafle a yeare or two after. To which I aifiwere, thate if it doe (as happily it will) teare vp or digge the ground fo, that you commoditic of loofe the next ycares croppe in fome part : yet, after the firtt yeare is paft, the fodderinge.
fecond will double, and the third will treble anie encreafe formerly recciued from the fame ground; neither will the goodneffe euer after be abated from the fame: beiides, if your ground be fubief to anie filthie foft moffe, or fuzzie graffe, which is both vnfauourie and vnwholelome for beafts, and alfo choakech and deuourech yp all better herbage; this treading of the catels feet will vteerly kill it, and make the ground fruiffull for cuer after. Nay, if the ground haue beene much fubiect to frmall whynnes, or prick-graffe, which is a moft venimous weed in anie ground, according to the opinion of the beft husbands, this courfe onely will deftroy it. To conclude, the Medow well kept and maintained, doth alwaies bring double commoditie, to that which is ill gouerned and husbanded.

> С н а р. V.
> of the harrowing, watering, and keeping clofeand well
> defenfed the Medows ground.

(30Efides the fecaes of good hearbes, which is verie requifite for the Medowes, yee there are other workes needfull for the goodneffe of Hay: for che Medowes mult be harrowed and raked prefently after they be fowne, to breake the clods into fmall earth, or duft, that fo the mowers may not thercby hurt their Sythes. If the ground of the Medow be withered, and drie, it will be a maruellous commoditie vneo it, to draw into it, all the Winter long, at the leaft, fome frall Brooke, for the watering and moiftening of it, fecing that moifture is the naturall nourifhmert of Hay; and this would be done efpecially during the moneths of Nouember, December, Ianuarie, and Februarie : afterward, when the carth hath drunke her fill, then flop the way whereby the water of the Brooke runneth. It is true, that if the Medow-plor lye vpon the fide of fome hill, or vpon fome high ground, there fhall be no need to water it: for the firft raine that fallech, will defcend and water fuch Medowes verie fufficiently, being ioyned with the iuice and goodneffe of the dung which you fhall hane beflowed in the higher places. Nerther thall it be needfull to water the ground much, where chere is great quantitie of three-leaued graffe, becaufe then it.would die by and by. Againe, you muft not caule anie water to ouerflow anic old Medow grounds, in the time of great and exceffiue cold, except it fhould be that they fhould continue a long time : becaufe that the water fayling, the ground thus boyled againe, and drenched, would be verie much annoyed by the vehemence of the froft and yce. Likewife, if there be anie marifh or dead water in anie part of your Medow, you muft caule the fame to runne and drayne out by fome Conduits or Trenches: for without all peraduenture, the fuper-aboundance of water doth as much harme, as the want, fcarcitic, or lacke of the lame. You muft be fure alfo to keepe Swine out of your Medowes, becaufe they are alwaies turning it ouer with their fnouts, and rayfing great foddes of earth : Neither muft you admit anic great Cattell into them, faue when they be verie drie, becaufe the hornie hoofe doth finke into the carth, and either breake off the graffe, or cut in funder the rootes, whereupon they cannot fring or multiplie anie more.

## Chap. VI.

To mowe your clleadowes againe and againe, to gather the Hay and refrefb your Meadowes, and to bring your barren Meadowes into Tillage.

(3ccoOw for the mowing of your Meadowes, it mult be according to their growth or ripeneffe, for fome ripen foone, and fome late, and fure there before it be ripe, for then the fap or moifture not being come fully our foft fuzzieand vnwholefome fubftance which no cattell will car, and nothing buta fand till it be ripe, or that it juice be too much dried out haue flied it feed, is fubftance which fhould vvill the rifhment to your cattell, will be lofl. Therefore to know when your grafle is truely fis to be cut, you hall looke carefully vpon it, and vvhen you fee the tops thereof looke browne, and che cocke heads, bells, or bottells which beare the feeds, not ftand vpright, or looke direct into the heauens, but bend their heads downeward as looking backe into the earth, then you may be certainely affured it is a fit and good sime to cut it, for the earth hath giuen it all the due it ought to haue, and this will be (if it be in a moft fertile and verie rich foyle, fuch as may be cut twice in the yeare) at the beginning of Iune, or about a vyeeke before Midfommer : But if it be in a reafonable ground, which hath the title of a good earthonely, then it will be about the tranflation of S. Thomas, which is the third of Iulie: but if the ground be ex- Bef time to cos treame cold, moift, and barren, then it vvill be after Lammaffe, and fometimes in the graffe. middeft of September. Now for the generall catting or mowing of Haye, it would cuer be done in the new of the Moone; and at fuch time as the veeather by all conjeAtures is cleare, conttant, and likely to continue faire: As foone as your Haye is mowne, if there be plentic of graffes and that you fee it lye thicke in the fwathes, fo as the Ayre or Sunne cannot paffe frecly through it, then you fhall caufecertaine with forkes to follow the fyches, and as they mow it, fo to caft it abroad thin, whereby the Sunne may veither it, and this is called redding of hay: The next day afer the dew is taken from the ground, you fhall turne it, and let it vvither on the other fide; then handling it, and finding it to your feeling fully drie, the next day you fhall with forkes and rakes draw it together in great quantitic into long rows, which rows you mult draw in that way which the wind blowes moft, leaft drawing it in the contrarie way, the vvind fcatter it abroad, and loofe both your labour and profit, for thefe rowesare called Wind-rowes; and as foone as it is thus gathered together, you thall forthwith thruft the haye clofe vp together, and make tbofe Wind-rowes into wind-rowes: good bigge handfome cockes fharpe at the top, and broad at the bottome, fuch as fix or feuen of them may make a Waine-load; for howfocuer floth or weakeneffe may fay that litele cockes, becaufe they askelitele labour, are beft, yet it is certaine that the great cockes are much better, and keepe the haye fafer from vver, if any thal fall, Great hay: and alfo makes it fweat, and haye a great deale more kindly: in thefe cockes you fhal ceckes. let your haye ftand a day at leaft, if more it is not amifle, and then breake them open againe, and let them lye in the Sunne till it haue dried vp all the fweat and moifture that was in them; vwhich done, you fhall load it according to the maner of the foyle wherein you liue, and fo carrie it to the barne, or elfwhere according to your pleafure. Now this manner of making of haye you mult vnderftand is for fuch as is moft fine. cleane, and the pureft graffe, without vveeds, ftumpes, thicke leaues, or other grofle fubitances; for if you find your graffeto be of that rough nature(as for the moft partall your voood-land-graffe is) or that it is much intermist with burnet, peny-
graffe, and other thicke leafed weeds, then you fhall giue it double withering, and after you haue mowed it, and tedded it, you fhall nurne it twice or thrice ere you cocke it, then being put into drie cocke, you fhall breake it open in the morning: and make it vp into drie cocke againe at night, threcor foure daies together before you load it, and be fure that in the cockeit take a verie good fweat, and then carrie it home and flacke it vp as fhall pleafe your beft. But if your ground be extreame barren, cold, moift, and full of veric fowre and Rubborne grafte, and of that alfo but litele plentic being thin, fhort, and hard in the cuuting, then you fhall noo need to ted that hay at all, but in fteed of that labour, you fhall (as $i t$ is mowne) wich your forke make it inrothicke little grafle-cockes, as bigge as pretrie little moalc- hills: che reafon whereof is this, That fuch fowre and harfli graffe being exceeding llow of growth, muft neceffarilis be verie lare in the yeare before it can be ripe, or readie to be cut, whereby wanting the kind lie heat and ffengeth of the Sunne, it cannot but with great difficultie vvither vvell : vvhersfore you muf adde vnto it all the art which you may to bring it to good haye, which this calting it into litcle heapes and cockes will doe, for the graffe fo layed together will heat of it felfe, and then being ofeen turned and toft that the ayre may goe through it and drie it, and then made into cockes againe cuerie day bigger and bigger, vvill in the end by it owne heat come to as kindly hay as if it had the full benefitof the Sunne. And herein you fhall obferue, that as at firtt you make them into fmall cockes, fo the fecond day you thall make them into bigger by putting two or threc of thofe cockes into one, and the next day you fhall put ewo or three of thole bigger cockes into one, cuerie day increafing the bigncfle of the cockes as you find them to vvither, till you bring them to fo great cockes that three or foure of them will make a Waine-load, and in thate flate you fhall let them fand foure or fiue daies before you Joad them : but $y$ yhileft they are in the lietle cockes, you fhail breake them open once or twice a day ar leaft, according to thefaireneffe of the vveather; for you muft vnderftand, that whileft they are in graffe or vnwithered cockes, if you let them lie too long, the grafle will turne yellow, and begin to putrifie, vwhich often firring vvill prevent. Laftly, touching the making of hay, you muft viderffand that the greateft enemie it hath, is wet, or raine, and thercfore you muft be carefull to make it vp in the drieft and faireft weather you can; and ifany raine fhall happen to fall on it, not to turne it till the vpper fide be drie; for to tuine the wet graffe to the wet earth, is the readic way to make it rot.
Now to feake a little touching the choyce and vfe of your haye, you fhall vnder-
chove anivive of haye. fland, that the haye which is moft long, loggie, and of greatefl burthen, is beff for horfes, being verie drie,fweet, and got in a good feafon: that vvhich is not verie long of growth, but verie pleafant and cleane graffe, without weeds, hard ftumpes, pricks, or fuch like, is beff for milch-kine, or ftall-fed-oxen; oncly that which you preferue for your Kine, would be got verie drie, and haue all the fweetnefle and plenlantneffe that may be: but that you keepe for your feeding. cattell would not be altogether throughly vvithered, bur got a litele greenifh, fo as is may take fuch a heat in the mowe, as may onely difcolour it and turne it red, but no more; for that will bring a thirft vnto the catell, and make them drinke vvell : and the Grafier is of this opinion, that cattell neuer fecd well till they drinke well, and that haye which is the fineft and Thorteft, growing vpon high and drie grounds full of flowers and fweec plants, is beff for your fheepe, or young calies, and this mult be gor verie drie, and (as neere as you can) vterly withouc any raine ; for when it is fo dric that it will hardly lye vpon the Waine, then is it the beft of all: for when the husbandman faith ehat moift haye is profitable for the increafe of milke, he doth not meane that you fhall get in your haye greene, or any part vnwichered, for chat brings it to a rottennefle or oucr-drineffe, which is verie ill for milke; but you fhall get it into the barne as drie as you can, without forching, fcalding, or fuch vnnaturall extremivies, and this hay which taketh a litete too much hear in the mowe, and altereth colour, is the Drie-hay, and keepech your fat cattell from gripings and other painefull griefes in their bellies,
to which they are cuermore verie much fubject. It is an vfe with fome husbandmen (as well in our France as in other countries) after they haue brought their haye into drie cocke, to put it into great ftonkes or pettic flackes without doores, and fo to let it remaine a fortnight or more that it may rake rhefull fweat before it be brought to the barne, or hay-loft: but it is a needleffe and a double labour, and may verie well be fpared, if the orders be oblerued before prefcribed; for this much curioficie did but fpring from a tearefulneffe of ouer-heating, or mow. burning, which to preuent, the Ancients fpared not any labour. Nay they were fo curious in the firft times, that they would not fuffer their haye by any meanes to lye neere to the finke or fimell of the beaft-houfe, or vvhere any other noyfome fauours were, fuppofing that the haye would naturally of it owne inclination draw all fuch corruptions vnto it; but it was a feare might hate verie vvell beene fpared. Now touching the later crop of haye which is euer to be mowne in the moneth of Sepember, you fhall in all refpects ve it like the hay of thefe barren grounds laft written of, for che yere time being fo much Thot on, it can haue no other kindly withering, neither is it to be vfed for the feeding of fat cattell, or for milch Kine, but onely for drie beafts, or fuch as onely labor, as the oxe, horfe, mule, or afle.

If by the gathering of your hay you perceine your meadowes to become barren, vwhether it happen by your negigence in not hauing beene carefull ynough in hus. banding of them : or by reafon ot age, feeing the earth will fometime reft it felfe as being vvearic, for therecoucring of the ftrength againe, as it is onely feene in barren foyles, and no other; for chat which is truely fertile and good ground, will neuer be wearic of bearing, efpecially if is lie low, and be gentlie wafhe with waters; but that which lies high or violently againft the heat of the Sun, will many times decay in his abound ance, which when you fhall at any time percene, it fhall be good to forbeare the cutting of it the next yeare, and onely graze it with cattell, efpecially fhecpe, Grazirg misu vvhich vvill be as good as a manuring vnto it, and make it beare grafle in as good plentie as euer it did afore: for often cutting occafioneth barrenneffe, and often feeding breedes increafe. But if it be through the naturall fertilitic and hardneffe of the ground that it waseth barren, then you fhall ve the like meanes, that you vvould in making of new meadows; fet downe before in the fecond chapter of this booke: or elfe if you fee that you loofe your labour in renewing of your barren meadows, fet downe with your felfe to reduce them into arable ground, efpecially thofe which are drie, parched, bringing forth verie fmall ftore of graffe, growne ouer with a hard cruft, and fraught rather with naughtie weeds, than good and profitable graffe. For the doing whereof, you mult cut the vpper face and cruft of the carth in A prill, with a hhallow delfe, in turfes fome fadome and a halfe long, and halfe as broad, and to the thickneffe of two fingers : drie thefe turfes in the Sunne, and being concocted by the heat of the Sunne, fitthem one to another, and lay one vpon another, in manner of a furnace : afterward, fee fire to them with good fore of fraw : when they are burned, let them coole fixe or feuen daies: after fpead the afhes thereof equally all ouer the field : then looke for a good raine in May, to incorporate this aflie earth, and when it is accordingly performed, then plow it vp in Iune, and prefently after fow it wvith millet, afterward with rie, and in the end with maftling and wheat.

Chap. VII.<br>Of the Ozier-plot.

[4Emember this, that three things carefully kept and increafed by the dilio gence of the vvorkeman, doe make rich vvithoutany great trauell, thas is to fay, the meadow-grounds, the Ozier-plot, and the Willow-plot, vwhich by the meanes of vvater lightly flyding through the veines of the earth in the fat and vvell liking places that are vpon the fides ot hills, and by the vvatering of manifold ftreames round about, doe narurally grow currie yeare, and yeeld great profit vnto their maifer, for the feeding of his cattell, the making of hoopes for veffell, and binding of them, as alfo for fewcill, the benefit of poles, woodden veffells, arbours, flakes for hedges, and fupporters for vines. We will therefore fpeake firf of the ordering and husbanding of the Ozier-plos, and after it of the Willow-plet,vvhich vve do not dreame to haue any orher affigned place, than abour the meadows,and far remouled from the arable ground; in as much as their fladow is fo hurffull ro wheat, line, pulfe, and other graine, as that they neuer grow vvell where they are ouerfhadowed by thele : but on the contrarie, meadow grounds receiue great profic thereby: as well becaufe that graffe doch grow the fairer and more pleafantly in the fhadow, than vvhere it is not thadowed, a a allo for that the leaues of Ozier,Willow, Aller, and fuch other Trees, falling vpon the meadowes, and there rotring, maketh them the more fat, abounding in graffe, and fertile. The Ozier then (which old Writers call Sea-willow, or Wicker-tree, that is to fay, apt to bend) defirech not to come verie neere to the water, but loueth rather to ftand vpon the defcending fide of the valley, and the Ozier. plot would end at the fides of the Willowplot : the Ozier-plot muft be prickt wich a line, and pretrie fmall ditches drawne our in it betwixt two lines, and eurrie flip muft be fet one from another about fiue foote and a halfe, to giue them their fpreading. It vvill not abide the fhadow of any tree, but loueth much to haue the fruition of the South-Sunne. The tame red Ozier requireth great husbanding, and is afraid of frofts, and the flowres of raine that fall in March,and verie cold vvater : the wvhite and the greene Ozier, wvhich neicher bend nor yer defend themfelues fo well, are of a harder nature, and grow higher. It vill be good to pricke downe moe of the tame ones than of the other, and alwaies to fet them out of the fhadow, and there muft be bura little water at their foct, the moft part of the time: vvherefore you muft make furrowes by the vvay, to keepeand refrue waw ter. It muft be dreffed twice in a yeare to make it grow vvell, that is tofay, about mid-May, and towards the end of Nouember, prefently after thatit is gathered, being alfo the time of planting of it.
It is verie delightiome vnto it to haue the carth raifed vvith the fpade and ftirred, and to caft in again the clods vnoo the foot fome fifteen daies 2fer S. Whichael, which is the time of gathering them, and making of them vp into bottles. You muft keepe your bottles made of the chicknefle of a fadome, frefh \& coole in fome cellar or caue, and if the feafon be drie,to vvater them throughout now and then: fome flip off the leaues in gathering of them,thereof to make good afhes : others let the leaues fall of themflues, and after gather them for the houfhold, and in Winter-nights by the fire fide make the flaues fpend their time in cleauing them, for to make baskets of. Some doe not cut the oziers all from the head, but fuch flips as are about the edyes of it, and leaue the maifter-twig to fand vvhole for fine or fixe yeares, when it mult be renewed and pricked downe againe : for this is the terme of the plant : for in all the cime following the plant doth nothing but drit,and the twig harden.

## Chap. VIII. <br> Of the willow plos.

5iseOme fay, that the Willow-plor craueth the like husbandrie that the Ozi-er-plot, becaufe the Willow differcth onely from the Ozier in vfe, bigneffe, and barke : for the Willow-rtee is for poles, the Ozier (as hath beene faid) for bindings about the vine and caske : the Willow is thicke and grewing taller, the Ozier is fmaller and lower : the Willow- tree hach a barke of a darke pu:ple colour, the Ozier of a yellow ffraw colour. But vyhaffocuer it is, the Willow loueth vvatcrie places, and is plarted of the tops cur off, or elfe of poles: the poies are taken frem aboue, of a good thickneffe, but notwithffanding not thicker than the arme, and they mult be planted and pricked downe in the earth fo deepe as they fhould fand before they touch the firme ground: the cut of the top may be of the length ofa foot and a halfe, and be fet in the carth, being coured a lirtle. That which you fhall plant, muff be cut from the tree verie drie, becaufe it will not thriue if it be vvec when it is cur: : therefore you mu?? fhun rainie dares in the cutting of your Willowes. The beft time of planting the Willow is in Fcbruarie in the beginning, or in the end of Ianuarie, vwhen as the heart of the great cold is broken, vvhich oftentimes hurtech this plant when it is newlic planted : It is true that it may be planted at any time after the beginning of Nouember, yea it may be then both planted and gathered. The planes fhall cueric one ftand from another fixe foot fquare, and they muff be carefully husbanded for the firft three yeres, as ifthey were yong vines. You fhall find a larger difcourfe of the Willow-tree in the fixth Booke. The diftilled vvater of Willowes is good to be drunke for the flaying of all forts of fluxes of bloud : the decoction of the leaues or the iee made of the athies of the vyood beeing drunke,doth kill bloud-fuckers svhich hang in the throat.

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4En of old time did much efteeme the Elme for the vine fake, becaufe they married the vine vito the Elme, as alfo, it is yet praatifed of fome vno this day in Italie, but now the Elme is applicd to anicther manner of vfe by the husbandman : and for that caufe vve hates giucn in charge to euery houfholder to plane a plot of eimes, at the end of his orchard, as vvell to make fagots of, as to make vvhceles and axle-trecs of for his carts and ploughes, as alfo for firewood and ocher cafements, befides the pleafure chat the Elme- tree affordeth all the Sommer tong. For the plancing then of your Elme-plot, make choyce of a fat pcece of ground, and vvithall fomewhar moift (al thoughthis Tree be eafie to grow in any kind of ground) wviich you fhall digge and caft, breaking the clods alterward vcrie frmall, in fo much as that jou thall makce ail the earth as it were duft, and in the Spring you thall harrow it and lay it euen: afterward, you fhall fow it verie thicke vith the feed of cimes, which fhall by this sime become littie red, hauing beene a long tinse in the Sunne, and yer notwithftanding rerayning his naturall fubfance and moifture: and you fiall fow if fo thicke as that all the carth fhall be coucred vvith it, then caft of finc enould vpon it, good two fingers thicke, and vvater it a litele, and couer the earth vvich fraw or broken boughes and braunches, to the end that vwhat fhall conco out of the earth may not be deuuured of birds. And vvhen the fiences hall beginto fliew, takc away the ftraw and boughes, and pull vp the bad vreeds verie
carefully vvith your hands, in fuch fort as that the fmall rootes of the elmes vvich as yet are tender, be not pluckt vp therewithall. The waies and iquares mult be fo difcreecly calt, as that he which is to weed them may eafily reach to the middeft of them euerie vvay. Fer ifthey vvere too broad, then he fhould be conftrained in pulling vp che vveeds to tread the earth with his feet, by which meanes the fhouts might be hurt. After vvhen the branches are put vp fome three foot high to take them vp from their nurferie, and to plant them in another ground, and after that to eranfplant chem againe. The Elme-trcealfo may be planted of fall branchestakenfrom great elmes, and that a great deale better in Autumne than in the Spring cime: after three yeares paffed, they muft be tranfplanted and that after Autumne, vven as the earth beginneth to be moift vntill the beginning of the Spring, as being the time when the roore may be drawne without leauing of the barke behind: you may plant an elme at cuerie fortie foots end, and not touch them at all for wo yeares after : wwhich being paffed, you muft dig the earth all about the bodie of the Tree, pruning and picking it with a fmall handbill, eucrie two yeares. We will not make any longer defcription of the elme: but fend you to the fixth booke, where you fhall find particularly and amply declared, how this tree is to be planted, and in what foyle it doth principally delightto grow.

> Chap. X. Of the Aller.

.E fee that the Aller or Alder-tree is no leffe profitable for the Husbandman, than the Elme, in as much as the wood of Aller doth ferue to make many implements \& working tooles, as ladders, railes for the cart, poles, handles for tooles, rackes for horle-meat, and fuch other things, to lay the foundations of buildings vpon, which are laid in the rivers, fens, or other ftanding vvaters, becaufe it neuer rotteth in the vvater, but lafteth as it vvere for euer, and bearech vp maruailous ftrange and huge maftes.

The Aller therefore fhall be pianred neere fome little brooke, in fome moift and vvaterifh meadowes: for the Allcr-tree naturally delighteth in vvater more than any other tree doth, and it looketh that the moft part of his roots fhould be in and lower than the vvater,for elfe it will not come to any growth. The aller is not fown becaule it beareth no feed, fruit, or flowers: yet it may be planted two vvaies, either of braunches taken from the great trees, or elfe of liue rootes drawne out of moift places their earth vvith them, and fo fer in another moift place, and that in fuch fort, as thatat the leaft the one halfe of the roots may be lower than the vvater, and coucred aboue with earth a fingers thickneffe: and vvithall, before it be planted, you muft cut the fmall branches away till within a finger of the maine root, vvhich afterward will hoot vp many fmall fiences. This tree is eafie to take and grow againe in moift places, becaule it hath much pith in it, and puttech forth much wood in a fhort time. You may make your aller to grow high in any place without any great labour, and to fmall profir becaufe it would need continuall watering. It is better thenthat your aller ftand in wacerie ground (as we haue faid) that fo it may both pleafe and profit you. See further of the aller-tree in the fixth booke. The frefleaues doe flay inflammations : being put vnder the naked foles of the feet, they greatly take away their wearifomenefle, which by far walking haue wearied themfelues: full and all moift with the morning dew, being fpred in Sommer all ouer a chamber, they kill fieas. The barke feruechto make inke, and to die leather blacke.

# To The Poole, Firh-pond, and Ditch for Fifh. 

Chap. XI.<br>Of the manner of making Stewes and Pooles for keeping of Fibes.

He chiefe and principall point of a good Countrey Farme, is to wane nothing, either needfull for the prouifion of the chiefe Lord, or auaile. able for the profit that may come thereof. The good houfeholder then thall not efteeme a little of Fifh, feeing that of them he may make both prouifion for his table, and yreat gaine vnto his purfe : but rather fhall prouide fome place neere vnto his houfe, for to caft Pooles or Stewes in, to the end, that when need is, he may find vietuals therein both for himfelfe and his familie, and that as readie, as if it were alreadie in the Kitchin: befides what he may yearely fell of that his fore to make money into his purfe.

Therefore for the appointing out of ground for thefe his Pooles or Stewes to The fituation of breed or feed his fifh in, he fhall chufe it ioyning vnto his Medowes, in fome leane the Pooles. place, and fuch as he could otherwife make no profit of, and yet it muft be in a firme ground, that is grauellie or fandie, for fuch places doe feed fifhes excellent well: notwithftanding, that the muddie and dyrtie Poole be beft for the Tench, Burbet, Cod, Eele, and fuch other flipperie and flimie fithes: but he that loucth his healeh, muft not furnifh his Pooles or Stewes with fuch manner of fifh. The Poole fhall be maruelloufly well feated, if the commodioufneffe of the place will affoord it continuall refrefherent from fome flowing Fountaine, or fome Brooke, or little Riuer falling into it, whereby continually the firft water may be remoued, and new fupplyed in place thereof, not fuffering the other to fland too long impounded : and therefore, if it be poffible, the Poole is to haue conuenient iffue in one part or other, for fo by this meanes the water is renewed the more eafily, and the fifh therein made the more chearefull and better thriuing to euerie bodies fight : whereas on the contrarie, the ftanding and corrupted water affoordeth them nothing but bad nourifhment, making the flefh thereof of an ill taft, and vnpleafant in eating. In the meane time you mult not forget to fet grates of Braffe or yron clofe faftened, and pierced but with fmall holes in the conduits, that fo by them the water may find one paffage in, and another out, and yet to ftay the fifh for getting forth. It will be good that the Poole be large and great, to the end, that the fifh which is kept therein may find roome to fport themfelues, without perceiuing of anie impediment or imprifonment that they fuftaine. It will be good alfo to make in thefe Pooles fome corners, or ftarting holes, like little lodging roomes, in the wall thereof, to the end, that thereby the fifh may find place for to hide it felfe, and to auoid the great heat of the Summer : prouided notwithftanding, that they be fo made, as that the water which is in them may eafily get out againe.
Thefe Fifh-ponds alfo may be made in anie low Valley, which the hills enuironing on euerie fide, fend downe their waters into the fame, making it coutinually wet: fo that (in truth) without it be applyed to this purpofe, it will ferue for no other good purpofe. In this place, aboue all other, you fhall make your Fifh-pond, To makea Fijbs drayning it at the dryeft time of the yeare, and digging it of fuch depth as you pond, mall thinke moft conuenient for the receit of fuch water as fhall fall into it: then noting how the water defeendech, you fhall iuft againft that defcent make the head of your Pond, mounting it of fuch a height, that no land-water whatfocuer may
ouerflow it, and this head you fhall make in this wife: firft, fo foone as you haue drained the ground, and made the earh firme where the head mult be, you fhall driue in foure or fue rowes of piles made nf Elme, and fome of Oake halfe burnt or fcorchh, and then the earth which you digge out of the pond, togecher with fagots and bundells of wood, you fhall ram in hard betweene che pile, till you haue couered them, then you fhall drive in more piles, and ram them likewife as before, heaping thus pile vpon pile, and earth vpon earth, till you haue made the head of that conuenient height which you did defire, and if in the middeft of this head you preferue a conuenient place for a fluce or floud-gate, which you may draw vp and flut at your pleafure, it will be a great deale che better: and on the top of the head you thall make a fmall fluce or two vvith fiue grates in them, to flay the Finh from pafo Ging through the fame, whhich fluces fhall conuay the vvaft vvater, which fhall at any time rife aboue the height or leuell of the bankes: the bottome and fides of this pond you fhall paue all ouer with fine greene-graffe-turfe which vvill be a great nourifhment to the Fifh, and aboue the, water you fhall plant Oziers, and on the top of the head diuers rowes of Willow, becaufe all fifh take great delight in the fhadow: and if youl intend the pond for Carpe or Breame, you fhall all along one fide of the pond, ftake and bind downe diuers fagots made of brufh-wood in which the fifls thall caft their young or fpawne, and fo haue them preferued, which ocherwife would be defltoyed.

## Chap. XII. <br> What manner of wild flefb is to be prowided for the furnifloing of the Filh-poole.

(anditOw one great commendation belonging to inheritances, is to hauc wild flefh and fifh in the fields thereto belonging. As concerning the wild flefh, the walkes thereofare partly in the woods, and partly in the warrens, of which we will fpeak intheir place : parlly in the arable grounds and fallowes, as the great and little Hare, the Partridge, Quaile, and Larke: and part in the vvood, asthe Hart, the Hind, the Doe, and the vvild. Bore : and as concerning birds, the Stock-doue, Turte, Small-henne, Plouer, and others : butto re-

The wild fefb of the fifh-poule. Buals of a two fold $i f$ if.
turne to our fifh-poole, the wvild flefh thereof (efpecially of birds) is the Swan, the Heron, the Woodcocke, Snite, Mallarde, Teale, young wild Duckes, she wild Goofe, and the Bittor. Befides, there are belonging thereto as concerning beafts, fuch as auncient Writers hauc called double-liued beafts, that is to fay, fuch as liue either in or out of the water, the Otter, the Badger (vvhich verily hath a fcalie tayle like Fifhes) the Beauer, and the Dormoure, vnto vihich vve will adde the Torteife, that daintie difh for Princes and great Lords : albeit the moft commendable of them, and which hath the beft relifh, and in moft requeft, is that which is called the wood Torteife, and maketh her borough in the woods, the wealth of Prouence and Languedoc.

## Chap. XIII.

## Of the forts of Fithes whercesith Pooles, Ponds, and Ditcbes, are to be furnaziod.

F you defire to furnifh your filh-pooles, and feeding ftewes, it is needfull that you carefully confider the nature of the place wherein you haue made chem : for all forts of fifines doe not feed alike in all manner of places : the fonie and rockie places do like well the fifhes called thereupon Saxatiles, or finies luing in Ronic places, as the Truut, Pearch,Loach, Lumpe, MulJet,and Gudgeons : In muckic and flimic places, the Tench, Bourber, Codfinh, and Eele doedelight to live: In grauclly and fandie grounds, the Salmon, the Pike, and the Barbel, doe not much difilike to liue. Wherefore,to the end that wve may feake generally, in regard of the fifh of pooles, ponds, or ditches (things common amongft the inhabitans of Beaux, though they have no fuch flore of vvater as the people of Salongne, Percheron, Turraine, Anjou, or Mantz) che moll comman, and which beft ftore and furnifh the fane, are the Carpe, and the Barbell. It istrue that the Piks is a good meat, efpecially if he be kept in (pringing vvaters, and into vvhich there run-
 naturall and greateft pooles that are in all France, and fuch as neuce drie vp) but frefh-water-filh, eating and deuouring the fmall thereof, in fuch fort asithat in finling there is not a litele one of that kind caft into the pooles againe, after they be once drawne out, vvhich yet is vfed in the letele ones of all other kinds befides. The frmall fifh, vwhich is called vvhite, are the Pearch, the Mullet, the Millers -thombe, the white fint Cheuin, Gudgeon, Loach, Menuife, and the Trout, albeit that the foremof are chofe The Trout, which are the moft daintie, and chiefeft in requelf for ficke and delicate folkes, but the Trout is the princelieft and moft delicate difh of all the reft, which is neuer feund but in running vvaters, or in great frings. The Salmon- trout is a verie daintiething, and fo likewife the flefh thereof is more faft and red, euen after the manner of the Salmon, after whom he hiad his name giuen. The Tench,Bourbet, and Cod, are of a Tenche courfer and moreflimie meat, as is alfo the Eele, which yet prouech fingular good in great pooles, and greatly commended being taken in chat of Nouë, and at the mills of Gouuicux : witneffe hercof, are the Eele-ponds which haue beene caufed to be made there by Princes, and therefore that of Noue feemeth to me to be of greater account, becaufe of the caufey belonging thereunto : but thero are fome which difdaine the cating of eele, in refpect of the vnfauorineffo of her flefl, and alfo becaufe (as fome fay) fbe coupleth with the frake. But whatlocuer the matter is, If find her as good in a fwift running vvater, as either the lampreie or lamperne, a venimous fifh in the Sea, though when the is foured and come vp into the great riuers, as Loire, fhe become a good firme nourifhment, faue that it is fomewhat limie, and of a hard digeftion, how weil foener it be dreffed or handled.
The excrements of che poole (which are eaten after the manner of Ein) are the frogge and the creuiffe, the firf whereof being taken in his feafon, as when fhe is not ingendring, but well fefhe and liking, doth tafte like a litelle chicken : the other doth more load the fonaacke than nourifh; and yet vnto the husbandmanand farmer this is as a fecond manna for his familie,which on feftiuall daies delight themfelues with the taking of them with che long-bow-nct,or with a litele maund of bulruhes, as alfo the litele filh with the fhoue-net, fmall-net, cailed a truble and lines for the fire, the tunnell and baitare forbidden by all right. The net and the hooke are chiefe and principall of all the reft.
And of nees there are diuers forts and kinds, as firft the long draw-net, wwhich contayning many fadomes in lengeth is as it were diuided info cwo parts, and in

The lamprotya venimaus fab in the Sea.

The excreverass of the poole are the fiog and the creaije.
the middeft a long rod or pole drawne clofe together at the furcheff end with a heauie ftone hanging at the fame, and into which the filh flie when they are taken, then is this net plumbed with lead all along the lower fide, and floated aboue with bigge round floats of Sallow-wood to keepe the net from finking, it is but onely poled at the two outmoft ends the juft bredth of the net: this net is to draw ponds, rucrs, or meares withall; then is there the flew, and fland net, vwhich are without rods, plaine fingle nets oncly, as it were farced or lined before with another ftrong net, euerie mafh being fixe or eight inches fquare, thefe nets are to fifh vvithin narrow brookes, blind dikes, and other fmall rundles, the ftand net being prickt downe firt, and the flew drawing along vnto it; then is there the leape net, which is made fquare with many rods running one into another, and this is faftened vnto a leape made of Oziers,and are onely to take Eeles or orher fifh in mill-dames, or other fuch like ftrait places: for the floue nee, fpade net, or cafting net, they are only to filh in holes, fo is alfo the augure, which is a fharpe inftrument of yron made thinne with many fharpe teeth, and foftriken into holes or muddie banks, vvhere they vvill many times catch a verie great aboundance of Eeles: Befides thefe, there are diuers other engines, as hookes, lines, the angle, and fuch like, but none of more vfe shan thefe alreadie fpoken of.

## Chap. XIIII.

## That Eifb-pooles muft be looked unto, and the jodes thereof repayred.

8Vt and if you mind to reap any profit by your fifh-pooles or fifh ditches, you mult haue care to lay them drie cueric fixe yeare at the leaft, and to dreffe them euerie three yeare taking away the reedes, bulruhes, and broad leaues of vvater-lillies, and other vvater-flowers, for thefe hinder the Filh that they cannot fiport themfelues, and maketh them eat muddily, and of a

## Tobanijbwater

 rats.Not 10 Pboot at wiildfowle $a$ bowt fifhpooles.
Gunnes cause figh to dic.

Theraifing of the fides or bankes of the sfh-poole. bad tafte. You mift hikewife chafe and driue away vvater-rats, or elfe take them vvith fome engine: as alfo the Otter and Beauer, as mightiefpoylers of the filhpooles: Thete two tyrants are found in greater number in Loraine, than in our true and naturall Countrie of France. Furthermore, you muft hane care that there benot much fhnoting in Gunnes at the vvild-fowle which is found to haunt therein, becsuie fuch thooring aftonifhech the filh, and killeth it oftentımes. A gaine, there are other neanes for the taking of fuch wild flefh : neither is the croffe-bow fo daungerous, whether it be the tiller, or the bullet. It is true, that the long- bow is the moft fingular of all, and performeth the attion of killing as wel as the Turkifh bow, vvhen it is drawne luftely, and by one vwhich hath a good fight.

The greateft charges of the fifi-poole is the keeping of the bankes and caufey, the vvater-ftops fluces, and ditch ouer againtt the poole, made for the receiuing of the vvater during the time of the fifhing, as alfo to rid it of mud and vnprofitable weeds, as being the caufe that the water when it is not of any ftrong current, becommeth couered as it were with earch : yea and though it be of a good frefh Spring, yet they are the meanes of the flopping and drying vp of thofe Springs, and to caufe them to diuert and turne their courles another way: wherefore all good houfholders muft be furnifhed with yron to repairethe grates, and flints, and hard ftones for the mantenance of the cauiey:
Filh-ponds and As concerning the pondes and ditches for fifhes, they mult be often dreffed, refigb ditches. plenfled vuith new flores, and alfo refrefhed with fmall ware: for to be alwaies taken away, and neuer adding any thing to, doth pull downe the greatelt heapes of ftore. Againe, the good farmer is carcfull and dilligent alwaies in his taking of fifh,
the Counsrie Farme.
ocaft the fmall backe againe into the water, and not to kill them out-right if he can auoid it : It is true, that for further profit and thaft, he vfeth to pricke about fuch ditch or pond great plentie of Willowes, and fome alfo doe plant the Aller and Elme in the fame place, for to gather fire-wood of for the houfhold : others againe doeplant the Afpe and Poplar-tree, and eueric one of there, according as they find their ground beft difpofed to beare the one or the other.

## Cнав. XV.

$$
\begin{aligned}
& \text { of the feeding of Filbes in their Pooles, Ponds, } \\
& \text { and Ditcbes. }
\end{aligned}
$$ T is moft certaine, that the Fifhes abiding in the Sea, or ftreames, and running riuers, haue greater fore of vitaile, then thofe vvhich are fhut vp in pooles, ponds, ditches, and fewes. for fuch as haue their full icope of libertie in the Sca and ftreames, doe alwaies meete vvith one reliefe or other broughe vnto them by the courfe of the vvater, befides the frnall filhes which are the food and fuftenance of the greater : but the other fhut vp and inclofed in fafegard, cannot goe forth a hunting after any prey. It vvill be good therefore fometimes to caft them in ofall forts of fmall Finhes, the bowells and entrailes of greas Fifh, tender figges cut downe, crackt Walnuts, foft ceruifes boyled, frefh cheefe, lumpes of white bread, certaine fruits choptfmall, all forss offalt fifh, and fuch other like victuall : for and ifthe fifh be nor fed and made fat vvith meat wwhich the houfholder or farmer fhall giue vnto them, vvhen they flall be carried cither to hall or markee (for my meaning is that the good farmer fiould make his profit of all things) the leanneffe thereof vvill manifeft, that they vvere not taken in any full Sea ar their libertie, but in fome place of gard and reftraynt, and fo they vvill not fell fo deere by much. And fometimes it vvill be good to caft vpon the pooles and pond's the frefh leaues of parfley, for thofe leaues doe rejoyce and reffefla the Fifhes that are ficke.

Befides, to kecpe your Fiifh-ponds well turft as vvas before faid, fo as they may Food fot wiff haue flore of greene graffe in them, is an excellenc reliefe for fifh, and a food which they vvill defire as much as any other, for they vvill fucke and feed vpon graffe exceedingly : therefore when graffe is in the prime, and hath full bit vpon it, if you gather large turfes thereof, and pin them faft downe vnder the water, hhey will feed and fatten the Filh wonderfully : the chippins of bread, or other crufts which come from the farmers table, although they be greafie and foule, yee are chey a verie good feed for filh; fo is alfo the clotred bloud of beafts, as fheepe, oxen, or any other kind, being eaft into the pond morning and euening; the young brood of Walpes when you find their neafts, being caft into the water, is a food that fifh will delight in before any other.

## Сиар. XVI.

## Other more certaine and apprould wayes to take all mans.

 ner of $F i \int h$, efpecially with the angle, and o-ther ingruments.

5ywnS for that vwhich hath beene before written, being onely the fecrets and experiments of the French practife, I doe not hold it fufficient for the fatisfaction of eucrie judiciall Reader, and therefore I vvill wade a little further in this art, and fhew you the maner of taking of all forts of finh by the angle, which is themoft generous and beft kind of all other, and may truely be called the Emperor of all exercifes. To feake then firft of this art of angling or taking of firh with the angle, you fhall vndertland that it confifterh in three elpeciall things, that is to fay, in the inftrument which is the angle, in the intifement vviuch is the bait, and in the erue vfe of them both together, vvhich is the feafons and times of the yeare firceff for the fport: To p peake then firt of the angle-rod, it mult be generally of two peeces, but particularly, as for the pike, or other greater fifh, it may be made of one entire peece; the fubftance of the fock would be a vvel grown ground Witchen, an elme, or an Ewe, or a hafel, and che top would be of hafel, orWhale-bone:fomeaniglers vie to compound their rods of wany peeces, as thofe which are made of cane, wherein one joynt is applied into another, but they are more for pleafure than any generall profit. To thefe rods doe belong lines made of the ftrongeft and longeft horfe. haire which can be gor,110r are they ro be gotten of leane, poore, and difeafed jades, but fuch as are faire,fat, and in ful ftrength, and if conueniently you can, it is beft euer to gather them from floned horfs, and not from mares or geldin 5 s: of haire, the blacke is the vvorft, the vehite and gray beft, and other colours indifferent: your fmalleft lines vvould confift of threchaires, and your bigger of feuen:if amongft your haire you mixe a filke-threed or two, the line vvill be the better and fronger : you fhall twift your haires neither too hard nor too foff, but hold a mediocritie, fo as they may twine and couch clofe together, and the ends you flall faften together vvith a fifhers-knot, vvhich is your ordinarie faft knor, foulded foure or fucc times about, both vnder and aboue, to make it from loofening in the vvater: for the length of your lines, they muft anfwer to the places in which you angle, fome being foure fadome, fome fixe, and fome more, according to the length of your rod, or the depth of the vvater : your lines (though their naturall colours, as being vvhite or gray, is not amiffe) vvould yet fometimes be coloured of other colours, according to the feafons of the yeare, for fo the fhadow of them (vvhich is mof daungerous) will leaft fcarre the fifh, and fooneft intice them to bite; and of thefe colours the W Water-greene is the bef, yellow next, hhen ruffet, darke browne, or tawnie.
To die your lines of a Water-greene, you fhall take a pottle of Allome-vvater, and put thereinto a handfull of Marigolds, and let them boyle vvell till a yellow fcum rife on the top of the vvarer, then take the quanticieof halfe a pound of greene coperas, and as much of Verdigreafe beaten to fine powder, and put it vvith the haire into the $v$ vater, and folet it boyle againe a liete fpace, and then fet it in fome place to coole for the fpace of halfe a day, then take out your haire, and lay it vvhere it may drie. This colour of Water-greene is good to angle with in all clayie vvaters, from the Spring till the beginning of Winter. If you vvill hate your haires yellow, you fhall take Allome-water (as beforefaid) and Marigolds, and boyle them therein, adding thereto a handfull of turmerick, or for want thereof, fo much of green Walnut-leautes, and mixing it with the vvater, fteepe your haires therein a day äd a night, then take them from them, and drie them : thefe yellow coloured lines are good alfo to angle with in cleare water, if hey be full of weeds, fedge, and other water
flowers, for it is not vnlike to the ftalkes thereof, and the time be $\cap$ from Michaelmas cill Chriftmas. To make your lines ruffer, you fhall cake a quart of Allome water, and as much ftrong lee, then put thereunto a handfull of foor, and as much Browne of Spaine: then when it hath boyled well an houre or two, fet it by to coole, and being cooled,ffeepe the haires thercin a full day and a night, and then lay the haires to dry. This colour is good to angle within deepe waters, whecher they be riucrs of flanding pooles, and are beft to be ved from Chriftmas ull after Eafter. But if you will haue them of a darke browne colour, then you fhall take a pound of Vmber, and halfe fo much foot, and feech it in a pottle of Ale a good fpace: then being coole,fteepe your haires chercin the fpace of foure and ewentie houres, and then hang them vp to drie, and if the colour be not darke ynough, you may adde a litele more of the V mber, and it will darken it. Thefe lines are beft to angle with in blacke and muddie waters, whether they be fanding pooles or running ftreames, and will endure all feafons of the yeare. Laftly, to make your lines of a tawnie colour, you fhall take lime and water, and mixe is together, and ftecpe your haires therein halfe a day: then take them forth and fteepe them double fo long time in Tanners ouze, and then hang them vp todry. Thefe lines are beft to angle with in moorifh and hearhie waters, which are of a reddifh or browne colour, and wil Cerue for that purpofe all the feafons of the yeare. Now if with this colour, or the grecne, you mix a filuer thred, it wil not be amiffe, and with anie of the other colours a gold thred, they will be much better to angle withall. Alfo you mult remember to make at each end of your lines good bigge loopes, the one, to faften to the top of your rod, the other, to the hooke-line, which commonly is not aboue a foot long at the moft.
To thefe lines there doch alio belong Corkes, or Floats, which you fhall make in corks, or Fotems this manner: Take of the beft and thickeft Corke you can get, and with a fine rape hauing pared it cleane, cut it into the fafhion of a Peare, bigge and round at the one end, and fmall and fharpe at the other, euer obferuing, according to the bigneffe of your line, to make the bigneffe of your corke: as, for a line of three haires, a corke of an ynch, or little niore,long, and to the bigger lines, bigger corks : through this corke you fhall thruift a quill, and through the quill the line. The corke ferueth onely to let you know when the firh bitech, therefore the leffe it is, the better it is, for it onely giues the leffe fhadow, prouided that it be cuer in your eye: for though fome Anglers will filh without corkes, yet it is not fo good, nor fo certaine. In placing your corke vpon your line, you muft put the fmall end downeward, and the bigge end to the top ward. Now there be fome Anglers which make their corkes of the fafhion of Nutmegs, fmall at both ends, and bigge in the middeft : and it is not much to be difliked, onely it is a litcle fooner apt to finke, and you may thereby ftrike before the fifl haue fully bitten : others fhape cheir corkes in the fafhion of a Whirle, or of a little Apple, round and flat on both fides: and this corke is not amiffe to angle with ar great filh, becaufe it being not fo apt to finke, will flote till the hooke be fattened, and that the finh beginneth to fhoot away with the bait : fo that the Angler then friking, can feldome or neuer loofe his labour.

The next infrument to thefe which belonyech to the Angle, is your Hooks, which Hookerì are of diuers fhapes, fome being bigge, and fome little, and fome of a meanc betweene both,according to the fifh at which you angle. The beft thing to make your hooks of, is either old Spanifh needles, or flrong wyar drawne as neere as can be to that hardneffe of temper, which being nayled and allayed in the fire, you may bend anie way. Now the beft way to foften your wyar before you worke it, is to hold it in the blaze of a candle till it be red hot, and then let it coole fotely and gendly of it felfe: or if nos thus, then roule your wyar $v p$, \& put it into a charcoale fire cill it be red hot, and then let it coole at leifure. As touching the making of your hookes, you fhall onely with a paire of plyars bend them to what proportion you pleafe, and then with a fharpe file make the point and beard as harpe as may be, and batter the lower end flat to which you muft warpe your line. But becaufe the trouble of making is a litele noyfome, it thall be beff to buy thiem from fuch as make a liuing or trade thereof, and to buy of all :
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his apparrell, by no meanes wearing light or gandie futes, which may giuc affright to
the fifh, but of the darkel? colour yourcan prouide, as ruffer, tawnie, or fuch like, and
of the plaineft fafhion, without hangino fleeues, of the plaineft fathion, without hanging fleeues, or any other waucring thing, becaufe
they are blinks or fcarres which afright fifh: it would be warme for your owne health of the plaineff fafhion, without hanging fleeues, or any other waurering thing, becaufe
they are blinks or fcarres which afright fifh: it would be warme for your owne health fake: you muft alfo keepe your head and feet drie, for the contrarie breeds feuers and other ill fickneffes. Touching the feafons beft to angle in : they are from Aprill till the end of OEtoA
Eell feapons for
$\underset{\substack{\text { Efll feranons } \\ \text { ffring. }}}{ }$ ber : and the beft houres, from foure in the morning till nine, and from three in the afcernoone cill fue in the evening, the wind blowing from the North,South, or Weft, and the ayre temperate, as inclined to warmencffe: but to feake a little more particularly, you fhaill vnderfland, that if the day be darke, clofe, and lowring, or hauc a gentie whiftling wind playing vpon the water, it is good to angle in: or ifa fine miza
zeling dew of raine fall gently without violence, the filh will bite the fafter: allo afer gentie whifling wind playing vpont the water, it is good to angle in: or if a fine mize
zeling dew of raine fall gently without violence, the filh will bite the fafter: allo a fer - ins
flouds
forts, euen from the leaft to the biggeft, as well double hookes as fingle : the double, which is for the Pike or biggerfifh; and the fingle, which is for the Pearch, Trout,or middle fort. Your double hooks are (as it were) two hooks of one piece of wyar, turned contrarie waies one from the other. This double hooke mutt not be faftened like the fingle to the line, but to a firong wyar ioyned vito it, of a handfull long, or more, being well wound about and warped wich a fmaller wyar: then to it another wyar of the fame length, warped as aforefaid, and by linkes ioyned together, and then the line faftened to the laf linke: and chefe are called armed hookes, becaufe they defend the hooke from fhearing or biting in pieces with the teeth of the greater fim. Now for your fingle hookes, you thall thus fixe them vneo their lines: Take a length of your twifted haires, containing that number which is fie for your hooke, and hauing made a loope at one end, lay the other end vpon the infide of your hooke:then with a filke thred, of the colour of your line, whip and warpe the honke round about, as thicke, clofe, and ftrait as may be, and then running the laft end through the whole warpe, draw it as faft as you can, then cut it away clofe by the warpe. After your hooke is thus faftened, you fhall plumbe your line : which is, to faften certaine pieces of lead according to the bigneffe of your line, about it, fome being in length about a quarter of an ynch, fome halfe an ynch, and fome more, according to the bigneffe of your corke, and the weight of the hooke: for thefe plummets are but to carrie downe the hooke to the bottome, neither being fo heauie to make the corke finke, nor fo light, as not with the fmallefl touch to make the corke dip into the water. You fhall vnderftand, that your firf plummet would be a foot from the hooke, the reft not aboue an ynch one diftant from another, \& not being aboue fiue or feuen at the moft: yet fome Anglers vfe nine; but it is not much materiall. There is in the plumbing of lines three feuerall fafhions of plummets vfed: as, one long, another fquare, and the third in a diamond forme,yet all to one purpore, and the long ones euer the beft, being fmooth$l y$ and well faftened to the line, for feare of catching hold vpon weeds or other things in the bottome of the water. Befides thefe inftruments before fpoke of,you mult have a Musket bullet, which fattened to a line, thall ferue to found the depth of the water where you angle, that thereby you may plumbe your lines the righter, and fet your corke in his due place: then you thall haue a large ring of lead, fix ynches at leaft in compaffe, and made faft to a fmall long line, through which thrufting your rod, and letting the ring fall into the water, it will helpe to vnloofe your hooke, if it be at anie time faftened about weeds or fones which lye in the bottome of the water $:$ then you fhall haue a finooth board, fix or feuen ynches fquare, and cur battlement-wife at each end, vpon which you flall lap your lines: you fhall have a boxe for your hookes, a bagge or horne for your baits, and another boxe for your flies, both aliue, or dead : you haall haue needles, filke thred, wax, and loofe haires: then a roule of pitcht thred' to mend anie cracke in the angle-rod: alfo a file, a knife, a powch with manie purfes: and laftly, a fine basket of fmall wands, which fhall hang by his fide; to put the fifh in which the Angler takes, and a fmall round net faftened to a poles end, wherewith you may land a Pike or anie other great fifh. Againe, an Angler mult be verie carefull in his apparrell, by no meanes wearing light or gandie futes, which may giue affright to and the ayre temperly, yountl vnderftand, that if the day be darke, clofe, and lowring, or harti-
flouds are gone away, and the riuers are come within cheir owne bankes, and the water clearef, it is good to angle in. Againe,for your Summers angling, you fhall chufe winter and the cooleft time of the day, for the heat is not good: but for the wincer angling, you Summier fflfing Shall not make anie difference of times, if the day be calme, for all houres ot the Sunne are alike, onely the noone-tide is efteemed beft. It the water where you angle, ebbe and flow, the beff time of angling is at an cbbing water; but in thofe places where the ty de is not great, there the timent flowing is preferred allo : laftly, whenfocuer you fee the Trout play or leape aboue water, and the Pike hute in the purfuit of efler filles, it is then a verie good time to angle in : and all times and feafons contraric to thefe before rehearled, are vild and naught to angle in.
After the knowlecige of feafons, you thall know the bett manner how to fland and The best maner place your bodie whilef you angle: for if you angle in anie pond or ftand ing water, of fifirg. then you thall chufe chat place which is deepeft, blackeff, and leaft tranfparent, flazdowing your felfe vnder the banke, or ioc; as your fhadow may be carried from the water; for it euer breeds a frighe vnto the thlies: but if you angle in anie riuer, you Thall chule that place which is deepeft and cleareft; and here allo you fhall friue to conceale your felfe as much as is poffible, by flanding behind trees or bufhes, or anic thing elfe that may couer you.

Next to this, you thall know the haunts of fifhes: as thus, the Carpe, Eele, and The baznis of Terch doe euer haunt muddie places; the Carpe lying in the bottome thereof, the flyeso Tench amongft the weeds, and the Eeles vnder fones, or other couert: the Breame, the Cheuine, and the Pike haunt eure the cleare and fandie bottome; the Pike, where you fec great fore of imall frie; the Cheuine, where the ftreame runneth fwiftefl, and the fhade is greateft; and the Breame, where the water is broadeft, and the depth giuech greareft libertie : alfo thefe three delight more in ponds than in riuers. The Salmon hath his haunt in the fwifteft and broadeft riuers, whofe channell falls into the fea: The Trout louech fmaller brookes, the current being cleare and grauellie, and lodgeth molt in deepe holes: fo doth the Pearch alfo, onely he abideth moft in the creekes or hollow places which are about che bankes. The Gudgin, the Loach, and the Bulhead haune fhallow waters : The Baibel, Roche, Dace, and Ruffe, haunt the deepe fhadie places of thofe warers which are mixt with more fand than grauell, or where the clay is firme, and nor flimie, and loue to lye vnder the fhadowes of trees or buffes that grow on the banke. The Luceor Lucerne hauntech the broad and large meares, being deepe and fill, and cuer lodgech in the bottome thereof. The Shad and Tweat haunt thofe waters which are brackifh, deepe, and accuftomed to ebbe and flow: and where they haunt, there commonly is found both the Mullet and the Suant, all which loue to lodge clofe and flat at the bottome, fo it be rather clay than grauell.

Next to the knowledge of the haunts of fihes, you fhall learne to know the feue- Baitss. rall baits, which, befides thofe formerly defcribed (which are indeed French fecress) there are manie other, and may be reduced to two kınds, Liue-baits, and Dead-bairs: your Liue-baiss are wormes of all kinds, efpecially the Red-worme, the Maggot, the Bob, the Dore, browne Fly yes, Frogges, Grafhoppers, Hornets, Wafps, Bees,Snailes, fmall Roches, Bleakes, Gudgins, or elfe Loaches: your dead-baits are paftes of all kinds, of which we haue expreft diucrs before, and their vfe; yong brood of Wafpes, dried or vndried, clottered Bloud, Cheefe, Bramble-berries, Corne-feedes, Cherries, and all forts of fles made of filke and feathers fol liuely, that they will many times derciuc a good iudgement, of which there are diuers, as the dunne flie, the ftone flie, the red flie, the yellow flie, the blacke flie, the darke yellow flie, the moorifh flie, the tawnie flie, the Warpe fie, the fhell!-flie, and the cloudie darke flie. Now for the fea- The fit timesfous fons in which all thefe feuerall baircs are to be vfed, you fhall know, that the Red- eurticb baise worme will ferve for fmall finh all the yeare long; the Maggot is good in Iulie, the Bob and Dore in May, the browne flies in Iune. Frogges in March, Gralhoppers in September, Horners, Wafpes,and Bees in Iuly, Snailes in Auguft:all paftes are good in May, Iune, and Iuly, dried Wafpes in May, Sheepes bloud and Checfe in Aprill,
and for Bramble.berries, or Corne.feeds, they are good at the fall of the leafe onely. Laftly, for your dead flies; the dunne flie is good in March and Februarie; the flone flic is for Aprill; the red flie and the yellow flie are for May; the black flie, the darke yellow flie, and che moorifh flie, are for Iune; the tawnie flie for part of May and part of Iune; the Wafpe flic and the fhell flic are for Iuly; and che cloudie darke flie for Auguf.

To preferue baïso

Now for the preferuation of aill baits, efpecially the liuing ones, for the dead doe not fo foone perifh; you fhall virderfand, that they muft not be keprall togecher, but eucric kind feuerall by it Celfe, and nourifhed wich fuch things as they delight in:and firft,for the Red-worme, you flali put them into a bagge of red cloth, and chopping a handfull of Fennell, mix it with halfe fo much fine mould, and put is to the wormes, and they will not onely liue long therein, but alfo fcoure and feed. Some put moffe amonglt them; ochers pur Parlley, or fweet Marierome; neither is it amiffe: but the firt is beft, and will keepe chem full two monechs in pertection: For the Maggot, you fhall mix with them Sheepes tallow,or litele bits of a beafts liuer. The beft way to fooure them, is to put them into a bagge of blanketting with fand, and hang them where they may hauc the ayre of the fire for an houre or two. For Frogges and Grafhoppers, you fall keepe them in wet moffe and long graffe, moiftened cuerie night with water. As for the Bob, Cadys worme, the Canker, and fuch like, you fhall keepe them with the fame things chat you find them vpon: and for all forts of liue flies, you thall vfe them as you take them ; onely the Wafpe, the Horner, and the Bumble-bee, you fhall firft drie them a little in a warme Ouen after the bread is drawne, and then dippe all their heads into Sheepes bloud, and then drie them againe, and fo keepe ehem in a clofe boxe, and they will keepe two or three monechs in verie good perfection.
Now, for the feuerall fifhes, and how they delight in cuerie feuerall bait,you fhall gor, clotered bloud, or the young brood of WVafps; the Carpe loues pafte, the Moflc- worme, the Red-worme, the Menow, the Cadys worme,or Grathopper; the Chub, Cheuine, or Trour, loule all forts of dead flics, Cadys worme, Bob, Frogges, Dores, or Hornets; the Ecle loues the Red-worme, or Sheepes guts ; the Flounder or Suant loues the Red-worme, or brood of Wafpes, the Grayling, or che Barbel, loue all that the Trout loues; the Breame loues Butterflies, greenc flies, pafte,or brood of Wafps; the Tench loues pafte,the Red-worme,Maggocr, \& dried Wafps; the Bleake, Ruffe, and Pearch, loue the Red-worme, the houfe-fie, fat Bacon, Bob, Maggot, or Canker; the Pyke loues the frall Roch, Dace,or Menow, Frogges, or Bullheads: Laftly, the Salmon loues all thofe baits which she Trout loues; as pafte or flies in Summer, and all forts of Wormes, or che Cankers or water-Dockes in theWinter. And thus much for the generall fatisfaction of all Readers, which defire knowledge in this arr of Angling, and which indeed is verie proper and fif for our Husbandman.

## Сиар. XVII. The fifhing of all Sorts of Filh.

2He fifhing or taking of fifh is diuers, according to the Riuers and Waters wherein they keep, as alfo in refpeet of the diuerfitie of the fifhes themfelues: for the fifhing in the fea, and that in frefh water, is not all one, but feurerall, and diuers: che greas fifhes one way, the Eelc another way, the Pike another way, and the Carpe is taken another way. But whereas it might fall out, that fuch variable manner of fifhing might be veric difficulte and long to defrribe, we will leaue chis knowledge to fuch as make account to fell and buy fifh, and will onely declare, for the benefic of the houreholder, that the chicfeft and moft principall waies to take fifh, are either in the Maund, or with the Cafting-net, or with the Line, or with

Nets, or wish she Hooke, The Nets do heape together greateff fore of fifl, but they are chargeable to maintaine: the Cafting- net is of the lame condition: the Line and hooke are the mof ing enious and witrie, but 1 caft profitable, and of flendreft reward.
The fiteff cime to goea fifhing in Autumnc, is after Sunne-fer, and then principally The time te when it is betwixe night and day, for then tifes are flumbring, and thas fo deepely, talct ffo. as that they may be taken at thcir reft with light and flaming torches. In Winter, the fitteft timc to fifh in, is about noone : in the Spring time all the day long, but chiefely before the Sunne rite: which Spring time is the mol fit of all ocher times for fifhing; in as much as then the water being warme, and the finh firred vp to engender, they rife from the bottome of the depths to the vppernoff part of the waters, yea, often. times to the verie edges chereof. The wort and moft vnfit time of all other is the Summer, efp acially whiles the Dogge. daics laft, the heat whereof cuuferh the finh to die, and conftraineth it to betake is felfe to the bottome of the depths: fo that if you would filh in Summer, it mult be in the night feafon. In fifhing you are to haue regard vito the wind : fo that when the North wind bloweth, you muft turne your Nets toward the South wind, and the South wind blowing toward the North wind. In like manner, when the Wefterne wind bloweth, your Nets muft be turned toward the Eaf, and contaraily : but before all things, filhing muff be gone about in a calme time, when there is not anie tempe abroad.

For to gather fifh together into one place: Take Penyryall, Sauorie, Organie, and To gether the Marierome, of encrie one the weight of three French crownes, of the barke of the Frankincenfe and Myrrhe-tree, of each one ounce, of fweet Cherries dried and infufed in good wine, halfe a pound, of a Hogges liuer rofted, of Goass greafe and Garlike,ot each a pound: flampe euerie one by ic felfe, and after put thereunto fome fine grauell; with this, mixt togecher, you fhall feed the fifh for fome houre or two before you caft in your Net, which when at fuch time you haue caft in, you fhall therewich compalte the place about.
To catch all fors of finh: Take Sheepes fewet, of burnt Sefamum, Garlike,Orga- To catch all nie, Thyme, and dried Marieronie, of cuen ic one a fufficient comperent quantitic, Sorts of fibheto flampe them with the.crummes of bread and wine, and giue of this compofition to she filh to eat : Or elfe take fweet Cherries dried, and braying them, make pills shereof to give vinto fifhes: Or make a meat with vnquenchr Lime, old Cheefe, and Rams fewee: caft this into the water, and prefently you fhall fee the finh flote and lye flill vpon the water. Fifhermen, to catch fmall fifh with the Line, doe bait hookes with fmall carth-wormes, whereof the fifh are verie defirous and greedie. Otherwife: the Indian fhell, Cummin,old Cheefe, flower of Wheat, knead them all together wich Wine, make pills thereof as great as fmall Peafon: caft them into the Riuer when the water fhall be quiet and calme, all the filh that ihall taft of this confection, as though they were drunke and befotted, will run to the brinke of the Riuer, and fo, as that you may take chern vp with your hand: Orelfe make a confedion with the round root of Birthwort bruifed, or Sowes bread, and vnquenche Lime : caft vpon the water fome portion of this confection, the filhes will halten vnto it prefencly, and hauing tafted thereof, will die fuddenly.
To take fruall fifhes: Take the fleh of a Snaile without a taile, and thereof make a To take frualh bait,and put not on anie more than one litele Snaile at a time: Or elfe take the fefh fifzes. and bloud of a Calfe well powned, pur it into a veffell, and foleaus it by the fpace of temne daies; afterward vfe it to make baits of. Otherwife : take fweet Cherries drued, and bray them, making. pills thereof, which you fhall caft vneo the fifhes.
Take Sal ammoniakc an ounce, Onions, the weight of a French crowne, of the fat To istrap and of a calfe the weight of fixe crownes: mike pills thereof after the fafhion of beanes, take Torteifes and offering them to Torteifes, they vvill come to the fmell, and fo be taken.
For the Cuttic-fifhes: Take the lees of ffrong Wine, and mixe them vvith oyle, To cateb the and cafting it into a place, vvhere you know that the Cutele hath caft her blacke and cuttle filo. fhadowing humor, fhe will come to the place where the oyle is, and fo you may take her. Or eifc take Sal ammoniack swo ounces, Goats butter an ounce: fampe chem all
and make little foft loaues thereof, wherewith annoint fome kind of corne, or little clothes that are not fringed : for fo it will come to pafle, that the Cutte will feed round abour them, and not Airre away, fo that you may take them prefently.

To fib for and to tahe Loaches.

To take Loaches: Take the bran of Wheat two pound, of whole Lintiles halfe a pound, mingle them rogether, and bray them with a fufficient quantitic of fale brine: after, put thereto halfe a pound oi Sefamum, of which you muft caft about you fome heere and fome there, for as foone as you haue caft it from you, all the fmall fifh will haften vnto it, and (which is more) they will flock together into one place, though they be fixe hundred paces off. Or elfe take Neats bloud, Goats bloud, Sheepes bloud, \& Swines bloud, and the dung which is in the fmall guts of an Hog, Thyme, Organie, Penyrall, Sanorie, Marierome, Garlick, and the lees of wine, of ech alike, of the greafes of the fame beafts fo much as you fhall fee to be enough: ftampe euerie thing by it feife, afeer mixe them together, and make pills thereof to caft into the place whither you would haue the fifh to flocke, and that an houre before you caft in your net. Otherwife, take the bloud of a blacke Goat, and Barly flower, of each 2like, bray them both with the lungs of the Goat cut very fonall, and make pills thereof to vfe after the manner aforefaid. Otherwife, take Garlicke halfe a pound, burnt Se-
A. famum as much, Penyryall, Organie, Thyme, Marierome, Sauorie, and wild Staue[acre, of each foure ounces, of Barly flower a pound, of the dough thereof as much, and of the barke of Frankincenfe-tree two ounces; mingle all together with Bran, and giue it vnto the fifhes.

To catch Pearches: The Pearch is not eafily taken with Nets, neither yet at the Weyres, but rather with a proper bait, and that in a puddlie and troubled water: wherefore you muft make a bait with the liuer of a Goat, and bait your hooke therewith. Or elfe take yellow, Butterflies, and Cheefe of Goats milke, of each halfe an ounce, of Opppanax the weight of two French crownes, of Swines bloud halfe an ounce, and of Galbanum as much ; then powne them all verie well, and mingle them tegether, powring vpon them neat red Wine, and make thereof fuch little loaues as you vfe to make perfumes into, and afterward drie them in the fhadow.

For to take Salmons, as well of the Riuer as of the Sea : Take of the tefticles, or ftones of a Cocke, one ounce, of Pine-apple kernels burned two ounces, bray them both together till they come to the forme of a powder. Otherwife: Take wild Rue feed, and the fat of a Calfe, of each an ounce, of Sefamum two ounces, ftampe them all, and make little loaues; which you thall vie.

The Trouts, which are a kind of Salmon, are taken with the hand, hauing betaken themfelues into their holes: or with Neis, or at Weyres : and fometimes with the light of a candle.
The Gudgean, zhe farpe.

The Gudgeon is taken with a hooke, or the little Net, called a Truble,
The Carpe is taken with the Net, hooke, or engines laid at Weyres : but fhee ofrentimes deceiueth the Net, fhoouing her head downe into the mud or myre, wherein thee delighteth.

The end of the fourth Booke.

## THE FIFTH BOOKE

OF THECOVNTRIE
HOVSE.

## Of Arable Grounds.

> The meafuring of Lands, of what fort or forme Jocuer they be.

Силр. I.

Of the common creenfures whereby things are meafured. Otwithfanding, that the Art of meafuring Grounds doth more properly belong vnto the Geometrician, than vnto the Husbandman; and euen as chiefe Mafons and Mafterbuilders, who ought to haue the skill of Meafuring, doe not vouchfafe, at anie time, to meafure the Workes and Buildings which they haue fet vp and finifhed, but leaue the fame for fuch as make profeffion of Meafuring : So likewife it may feeme, that this is no durie of the Husbandmans, to meafure out his grounds, but rather appertaining, and therefore so be expected of them which practife fuch art and skill. Notw thftanding, being defirous that the Mafter of this our Countrey Farme floould nor be ignorane of anie thing which may ferue for the enriching of his houfe, and encreare of his wealth; I haice thought it meete and reafonable, before I paffe anie further vnto my purpofed difcourfe of the husbanding and tilling of Corne-ground, familiarly tovnfold certaine rules of Meafuring, which are verie common with vs here in France, and wherewith the Farmer, in cafe of neceffitic, and for his commoditic, may. helpe himelefe.

-To begin therefore with the mater, all Grounds and Lands, whether they be Medowes, Vincyards, Woods, Ifes of Water, Courts, Gardens, Corne-ground, plaice, fields, and others whatfoeuer, are meafured in France by the foot, fadome,

The Meafures in France callicd the Kings meafures.
The Kings foot. The Inch. The dour. The quarter. The fadome. The pole.
and pole. The foot, according to the Kings meafure, containeth throughout all France twelue ynches : the ynch twelue lines, and euerie line munt be of equall length to the thickneffe of a barly cone that is full and well fedde. A tierce or third part of a foot, is called a Dour: and the fourth part is called a Quarter. The fadome and the pole are meatured by the foot, but how manie foot the one and the other fhould containe, there is not anie fo fure and certaine a rule which holdech through all France, as there is for the foot, by reafon of the varietie of Meafures, and thufe not in diuers Countries of France onely, as in Britaine, Normandie, Gafcoine, Poictou, and others, but alfo euen in places fituate within fome one Ille of France, and ftanding hard together; as may eafily be feene neere vnto Paris: in fuch fort, as that the fadome of fome Countries containeth fixe foot and cight ynches; and the pole, twentie foot: elfewhere, the fadome containeth feuen foot and foure ynches, and the pole two and twentie foot: In manie places the fadome containeth fixe foot, and the pole eighteene foot: In others againe the fadome containeth fixe foot fiue ynches and halte an ynch,orthereabout, and the pole mineteene foot and one dour, which is foure ynches.

True it is, that as the rule is certaine through all France, that a foot containech twelue ynches, fo it is as fure and inuolable, that a pole containeth three fadome. Wherefore, without ftanding much vpon the fadome (which in truth is a meafure more fit for Mafons and Carpenters, than for meafurers of ground) for the well meafuring of all forts of grounds, you mult content your felfe with two principall meafures, the foot and the pole, not forgetting or omitting your ynches, quarters, and thirds, which are parts of a foot. Which more is, in as much as feet, fadomes, and poles are but fmall meafures, and fuch as whereof might rife (as it were) an infinite number, or (at the leaft) a verie troublefome number, and fuch a one, as the reckoning whereof could hardly be kept, efpecially when there is need of meafuring a Wood, Medowes, Places, Ifles, arable ground, and other places of great compaffe; befides the foot, fadome, and pole, there is vfed anothermeafure, which the Frenchmen call an Arpent, but of the people of Burgundie and Cham. paigne, and manie others, it is called Iournax, deriued from the Latine word Iugerum, which containech as much ground as two Oxen or Horle coupled or yoaked togecher can tyll in one day. The Normans call it an Acre, taken froms the Romane word caitus. This meafure arifeth of manie poles being put one vnto another, or elfe multiplied together, as the poles doe rife of manie feet mule, ciplied.

- It is verie true, that euen as the pole doth not hold throughout all Fraunce one meafure of feet, fo neither doth the. Arpent conlift infallibly of one number of poles: but looke (almolt) how manie Countries there are, even fo manie differences of forts of Arpents there are likewife : And that it is fo; there are to be noted, amongft manie other, foure forts of this meafure, called the Arpent, as being moft accuftomed to be vfed. The firft of them is called the Kings Arpent, and it is vfed of men ordinarily about the meafuring of Woods, and it confifteth of two and twentie foot to the pole, twelue ynches to the foot, and a hundred poles to the Arpent. The fecond is more common, confifting of ewencie foot for a pole, twelue ynches for a foot, and a hundred poles for an Arpent. The third is the leaft vfuall of all, it confifteth of nineteene foot and a third, which are foure ynches in euerie pole, twelue ynches to a foot, and a hundred poles to an Arpent. The fourth is mof commen of them all, confifting of eighteene foot for euerie pole, twelue ynches for euerie foor, and a hundred poles for euerie Arpent. Becaufe therefore of fuch great diuerfities of meafures of the Arpent, the Meafurer fhall not of neceffitie bee put befide the right performing of his worke; before he begin to meafure, he fhall diligently and wifely enquire of the meafure that is holden by the cuftome of the Countrey, in the place where he is called for to meafure.

[^5]Furthermore, you mult know, that the arpent may be diuided into manie parts, as the halfe arpent, a cierce, a fourth, a halfe fourth, a halfe cierce: all which containe, eueric one according vnto his proportion, fo much as the whole arpent containeth.

## The inflrumsent and perfons required as necefaric to belpe to make meafure.

THe Meafurer mult be prouided of teme' or ewelue arrowes, otherwife called little broches, or prickes, becaufe they are prickt downe in the earth, to guide the chayne: they are made of wood, but harnelfed at the nether end with a harpe pointed end of yron, of the length of two foot, or thereabout, being of fuch thickneffe, all the tenne or twelue together, as that a boy of fifteene yeares old may eafily hold them in his filt. Wee hanefaid, that hee mult haue fome tenne or twelue of thefe arrowes, that is to fay, tenne of them, when the Meafurer doth vie his Geomerricall faffe in flead of one fticke, or elcuen, when he doth not vfe his ftaffe.

The fecond inftrument verie neceffarily required for the Meafurer to meafure affuredly withall (that is to fay, not to faile in his feet and poles, and inthe number of them) is the Richards chayne, which is made of yron rather than of coard, (becaufe that coard being apt to flretch, it will not keepe his exact lengch conftancly at all times) and allo fufficient frong and thicke, and diftinguifhed and diuided by round buckles or mayles at the end of eurrie foor, to the end it may be folded vp together the more eafily into one: It mult be of the length of a pole, according vinto the cuftome of meafuring in Fraunce; or of two or three poles, more or leffe, according vnto the aduife of the Meafurer, and cuftome of the countrey: and it muft likewife have in the end of euerie length thereof a ring, or round hoope, fo wide and great, as that the middle finger either of the Meafurer or of his affiftane may frecly goe through it, withour anie manner of force or violence vfed. Befides, the faid chayne muft alfo (if a man be fo difpofed) be marked by the way, that is to fay, into cierces and fourthes, with fome mayles differing from the mayles of the chayne, that by them the tierces and fourthes may be the better knowne: And as for the Meafurer, hee mult haue three or foure foot length of chayne to referue vnto himfelfe about his Spade, or in fome little bagge of Leather, that fo vpon occafion (if need be) he may lengthen the chayne, or elfe helpe to make it againe, if in cafe it fhould breake. In this figure or pi\&ture following you may fee the fhafts in a bundle by themfelues, and the chayne gathexed up sogether by it felfe.


The principall inftrument for the Meafurer well and affuredly to find out the forme of the earth which he mult meafure (whether it be fquare, or fomewhat long, or of anie fuch other forme; for to iudge of and difcerne the length and breadth thereof ; for to reduce all forts of earth, and of whatfocuer forme they be, into a (quare; and to order and begin his meafuring well) is the Squire, which is an inftrument made of yron, or molten mettall, or of common wood, or of Brafill, fquared or round, diuided iuftly and equally into eight portions, hauing the forme of direat lines, and thofe fuch fine and Imall ones, as pomibly may be; for the thinner and finer that they are, fo much the furer they will be. This Squire mutt haue in the middeft a round, in manner of a ring, reafonably thicke, bored in the length thereof cleane through with eight holes, without which the faid inftrument would be altogether vnprofitable. By thofe lights or holes the Meafurer fhall make his fight, by winking on the one cye, to difcerne the length and bredth, and all other forme of the grounds which he mult meafure. There mutt alfo be on high, iuft in the middeft of the round of this Squire, a hole, for to receiue the Meaturers ftaffe, whereof wee will feake by and by, that fo it may beare vp the fard Squire, and raife it on fuch a height as fhall be needfull for the Meafurer to take the view and fight of the ground fitly and conueniently.

E It will be good alfo, though notmuch neceffarie, that there werea dy all fet vpon this round, to difcerne che houres of the day, if need be, and to know in what part she South flandech.

The ftaffe that bearech vp the Squire, is called the Geomerricall ftaffe, which The Geometrii mult be of wood, verie ftraight, fix foot long, or thereabour, and reafonably thicke, callf faffe? ro as it may well be carried and held in your hand, hauing the end downeward fharpe and fhod with a fharpe point of yron, made verie hard and thicke, or clfe of Copper, and hauing a lictle hindge after the fafhion of a vice aboue, and in the end thereof a litele hoope to receive and hold faft the Squire fer thereupon, that fo it may not moue, tremble, or fhake with the wind, yea, though it be a great and violent wind that bloweth, whiles the Geomerrician is in performing his bufineffe. The flaffe mult be marked out all along wich lengths of feet, halfe feer, fourthes, and sierces of poles.
In this prefent figure you may fee the Squire and the Staffe, each of them by chenifelues.


The Geometrician muft likewife haue in readineffe two forts of writing-Tablesà The one of Slate, reafonably thicke, with a penne faftened to the fame, at the end of a litele fring; and it mun be likewife of Siate, that fo it may not cut the faid Tables too deepe in!, when he writech vp his accounts therein with it. The other litele
paire of Tables fhall be of Boxe, or other fuch like matter, like vnto thofe which are brought out of Germanie, hauing a Copper penne, which the faid Geometrician thall vef for the ferting downe in wrising the lying, buttings, and contents of the faid peece of ground which he hath meafured.
He muft alfo have two men: that is to lay, one his affiftant to goe before him, and to carrie the end of the chayze, and to thrult downe into the earth the tenne or twelue fhafts: and the partie whole ground is meafured, or fome one for him, that can lay and point out vnto the Geometrician the bounds and limits of the faid peece of ground, whether it be arable, wood, medow, or anie other fuch like place.

How and in what manner the © Meafurer of the fe grounds is to accomeplibs and performe his zoorke.

THis Meafurer of grounds (being thus fured with all the forefaid inftruments fem uing for the meafuring of ground, and hauing likewife the direations and affiftance of others, as hath beene laid, to helpe him about his worke) mult diligently enquire of the manner, fathion, and cuftome of meafuring in that place, and of what length his chayne muit be, how manie poles are contained in an arpent in that countrey, and how manie foot are to yoe to eucric pole, feeing (as wee haue faid before) almoft euerie countrey hath his feucrall meafure : befides this, hee being well inftruEted and taught in the boundings and limits of the peece of ground which hee would meafure, he muft lay afide, or elfe (at the leaft) cruffe vp his cloake verie clofe, and place himfelfe at one of the ends of the plot of ground, wood, or medow, hauing his hhafts, all of them, vnder his girdle on the left fide, and his Squire hanging by a litele crooke at his girdle on the right fide : there pitch downe his Geometricall ftaffe, making fit and faft his Squire vnto the end thereof, and to affigne, for his more eafe, the ernne fhafts which hee had made faft vnto the left fide at his girdle, vnoo that place whereas is fixed the little hindge: afterward flouping with his head, to take his fighe and view, by fhutting the one eye, ourerthwart and within the holes or lights of the faid Squire, the forme; and firft the length, by one fide of the Squires afterward the breadth, by the other fide of the faid Squire (without flirring or mouing of the Squire at all from out of his place from aboue the faffe) of the pecce of ground that hiee would meafure. It is true, that hee fhall need neither faffe nor Squire, if the peece of ground be Iquare, or of a fmall compaffe, becaule that without any fuch $S$ quire he ihall be able to difcerne the forme of the ground : and in fuch cafes hee fhall onely ver the helpe ot his fhafts, which hee fhall giue vnto his affiftant, and of the chayne, the one end whereof he fhall hold himfelfe, and give the other vnto his affifant, which fhall goe before to flicke downe the fhafts at each end of the chayne, both of them herein applying themfelues to the fame purpofe alike. The affitant thall goe before, and firt he fhall hold in his left hand the tenne fhafis altogether, leauing the elcuenth with the Mafter-meafurer, to faften downe in the place where he fhall begin his meafuring (if fo be that the meafurer doe not chufe rather, in ftead thereof, to vfe his ftaffe:) the faid anfifant fhall hold one of the ends of the chayne by the ring with the great finger of his right hand, and that without anie want of roome for his finger to goe in, he fhall falter downe in the earth one of his Phafts (which his left hand thall haue reached him) with his right hand, at the end of the chayne, as it is flectched forth at length : the faid Mafter-meafurer fhall follow him, and fhall take vp the fhaft which his affifant hath fet downe into the earth : then the affiftant fiall proceed and goe on, alwaies carrying the chayne with him, and faftening the end of the chayne which hee carriech with one of his fhafts thruft downe into the earth, and this thaft the Mafter-meafurer alwaies comming after, fhall take vp, and both of them fhall continue and hold on this courfe, the one to put downe the fhafts, and the other to take them vp, vntill fuch time as the chiefe meafurer haue gathered to himfelfe all the tenne or twelue fhafts, which will be fo
sanie or fo manic poles. This done, both of them fhall goe vnto two other ends of the faid peece of ground, and fhall doe in like manner as they did at the firft : where when as the ineafurer hath meafured the length of one fide, he fhall meafure the one breadth, leauing the length of the other fide, and the ocher breadth, hauing found out by his Squire, that the pecece of ground is fquare, if rather,for his owne aflurance, and contentment of the owner, he thinke it not ineer to meafure the two lengths by themfelues, and the two widenefles by themfelues. Whereupon it will come to paffie, that if the peece of ground or wood (for an example) containe from the one end to the other, on all fides, cenne poles, mulciplying the one fide by the other, that is to fay, tenne by tenne, they fhall hane the totall fumme of che poles of che Square, which will be a hundred poles, which is one arpent: and fo herenpon the meafurer Thail conclude, that the place doth containe an arpent. A gaine, if in cafe that the place werc of greater breacth and length than tenne poles fquare, they flall hold on their meafuring, and paffe from one cnd to the other, accounting that which fhall be more, fill reducing all that they meafurc into hundreds of poles, and fo into arpents. See here the calie way for the meafurng of Land, Woods, and other places of fmall compaffe and fquare, whercin there is no great need of anie Squire : but and if the peece of Land, Wood, or other fuch place be of great compafte and contents, and yet notwithftanding lying flraight on curerie fide, as of fiue or fixe hundred arpents, or more, it will fand the meafurer vpon to vfe the helpe of his Squire: wherefore hee fhall pitch downe his Geemetricall ftaffe at one of the ends of the faid peece, and fhall fet his Squire to the top of the end of his ftaffe, and fhall view the other end of the ground through the holes or lights of the faid Squirc, if his fight and largeneffe of the place will permit him : which if it will not, then onely fo farre at that time as his fight may bee conueied: vnto which place directly, whither the direct line of the Iquire doth looké, hee fhail fend his afiffant, or fome other man, to pitch downe a diameter, that is to fay, a flake or pole, or fome other certaine marke,fo farre off, as that the faid meafurer may fee it at that end of the peece where he is taking his fight: or elfe many diameters in many places, alwaies direetly beholding the firft diameter, if in cafe the peece of ground thould be of longer diftance, fo as that one, two, or three diamerers alone would nor be. fufficient, as thofe which the faid meafurce fhould not be able cafily to fee and diferne. The diameters, one or many, being thus pight, they will frue to helpe the meafurer better and more eafily to meafure the peece, being thereby as it were diuided into many equall porrions. If it be a peese of vnderwood that one would meafure, the meafurer and two or three ftoppers doe cur downe fo much of the faid viderweod as may make a way offuch widenes, as that the meafurer and his affiftant may eafily pafle. But if this bea wood of great timber trees, and of a great compaffe and reach, the great trees hall ferue for diameters. Then the direat draitght being taken, and the diameeters pight, and the other end of the peece of ground attained, the meafurer fhall giue his affifant tenne fhafts, and fhall keepe ftill the eleuenth, or in place thercof vfe his Geomerrical flaffe (as we haue faid before) and thall hold one of the ends of the chaine with the greas finger of his right hand, as his affiftant fhall hold the other end in his right hand, and the ten fhafts all together in the left, to pitch downe one at the eme of euerie chaincs length, as we haue faid before. In this figure you may percciuchow this ineafuren and his affitant doe performe the thing.


> How to reduce all forts of grounds into a qquare for the better meafuring of it.

BVtas all grounds are not of one forme and faffion; $f 0$ is it not poffible chat one manner of meafuring thould feructe find our the quanticie of euerie pecce: and therefore to fpeake generally, all places and grounds are either fquare or longer tham they be broad, and then they are called fomewhat longer than broad : but ftretching right out, or vnequall both in length and bredth, and then they be called fomewhat long, and ending like a horne, or in the forme of a vvedge, that is to fay, alike long, but of an vnequall bredch; or of an equall triangle, or of an vnequall triangle; or round, or halfe round, or of the fathion of a bow, or confifting of many corners, or of many fathions mixtrogether, or they are inclofed one within another : for the fure meafuring of all which places, you muft reduce them into a fquare, vwhich is as Polycletus his rule for the veell meafuring of all grounds and places : the meafure of fquare is verie eafie as vve haue faid, that is to fay, like number of poles on euerie fide, which confiftech of tenne poles to a French arpent, which number being multiplied vvith it felfe, which is ten by ten, make the whole fumme of poles, whereof an arpent confiftech, wvhich are a hundred poles, and euerie pole confifting of eighteene foot.

## the Countrie Farme.

If then the earth be found by the meafuring of the Geometrician, to be more long than broad, and yet hauing each long fide equall, and each fide of bredth likewife equall, which is called Balongue droit, for the bringing of this forme into a fquare, you mult remember (or elfe hating it fet downe in writing tables for the better remembrance) what number of poles are in the lengch, and how many likewife in the bredth, and to multiplie the length by the bredth, that is, the poles of the lengrh, by the poles of the bredth: as for example, it the meafurer have found in the equall length of a ground fiue and swenty poles, and in the equai bredth of the fame ground foure poles, he thall multiplie flue and twentic by foure, and fhall fay foure umes fue and twentic are a hundred : chis ground then by this multiplication is found to containe a hundred poles, and fo by confequent an arpent, at a hundred poles to an arpent, and eighteene foot to a pole, and fo in like manner as the length is more or leffe. Likewife the bredth being lefle or greater, that the number of the length and bredth be multiplied together, whecher it be leffe or amount to more than an arpent, he fhall make his accounts and reckoning to fall proportionably, according to the greater or leffe number of poles, as well of the length as of the bredth : as for example, if the meafurer haue found in the length of a ground feuen and thirtie poles and a halfe, and in bredth one pole, he fhall nultiplie thirtie feuen poles and a halfe by one, and thall fay that this ground containeth thirtie feuen poles and a halfe, which is a quarter and a halfe of an arpent, at a hundred poles to an arpent, and eighteene foot to eucrie pole : by the fame meanes, if the ground be feuenteene polelong, and two pole and fixe foot broad, in multiplying feuenteene pole by two pole and fixe foot, he fhal find a quarter and a halfe,two pole,three foot of an arpent : after a hundred pole to an arpent, and cighteene foot to a pole.

If the ground be found by meafuring to be vnequall and vnlike, as well in the length of the one fide to the other, as in the bredth of the one end to the other; you muft remember, or for your better remembrance fet downe in writing tables, the vnequall numbers of the two fides, as alfo thofe of the two ends, and afterward to redince the two vnequall lengths, as alfo the bredths, into an equalitic, in the end multipiying the equall length by the bredth likewife made equall : as for example, ifoneof the broad ends of the faid ground doe containe foure poles, and the other two poles onely, and the orie of the fides of length containe fixteene poles, and the other tenie poles, to bring and reduce the thing into a fquare, you mult take of the two poles by vvhich one of the broad ends is broader than the other, the halfe, that is to fay, one pole, and pur it to the two poles of the other end, and thus each end will contain his chree poles a peece equally. And of the fixe poles wherein the one of the fides doth exceed the other in length, to take alfo the halfe which is three pole, and to put them to the temne, fo each of the fides vvill be thirteene pole a peece: then afcerward to take the number of one bredth (made equall vvith the other, as vve haue faid) wvhich is three pole, for to multuplic one length (made equall likewife with the other as we haue faid) which isthirteene pole, and to account that three cimes thirteene are thirtie nine: So there will be thirtie nine pole, which make a quarter and a halfe, one pole and a halfe, of an arpent, according to a hundred pole to an arpent, and eighteene foot to eueric pole: fo then you mutt follow this rule in enerie thing that is Balongue cornue, that is, fafhioned after the manner of a horne, that is, that the fide and end which are of greatelt contents, doe helpe and fuccour the other which are the lefler, in yeelding of their owne fo much vnto them, as may make fide equall with fide, and end with end.

If the ground be falhioned like vnto a Wedge, that is to fay, equally long on both fides, but hauing one end broader than another; as for example, twentie pole long, and feuen pole broad at the one end, and but three at the other: then you muft gather the two breadths together, which will make tenne pole : to take the halfe of them, will be fiue, to multiplie the length withall, in the doing whereof you muft count fiue times twentie, and the fumme will rife in all to a hundred pole, which

Grounds that are move long than broad, and yet of an equall lengthand an equall breadib omenerie fide.
qual and vulike led Balengus cornas, after be fabion of a horne:
make one arpente, after the rate of a hundred pole to an arpent, and eighteene font to euerie pole. This is your direct courfe to meafure ground fafhioned like vnto a vvedge.
But if the ground fhould be triangled, haning three fides equall, then it is your
there vay to follow this courfe, vwhich is, firft of all tolearne out how manie poles there are in euerie fide, and then carefully to mulciplie the number of the one fide by the halfe of the number on the fame, or another fide : and that which arifeth of fuch muliplication, vell be the vvhole contents of the poles of that ficld : as for inftance, fuppofe an equall triangled field, hauing ten pole on each fide, I will multiplie the number of the one fide by the halfe number of one of the other fides, that is to lay, ten by fue, vwhich is fiftie pole, and containe halfe an arpent, at a hundred poles an arpent, and cighteene foot to euerie pole, and twelue incheseucrie foot.

4 ground cono faition of two trianglesp.

Aground that is circular or rounds

## $\therefore \quad$. <br> $\because \because$ <br> A ground cons fifing of many

 formes and fac fbions mixibto gether.Aninclosed or intang!ed ground.

If the ground haue the falmion of an Oxe head, that is to fay, be caft into two
triangles equally joyned together, and that eucrie fide (for example fake) containe twentie poles, I will multiplie the number of the one fide by the number of the other fide, that is to fay, twentie by twentie, and I vvill fay that twentie times twentie poles are foure hundred poles, and that foure hundred poles are foure arpents: at a hundred poles to an arpent, eighteene foot to a pole, and twentic in ches to a foor.

If the ground fhould proue round like a circle, you muft diuide the fame round into two diameters; which make foure equall quarters: then you mult know the number of the poles of cuerie quarter : afterward, to muleiplie them vvill be the fumme of the whole round compaffe of the ground: for example, cuerie quarter of the round doth containe twentie poles : vve will multiplie twentie by twentie, and fo we fhall find foure hundred poles, wwhich make foure arpents vvhich this round fhall containe : at a hundred pole to an arpent, eighteene foot to a pole, and twelue inches to a foot.
Ifthe ground be of a mixe fort, hauing many formes and fhapes, the beft vvill be by the meanes of the qquire to reduce them all into fquares, and then to find out the number of poles in them, and to put the faid numbers together. And, if in reducing and bringing of them into foure fquared formes, you borrow fomething, you muft reftore the number vohich you haue borrowed in the totall number vvhich you haue gathered, and by this meanes you thall haue the perfect number of yous ground.
And laft of all, iffo be that your ground be intangled vvithin fome other peece
of ground, you muft meafure all together, and afterward taking away the inclo fed part, and putting the one afunder from the other, you muft meafure your owne by it felfe.

Thus haue we briefly fet downe that wwhich is to be knowne of the Husbandman, concerning the skill of meafuring of lands, and whatocuer ground: if he happen vpon any peece of meafuring vvorke which is of greater importance than this which I haue mentioned, hemuft haue recour\{e vnto the profeffed skillfull in meafuring.

Chap:

## Chap. II.

## What manner of tilling of arable grounds fhall be intreated of in this Booke.

540Sit is ordinarily feene that the complexions of people dwelling in the fcuerall Prouinces of one great region and countrie doe differ one from another according to the arre, or afpect of the Sunne which is called the climat that they dwell in: fo in like manner one may fee the nature and fertilneffe of arable grounds to ingender and bring forth diuers complexions and forts of ordering of the fame more in one place than in another, according as the ground fhall be moift and glib, grauelly confifting of fullers clay, brickie, ftonic, or free and well natured: vvhich thing did neceffarily compell our predeceffors inhabitants of this countrie to alter and change the manner of tilling, as alfo the fafhion of the ploughs in France, and the confines of the fame, as the highand bate countrie of Beaux, the countric of Normandie, and the confines thereof, Sangterre, Berrie, and Picardie : in like manner high and bafe Brie, Champagne, Burgongne, Niuernois, Bourbonnois, Rotelois, Forcft, Lyonois, Brefle, Sauoye, and againe in the couneric of Auuergne, Languedoc, Solongne (where there groweth no corne but Rie) Bordelais, Rothelais, Vaudomois, Baladois, and generally throughout all the countrie of Languedoc,euen vnto Gafcoigne, Bifcay, and Bearne, and not tolcaue out Prouence and Bretaigne, vvhich fome call Gallo and Tonnant. To be fhort, beyond the countrie of Mayne, Touraine, Poictou,Le Perche, and Conte d' Anjou, which are as is were the lands of promife in our Countries of France.
And as it is chus with our Countrie of France, !o it is likewife with our neighbour countries, as both in great Brittaine and the Neatherlands, where, according to the alteration of the foyles, fothere is found an alteration in their tilling, the Eaft part much differing from the Welt, and the North from the South, nay cuen in one and the felfe fame countrie is found much alteration in tillage, as fhall be faid hereafter.

Of all thefe forts of tilling of arable ground vve haue purpofed to intreat hereafter infhort and eafiemanner, and that in regard onely of the husbandrie of the true and naturall France, vwhich vve vnderftand to containe all whatfocuer is inclofed within the bounds and circuits of the riuers of Oyfe, Marne, and Seyne : and our purpofe is notwithftanding this to make the husbandrie thereof as a patterne for all other fafhions and forts of tillage vfed in all other countries, as well neere as thofe which are furcheft off.

## Chap. III.

## Of the nature and conditions of the arable ground in Erance.

Ow as concerning the husbandric of France(which comprehendeth and containeth the confines called alfo French, and reacheth vnto the coun. tric of Sangterre, and to be briefe, which compafleth ail whatocuer Seyne doth ouerflow, euen to the riuer Oyfe both of the one fide and of the other, coalting along the riuers of Marne and Aube) it is certaine that it is yerie ftrong and toilefome, as alfo the earth is found to be well natured, eafie to ftir, blacke, deepe, lying high when the fallowes come to be ploughed vp, hauing few fones ${ }_{3}$
ftones, and by confequent, bearing great flore of fruit. Againe, it bearech pure Whear, that noble graine, for the making of bread, and fuftaining of mankind, if $f_{0}$ be wee will but giuc that which is due vnto Gonneffe, Louures, Poilly, Dampinartin, and vnoo Sarcelles, and vider Efcouan, and Lufarche : in which Countries, a couple of Horfes, of the price of a hundred or fixe fcore crovwies a piece, or aboue, doe runne through their worke and husbandrie, withour being either called or cried vpon : and they doe but a certaine taske by the day, feeing they cannot endure greas heat,or raine, ftrong winds, or frofts, being as lofuly and brauely kept as the Courfer or light Horfe is in the fables of Princes. It is true, that all their ground in France is notatogether alike: for in fome Councries you fhall fnd it much confifting of a Porters clay, and graullie: in other Countries marfhie, moift, flonie, flintie, barren, and vninhabited, billie, full of wilds, oucrgrowne with ruhes and broomes, which and if a man would till for to bring torch corne, he mult earich and make the better by fuch meanes as $I$ haue declared in the firt Booke.
And as it is with vs in our France,fo is it likewife with all orher forraine Countries, each one changing in their husbandrie, as the earth alterecth in his nature and qualitie: thereforet hat the husbandman may know the feverall natures of arable grounds, hee fhall frift know, that they alter in tillage according to the mixture or temper of the earth of which it is compounded.

T2xos forts of carth

Seutrall nam tmes of Soyles

Tofpeake then generally of earths, they are two-fold, that is,fimple, or compound, or loofe, and binding: your fimple or loofe earths are chofe which are not nixt with anic earths of a contrarie cualitie, as the fertile black clay, blew clay, the clay which is like marle, and marle it felfe, the red fand, yellow fand, whise fand, and fand like vnto duft : your compound and binding earths are when anie of thefe clayes and fands equally or vnequally are mixt together, as the blacke clay and red fand, the white clay and white fand, or the blacke clay and white fand, or white clay and red fand, and fo of the reft, howfoeuer they are mixed. Laflly, there is a grauellie earth which is to be reckoned amongft thefe compound earths, and is fometimes loofe, fometimes binding, according vnto the mixture, and this is a hard grittie fand, mixt with pebble, flint, or fhell-ftone: and it isfaid to be loofe, when it is crie; and binding, when it is wet.
Now for the feuerail natures of thefe Soyles, you fhall know, that the blacke clay is fertile and rich, and apt to bring forth encreafe, being husbanded and tilled in fuch fort, that the mould nay runne and breake, for otherwife the ftiffenefle takes away the profit : it defireth no manure, for being fo rich of it felfe, any addition would make it too prowd, and then the corne would either mildew, or by rankeneffe folye beaten to the earth, that the encreafe would wither and loofe the fulneffe. It would be plowed thrice for Wheat, that is, fallowed at May day, Summer-ftirred at Lammas, and fowne at Michaelmas. It would be plowed foure times for Barly, that is fallowed and Summer-ftirred, as aforefaid, then Winter-rigd at Michaelınas, \& fowne March and Aprill following: it would be plowed but once for Peafe or Beanes, that is at plow-day, then fuffered to lye for bait till mid Februarie, then fowne without any more plowing, and buconely harrowed: for Oats or Rye it is no great friend, yet vvill beare both by carefull husbandrie, Rye in thefame fort that it doth Wheat, and Oats, as ie doth Barley. Now for the blew clay, the clay like marle, or the marle it felfe, they are not fully forich as the blacke mould, and therefore will endure to be manured at all times vvhen your leafure vvill Cerue, they niuft be plowed in the fame manner, at the fame times, and for the fame feeds as you plow the blacke clay, and are alfo no friends to Rie or Oats: for the fimple fands, they are by no meanes verie fruitfull for corne, but onely bring forth their increafe by great labour and trauell; they feldome beare Wheat, efpecially the red or yellow fand, except they lyeneere to the Sca coaft, or elfe haue fome other mixture. The corne in which they molt joy is Rye, and they mult be plowed foure times for it; that is fallowed in Ianuarie,Summer-firred in Aprill; foyled in Iune, and fowne ar Michaelmas: for Barley it mull be plowed fixe cimes, as fallowed, Summer-Atirred, and foyled as
afore〔aid,
aforefaid, then Winter-rigged at Michaelmas, caft downc in Februarie, and fowne in May; and to fpeake more generally, thele barren, hot, loofe carths, vvould feldome lye ftill, bur plowed as oft as leafure vvill giue you leaur; as for beanes or peafe they neuer beare any, but forTare, Fetches and Lupines they vvill beare chem, vvith once plowing, $v$ which is onely vwhen they are fowne about Aprill. Thefefoyles mult be vvonderfully vvell manured, for longer than they haue much heart thercof, they vvill beare no corne at all. Laftly, che grauclly ground of vvhat mixture focuer it bes is fomewhat better for Whear than thefef fands, yet Rie is his chiefe tece, and it muft in all things be vfed like the fand ground, and wvill beare (Vheat wvith the fame husbandric that it beares Rie. Now for the compound or binding earths, they are ferrile and barren, according to their mixture, as vvien the richeft clay is mixt with the richefl fand, as namely, the blacke clay vvith the red Iand, it is thein heid to bea good ground; Io likewife vvhen the vvortt clay is mixe vvith the wvorff fand, as the blew or gray clay vvith the fand vuhich is like duft, then it is held for a verie barxen ground, and fo confequently of all the reft:and as of thefe clayes and fands,fo alfo of clayes themfedues, as wyhena blaike clay is mixt with a blew clay, or a marle vvith a gray clay: and fo of fands, as vvhen the red is mixt vvith the vwhite, the yellow vvith blacke, or any of all with the grauell : vvhercin you fhall note, that how much the good foyle is more or leffe than the bad, fo much it is more or leffe fertile. Now for the rillage of them, all fands mixi rvith clayes, or clayes vvith clayes, vvill beare any graine, as Wheat, Rie, Maflin, Barley, Oats, or Peafe, being husbanded vvell, and chroughly rranured, onely they muft be plowed in fuch fort as you plow your fands : but fands vwhich are mixt, vvill beare onely Rie, or fmall pulfe, and plowed like che reft befforefaid : to conclude, all clayes naturally are cold and moift, and all fands hot and drie, and the mixed foyles more or leffe according to the mix: ture thereof.

## Chap. IIII.

## Wbat Pace and largenefse Arable grounds would baue.

5indOw if you deffre chat your Corne-grounds fhould be faire to fight, make a goodly fhew, be eafie to be tilled, and beare plentifully, part them into many peeces caft foure fquare, and let neuer a one of them exceed in the length of fortie poles, nor yee be leffectan thittie or fuec and twente: and, ifthe inconuenientnefle of the place vvill not fuffer you to caft them into fquares, then make them fomewhat miore long, but yet not excecding the forefaid fortic poles in length : for befides infinite other commodities and pleafures accompanying fliort fields, and fuch as are not of large reach, this is one verie fpeciall profit, namely, that oxen and horfes doe la bour there vvith leffe trauell and vvearifomneffe, in as much as they do not onely cheere vp themfelues, and take their breath being at the end of the furrow, but alfo for that the plow-man cleanfech and freech his plow of the earth vwherewith it is wount to be laden, as then alfo carry ing them about to enter vpon a new furrow : caufe your ground if poffibly it may be, to lie leuell and euen; for befides the pleafure of iceing from the one end to the other, they vvill alfo be the more eafie to be plowed, dunged, and fowne :lee thembe dirched round about, or at the leaft on the fides, as well to draine away raine-vvater, or other if any fhould fland there, as for to cur off che errade-waies of paffengers. Plant not witho in nor about your Corne-grounds any trees, for feare of the fladow, knowing affuredly that the more that corne is fladowed, the further off it is from being comforred and rejoyced by the Sunne, as alfo from hauing the duft (which is vvoont to lye much vpon it) blowne off by the vvinds, and likewife from being deliuered from
frow,

Enow, fogges, and rempefts, oftentimes a heauie burthen vpon the backe thereof. And yet put cafe that for your pleafurc you vvould plant fome trees thereabout, then lee them be no other but Willowes, or fuchlike, that may beare no great head to make fhadow : and theretore let never come nie thereto either the poplar, or afpe, or aller, vwhofe fhadow is not onely daungerous and hurtfull vnto the corne ground, but vuhich is more, vvith their great, thicke, and great fore of roots, they draw vnto them the belt juice, they fucke vp the far of the earth, and fo feale away the beft from the feed that is fowne.
And no leffe than thefe the Athe is moft poyfonous vnto Corne-grounds, for how farse focuer his hadow extendeth, fo farre you fhall fee the ground cuer forbeare to profper, and yet it is not vtterly vnneceffarie to haue trees grow about your Cornefields ; for if you plant Fruit-trees about them, as the Apple, Peare, Ceruife, and fuch like, you thall find the profit many times double the injuries that are reaped from them: neither is it forcibly neceflarie that your fields fhould be caft into thefe fimall fquare grounds, feeing you may baue them as large as you pleafe, according to the quantitic of your Farme, or the nature thereof, vvhich may as well lye publique and in common amongf your neighbours, as priuate and feuerall to your leite, in either of vohich you may make your lands of what length or bredth you pleafe, vwherher acres, halfe acres, or roods : and herein is fpecially to be noted, that you

Lands muft be caft according to the naturc of the foyle. muft caft your lands according to the natures of your ground, \& not the profpect of your eye, for if your ground be a gentle earth, either mixt or vnmixt, and lye drie and free all Winter from vvater, neither by any meanes is fubiect from ir owne nature or cafualtie to any fuperfluitie of moifture, this ground you may lay leuell, fmooth, and plaine, and make it appeare as an entire garden, or one land, but if it be within any daunger of vvater, or fubject to a fpewing and moift qualitie; then you hall lay your lands high, raifing vp ridges in the midden, and furrowes of one fide, and a ccording as the moifture is more or leffe, fo you thall make the ridges high or low, and the delcent greater or leffe: but if your ground, befides the moifture, or by meanes of the too much moifture, be fubject to much binding, then you thall make the lands a great deale leffe, laying cuerie foure o: fiuefurrowes round like a land, and making a hollowneffe betweene them, fo that the earth may be light and drie: and this you muft doe either vpon leuells, or vpon defcending and hanging grounds ; and to conclude,the larger your fields are, and the drier they are kept, the better they will be, and the better your corne vill prof per vpon them.

## Снлр. V.

## How often your Corne.ground must be eared or plowed ower.

Hat I may therefore briefly declare vnto you the tilling of grounds for graine and pulfe, vnderftand in generall, that the earings of arable grounds are diuers, according to the places and fituations of the faid grounds, as vve hauealreadie alledged. But howfoeuer the cafe ftand The firt earing in that poynt, and in wvhat plat or peece of ground foeuer you can name them to be, of groundafter it behooueththat at the firft earing vvhich is giuen them after they haue refted and
it hoth lagen ithath layen fallowo laine fallow, that you cleanfe them vvell from ftones all ouer with rakes, and that at the paines or trauell of fome young boyes and girles that can doe little or nothing Vntilled ground. elfe, or otherwife by others: for the earth of it owne nature lying vntilled, begetteth nothing but fones, and ftrong and vaprofitable vveeds, as thofe which are the reliques of the dung now throughly digelted, and chaunged by a heat exalted vnto the fifth degree. And we need not make any doubt of it, but that euen good and kind ground, when it fhould not bring forth any thing but muftard-leed, couch-grafte, pimpernells
the Countrie Farmie.
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pimpernell, mercurie, thiftles of all forts, danewort, vvild-fetch, red poppie, vivild oats, veruaine, blew botles, ax-fetch,or fuch other like vnprofitable vveeds, without forgecting of cockle and darnell, and that which is called reft-harrow, or ac che lealt fome fumitorie and henbane; yet it will be doing of fome ching more: as namely, thofe which grow out of it of themfelues, as ftinking maathwecd, kexes, rupeure-wort (thefe be reclaimed grounds) and the herbe called Chamepytis, as I haue fometimes feene in thofe couneries which properly and cruely containe France. For the diftinguifhing of thefe herbes, the chiftes fhew the icat of the ground as cherr aromaticall and odoriffrous roots may teftifie : the hemlocke, vvild tmalliage, and fumitorie grow of putrefaction : the bind-weed, both great and fmail, do proceed partly of drineffe, partly of the alteration of the humour: night- thade the great and fmall doc fpring vp of the cold part of the earth, vvhich they draw foom the humour thereof: mercuric of both farts, cyebbright alfo of two or three differing flowers, the fmall forrell red vnderneath, and the three forss of plantaine do hold of cold or tcmperate ground: but the garden and vvater creffes, xockers, wild muftard-feed, as alfo the two forts of vvater-parfley haue differing natures, and aremore hot, according to the humour vvhich they confeffe to participate, in refpeCt of their propertie: To be floor, thefe Nature is stes are cerraine dalliances and fports of niarure, wvhich (though fhe fhould neuer be husbanded in the earth) would (nutwihfltanding) yet never abide idle, or without doing fomething. It is true, that the couch-grafle, and that which is called reft-harrow, make fhew to be more ftanding tenanes, than veruaine, cr male knor-graffe, for they will not away, except the plow and culture (their tyrannous commaunders) doe come. To conclude, thefe later hearbes being cut and rooted out by oft and deepe plowing, muft afterward (efpecially the chiftes) be chwacked and beaten fimall before the firt raine, that fo there may nothing of them (yea, no more than of an Adder) remaine aliue to breed or increafc any thing againe: for thcir nature is, fo foone as they receiuca litele moifture, to fafien and clafpe themfelues fo clofe to the flime of the earth, as that they vvill thereby againefo enter new poffeffion, that withina fhort timeafer they vvill become flrong ynough to frangle their mother. Let vs there- The fiffeaz fore conclude, that the earings of the arabie ground are to cleanfe it from fones and ringo vueeds, to manure it, to foread and caft abroad the dung or marle, to plow it after. the manner of the firft earing, to firrow or ditch it, to clod it vvich a roller or board to couer it: then after fome time vvhenthe raine hath fallen vpon it, to plow it for the fecond earing, which of auncient men is called firring of it, and this cannot be The fcoond . done withour laying it in furrowes : and the third earing, is to plow it for feed time, The third: to fow, harrow, and pull vp veeedes, wvhich by aboundance of raine, and too much rankeneffe of the earth, doe ourergrow and enter commons with the new fhot corne. And laftly, to mow and lay it bare and naked, to fieare or cut it downe, to fheaue it and to gather it in. And albeit I here fand much vpon the cleanfing of grounds from ftones, which is a verie good husbandrie, 'and for which by a generall confent wholelord hhips and townefhips will joyne together, and make (as they terme them in diuers countries) common daies for common works, yet you muft vnderftand that all foyles are not to be cleanfed from fones, but only the clayes and fands which haue no generall mixture with flones, but as one would fay, here a fone and chere a fone fcattered feuerally, and not mixt vniuerfally; for where the earth and the fones are of one equall mixture, not abounding more in the one than the other, here to take away the ftones were to impouerifh the ground, and make ir bare and vndefenfible both againf the wind, heat, and cold, as thus, vvhere fones are mixed equally vvith light fands there they keepe the fand firme about the rootes of the Corne, vvhich, fhould they be taken away, the vvind vrould blow the fand away fromthe corne, and leaue it drie and bare, by wwhich meanes it vvould neuer fprout; or in thofe hillie countries where the reflection of the Sunne is verie hot, and the earth light, if the ftones being generally mixt fhould be takeri away, that violent heat vvould fo fcortch and burne che corne, that it vvould feldome or neuer fprour, or neuer profper: and againe where the countrie is moft cold, and moft fubjeet to the bitterneffe of

Nature ist
ner idle:

## The fifth Booke of

frofts, there this equall mixture of ftones, taking a heat from the Sunne, giues fuch a warmth to the corne that it profpereth a great deale better, and fooner than otherwife it would : for vvhich caufe, flones are many times held amongft Husbandmen to be an excellent manure for arable land, fo that I conclude, though in heauie earthes they are moft fit to be cleanfed away, yet in light foyle they may verie well be fuffered, as is to be feene in the Southerly parts of France, and the Wefterly parts of great Brittaine.

## Catp. V.

## The Plow mans instruments and tooles.

鲐He carefull and diligent plow-man, long time before he be to begin to eare his ground, fhall take good heed, and fee that all his tooles and implements, for to be vfed in plowing time, be readie and vvell appointed, that fo he may haue them for his vie vehen need fhall be: as namely a waggon or two, according to the greatneffe of the farme, and thofe of a reafonable good bigge fize, and handfome to handle, vvell furnifhed vvith wheeles, vwhich muft be finely bound and nayled, and of a good height, but more behind than before : one or two carres, vwhich may be made longer or fhorter,according as the matter, which fhall be layed vpon them, fhall require : one light and fwift cart, the bodie layed vvith plankes, and fufficient ftrong to beare corne, vvine, vvood, ftones, and other matters that are of great vveight: a plow furnifhed vvith a fharpe culture, and other parts : tumbrills to carrie his dung our into his grounds: wheelebarrowes and dung-pots to lade and carric our dung in: Atrong and ftout forkes to load and lay vpon heapes the corne.fleeaues : pick-axes to breake fimall the thicke clods: the roller to breakethe lietle clods : rakes, pick-axes, and mattockes, or other inftruments to plucke vp vveeds that are flrong and vnprofitable: harrowes and rakes with yron or woodden teeth, to couer the feed with earth: fickles to fheare or cut downe harueft : flailes to threfh the corne: fannes and fieues to make cleane the good corne, and to feparate it from the chaffe, duft, and other filth.
Ploughes of di. And becaule the plow is of all inftruments belonging to the arable field the prinwerfeforts. cipalleft, and varieth the oftef according to the variation of climats, I vvill here giue you a little touch of the feuerall plows for euerie feuerall foyle; and firft to fpeake of the compofition of plows, it confifteth vpon the beame, the skeath, the head, the hales the fpindles, the reft, the fhelboard, the plow-foot, the culture, and the fhare; then the Ilipe to keepe the plow from wearing, and the arker-ftaffe to cleanfe the plow when it thall be loaden vvith earth or other vild matter. The plow vvhich is mof proper for the ftiffe blacke clay, would be long, large, and broad, vvith a deepe head, and a fquare fhelboard,fo as it may turne vp a great furrow, the culture vvould be long. and little or nothing bending, and the fhare would haue a verielarge wing; as for the foot it wvould be long and broad, \& fo fet as it may giue vvay to a great furrow. The plow for the vvhite, blew, or gray clay, vvould not be fo large as that for the blacke clay, onely it voould be fomewhat broader in the britech ; it hath moft commonly but one hale, and that belonging to the left hand, yet it may haue two at your pleafure, the culture vvould be long, and beinding, and the fhare narrow, vvith a vving comming vp to arme and defend the fhelboard from vvearing. The plow for the red fand, would be leffethan any before fpoken of, more light and more nimble; the culture would be made circular, or mach bending like that for the white clay, yet much thinner, and the fhare voould be made as it were with a halfe vving, neither fo large as shat for the black clay, nor fo narrow as that for the white clay, but in a meane between both. The plow for the white fand differs nothing from that of the red fand,, only it of thath one addition more, that is, atthefurther end of the beame there is a paire of round wheeles

Which bearing the beame, vpon a loufe mouing axle-tree, being juft the length of two firrowes and no more, doth fo certaincly guide the plow to his crue furrow that it can neuer loofe land by fwaruing, nor take too much land by the greedinefle of the yrons: the culture and foare tor this plow are hike thofe for the red fand, onely they are littic leffe, the culture being not fully folong, nor fo much bent, nor the thate fo broad, but a litele fhat per pointed, and this plow alfo feruech tor the grauell howfocucr mist, whecher with peeble, fline or otherwife: The plow for blacke clay mixt with red fand, and the white clay mixt with whise fand, would be made of a middle fize beewixt that for the blacke clay, and that for che red fand, being nos fo huge as the firf, nor fo flender as the later, but of a meane and competene greatnefle ;and fo alfo the culture and thare mult be made anfwcrable, neither fo bigge and ftreight as the greateft, nor fo fharpe and long as the fmalleft. Laftly, the blacke clay mixe with white fand, and the white clay mixt with red fand, would haue a plow in all points like that for the red fand fimple, onely the culture would be more fharpe, long, and bending, and the fhare fo narrow, fharpe, and fmall, that is flould be iike a round pike,onely bigge at the fetting on.
Thus you fee the diuerfficie of plowes, and how they ferue for cuerie feuerall foyle: now it is meet to know the implements belonging to their draught, which if it be Oxen, then there is but the plow cleuife, the teames, the yoakes, and becles; but if it be Horfe, then they are two.fold, as fingle or double; fingle, as vvhen they draw in length one horfe after another, and then there is needfull but the plow cleuife, and fwingle-tree, treates, collers, harneffe, and cart bridies; or double, when they draws two and ewo togecher in the beare geares, and then there is needfull the plow, clewife, and teame, the toaftred, the fwingle-trees, the treates, the harneffe, the collars, the round withs, or bearing geares, bellie-bands, backe-bands, and bridles. Alfo, therebe of harrowes two kinds, one vvith vvoodden teeth, the other vvith yron recth: the vvoodden are for all fimple clayes, or fuch as eafily breake, and the yron for fands, mixt grounds, or any binding earth, and for new brokenfwarthes, or fuch carths as are fubjeet to weeds, or quicke growth: for ीleighting tooles, the barkeharrowes vvill ferue loofe grounds, and the roller thole vvhich bind.

## Снар. VII.

这Vt io fpeake more parcicularly of the dieffing and earing of arabie grounds that are to be fowne with corne, that is to fay, with Rie corrie, Maflin, fome kind of Barly, Turkie corne, and fuch others, whereof bread is made, and efpecially that which the Frenchmen call,for the excellencie thereof, Wheat corne, and the Latines Frumentum and Triticum: they muft haue the fones gachered off in Winter, vpon ground that hath layne fallow: which thing, for to fpare coft and charges, may be done by little Iackboyes and girles, which with their hands :touping downe, and filling Maunds and little Baskets, may carrie them into the middeft of the high wayes, and into che furrowes and rupts of Carts, or elfe vnto the end of euerse land, there cafting them in fome vnprofitable place. And if chis worke be done in the height of the Spring, or in the Summer feafon, it will not be amiffe, becaufe it will be much better, and eafier treading vpon the lands, and the ardors of the field being then new, the fones will be a great deale the better perceiued : or if this labour be done at the fall of she leafe, it will not be amiffe, becaufe it is both the time of che laft ardor, and
when the field fhould be beft cleanfed, as alfo the fiteel sime to mend and repaire the high waies againtt Winter. The vvorke is fo necdfull, as that if the field be not cleanfed from fones, though otherwife it fhould be duely and orderly plowed, though otherwife it were fat and fruifflll of his owne nature, yet voould it beareleffe than any other peece of ground : and onthe conerarie, how leane foeucr it be, if yet it becleane vvithall and freed from Nones, it will net let to bring forth in good and plentifull fort. Sometimes before the gathering of the fones off, fome vfe to vveed it, and to pull vp by the root the briers, thornes, buhtes, and great hearbes growing thereupon: but fuch labour may feeme muft requite in an ouergrowne ground before the firl breaking vp of the fame. The ftubble is to be taken away and rid from off the ground where wheat, or other corne, or oats or other grainc hane growne, to foone as the corne it felle is fhorne and cui downe.

And thefe weeds and quickes which grow vponthe arable lands, would be terne vp by the routs vvith a tharpe harrow, or as fome husbandmen vfe, plucke vp by the roots with a paire of vooodden nippers made for the purpofe, and this would be done in the Sommer time after cuerie great thower of raine, for fo they are veterly deftroyed, vohereas the curting them vp by the ground doth but abate them for a vwhile, and makes them after pering a great deale the fafler: now for to deftroy thofe fmaller rooss of vveeds, whhich lye hidden in the ground, and are vnperceiuable till they doe mifchiefe, you fhall ftrke into your plow-reft many fharpe dragges, or crooked peeces of yron, mofl direatly vinderneath and looking into the earth; and then in glowing of your grounds, where you (pie a wveed before your plow, there clap downe your reft vpon it, and it will forthwith teare it vp by the roots, and in one arder or two you hall make your greund as cleare of weedes as is poffible : for Imult needs difcommend that mannex of veeeding (how generally focuer it bereceiued) vvhich is vfed after the corne is findled, for though it taketh away the weed from the cye, yet it fo bruifeth and breaketh downe the corne, that the difcommoditie doubleth and trebleth the profic, neither can the weed flay more corne than the feet of the vveeder : vvherefore I vvould wifh, vvhen extremitie vrges a man to vveed at thefe ill feafons, that he by no meanes flep out of the furrow, or ftriue to cut vp more weeds than he can reach without hurting the corne thereby.

## Сhap. VIII.

## That the fecond or next dutie to be performed to the ground is to enrich it by manuring it: that fo of alcane ground, it may become fruitfull.

Vt all grounds which are appointed for feed or corne ground, whecher they be fuch as are new broken up, or fuch as have oftentimes alreadie borne corne, muft be enriched and repaired by manure in the begin. ning of Winter about the eightecenth of Nouember, or the begin. ning of December, vvith Sheepes dung that is three yeares old, or elfe vvith
What manner of duxg must be vjeáa Cow and Horle-dung mingled together, for the helping of it to a temperate heat: or vvith other manure fuch as the foyle affoords, or the Farmers yard can breed, and yet although I feake thus of Nouember and December, being a time much ved vvith vs in France, where the vvaies are faire, the journey little, and the labour eafie, yet you hhall know that you may leade your manure either in the Spring, or in Sommer at all fuch vacantfeafons vvhen you cannot follow more neceffarie labour, as when by vvetor other vveather you cannot lead your hay or corne, then you may lead your manure: for albeit husbandmen hold, that the later you lead your manure, the better, yet it is not good to driue folong, for feare of preuention, but to
take anie fit time or leifure that is offered you through the whole yeare. The dung is to be laid on in hills, little lumpes, or heapes, and that along as you meane to caft vp your furrowes in plowing, and after to fpread it in has feafon, whether it be roten dung, or marle. And it fhall chiefely be done in Winter, that fo the raine and fnow dropping and falling downe vpon it, it may be our rcome and cauted to relent. The vaskilfull and bad husbandman fpreadech it all hot, but he lacketh not a faire forreft of weedes, as reward of his haftie paines: for dung being thus at the firf fowne and fpread, though it be ouercome afteiward ; notexithftanding, fee whar weedes it hath received from the beafts houfes, as being there fattered, it yeeldeh for his firft fruits backe againe vpon the land, and therewithall impaireth much the firf crop of corne that thall follow after, howfocucr others following niay prone inore naturall and plencifull by ie, and further, handereth both the ground and hinds in their working. And this is the caufe why the inhabitans of Solongne and Beaux, the be ft husbandmen, canfe their Rofemarie to be rotted in Summer, and made manure of in Autumne; and yet manie times not hafling, but deferring the vfe for a longer time. Furthermore, chey continue and hold it from father to fonne as a receilled veritie, That nothing is more deare and precious than dung, tuken in his feafon, for the enriching of ground.

Nothing more

Some take dung as it were hot and halfe rotten at the end of their field; but that doth much harme: becaufe fuch dung not being oucreome of the fnow, raine, and other helpes of the heauens, but remaining crude or raw, doth likewife remaine vnprofitable, efpecially the fint yeare; doing nothing it felfe, and keeping the better fruit from profiring and comming on as it would; though the fecond yeare it may helpe well, and hinder nothing.
It is true, that if you would enrich a poore field, that it is better done by the dung The dikerfitie newly gathered out of the bealts houfes, than with fuch as is old: and it would bee of manure. fpread in the new of the Moone, a little before the feed be fowne, prouided yet, that it be then plowed and turned vader the earth. They feeme vnto me not to doe worft, stabble ferving who hauing gathered their corne in Augult or September, and cur it fomewhat inflead of dung high, doe burne the flubble and other weedes which are in the fields, whereby they make a manner of dunging of it by the helpe of raine falling thereupon. Thisflandeth in ftead of the firf fore of enriching of their ground, efpecially in barren and fandie grounds, and fuch as ftand vpon a cold moittifh clay, or fuch as haue a ftrong new broken vp ground. True it is, that they doe not this yearely, becaute of their need to coucr their houfes, and of hauing litter for their beafts. And yet thole may feeme vnto me to be leffe deceived, who hauing left their fubble long and high, in the fhearing and cutting of it downe, doe prefently thereupon beflow an earing vpon fuch ground, and fo vaderturne the faid flubble and weedes, there to let them rot with the Winter raine.

There is nothing fo good as the firft manuring and dunging of the ground, which The fuft manyen if it be negleEted, it will not recouer it for two yeares face againe: lu that for fuch ring of the fpace he fhall gather nothing but Rye in fead of Wheat, and Fetches for Oates, and ground is the wild Ferches tor kind and raturall ones. It is true, that the firft is not fufficient of it felfe for to dung and enrich the earth fufficiently, and to make fruitfull thofe that are barren and leane : but there muft be other meanes vfed for to effect fuch a worke: and amongft them all, that feemeth vnto me the principall, which is the letting of the field to lye a yeare or two vnoccupied, not ecaling the while to husband it both Winter and Summer : as allo the firft time when you would haue it beare, to fow it with Lupines, or rather with Peale, pronided that the ground be not ouer-cold, for then it would profit thofe Pulfe but a little. And if all thefe meanes fhould fall out to be infufficient, it will be good to fpread Quicklime vpon the plowed ground in the end of Februarie : for befides that it earicheth a ground greatly, it cleanfeth it alfo, and killicth all bad and dangerous weedes: whereupon it commeth to paffe, that the harueft after it is more plentifull, than after anie other dung that a man can inuent to wic. Furchermore, if the ground be light, it will be good to caufe fome water to
ouerflow the corne for the fpacc of ten daics or thcieabour, which will likewife fand in fead of a manuring or dunging.
The dung or marle is to be fered in the increafe of the Moonc, about the eighteenth of Nouember, after fuch time as the refed ground hath paffed his time of eccreation: butif it bee in fuch grounds as wherein the chiefeff kindes of corne areto bee fowne, then they muft be dunged prefently afer the end of Autumne,thatfo the ground may haue leafure to receiuc the raine therewithall, which will ferue to help the feedes the better to rot, thereby prouiding an aid for the weakenes of the carth. In like fort, if this fhould befor Rie, or for Mefling, the ground would be dunged in the heare of Winter, or a little before, notwithlanding that fome doe flay toz the monech of March, that it may prefently after receive the thowers of A prill, which uray do much good towards she later end of September, at which time they fowe in fire duft, and windie drowthes, looking for the firft raine, and the purrifaction to be wrought by the fame. But howfoeuer the cafe flandect, feeng it is beter to manure the ground,
Hos it is naught to durg - ground 100 macho. than not to manure it; fo it is better to dung it off, hann much at once : for as a ficid flarueth, if it be not dunged at all, fo it burnech if it be ouer. dunged : in confideration whereof, the ground muft be well weighed;for a good ground hath no fuch need to be dunged as a leane ground. The noifl field would be much more dunged : for feeing it is frofen continually by reafon of his moifture, it commeth ro paffe that the dung by his heat doth refolue and thaw the fame againe. The drie ground requirech leffe, becaule it is hot ynough of it felfe by reafon of his drineffe: and if you thould beftow grear flore of dung vpon it, it might be a caufe to make it burnt. Againe, your exceeding rich and tiffe clayes defire litele or no manure at all, becaule it is fo rich and fat of it felfe, that hauing anic more addirion, it prefently mildeweth the corne, and makes the kernell thereof as blacke as foot a and therefore the good Husbandman fayth, That the manure which is beff for thefe rich foyles, is ynod plowing in due cime, and ripening the mould.
There mufl likewife confideration be had of the goodneffe of the dung:for good
To put duns clofe logether.
The diuerfatic
of dung. dung would lye faft and clofe togecther for a feafon, and reft it felfe a yeare : if it be elder, it is fo much the worfe. The Pigeons dung is the beft of all: and nexs thereto is mans dung, efpecially if it be mixt with the other filth and fweepings of the houfe : for of it owne nature it is verie hor. Next vnto this is Affes dung, which is the beft of all beafts dung, becaufe this beaft doch chew and eat his meat with great leyfure, and digeftech it beft, and thereupon alfo maketh a dung moft prepared and fitted to be put prefently into the earth. Next vnto this is the dung of Shecpe: then that of Goats: and alike of all others, as Horfes, Mares,Oxen,and Kine. The worft of all is Swines dung, by reafon of his great heat, for thecewish it prefently burnech the earth. For want of dung, the falkes of Lupincs cutc downe, haue the force and efficacie of very good dung: or elfe to fow Lupines on Corne-ground which is leane, and after that they be come vp , to put them inso the earth againe, turning ic ouer them.

There are manie Farmes of which one can keepe neither bird nor beaft to make dung of: and yet the painefull Farmer, in this fcarcitie of manure, may make fome of the leaues of Trees and Thornes, and dyrr, or parings of the earth gathered our of the freetes: hee may alfo take Ferne, and ningle them wist the filth and myre of the vter court: or make a deepe pit, and gather into it afhes, flubblc, and ftumps of hay or ftraw, the dyrt hanging about fours, and all other manner of filth chat may be frraped and raked together in paring or fweeping the houfe, or elle howfoeucr. And in the midft of this ditch you muft fer a piece of wood of Oake to kecpe away Adders and Snakes, that they come not to breed or abide there. If you haue no other but arable grounds, they wil not need, that you fhould diuide your dung into diuers forts: but and if you haue Vineyards, Medowes, and Corne-ground, you muft lay cuerie fort of dung by it feife, as chat which is of Goats and birds mult be firred currie fume mer, as if you would digge it with Pick-axes or Spades, to the end it may rot the fooner, and be beter for the ground.

The cleanfing of Ponds, Ditches, or flanding Lakes, is a compaffe or manure not inferior to anie before fpoken of: and Marle may haue preheminence before all, in as syyleof Ponds much as the beft before named doch not laft aboue foure yeares at the moft ; and or Ditches. fome but two ; and fome but one : yet Marle will keepe the ground rach twentie yeares, and better. All forts of afhes, eicher of Wood or Coale, is a good manure, chiefely for ground that is ape to chap or riue : So is alfo Lyme, or Chalke, efpecially for cold foyles; yet your Lyme would be featered verie cthinne vpon the fame, and your Chalke layd in greater aboundance. Alfo Sea-fand is a verie good kind of manure, and both fafteneth a loofe mould, and alfo makerh it a great deale more ferrile,

## С нар. I X.

## That the ground mufl be plowed ouer according to bis three carings before that it be forme.

丞等cilling and husbanding the earth as it fhould be, there are ethree things chiefely required: firt, a Husbandman, furnihed with a good vnderftanding and ripe iudgement : fecondly, Cattell fitted for the worke: and chirdly,a Plough well appointed and made. But of all other things, it is verie requifite, that the Husbandman doe know the nature and condition of the earth which he vnderrakech to cill, thereof to reape fruit and commoditie, that fo accordingly he may firre it, and giue it as manie earings as the nature thereof doth require. For in fields which are of a good ground vnderneath, he muff fee his culter and plough fo deepe therein, as that the better and fatter earth which is vnderneath, may be turned aboue : whereas to take the fame courfe in a ground that is barren and leane vnderneath, were altogether vnprofitable. In like manner, there are manie fields, which the more that they are cared and plowed, they become fo much the more leaner and barrenner : and fuch are thofe which haue a light mould, which the oftener they are plowed in the time of heat, to much the more they are pierced of the Sunne, and fo become the weaker and leffe able to beare Cornc.
It is true indeed, that there are not manie forts of grounds, but by oft earing they become more fruiffull, than and if they were feldomer eared: but howfoever, Wheat or Melling efpecially, doe defire to haue three earings before they bee fowne: one, which is called the firt earing; and it mult be when as the dung is newly fpread (ocherwife the dung would loofe his force, being wafted and confumed by the heat of the Sunne: ) and this firt earing is for to firre the earth, and to make it foft for affer-plowing, not turning vp much earth with the plough, nor piercing deepe into the earth this firft time, but cutting it in fuch fort, as that the furrowes may be fo neere together one vito the other, as that a man fhall hardly perceiue the path or paffage of the plough : for by this meanes all the rootes of the hearbes will be broken, and die. The fecond earing is in the Spring, at fuch time as the earth beginnech to open of it felfe: and then you may caf your ride ges good and high,and great withall, that fo the feed may be the better receiued inte the ground.
But you mult vnderftand, that according to the fituation of the grounds that are good for Corne or Pulfe, as alfo according to the Countrey, mould, and hearineffe thereof, it is v.ed to varie and alter the plowing and cilling of the ground, for the further benefit of the inhabitants: for at Brie, where they hauc a flipperie and moift ground, fit to make pots of for neceffarie bufineffe, they plow vpon a caulcy, and as
it were vpon an Afles backe : and in euerie fiue furrowes they hold it meete so caft one high ridge, that is verie large, and made alfo like vnto a cauley, that it may both receiue the raine water, and that which fpringeth out of the earth, which is alwayes moin, and that becaufe of two Riuers lying vpon the one fide and on the other, and doc moiften and water the grounds there continually vnderneath.
And for the fame purpofe (which is alfo praatifed in fmall Beaux, as in Longboyau, Val de Gallie, Val-boyau, Niuernois, and Bourbonmois) they make at the end of their ground certaine rifes of fufficient height: where, betwixt the faid rife and arable ground, there is a ditch or pit made within it, affer the fafhion of a long fitt, to receiue the waters which runne along afeer great raine: for otherwife they would rot and fmother the corne. This troublech fuch as traueil thofe countries, exceedingly : and this is the caufe of the name, whereby they are called the Grathoppers of Brie: Infomuch, as that they cannot tell how to doc fo well, as in a rainie day to goe and pull vp Darnell, Dane-wort, and other oure-fpreading weedes (which elfe they could hardly ouercome) being a kind of earing of she greund, called of auncient Writers the freeing of Corne-ground from weedes: hauing further, by fuch aboundance of raine, this feath done vnto their Corne, as that it is layd bare now and then, yea, and that though it be neuer fo well harrowed, and the earth of it telie ftrong and mighrie.
There is no need of anie fuch riles or ditches in the parts of France, truly and properly fo called, neither in the Ifle thercof, nor in the flat and free Countrey of Blairie, as Long.boyau and Labeauce (the verie Barne and Store-houfe of France) the Countries of Oye, Sangterre, or elfe of Berry and free Poictou. And all gratuellie Countries may be well excufed and freed from all manner of fuch inconuenience, as appearech by manie places of Picardie and Solongne, euen vnto Percheron: fo that they make their furrowes clofe and neere one to another, as is wont to be done in low grounds and valleyes.

The ground muft alfo be plowed in a fit and conuenient time, to the end that it may become fruiffull : Wherefore the carefull Husbandman fhall neuer plow his ground whiles it is wet; for running through it with che plough at that time, it will doe nothing but runne vpon heapes, efpecially in tough and clammie grounds, as alfo in thofe which be hard, or growing and putcing forth their fruit, in as much as this maketh them fo fad and clofe, that it is impoffible to make them fine and fmall mould againe. Likewife, it is an abfurd thing eucr to goe about to put the plough into a dyrrie and myric ground, becaufe it is nothing fit to flirre or deale anie manner of way withall, before it become drie, and fo vnfit, as that though you could doe what you would vnto it with the plough, yet there is no cafting of anie feed into it.
And if it fhould fall out, that there were anie Tree or Vine-plant in the ground; you muft pafte it ouer, in lifting vp the plough from off the fhootes which come from the rootes, at all times when you perceiue your felfe to be vpon them : or elfe you fhall curthem off with a hatchet, rather than bruife and breake them with the culter, for feare of breaking the culter it felfe, and putting the Oxen or Horfe to trouble and paines.

# Cнір. X. <br> That the cattell ved to plow withall, doe differ according to the manner and cuffome of the Coustrics. 

RisNrough and tough grounds, as alfo in free and kindly grounds (as hath Plowing pisith been faid) where there are required as needfull three Horles to a plough Horfe. of fiftie foot (but not fo coupled and fpanged, as they be in Countries where they vfe to plow with Mares, Oxen, Afles, or Buffles) you muft; after the tritt caring, breake the clods with the rowler, and lay it flat, fquare; and plaine, with a planke. In leane, grauellie, and weaker grounds, you fhall nor ftand in need to be at fuch coft either with horfe or man; for it is not requifite that you fhould draw fo deepe a draught in the earth: and againe, the husbandmen of fuch Countries haue fooner finifhed and made an end than orhers, and yee doe labour with more leifure, becaufe of the ayre and climate of their Councrey. Yet this is but a particular fa- Hor fiser Oximín fhion in France: thereforc so fpeak more generally, both a ccording to that and other of Francee forraine foyles, you thall viderfand, that there be two principall caufes to make a man plow with Horfes, although he may haue Oxen at his pleafure: The one $1 s$, when he liueth in a verie wet and dyrcie foyle, where the ground of it felfe yeeldeth forth fuch a continuall moifture, that the fralleft trampling or treading therupon bringeth it to a verie myre; in this cafe it is beft to plow with Horfe, becaule they draw euer direetly one after the other, and tread euer in the furrow, without annoying the land, and goe alfo much more light and rimbly than other cattell; whereas Oxen going double, and treading vpon the land, would foyle it, and make it fo myrie, that it would be good for no purpofe: The other, when a man liueth farre from his neceffarie accommodations, as from his fuell, his fencing, his timber, and other fuch like neceffaries, which he mult forcibly vfe euerie yeare; in this cafe he muft cuer beepe his teame of Horfes, becaufe they are fittelt for trauell and long iournies, doing them cuer with the greateft foeed and leaft loffe: whereas the Oxe, being a heanie beaft; would foone furfer, and are indeed fo vnape for the fame, that a man can hardly doe them greater iniurie. Now for the number of Horfes to be ved in the plow, it muft be according to the greatneffe of the labour, and the ftrength of the cattell: for in the heauie and liffe clayes, lixe are euer few ynough, either to fallow with,or to plow the Peale-earth with; and foure for anie ocher ardor: in the lighter fands foure is fufficient at all times, and three vpon anie neceffitie. As for the mixt foyles, if they be binding, they will craue as much frength as the clayes: but if they be loofe, the fame thas ferues che light fands will ferue them alfo. And hercin is to be noted, that the floned Horfe is cuer better for the draught than either the Mare or Gelding, yet all good and meet for feruice. Againe, they werke with the Affe and the Oxe, as in Auuergne Plowimg wist with the young Mule, and in Romaine and Champaigne in Italie with the Buffle: Oxere whereas, of a truth, the labour of Oxen is not readie, nor fo quicke of difpatch in the time of neceflitie; and for to remedie and helpe this mifchiefe, you mult begin your worke with the Oxen fooner, and haue a greater number of them than of Horfe. The prouifion of Oxen is of leffe charges for diec, buying, and felling againe: whereunto you may adde, that you may eat the Oxe, or fell him againe, after you haue had his labour a certaine time. True it is, that he that hath wrought all the morning, muft reft the afternoone; and the Oxen going earlier to plough,recurne carlier from labor thans the Horfe. The greateft commoditie comming by them, is, that they better endure the vnfeafonablenefte of times, and in fturdie and ftiffe ground they draw a deeper draught, and acquite themfelues in the worke with more commendation:againe, they craue nothing fo much thooing or harneis in the Countries where yron and harness is deere, neither are they fubiect vnto fo manie maladies, faue that they mult be kepe from being flarued with cold, and from the raine, as alfo care taken that they be well. souered.

## The fifth Booke of

This I fpeake as of our French Oxern, which are not much inured to labour: but if
Englifh oxe。 you pleafe to looke vnto the Englifh Oxe, you fhall fee, that he is the worthieft creature of all other for che plow, both in refpect of his con!lancie in labour, and of his long endurance theicin; as alfo for his leifurable and certaine drawing, withour flarts or twitches, keeping euer one pace, wwithout going fafter or flower: whereas the horfe by his courage and fierceneffe doth, when he is pricks forward, draw fo rafhly and fuddenly, that a good hand can hardily, now and thelı, keepe an cuen and direĉ furrow. Thefe Oxen are fiteff for thole foyles which are rough and firme, withour anie fpewing moiffure in them, becaufe (as was befere faid) they draw double: yec in fome places, and in moif grourds, you fhall tee thon draw fingle, like vnto horfes, with open collars,and large hames. Touching the number meet fur a Plow, the horfe and they are all one, for fix Oxen will ferue well either to tallow or breake vp Peafe earth, and foure will performe anie other ardor : yet 1 f you will let them haue anie Tyet or meane Iade to goe before them, and lead the way (which will, as it were, cale the yoakes from their neckes) it will be a great deale the better, and they will take their labours with much more pleafure: and howfoeuer our cuftome is in France, yet they will endure a full daies labour as well as a horfe, prouided that they be driuen temperately and gently: for nothing breederh furfet fo foone in Oxen, as ouer-haftie driuing, or heating then wirhout dilcretion.
If ind not anie labour lefle chargeable than that of Affes, fuch as are to be had in

Toplow with Afles.

Agond Mulet, but a curft beafl.

The diuerfitie of Ploughes. Tabie,Calabrie,Sicilc,and in the countrie of Ia ffe, being all of them countries where they grow great and faire: for they enduremore labor, and are not fubiect to fo many difeales, neither are they fo coftly to feed. True it is, that they do not fo much, neither yet altogether fo well: wherefore they are better to be ved in leane grounds; excepe the yong Mule of Aunergne, which exceedech all other beafts: but he is troublefonie, hard to be brought to draw, and fo brainfick, as that there is not the yong Mule which hath not his madding fit, and vexech his mafter now and then:whereupon it groweth

The plowing with Buffes, as is so be feenc in Romaine, and elfewhere, is good in grounds that are fat, and ftanding vpona Potters clay: and are not charg cable in harneis, becaule that hauing fo fhorr a necke, they fand not in need of anie thing buta ring, to hold and keepe them by the fnowt: but in Summer they are dangerous, and fall oftencimes into a frenzie, efpecially when they fec anie red cloches; and yet notwithfanding they hold out longer at labour, and are more readie and diligent than the Oxe. Finally, this poore beaft ferueth to giue milke, befides the worke and labor performed by them : as allo their hide is of much more vfe than that of the Cow or Oxe: for in fome places Husbandmen doe vic Mares, Affes, fhee Mules, and Kine, to draw and goe to plow, after the fame manner that the males doe.
I doe not intend to trouble my felfe in this place with the fafhion of the Plough; neither yet with the diuers forts thereof, that are found in diuers and fundry countries: fo as if you flould aske me of the difference betwixt the Ox-plough and the Horfeplough, I intend not to Thape you anie further anfwere thanthis, namely, that according to the loafe, fo muft the knife be: even fo, according to the force and flrength of the ground, fo you muft haue your inftruments and tooles for to cut and till the fame. Neither will Itrouble my felfe with examining the fafhions of our ploughs with that defcribed of Hefod, to fee whecher they be like, or no: no more chan I intend to meddle with the fafhion and making of Columella his Hedging-bill,or Wedge, which he faith in his time to haue beene named after the French name.

## Сия в. XI. <br> Of clodding and earing it the fecond and third time, and of foring of it oftermard.

CMVrthermore it is mect, after the firte earing of Corneground, verie dili- To clod the gensly to breake and take away clods, and to make the ground plaine grcando and cuen, for the better fowing and beftowing of the feed in good proportion and fort vpon the ground : vvhich our common Husbandman viech to doe in the time called of him the dulting time:Notwithfanding that the inhabiamts of Beauce doc nor fo frially fland vpon the fame : for by reafon of the fatneffe of their grounds, they take the time howfoeuer it fhapecth, hauing no good affurance of the time, whecher it will continue faire, or turne rainie. It is the crder and common fa?hion to breake che clods with the Rowler (vvhich would doe well to be of Marblerin a tough and fiffe ground) or eife you may breakechem with a harrow, well toothed with hharp-poinred reeth of yron, and of a good length. But howfoeuer, you muff folabour if, and fo of gee oucr ir, as that it may be broken all into duft, if is be poffibie, that fo there may not remaine one clod vnbroken afier that it is fowne.
Yet for the more certaine clodding of arable grounds, you fhall know, that it muf be done according to the nature of the foyle, and ever after a good thower of raine, the firlt which fallech, afeer the feed is fowne. If the ground be a loofe foft mould, and verie apt to breake, then the back-fide of your harrowes being runne ouer the lands, vvill be fufficient: but it the earth be more hard and binding, then you flall take the rowler of Wood, for that of Marble is a great deale too heauie, and indeed onely fic for Gralte-grounds, and not Cornc-grounds, as alfo the teech of the harrow are too tharpe, and teare vp the eareth too mulch : and vviere the vvoodden rowler vvill not ferue, there you fhall take clodding-beecles, made of purpofe broad and flat, and with them breake the clods fo in peeces, that the raine may foften them; \& then with your back- barro wes runnc ouet thens againe : and this is called fleighting, as well as clodding.
Wherefore, after that the clods are well broken, and all made plaine; for the fecond the feond enta caring, you fhall cur vp your grounds againe abour mid Iune, if they be fat and moift; ing. or about the monecth of September, if they be leane and drie:for otherwife you: leane ground would be quitedried yp and burne with the Sunne, neither would there remaine therein anie vertue or iuice. Aboue all things you muft obferue and keepefuch order in plowing, as chat the ground may not be too drie nor roo moif:for greas fore of moifture makech them dirt and mire, and too much drineffe doth difaduantage the husbandman amaine, either becaufe the plough cannot enter the ground, or if it cnter, yet it cannor breake it fmally yough, but turneth yp thicke and broad clods of carch, in fuch Cort, as that afterward it will be hard to plow vp the field againe : for certainely, there cannot be that done which fhould and is requ:fite, when the carth is too hard. Wherefore the ground that hath beene plowed in drought, muf haue a rainie feafon found outto be plowed in afterward againe, that fo the fame being watered and moiftened, may be the more eafily tilled.
Yet of the moft approued h husbandmen(for France is not rich in thas profefion) is is held, thas the carth can neuer be plowed too dric, folong as the plow is able to run through the fame, and one ardor fo gotten, is worth, three in the moifter weather: befides, the greater that the clods are which arifc by plowing thus in drie weather, the greater fore of mould you fhall haue, which is a good aduantage to the graine, neither will it be anie thing more difficuit to plow, if you fay a good feafon, and haue the earth throughly wer before the next plowing, for thefe grear clods doe neuer arife but in the clay grounds, which are apt to breake with anie moifure.

## The fifth Booke of

Shortly afeer the fecond earing, you flall giue it his shird caring, which muft be more light, and fuch as breakech not in fo deepe as the ewo former. This earing beng finifhed, you mult make the ground cuen and fmooth with a harrow prefently ater, which fhall be about the middeft of October : then you fhall fow and befow your feed vpon the ground in good proportoo, but not at anie cother time than in the encreafe of the Moone, and neucr in the decreafe: and shen likewife it will be he better, if you take the opportunitic of a little raine, following the Prouerbe, which fayth, You mult fowe Wheat in myre, and Barly in duft : and the reafon is, becaufe that Wheat being hard, and comming necre to the nature of Wood, doch bud and fprout better and fooner, when it is layd in feepe and mollified in dyrt : or elfe for feare of Pifmires, which if the Wheat fhould be fowne in a drie ground, would become lords of it by and by, and carrie it away. Notwithltanding, if you fee that the raine be fomewhat long in comming (feeing the times are not in mans power) you fhall noe deferre to fow, efpecially in dry grounds:for the corne which is fowne in dry ground, and well harrowed and couered, doth enioy and keepe the fame withour corrupting as well as if it werc in the Garner : and ifthere follow anie raine, the fred will be vp in a day. I prefuppofe in the meane time, that the Husbandman hath let reff and lye idle his grounds for fome two yeares, wherein he is incending to fow his Wheat, to the end they may bring him a better crop. Furchermore, feed teime is expired and paft about the eighteenth day of Nouember: for then the earth, by the coldnes of the aire, becommeth clofe fhut, and (as it were)rugged, flaring, and agaft, fo that it will not bo able fo well to receciue the feed, and to caule it to thriue. It is true that in cold places feed nult bee fowne earlier, but in hote places later: whercupon it commeth to paffe, that in Italic they fowe about the beginning of Nouember; but with vs in France, where it is emperate, in OCtober; in cold places, and Coaft-countries, in the kalends of September, or rather fooner, to the end that the routs of the corne may be growne ftrong before that the Winter-arine doe moleft it,or the Yce and Frofts doe hurt it. Notwithftand ing at what time focuer you fowe your feed, you muft make diuers con. ueiances ouerthwart the grounds, and conduiss to carrie away the water out of the Corne. Yet this Seed-time is fpoken but as of Whear only, or Rie, which are called Winter-cornes: for Peafe, Beanes, and Pulfe, would bee fowne in Februarie, and the beginning of March; and Oats and Barley, at the end of March, and beginning of Aprill. Now fometime the husbandman fhall haue occafion to reioice in hopeof good fucceffe, and fometime to feare in doubr of the cuill fucceffe, of his feed, by reafon of the variablenes of the cime. Hee flall haue grod hope of his Seed, if hee fee the time inclined to fweet, mild, and not violent fhowers; and vnto temperate, not exceffiue and often fhowers : for thé mild fhowers refemble the dew; the exceflue ones doe moiften and coole too much: If in like manner the fnow doe fall in aboundance, and become hard by fome frof following thereupon: for fuch fnow letteth and flayeth the earth from fpending it felfe by exhalation, and vvalting of his fatneffe, which otherwife by vapours would be confumed: and if alfo the faid fnow in metting doe wafh and water by little and litele the earth vvith his pure,and fweet liquor, ${ }_{3}$,nd (as it vvere)f cumme of raine; for that ferueth to make the carth fat, prouided that prelently vpon the melting of the fnow there fall no fhowers of raine accompanied vvith haile: if laftly the frofts come in their proper and due time; for if they be too earlie and forward, they burne the young fprouts; and if too late, they hurt them verie much.

## Снар. XII。

## of the choice and guantitic of Seed to be fowne.

(axisOr Wheat to make feed of, che induftrious Husbandman fhall chure The chufing of fuch as is full, thicke, heauie, firme, and fo hard and ftrong, as that it feed Whearo cannot but with paine be broken betwixt the teeth, of a red colour, bright, cleane, not aboue a yeare old, which makech fauourie and veelltafted bread, threfhed out of choice and culled eares, which after fanning and winnowing lyech vppermoft (as that which is the thickeft and moft maffie) which was growne in a fat ground, but concrarily feated to that whercin fuch Wheat is to be fowne, as from hill to plaine, and from moift to drie, and yet fo concraric, as that the feed of a bad place be racher fowne in a good place, than the feed of a good place fowne in a bad: for teed, be it neucr fo good, doth become worfe and degenerate eafily, when it is fowne in a bad plot.
And for as much as If peake onely of Wheat in chis place, being the graine of moft ve in Fraunce, you fhall vnderftand, that there be diuers kinds therevf, as fhall be Thewed hereafter; which fith their names are not tamliar in other Countries, I will here repeat thofe which are moff in vee amongft our neighbours, efpecially in England: of which, the firf is called whole-ftraw Wheat, becaufe the fraw is whole Sorts of whetion and entire, not hauing anic hollowneffe within it, and this is of all Whear the largeft and goodlieft, and yeeldech the greateff fore of flowre, yer not of the moft pure and moft white colour : it profperech onely on the rich ftiffe clay-grounds, and mult neceflarily haue three earings before it be lowne. Next vnoo it, is the great Pollard Wheat, which hath no aues vpon the eares: it is a large Wheat alio, and prof perech likewife vpon fliffe clay-grounds, yet will aske but one earing, becaufe it loues to be fowne vpon Peafe-ground, from whence Peafe was reaped the fame yeare. The next is fmall Pollard, which loues an indifferent earth, as that which is gravelly, or of barren mixture, and it mult hauc euer full three earings. Then Ograue Whear, which louech anie well-mixt foyle, and will grow either after chree earings, or but one, fo it be fowne where Peafe is reaped. Then flaxen Wheat, which will ioy in anie foyle, except the fliffe clay, or burning fand, prouided that it haue fully three earings, and be well manured. And lattly, Chylter Wheat, which is like vito flaxen Wheas.
It will be good before you fowe your feed, to lay it in feepe in water fome certaine seed degesss),
houres, and aferward to fpread and lay it abroad fomewhere in the fhadow so drie, rate, that fo it may be readie to rowle or runne at fuch time as it is to be caft ineo the carth: by this meanes you fhall chufe che faireft cornes that fhall fay behind in the bottome of the water, to fowe them, which will grow within three or foure daies: but as for thofe which fwinme aloft aboue the water, they fhall be taken away, becaufe they are not worth any thing to fow: for the beft vfe for fuch,is cither to feed Hennes, or elfe to grind, that fo you may get out euen that finall quantitic of meale and flowre that is within chem. Some before the fowing of their corne, doe frprinkle itouer a lietle with water, wherein haue beene infufed Houfeleeke, or the flamped feedes and roots of wild Cucumbers, to the end that the corne may not be eaten of Moules, field-Mice, or other fuch like vermine. Yet howfoeuer this may be a practife in France, it is not receiued generally amongft Husbandmen, tofteepe the corne in water, before they fowe it, becaute fo much muiffure coolech and drownech the kernell of it too much : Nay, they are fo farre from the practife thereof, that 2 well-reputed Husbandman will not fuffer his corne to be to much as wafhed before is be fowne.
The quantitie of corne which muft be fowne, fhall be meafured and rated accor. Hew sumb corxe ding to the peece of ground: for an arpent of fat ground will for the moft part take foure buthels of Wheat, a reafonable tat ground will take fiue, and a leane will take

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more. It is true, that there muft refpect be had vnto the Countrey and place where it is fowne: for in cold Countries and places that are waterie, being allo alwaies fub. ięt to Snowes, it is needfull to fowe a great deale more than in hot Countries, or in temperate and drie places, in as much as the cold and Snow doe corrupt the greacelt part of the feed. Befides, the time is well to be obfrerued, and the difpofition of the ayre : for in Autumne you mult fowe leffe chicke : and in Winter, or the cimes approaching and comming neere to $W$ inter, a great deale more: againe, in rainie weather you mulf fowe thicker than in drie weather. Yet in England and other Couneries which are much colder than France, two buhhels of Wheat or Peafe will fully fowe an acre: and foure bufhels of Barly, or Oates: and three bufhels of Beanes: which proportion no man need to alter vpon anic occafion whatoeuer.

## Снар. XIII. Of harrowing and weeding of Corne.

(1)Refently after that the feed is beftowed in the ground, you muff,for your laft worke, harrow it along and croffe ouerthwart, and afer that rake it from furrow to furrow, but ouerthwart onely. This would be done wihh Harrowes, hauing yron teech rather than woodden ones, becaufe they make the corne fettle deeper into the earth, which they doe breake and make fmall a great deale better, and fo by that meanes doe couer the corne with earth, as is requirech, at the leaft the thickneffe of foure fingers, that fo it may be the fafter rooted, and the fafer from birds: and thus it mult be let alone the whole Winter vnto the Spring. True it is, that during Winter you muft not negle et to make draynes and draughts, thereby to carric away the water that falleth in too great aboundance by raine.

Now this manner of harrowing is but for fuch entire grounds as lye togecher leuell, plaine, and vndiffinguifhed by lands: for were they caft vp with ridges, as the lands of many Countries are, then could they by no means be harrowed ouerthwart. Therefore wherefoeuer your ground lyes, in lands or in common, mixtamongftyour neighbours, there you fhall euer harrow your lands direatly $\mathbf{v p}$ and downe the full length of the lands, beginning at the furrowes firft, and fo afcending vp to the ridges. As for the Harrowes, as before I Iaid, the woodden Harrow is beff for the loofe moulds, and the yron Harrowes for the tough and binding moulds. As for the Oxeharrow, which is as bigge as two Horfe-harrowes, and hath cuer yronteeth, it is beft for the tougheft earchs, cfpecially new broken vp fwarths, the Horfe-harrowes going before, and the Oxe-harrow following after.

When the Spring time is come, and the Wheat hath taken good root, you mult weed your ground of fuch fore of weedes, as Winter raine, and the rankneffe of the earth it felfe, haue cauled to abound and oucr-grow the corne, newly put vp, as Fetches, tame and wild, Poppie, Cockle, and fuch like: and after once hauing weeded it, it will be good to doe it the fecond time, as when the eare beginneth to hoot ; for in fo doing, the corne will proue faire and cleanc. But in the meane cime, you muft fo weed it at the firf, as that che rootes be not hurt, bue that they may remaine coucred and laden with the earth, that fo they may fland fafter in the earth, and grow the more vpward. At the fecond time of weeding you muft not bare it much: for and if the Wheat fhould not fhoot yp ftill more and more, it would ror vpon the earth, and bring forth nothing. Againe, at the fecond weeding you fhall firre and make euen the ground a litele, that fo the corne may not be too clofe and faft couered as the foot, which would caufe it to die alfo, and rot away, bringing forth nothing This worke and dutic is not of frall weight and moment, in as much as oftentimes the corne is choaked by weedes, and bowed to the earth by their too much lofineffe,
caking
taking their opportunitic of fome beating wind or raine. Moreouer, you muft not be abafhed, if the greater part of the eares proue emptic, without hauing anie thing at all in them, and the other not to come to perfection and ripeneffe. Againe, when the good cotne is accompanied with Fetches, Darnell, and other weedes, the bread is not onely made more vnpleafant, leffe fauourie, wholefome, and difcoloured, but alfo it commeth not to the one halfe of good corne, which is not mingled with thefe filthie weedes: infomuch, as chat three load of fuch corne, after the wimnowing of it, doe not yeeld two of pure and cleane corne. And which is worfe, the ficld where fuch feedes are fcattered, doe not bring forth halfe fo much as thofe which are charged with nothing but well cleanfed and winnowed corne.

## Сhap. XIIII. Of mowing, or Jbearing.

 going before, was taken, is mowing and cuting downe of the corne: which mult be attended, afeer that it once becommeth ripe; which will appeare, by the turning of the colour into a light yellow throughout, in all parts alike: and before that the graine be altogecher hardened and turned red, that fo it may grow thicker in the weathering and barne, racher than Randing in the fields. For it is moft certaine, that if it be cut downe in good and due feafon, it will grow bigger, and encreafe afterward: whereas otherwife, if you ftay the mowing or thearing of ir downe, till it be throughly drie, the greateft part of the corne will fall to che ground in thearing of it, and will become a prey for the birds and other bealls. If there happen anie violent florme, or whirlewind, it will lay it flat with the earth. You mult, of all other times, make choice of the wane of the Moone, or betwixt The timet to cha Moone and Moone, to cut downe your corne therein, if that you would haue your domnecerrme. corne to keepe well: and the beft houre, is the breake of the day, when it is full of deaw. The manner of fhearing, is either to cut it in the middeft of the flraw, to the end you may haue flubble to coucr your countrey houles, as alfo to hisat the Ouen to bake bread, in fuch counirries as are vnprouided of wood, as in Beauce: or elfe to cut it within a foot of the ground, for the greater provifion of fraw, which will ferue afterward to make Mats for Beds, or Liter for Horfes and other Cattell, and (which is yet the greateff profit of all) to imploy about the making of Mats, for the vfe and behoofe of the houfeholder in his chambers. That which remainetl, fhall cither be cut downe with Sickles, or Hedging-bills, made faft to the end of a great ftaffe, to make a fire withall for the Winter time : or elle it fhall be burned in the fields themfelues, to make dung, by the means of raine falling thereupon, in grounds efpecially that are fandie, or ftanding of a ftiffe Potters clay, or which haue a frong mould:And alchough this be the French manner of fhearing of Wheat or Rie (for of there graines there are no difference) yet in other councries they vfe to fheare after the Sunne is rifen, and at fuch time as the corne is moft drie, holding (as doubtleffe it is moft probable) that the binding of the corne togecher in theaues, whileft the wet deaw is vpon it, doth either roc or make it mildew quickly. As for the fubble, it is sybes e siff much better to mowe it downe with Syches, than cut it vp with Sickles, both becaufe les. you may goe neerer to the ground, and alfo faue much labour, in doing your worke fooner and beter.

The corne being cut, fhall be gachered together and made into fheaues, and after led and carried into the barne by the Farmer : which muft be feated in a fufficient high place, that fo ie may receiue the wind fomewhat readily : and yet not that I would haue the wind, when it commeth, to be able to goe againft the houfes, or gardens: for befides the annoyance which the fmall chaffe would worke in the eycs of the people, and that before they fhould perceive it, it would furchermore

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hurt and much annoy the gardens, becaure chat by the fame flicking to the leaues of the hearbes and trees, as alfo to their fruits in Autumne, it would dric chem, and make them apt and eafie to be burnt by the heat of the Sunne.

> Сияр. X V. of threfbing corme.

RedOr che laft labour of the Husbandman, there remainerh noching more, but to threfh out the Corne, for to fows it againe, or for to fore vp and lay afide in the Garner, and this nut fooner than till three monchs paffed atter the Harueft : for although the Corne fhould be gathered of full ripenefle, yet fill it goeth forward to more perfection as it lyech in the Barne. The Gafcoines notwithftanding fearing, that Corne left long in the fheaues fhould not onely take a great heat, but grow full of Butterflies,, Mothes, and f fmall Wormes which are wont to fpoile it, caufe the fheaues to be dried three whole daies in the Sunne, and that in the field where chey were mowen, and aferward threfh it in the fame place, carrying laftly the Corne fo threfhed into Garners : fo that by that means they fland not in need of Barnes to carrie their fheaues into, and there to keepe them.
This is alfo a cuftome ved both in Ireland, Spaine, and the Illands neere vnto Spaine; but I cannot commend the husbandrie : for it is moft certaine, that except Corne may take a kindly fweat in the Mowe, it is neuer wholefome, nor will yeeld
corme better
lept in the eare
than in the Garner. , fafely kept in the eare than in the Garner, and take much lefiep purrifaCtion, Whence it comes, that your great Corn-mafters and hoarders of Corn, when they want roome to lay their Corne in, will threfl vp their oldeff tore, and then keepe it in the chaffe till they haueoccafion to vei it, being of this mind, that whileft it lyes therein, it will euer kcepe fweet; and it is a moft cercaine rule: for nothing is a greater preferuer of Corne than the owne chaffe, except it be the eare it felfe; in which, Nature hauing at firft placed it, of neceffitie it muft euer be fafeft therein. Wherefore I would haue all good husbands to bring their Corne home into the Barne firft, and there to let it reft three weekes ora moneth at leaft, in which time it will haue taken the full fweat,

Bad to threfh smeating corne and then to threh it , as occafion fhall ferue. And herein is alfo to be noted, that if you fhall threfh it during the time of fweating, it will be fo danke and foft, that it will by no means grind or make good flower, except it be dried, whichalfo is not held good nor profitable, and efpecially where it is dried with anie other heat than that which the Sunne yeeldeth, as Kylne, Ouen,Stoue, or fuch like.
Before the threfhing of it , you mult be carefull to prepare the floore, and to fprinkle it ouer with Oxe bloud, mingled with oyle of Oliues not falted, and afterward to make it plaine and fmooth with a Pauing-beetle or Rowler, to the end ic may not haue anie clefts or creuifes in it, wherein the corne threfhed out may be lof,or wherein the Pifmires might breed and hide themfelues. The beft way to threfh it, is with flailes, and after to cleanfe it from the chaffe, husks, and other filth, with the fanne, and laft of all, tof fiff it. In anie cafe leaue not Wheat long in the fheafe, becaufe it takech heat, and thereupon becommeth full of Buterflies, Mothes, and fmall Worms, which eat it vp. In the meane time you muft not caft away the chaff, which is good meat, not onely for horfes and other beafts, mingled with prouander, but alfo for to ripen fruits, and to keepe them as we haue faid béfore. In like fort, the Spaniard and Italian doe make it ferue to keepe Snow in all Summer: for they make deepe pits in the ground, wherein they put their Snow, and couer it with chaffe.

## the Countrie Farme.

## Снар。 XVI.

## In what manner the Garners are to be made to put Corne in.

(2)Et the Garner wherein you fhall keepe your Wheat, take his lighe from the Eaft, and a little ayred from the North and Weft, but principally from the North-eaft, which keepeth the Corne alwaies drie, and frefh, and coole: but not from the South, nor from anie fuch like coaft or quarers. It thall have manie open holes, by which the whole vapour of the Corne may paffe forth, and the coole gentle ayre come in: And it mult nor be floored or planked aboue, to the end that the winds may eafily enter in through the open places and tiles of the roofe, that fo it may be more frefh and coole at all times. It mult be placed farre from all moifture, and other cuill fmells and vnpleafant ayre, and alfo from all the houfes wherein cattell are kept, whether horfe,oxen, or orher fuch like: the boorded Hoore thereof thall be ordered as the earth-floore, that is to fay, fprinkled with Neats bloud mingled with oile- Oliue vnfalted, and after fnooothed and made plaine with a rowler or pauing-beetle,as in which there is not to be left hole or breach, be in neuerfo little, without fopping of it with lime and fand. The faid floore where the corne is to be laid, thall be watered with vineger : the walls muft be made trimme and dreffed ouer with mortar tempered in water, wherein hath been fteeped the roots and leaues of wild Cucumber: or with Lime tempered with Sheepes vrine, which flall be of much vfe againt all kind of firewd beafts that vfe to eat the corne. And thus much for the French experience. But for the cuftome of other Countries, it fhall not be amiffe to make your Garners of Oaken boards clofe ioyned together, or elfe lined in the ioynts with Lime and haire, in fuch wife, that no corne may runne through the fame. Others vfe to keepe their corne in great Hutches, or chefts of wood, with clofe couers. But better than anie of thefe it is to make your Garners of Plafter as large as you fhall thinke good, for it kecpes it moft coole and found, and is the leaft troubled with Weeuils,Mites, Mice,or fuch like vermine. Yet to fpeake truly, and according ro the opinion of the beft Husbandmen, all thefe Garners are more proper for Barly, Oates, Rye, or all forts of Pulfe, than for Wheat, becaufe it is a tender graine, and of it felfe naturally apt to heat and putrifie, when it is kept clofe together in great and thicke heapes: and therefore the wifer Farmers doe vfe to fread their Wheat thinne (as not aboue a fout thicke at molt) vpon the Garne-houfe floore: which floore, if it be of plafter, it is beft; boards is the next; and the mudde floore is the worft of all: and being fo fpread, you fhall not faile to turne it oucr once a weeke at the leaft, for feare of heating, or growing muftic.

In the Garner thus fitted, fhall your corne be layd, being firft made verie cleane, for the cleaner it is, the leffe fubject vvill it be to IVecuils and other vermine: It is true that being in the garner, for the defending of it from this vermine, it is good to remoue it often, and to haue about the heapes fome wild Organie, or the dried leaues of Pomegranat-trees, or Wormewood, or drie Southernwood : or vvhich is better, in che middeft of ten load of drie Whear to mingle one of Miller made very cleane: for by the cooleneffe of the Millet, the Wheat vvill be kept from the vermine and taking of all other manner of heat, and when uccafion requireth, this Millet vvill be eafily fifted from the Wheat, by the rneanes of a fieue : and furthermore, that ir may fomewhat encreafe, you mult caft vpon the heapes of corne Sal-nitrum, and the fcumme thereof, both of them finely powdred, and mixt with verie fine earth. And if it fhould come to paffe, that the corne fhould not prone to laft and ftand found for lony time, and that therefore it is groundinto meale, then for the keeping of the faid meale, you mult make maffes or drie lumpes of Cummin and falt powned, and lay them in the middeft of the meale. Or if it appeare that Palmer-wormes are bred
in the corne, or any other fuch like vermine, by the ouerheating of it, you mult duft it by and by with a fieue, and after fpread it abroad, and leave st in the Sunne all the while of the great heat, euen vntill cuening, and after that it is become hot thus by the Sunne, and hath beene made verie cleane, carrie is vp againe into the higheft garner chat you haue, and thus she vnnaturall heat thereof will ceafe, and all the vermine be killed, and the Whear fo coole a shat it will beous of the danger of the former ouerthrow. Furchermore, as concerning the fanning of Corne, the husbandman mult beware lealt he be beguiled by the meafurers, or yet by che neeafures; fecing it is a tricke they haue cicher in powring on the corne to preffe it downe with their hand, or elfe to frike the meafure with their knee to caufe the corne to run the clofer together, that fo they may haue the better meafure : fuch craftie fhifts as this, are che caule that the fecond meafuring is not aniwerable vnto the firft.
And although 1 fpeake here onely of fanning, of vwhich there are two kinds, the one, a fan with loofe clothes like failes, which being curned fwiftly abour, gatherech a vvind that will difperfe the corne from the chaffe; the other made of Wickers, of a great compaffe, being the one halfe plaine without an edge, the other halfe hating an edgealmoft a foot deepe, vvhich being turned to the bodie of the man, and cafting the corne to and fro in the fame, it difperfech and driueth the chaffe from the corne; yet the wynowing of corne before the vvind, either betweene your corne-barne-doores, or in any other narrow place where che wind being ftraitned is made to blow with more violence, is as good, and drefferh your corn as cleane as any other way whafoeuer, and with a great deale leffe coft and labour, for that way you fhall difpatch more corne in an houre than any other way in three, neither will chere remaine in it fo many feeds as by doing otherwife.

# The fowing and ordering of other forts of Graine. 

## 

of Bic.

Ie (called in Latine Secale, and of the Auncient Writers Farrago) crauech not fuch an induftrious \& carefull orderiny, nor yet fo fat a ground, and fo well inriched, as doth the whear, for it fo increafech in all grounds in fuch aboundance, that ofone bare corne there will come an hundred, fo badly plowed and dunged. Witneffes hereof are the people of Aube it neuer which is abounding in this kind of corne; notwithflanding that the ground thercof for the moft part beleane, grauelly, and verie flenderly husbanded and tilled by the inhabitants, as thofe which imploy themfelues a grear deale more bufly in keeping of Shecepe, than in growing of Corne: and hereby we may learne and take out a new leffon, namely, that negligence is good for fomeching, and now and then bringeth his commodicie home with it. Ic is but a verie fmall and ftarued graine in refpect of Whear', and the bread vvhich is made thercof is vnpleafant, fattie, flymie, heauie, like pafte, blacke, and more profitablein the time of dearth to flay and kill the fharpeneffe of hunger, in the bafe and rufticall people, than to feed wholefomely, and make good nourihhment of: againe, fuch as be wealthie, and men liuing at eale, make no reckoning of it. It is crue that many doe mingle it with wheat, to the end that the bread

## the Countrie Farme.

bread made thereof may continue a longer time moift and tender: yea, and which is more, the phyfitians of the Court doe giue directions for the making of bread of this kind of Corne for Kings and Princes to feed vpon in the beginning of their meales (efpecially in Summer) to procure them a loole bellie : but they that are carefuil of their health, efpecially fuch as doe not exercite and toyle their bodies, and fludents in generall, the Monkes and fuch like, muft auoyd to eat the bread made of the meale of this Corne alone, howfoeuer the plow-Swaine haue chis opinion of it, namely, that it maketh the bodie ftong; and for certaine it is found by manifeft and daily experience that the vvomen of Lyons, Auuergne, and Foreft, by the vfe of this bread doc become verie faire, and to haue more folide bodies, and more abound ing in good and laudable juice or humours, than others commonly haue. Some likewife are of judgement, that the vvater of Rie-bread is more pleafant, and farre better than that of Wheat-bread be it neuer fo vvhite. Cookes, vied to vvorke in paftrie, doe make fuch crufts as they would haue to endure long, of Rie-flower. This bread is made to feed dogges, and to fat fwine: all other kinds of cattell, efpecially hens and horfe, do abhorre and loath it altogether: This Corne is verie fubject to ruft, becaufe it leepeth vvarer in the huske or bagge wherein it groweth, the remedie vvhercof confifteth in fuch meanes vfed, as we haue alreadie fet downe: The ftraw thereof feruech for much vfe in binding of Vines, becaufe is is flexible and pliant, hauing beene firft Ateept in vvater, as likewife the meale thereof, to make catapla(mes of, for the fuppurating and ripening of impoftumes: the decoction of the Corne killech vvormes, if there be fome Coriander-feed putthereto: in like manner horfe-leaches doe giue it to horfes which are pained in their bellies.
And thus much for the opinion and cufome of the French, whofe foyle is fo frequent vvith Wheat, that they litele refpee the ve of other graines. But to refort to the better-knowing husbands, and to whofe opinions Seres and diuers other later Writers agree', you fhall vnderftand that R ie is a moft excellent graine, pleafant, and Cawouric in tafte, and verie wholefome to be eaten, in as much as it kecpech the bodie open, and breedeth not that coftiuenefle which other graines doe: and although the bread which it maketh, being made of the meale as it commeth from the mill vnfif. red and vncleanfed, be blacke, and vnlouely to looke on, yet it is verie wholefome, and more fauouric, and better to eat than any bread made of any other graine, except Wheat; nay if it be fifted and cleanfed through a fine raunge, fearce, or boulter, it makes bread as vvhite, as comely, and much more pleafant to eat than any courfe or leuened Wheat whatfocuer. This Rie naturally defirech a warme and drie ground, as efpecially the red fand, or any clay that is much mingled therewith : it will grow in any clay, and the richer the better, and the corne the larger, prouided that the mould be loofe and gentle: it asketh as many earings as Wheat doth, and mulf euer be fowne in one and the felfefame time, yet if the ground be any thing good of it felfe, it vvill grow well ynough after one earing, prouided that it be fowne on fuch ground as Peafe were reaped from the fame yeare: for Peafe (by reafon of their running on the ground, and fmothering of the weed) is as good as a fleight manuring of the land: Rie is verie quicke of growth, and will fprout in three nights at the furtheft; it hath no enemie fo much as wer, or extreame raine, fo that you muff fow it in as dric a time as is pomible : for it is a common faying amongी Husbandmen, That Rie vvill be drownd in the hopper, that is, if a fhowre of raine fhould but fall in the hopper or feed-basker whileft you were fowing it, that fhowre would drowne it, and the Rie would hardly grow after : therefore your greateft care muft be a faire feafon, and a drie mould; for the contrarie kills it.

## CMafin.

M
Aflin (called of the Latines CMetellum) is notone kind of Corne, but a mixture of Wheat and Ric, or of White corne (wvhich the Latines call Far adoreum, euen as we fhall furcher declare by and by) and of Rie, in fuch fort as that there
two kinds of corne mingled, are fowne, gathered in, and threfhed together : the maflin delighteth in a mixt kind of earth and tillage, but for the moft confifting of that which is fit for Wheat. The bread made of mallin, is one of the beft forts of bread, and eafie to digeft. Ir feldome or neuer requireth any more than one earing, which is at fuch time as it is fowne onely, neither is ir euer fowne vpon the fallowes, bue vpon the Peafeearth, being ener vvell and carefully harrowed: if you find the foyle whereon you fow it to be wcake or out of heart, the beft meanes to give it ftrength is to fold it with theepe immediatly before you fow it, fo that as foone as you take your fold from the land, you may put your plow inno the land, by which meanes the feed and the manure as it were meeting rogether, the manure keepeth the feed fo warme, and giues it fuch comfort, that forthwith it takes root, and brings forth the increafe

Tocrop or ga ther Madlun.
moft aboundantly. Now for the cropping or gathering of this Mallin, or blendcorne, you fhall euer doe it fo foone as you fee the Rie begins to open or curne his eare downeward towards the earth, albest the Wheat feeme a litele greenith at the root, and be nothing neere ripe, the corne being foft and milkie; for the Wheat will ripen, and grow hard in the fheafe, which no other come will doe: and the Rie being fuffered but to grow a day beyond his full time, will thed his graine vponthe earth, and you fhall loofe more than one halfe of your profit : againe, you fhall not lead your blend-cone fo foone as you doe your cleane Whear, or your cleane Ric, but making it into good bigge fafe ftouckes vvhich will fhed the raine from the eares, and conraining lome fixteene or twentie fheaues in a ftoucke, you fhall fuffer it fo to ftand in the field ro ripen, as well tor the hardning of the Whear, as for withering of the greene weeds vvhich growing amongtt the Corne will be fhorne vp therewith, and bound in the fheaues altogether.

## Secourgion.

SEcourgion is a kind of Corne that is verie leane, vvrinckled, and ftarued, fome. what like vnto Barley, and it is not vfed to be fowne in France, except in the time of famine and dearth, and then alfo but in fome countries as are barren and verie leane, and that to ftay the vrgent neceffitie of hunger rather than to feed and nourifh. It hath his name from the Latine vvords Succurfus gentium: The greateft part of Perigord and Lymofin doe vfe this fort of Corne: it may feeme to be a degenerate kind of Corne, and may be called bad or wild corne. It mult be fowne in the thickeft and fatteft ground that may be chofen : howfoeuer fome fay otherwife, as that it delighteth in a light ground, in as much as it fprouteth out of the earth, the feuenth day after that it is fowne, the thicker end running into rootes, and the fmaller putcing torth the greene graffe blade vvhich flourihieth and groweth out of the earth. The fitteft tmae for the fowing of it, is about the moneth of March in cold places, or about the eight or tenth of Ianuarie, if it be a mild Winter, and not fharpe and pinching. This is that kind of graine of three moneths growth, whereof Theon phraftus \{peaketh in his Booke of Plants, howfoeuer Columella doe not acknowledge any kind of graine of that age. Theophraftus in like manner maketh mention of a kind of graine of threefcore dayes or two moneths growth, and of another of fortic daies growth. I heare fay that in the Weft-Indies about Florida there grow forts of corne, fome of two, fome of three moneths, and fome of fortie daies: vve fee it verie ordinarie in France to haue corne in three moneths, namely, in the countries of Beauce, Touraine, Lyonnoife, Sauoy, Auuergne, Foreft, Prouence, Chartrain, and others, in which the corne being fowne in March is ripe and readie to be cut downe inthe third moneth. The occaion of fowing it fo late is either the vvaters or exceffiue cold, or fnow, or fome fuch other hard vveather, which kept and hindered is from being fowne any fooner. Such graines and forts of corne as are of three or two moneths, or of fortie daies, and amongft them efpecially the Secourgeon, doe yeeld a verie vvhite and light flowre, becaufe it hath but verie little bran, and the graine hauing drawne verie fmall fore offubftance for his nourifoment, but fuch as is of the
lighteft
lighreft part of the earth (and therefore fmall fure of Bran) by reafon of the fmall fpacc of time that it ftayed in the earch : The bread made of this Corne is verie white, but withall verie light, and of fmall fubftance, more fir for Countrie-pcople and feruants in Familiesthan for Maifters and vvealchie perfons: A gaine, in countries where it is of account, they vete to mixe Wheat vwith it, to make houfholdurcad.

## Blanche.

BLanche is a kind of Wheat which the Latines call Far clufinum, and old Writers Far adoreum, as a Corne or Graine worthie to be highly thought and made of for his excellencie and goodnefle fake : it is verie hard and chicke, and requiretha ftrong and tough ground, though it be not all of the beft husbanded. It groweth alfo verie wel in places and Countries that are verie cold, as not fearing any cold be it neuer fo outragious: Neither doth it minile and refule dric and parched grounds, and fuch as lye open to the exceffiue heat of Sommer; the Corne cannot be driuen from his huske, except it be fried or parched: againe, for to grind and make bread of it, they vfeto frie or parch it, but vvhen they vfe to fow it, they let it alone vvith the huske, and in it chey keepe ir for feed. It is verie maffie and veeightie, but not altogether fo much as Wheat, but yet more cleane and pure than Wheat, and allo yeeldech more flowre and branne than any one fort of Whear befides. This kind of Wheat is veric rare in France, but verie common in Italie, vvhere it is called Sacidata.

Fine Wheat, or TVinter-wheat.

THere is a kind of fmall Corne that is verie vvhite, vvhich the Latines call siligo, vvhereof is made White-bread, called therefore of the Latines Siliginitis. The French cannot as yet fit it with a name. It mult be fowne in verie open places, and fuch as are hot and throughly warmed by the Sunne; although it doe not vtterly refufe an earth that is thicke moift, flymie, and of the nature of Walkers-earth, feeing that good husbandmen doe likewife report of $1 t$, that there needeth no firch great care to be taken about the making of this graine to grow, and vvithall, that if a man vleto fow Wheat in a moift and muddie ground, that after the third fowing it will degenerate into this kind of Wheat. It is that kind of Wheat which among ft the Englifh is called Flaxen-wheat, being as vvhite or vvhiter than the finelt Flax: it is of all forts of Wheat the hardeft, and vvill indure a more barren and hard ground than any other Wheat vvill, as the grauellie, the flintie,ftonic, and rough hils againft which by the reflection of the Sunne onely (vvhofe beames it loueth exceedingly) it will grow verie aboundantly, neither will it profper vpon any rich foyle, but being as it were outrcome vvith the ftrength thereof, it will vvither, or not grow at all, or elife mil-dew, turne blacke, and become altogecher vieleffe.

Amel-corne.

THere is yet another kind of Corne, vvhich the Grecians and Latines call Olyre, of a middle fize betwixt Wheat and Barlie, vnlike altogether vnto Wintervvheat vvhereof we laft fpake, but of a fort and facultie like vnto fpelt, whereof vve will fpeakenext in order. Of this graine Diofcorides maketh mention, and CMasthiolius calleth it in French Seigle-blanche: the tilling and ordering of it is like vnto that of fpelt. There is verie vvhite bread made chereof: there is but fmall fore thereof in France.

## Spelt-corne.

SPelt-sorne is that which the Latines call $Z_{C a}$, and hereof the auncient RoImans did make great accounr, and gaue it to name Semen, by the way of excellencie, as the Italians in fuch places as vviere the faid Spels groweth in great aboundance, doe call it Biad. The Graine is leffe, and blacker than Wheat. It is found fonsetime fingle, fomerime double in an care fee with a long beard. It muft befowne in a verie firong and hard ground, for otherwife it will not thriue, meither isthere any fort of Wheat which fo sroubleth and weakeneth a ground as this, but the bread that is nade thereot is excellent: and of it likewife the l talians vie to make a fiugularkind of Furmentic.

> Courfe wheat-flowre: or fine wheat-ineale.

COurfe Wheat-flowre is that which of the Latines is called Similago, and is made of Wheat that is cxceliene gocd, hauing the greatel Bran onely fifted from it, but being ground of the beft Mill thatmay be gotten, howfouer the French name Semole which feemeth to be ceriued from theie Latine ones Sine mola, may feeme to argue the contrarie. We haue not any of the Corne inthis Countrie vvhereof the Semole is made : but in Prouence it is fowne in great quantitic: asalfo in Champanie, and in the Countrie of Naples, and from shence there is great fore of this fine meale brought, which Phyfitians doe prefcribe to their ficke patients to make Pa nade or pap-meat of, vwith the broth of a Capon, notwithftanding that Galen and the greatelt part of Phyficions doe affirme, that the fine meale called of the Erench Sermole, 1 s of a groffe and flimie iuice, and not digefted withour difficultie, and thereupon injurious to fuch as haue need of a fine and attenuating nourifhmenc. It is certaine that it is of great nourifhment, as is alfo the bread that is made thercof. In fteed of Semole vve vfe Miaflin; and as concerning the Wheat vvhereof the courfe flowre Semole is made, it crauesh fuch ground and manner of husbanding as Ma. flin doth.

## Furmentie.

FVrmentie is that vwhich the Latines call Alica or Chondrus, and it is a kind of Wheac, whereof (after that it hath beene fteeped for fome time in vvater, and afterward brayed and husked, and then in the end dried againe in the Sunne and ground fomewhat grofly) is made a kind of groffe meale, relembling oatmeale verie much, vvhereof fometimes is vvoont to be made pap-meat, fometimes it is mixt in mear-broth, and fometimes panade vvithall: all which meats, to fay the truth, doe nourifh a great deale more than they profit the health of the bodie, in as much as they ingender a thicke, clammie, and grofle juice, verie hurfull for them that are fubject vnto obfructions, or vnto the ftone and grauell.

## Turkie-Wheat.

TVikiewheat (fo called, or rather Indian wheat, becaufe it camefirt from the Weft-Indies into Turkic, and from thence into France, not that it is Cowed there any otherwife than for pleafure, or for to caufe fome admiration at the ftrange things which Frenchmen themfelues doe admire and make much account of) mult befowne verie carefully after this manner : the field mult be diligenely tilled according to all the forts of earings which are woont to be beftowed vpon any arable ground, afterward toward the end of March, at fuch time as the Sunne beginneth to affoord his hot and comfortable beames in franker and freer fort, the faid wheat muft be ftecped in water two whole daies, and when this is done, to keepe it till the earth recciue
scceine fome prettie fhowres: w vhich happening, then prefently to cpen the earth vith fome fharpe flake, and that all along as ftreghe as a line, bur with equall and fufficient diftances : and to caft into eueric one of thefe holes foure or fure graines of this vwhear, and by and by to clofe in the earth againe vvich your foor, and fo in this fort to fill and fee a vvhole field with this Corne. It the earth be fat, and she feed full and well fed, it will not faile to fprour withinfeuen daies, and to be ready to mow with in fortie daies, two moneths, three moneths, or at the furtheft foure moneths, fooner or later according to the goodneffe of the ground, and power of the Sume, that is to fay, earlier in a hor place and good ground that lycth open vpon the Sunne, but more lare in a cold ground, and a leane place. It hath the liketemperature that our v̌heathath, but fomewhar more hot, as may eaflily be gathered by the fweenneffe of the bread that is made thereof : the meale thercof is vvhiter than that which is made of our wheat, bur the bread madechereof is more groffe, thicke, or clole, and of a nore flymie fubftance, in fuch fort as that the nourifhment made thereof is likewife more groffe, and apter to ingender obftruations; voherefore if the dearth of vvheat and famine doe force and compel you to fow of this Turkith-wheat, to make bread thereof, it will doe berter if you mingle it with the flower of our voheat, than and if you fhould vfe it by it felfe all alone. The meale of this vvheat in as much as it is chicke and clammie, will be good to make cataplafmes of, toripen impoftumes withall : for being apt to fop the pores of the skin by his clammineffe, it cannot chufe butworke fuch effect.

## Surc.jns-wheat.

SArafins-wheat is a graine verie ordinarie and common throughout all France, and more abounding vvithout comparifon than the forefaid Turkie-wheat: it muit be fowne in all manner of grounds, becaufe it refufeth not to grow in any, wo hether it be grauelly, or of any other qualities vvhatfocuer, and that efpecially in A prill in hot places, or fomewhat later in thofe that are cold, and it is fo forward and haftie, as that it will ripen twice, and yeeld you two crops in a yeare, in one and the fame ground, being in a hot ground, as is to be feene in Italic. It may be mowne atthe end of three moneths after it is fown : in this countrie it is moft vfed in the fatting of hogs, pigeons, and other fowles, and in the time of dearth and famine to make bread, which will be a great deale betrer, if with this corne be mingled the corne of our councrie vvheat. It may be made into groffe meale, euen as the grain called furmentie, but better without comparifon than that of millet to be imployed in meat-broths, in panades and pap-meats, as alfo to make tartes with cheefe and butter. This is a meat that is oleafant ynough, and nor much loading or charging the fomacke, notwithftanding that it be windie, for therein it is not fo exceffiue as the peafe or beanes.

## Goats wheat, and Typh wheat.

THere are yet remaining two other forts of Wheat, which the Latines call Tragos Cerealis, and Typha Cerealis, whercof Diofcorides and Galen doe make mention. Typh wheat is verie like to our Rie, and doth make a verie blacke bread, and verie vnpleafane alfo when it is old, though it be otherwife verie pleafant when it is new baked, after the manner of Rie. The Goats wheat is not verie much vnlike vnto the graine called Furmentie, faue onely that his meale yeeldeth more bran without comparifon, and fo maketh a ficter bread to loofen the bellie than to feed or nourifh ito Thefe wheats are not fo much as to be feene in France, and therefore I meane not to make any longer difcourfe thereof.

# Of all manner of March-Corne. 

Снар. XVIII.

## Barley.

 Fter that vve haue thus largely fpoken of Whear and other Corne, it remainech that wve fhould confequently fpeake of all manner of pulfe : the ordering and husbanding vvhereof, to (peake in generall, is like vnto that of the other graine going before, as namely, in the gathering of fones from off them, in manuring and giuing them their firt, fecond, and third caring, as alfo in clodding, fowing, harrowing, and mowing: but differing notwithflanding in fome things, as namely, in their nature ; and therefore it will be beft to make a particular defcription thereof; efpecially of Barley, which howfoeuer it is of fleight vfe in France, becaufe of the great profit of the vine, and the plentie of Wheat in which the kingdome aboundeth, yet in other Countries it is of beft refpect, efpecially in England, vvhere the greateft fort doth grow, and where they make Beere thereof fo good and excellent, that not any French Wine is more pleafant, or more wholefome. Therefore to (peake firt fof Barley, according to the opinion of the French hiusbandman, vvhich is not to be held mof authenticall.
Barley muft be fowne in a leane, drie, and frmall ground, or effe in a ground that is verie fat throughout, becaufe it doth bring downe and diminifh the fatneffe of a ground mightily : and for that caure it is either caft into the ground that is verie fat, the force and goodneffe vvhereof it fhall not be able to hurt: or into a leane ground, vvherein a man thould not fow any thing elfe fo well. It muft be fownein a ground that hath had two earings, in fome countrics in the moneth of October, but in this countrie after the fifteenth day of A prill, according to the common prouerbe (at $S$. Georges day you muft fow your Barley, and lay your Oats away) if the ground be fat, but and ifit be in a leane ground, it muft be fowne fooner, not flaying for any raine, in as much as that according to the prouerbe, Wheat muft befowne indyit, and Barley in duft : for Barley cannotendure any great ftore of moifture, being of it felfe drie, open, and cold : againe, Barley being fowne in moift places, and much watered vvith raine-water, dorh eafily canker, and turnc into darnell and oats : the fame manner of ordering is giuen to the barley called mundified barley, and that becaure the chaffe thercof fallecth prefently, and cleaucech not vito the corne, as it doth in common barley. When you percciuc it fomewhatripe, you muft mow if fooner than any other corne: for it hath a brittle falke or fraw which is verie apt to breake, when is is verie drie, and the come being but weakely inclofed vvithin his huske, doth eafily and of it felfe fall vnto the earch : and hence allo it becommeth more cafic tothrefh and fhake our, than any other graine. After the cornc is mowne, it will be good to let the earth lye ydle a yeare, or cife to manure it throughly, and fo to take away all the euill qualitiether is remayning and left behind. In a decre yeare it is vuall to make bread of barley,as vve fhall declare hereafer, and that better for the poore people than for the rich, and yet in one point to be praifed, in as much as it is good \& wholefome for them that haue the gour: the affured truth vvhereof, is found out racher by experience than reafon. Notwithftanding in as much as Barley (as Galen teacheth) wvhecher it be in bread or in pap-meat, in ptifanes, in mundified barley, or otherwife imployed, doth coole, and yeeld a thinne kind of nourihment, and fomewhat cleanfect the bodie, in that refpect it may be profitable for them that haue the gour, as thofe ehat are full of humours, and fubjeet to diffillations falling downe vpon the mints.

There

There is made of Barlie a certaine kind of drinke, vwhich is commonly called ap- תuzndifed cifane, and a meat that is good for ficke perfons, called mundified barley, which the Barley: good vvife of the Farme may make in chis fort : Take barley well cleanfed and hufo ked, boyle it till it burft, and till it become like vnto a pap-mear, after beatit in a morter, and when you haue fo done, ftraine it through a verie fine ftrayner, put vino is fugar, or the juice of fweet almonds, or of poppie-feed, melons, or lettufes, according as occafion fhall be offered. Or elf, Take of the beft and neweft barley, putitin a mortar, and caft vpon it warme vvater, as it veere to wee it, but not to make it fwim, afterward beat it gencly with a vvoodden peffell, in fuch fort as that the huske that coucrech it may beforced off, then chafe it betwixt your hands, that fo you may free it quite from huskes; then afterward drie it in the Sunue : vvleen you hauc shis done, take a handfull of the faid barly, and put it in a pot, vwhich it may fill to the halfe, and filling vp the ocher halfe with vvater, let it boyle by lietle and litele vntill fuch time a sit be burft, and become like pap-meat, let it run through a linnen cloth, and Coftraine out the juice.

Thus much for the French opinion of Barley : but to come to the true knowledge Ilow Barlet thereof, from che opinions of thofe that are better experienced in the fame, y ou fhall ought to bes vnderftand that Barley ought to be fowne vpon the beft, richeft, and beft husbanded fowne. ground you haue, and although it will grow in any foyle whatfoeuer that is vvell hasbanded, not being too extreame cold and moift, yet the better the earth is into which you fow it, the better and the larger the corne is vvien it growech, and much more feruiceable for any vfe you fhall pleare to imploy it. That Barley which groweth on the ftuffe clayes is che beff, being large, white, and full like a Buncings beake. That which growes on the mixt foyle, is the fecond beft: and that which groweth onthe fands, is she vvorft. Barley askech the greateft tillage of all graines, becaure it muft euer lyc in a loofe and gentle earch, and therefore when it hath leaft it ought to haue full foure earings before it be fowne, as in the ferrile rich clayes, it mult firft be fallowed acthe later end of A pril (for to flay till May the ground may be too drie) and this arder of fallowing muft caff downe the ground, that is to fay, the furrowes muft be all turned downe from the ridge, and the ridgeleft open, fo as the carth muft receiuefeafoning: Ar mid-May you fhall manure it, and in Iune you fhall giue it the fecond earing, which is called Sommer-ftirring, and in chis ardor you fhall fet vp the land, that is, you fhall plow all che furrows vpward toward the ridge of the land, clofing vp that which was before opened, and lapping in the manure into the carch in fuch wife that not any thereof be vncouereds then at Augult you fhall giue it the third ardor or earing, vvhich is called foyling, and chat is to caft the land downe againe, as you did vvhen you fallowed ir, and dhis ardor is of all orher' one of the beft, efpecially for the deftroying of weeds and thiftes; then in October you fhall giue it the fourth ardor or earing, vvhich is called Winter-ridging, and in that ardor you fhall euer fee vp the land againe, as you did at the Sommer-firring; and chen in March and Aprill following, you fhall fow it. Now touching the manner of fowing of thefe niffe clayes, you fhall firt make your feedes-man calt his feed oure the land, in fuch fufficient manner as you fhall thinke meet: then taking the piow, and beginning in the furrow, you fhall calt the land downeward ouer the feed, till you hauc plowed all the land, and left onely the ridge open, then holding the plow crofwife ouerthwart the ridge, you fhall clofe che ridge, and draw the mould into it, then you fhall make your feedes-man caft anocher caftor two of the feed vpon the ridgeonely, and then harrow it with woodden toothed harrowes, and this manner of fowing is called lowing vnder furrow. Now whereas Ihaue fhewed you in the plowing of your land, that you muff firf caft downe your land, then ridg e it vp, then foyle is downe, and laftly, fet it vp for the whole Winter following : you fhall vndertand that it is the beft and moft orderlieft husbanding of land, breedech the greateft plentic of mould, and courecth che reanure clofeft, and makech it fooneff rot in the earth; yee notwithftanding for as much as Barley is a cender graine, and may by no meanes induse any cold or vvet, if you find that your lands doe lye too flat,

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fo that the Water cannor defeend from them, buteither choakech them, or keepes them too vvee, then you thall fee vp your land, and not caft it downe in any ardor till you haue brought it to that conuenieut height that the vvater may haue free paffage from the fame; and fo on the contrarie part, vvhen your lands lye too high, you fhall caft the furrowes downeward, vatill jou haue broughe them to that lowneffe vuhich thall be conuenient ; and vwhen you haue fo done, then you fiall caft them downe, and feethem vp againe in fuch order as hath beene before mentioned. There is alfo another maner of fowing of barley vpon thefe ferrile and rich grounds,

Innames. vuhich is called fowing vpon the Iunames, that is, to fow barley on the fame ground from vohence but the harueft before you reapt your Barley, and it muft be done in this fort; as foone as you haue reaped your barley, which is commonly in Auguft, you Dhall forthwith (if the ground doe require it) manure as much as you intend to fow Barley againe vpon, and as foone as you haue manured it, immediatly (it the ground be not too hard) you fhall plow it, either ferting it vp , or cafting it downe, as the land Chall require; or if it be too hard, then you fhall !tay for a fhowre of raine, yee the drier it is plowed, the better is is both for the land and the corne : the land being thus plowed, you thall let it lye till Nouember, and then you flall plow it againe, but in this earing you hall by all meanes lec it vp, and not caft downe the land, and fo let it lye till feed-time, and then fow it vnder furrow as was before fhewed. This barley vvhich groweth thus vpon the Iunames is the faireft, vvhiteft, and goodlieft Corne of all orher, and is the onely principall Corne you can referue for feed of all other; and therefore you muft haue a grear retyard to the election of the barlcy youthus fow vpon the junames: for the fowing of Barley vpon any mixt earchs, or hafell- grounds, which are clayes and fands, or clayes and grauells mixt together, you fhall husband the grounds in all poynes as you doe the clay-grounds, onely you fhall differ in the times, for thefe mixe earths mult be fallowed in Ianuarie, Sommer-Atirred in May, foyled in Auguft, and Winter-rigyed in Octuber: as for the fowing of them, you hiall not fow them vnder furrow, but alofs, becaufe they are of binding natures; fo that after the fowing fhould any fodaine raine fall, and then a drineflefollow it, it would fo bake the earth together, that the Corne vvould not poffible be able to fprout through it ; and therefore (as I before faid) you Thall fow it aloft, that is tofay, you thall firft plow it, beginning at the ridge, and fetting the furrowes vpward, then caft on your leed, and laftly harrow it. Now for fowing Barley vpon fand-grounds, you fhall husband it like vnto the mixt earths, onely you fhall giue it an earing more, that is to fay, a double foyling, and you fhall forbeare to fow it till it be abour Whitfontide, for the heat of the fand is fo great, that it vvill make the Corne verie fwift in growth, and ripen verie fodainely. Barley, in vvhatfoyle foeuer it is fowne, melt be exceeding vvell fleighted, clotted, foned, and vveeded, for it is fo verietender in the growth, that the fmalleft clot or ftone will keepe it backe, and the leaft vveed vvill choake it. Barley is of mon pretious eftimation wvith all thofe which know the true vfe thereof, efpecially for the making of mault, of vuhich is made Ale or Beere, drinkes to vvholefome and excellent for mans bodie, that no nation vvhich doth enjoy it, hath any bleffing to preferre before hath beene cleane vvinowed and dreft, you fhall put it into a cefterne or fat made for the purpofe, and there fteepe it in vater the face of three nights, then draine the vvater from it cleane, and fo let it lye in the fat one night more, then take it forth of the fat, and lay it vpon afloore made either of boards, plafter, or earth : the earth floore is v varmeft, and beft for Winter, the plafter floore is coldeft and beff for Sommer, and the boarded floore is beeweene both : as foone as you haue laied it on the floore, you fhall make it into a great big coutch or heape a yard thicke or better ; vvbich coutch you fhall make either long, round, or fquare ar your pleafure, and according to the quantitie of your corne, it fhall thus lye in the coutch till you fee it begin to proue and put forth little whire jags or ftrings vwhich is called the coming of the malt, and then you thall reane and turnit, bringing that vvhich was the out-fide into the midft,
and that which vvas in the middeft vnto the out-fide, that fo it may come all alike, for that which is in the middef, and lieth warmeff, vvill cuer come the firf. Now fo foone as you fec it is all comed, you fhall forthwith fpread open your courch vpon the floore, laying it not aboue a handfull deepe at the moft, that fo the corne may coole, and not iprout or come any further, not forgetting buicuerie day the fpace of three veeckes, or vvithin shrce dayes of three weekes at the leaft, to urne the malt vpon the floore twice or thrice a day, leaff forbearing fo to doe, the corne heat, and by that meanes aker-fpire, vvhich is, to fprout at both ends, and fo loofe che heart of the graine, and make che malt good for nothing. When you haue chus giuen it full (fat and floore) three weekes, then you fhall lay is on a veell-bedded kilne vpona good haire cloch, and there with a gentle fire drie it: the beff fewell to make this fire on, is fraw, either Wheat, Ric, or Barley. Braken or Ferne is good alfo, gorfe is too fharpe, and vvood is the vvorft of all, for it leatuech (through the fharpenefle of the fmoake) an ill tafte or fauour vpon the malt, yethere in France there be kilnes made of Bricke, vvith fuch furnaces that carric away the fimoake, that you may burne whas fewell you pleafe vvithout annoyance, neither are they fo dangerous for the cafualtie of fire, as the cther plaine isilnes in England and other places are. After your mals is vvell dried, you fhall with your hands rubbe it well vpon the kilne, to gee off the come or fproutings vvlich before the drying did flicke vnto it; for $1 t$ is a generall rule, that the cleaner your malt is from come, and the fnugger and fmoother it lookes like Barley (prouided it be well malted) the beter it is, and eciermore the more markeable: for the come is of this nature, to drinke vp the liquor in vyhich your malt is mathed, vvhen you make Beare or Ale, and fo by that meanes to feant you much of your proportion. When your malt hath beene well rubbed, and is reafofonablecleane, then you fhall thouell both the malt and the corne together, and fo put them togecher into a clofe garner made for the purpofe, vvhere you thall ler it lye at leaft a moneth or fix weekes before you vfe it to ripen in the come, for that makes euer the beff yeelding malt : then when you pleafe to vfe it, you fhall cisher winow it,or trie it througha skreene made of wiers for the purpole, and then grind it, and brew it as occafion fhall ferue. Now touching the choyce of the beft malt, you Thal euer take that which is made of beft and cieaneft corne without weed-feeds, tares, or like filthineffe; yet ifit hauc here and there an oasit is the better, and not the worfe: it fhall to your eye appeare bright, white, full, and cleane without come, infmell it fhal be pleafant and fweet, and not fharpe of the (moake, in handling it thal be brittle and apt to breake, and the kernell fhall be whire and meallie, and in tafte it fhall be ftrong, and exceeding fwect, and the graines whichyou fhall champe in your mouth $y_{y}$ ifyoutake them forth, and preffe them betweene your fingers, they fhall yceld youa whitejuice like milke, but thicke and lufcious : but if in the biting or brcaking they be hard and vnapt to bruife, then it is a figne that there is in it much barley vnmalted, and fo the malt of a yreat deale the leffeprofit. Barley as it is thus moft excellent for the making of drinke, fo it is good alfo for bread, bue not of the French maner, which makech bread thereof fimple of it felfe, for indeed that bread of all other is leaft nourifhing, and moft vníauourie : but to mix it with any other graine, as with wheat,rye, peafe, or beans, with any one or with all of them, it makech verie good \& mof wholeTome bread : it is vfed in England molt for hind-feruants, adding to a bufhel of it, and abufheil of peafe, one pecke of wheat, and another of ric, and then laying it in ftrong leuen,and fcalding the meale well, to take away the ftrong fmell of the peafe, and fure this is a verie frong and well-relifhed bredd, and moft wholefome for any man thas Thall labour hard, as is found by experience in England and other places. This barley being boyled in water till it breake, and fo giuen to eat whileft it is fwect, is the beft food that can be for the feeding or fatring of fwine of all forts, whether they be brawnes, or porkets,or bacon-hogges : it alfo fattech a horle verie fodaincly, butfuch fat will not indure labour: the light corne, or hinder ends of barley, are cxcellens for the feeding of all forts of poultrie, as capons, hennes, turkies, geecfe, or what cife frayech about the Farmers yard or houfe: a leuen made of cleanc barley-meneale,

## The fifth Booke of

and milke is the beff food that can be for the cramming of all forts of poultrie; many other vertues are in Barley, but none of greater vfe than thefe alreadie rehearfed.

Oats notwithflanding that they grow amongf Whear and Barley without being fowne, as an euill and vnprofitable thing, notwithftanding tor the profir comming of them for the feeding of great cattell, as alfo of men in the time of necefficie, they deferue a proper and conuentent kind of husbanding. They loue to be fowne in leane places, which are drie, well aired, and have beene alreadie twice eared, and that in Fcbruarie, or March, but not later: they craue vvatering, and then they grow both fairer, and fuller fee. They mult be gathered prefently after that Ric and Barley are in.

Although Oats be not vfed to make bread of, except it be in the time of great dearth, notwithftanding fome doe beac them in a morter, and doe make a meale thereof called Oat-meale, vwhich is boyled either alone, or elfe with flef, to vef in manner of a panade. Phyitians are of judgement that Oat-meale fo made doth
Grakells. feed verie vvell, and is good againft the gravell and difficultic of vrine : for the truch vvhereof, I referre you to the Britaines and Angeuines, which vfe it for the fame effets. When it is boyled all alone, for the making of it the more pleafant, there is woont to be put vnto it cowes -milke, goats-milke, or the juice of fweet almonds with fugar. The Flemmings ve to make pap. meat thercof, which they loue exceeding vvell. The Mufcouites diftill che water of oars, and vfe it for want of wine, and luch water heatecth and makech drunke no leffe than Wine.

Thus much of the French opinion of Oats, wvho are indeed but halfe knowing, or not fo much,in the excellencie of the graine; but to come to theis knowledge who haue the full proofe and triall thereof, you fhall videffand that it is a graine of no leffe worth and eftimation than any of the other, and quellionleffe may much leffe be banifhed a Common-wealth than the other, in as much as where none of the other will grow, there this will; you fhall then know, that Oats will grow in any foyle whatfocuer, as either in fertile cr barren, hot or cold, drie or moift, nor doth it aske much labour: for in fertile foiles it wil grow with one earing, as namely at feed-time, which is euer about the end of March, or beginning of A prill: it will grow alfo after any other graine, as after wheate, rye, barley, or pulfe, bur it is bef fowing it after barley or pulfe, becaule to fow it after Wheat or Rie would pill the ground too much, and make it barren too foone: In barren grounds it will grow with two arders, or three at the molf, as one at Midfommer, another at Michacimas, and the chird at feed-time, or elfe at Michaelmas, and at feed-time onely: it muft be fowne vnder furrow, like barley in loofe moulds, and alter two or three arders: but aboue furrow, in faftearths, and where it hath but one arder onely: it munf be well harrowed, according to the ftrength of the mould, that is to fay, with wooden-teeth in loofe moulds, and vvith yron teech in faft moulds : they muft be cropt as foone as they turne colour,and appeare a litte yellow, for elfe they vvill hhed their graine, as being the loofeft corne of all ocher.
Thefe Oats are of divers moft excellent ves borh for men and alfo for cattell, as firt for Oatmeale which is made in this fort; as foone as your Oars haue beene threfht and vyynowed, you fhall lay them on your kilne, and vvith a foft fire drie them verie vvell, and then carrie them to the milne, either the Wind-mill, the Wa-ter-mill, or the Horfe.mill, and there let the Miller cut them, and hull them, but by no meanes crufh them to fine meale, but onely driue the cleane kernell from the courfer hull; then vvitha fanne or a gentle vvind vvinnow the emptie hulls from the Corne, and if fo be that you find they be notall cleane hulled, then paffe them through the mill againe, and then vvynow chem againe, and thus doe till the hulls be cleane taken off; vwhich hulls are a verie good prouander for horfes : as for the Groats, wuhich is vfiually called common or courfe Oat-meale, they are excellent to make porridge of all kinds, and for puddings of all forts, or for any ocher papmeat or panada whatfouter : it is alfo an excellent food at Sea, being boyled in Water, or otherwife ved after the manner of grauell. This oat-meale being ground

## the Councrie Faime.

into fine meale like other corne, makech diuers kinds of verie good bread, chiefely where other corne is not to be had. If you mixe the fine meale of Oates with Whear meale, it maketh verie daintie Oat-cakes, either thicke or thinne, and is of great eftimation where they are knowne. Thefe Oates being maulced, as you maule Barley, make a verie good maule, and that mault both verie good Ale and Beere, only a little more fharpe chan that which is made of Barley. Lattly, thofe Oates are of all other foods the beft that may be for the feeding of horfe, or fatting of cattell: they are alfo good to feed all forts of Pulleine, efpecially Geefe,Swannes, and all manner of water fowle, which take much pleafure therein.

## Millet.

MIllet (as thole know verie well which dwell in the Countrey Bearne, Bigorre, and Armignac ) after that it hath beene fteeped forne certaine time in water, would be fowne, either morning or euening, in the coole thereof, in light and fmall moulded ground: and it groweth not only in grauclly ground, but alfo in fand, when the country is wet and moift : but in anie cafe it would not be fowine in drie grounds, and fuch as confift of Fullers earth, or are marly, neither mult it be fowne before the Spring, for it requirech heat : wherefore it may conueniently be fowne in the end of the moneth of March, or elfe fomewhat later, that fo it may enioy the benefic of the dew a long time. It purceth not the husbandman to anie great charges, for a little feed will fowe a great deale of ground. So foone as it is fowne, it muft be prefled downe with a hurdle of Wickers well laden, to keepe ir from the heat of the Sunne, in the fpringing vp thereof: for otherwife the feed would grow vp and drie away, through the vehemencie and heat of the Sunne-beames. Notwithftanding, it would be ofe and verie well weeded, for the rooting vp of all manner of ill weedes, efpecially the blacke Millet. So foone as it may be fpied peeping forth of the earth, and before that by the operation of the Sunne the corne doe Shew, it mult be plucke vp by the hand, and be laid in the Sunne afterward to drie; and laftly, fhut vp in fome place where it may be kept : and being thus ordered, it laftech longer than anic other manner of corne. Millet doth good vnto the fields wherein it is gathered, in this refpect ; namely, that wormes will not hurt the corne that hall be fowne there prefently after anie whit at all, feeing they will leaue the graine that is fowne, and cleauc to the ftraw of the Millet.
In the time of dearth they vfe to make bread of Millet, but vnpleafant ynough, efpecially when it is fetled : and the inhabitants of Gafcoigne and Campaigne doe vfe a pappe-meat made of Millet with milke, and that not of the pleafanteft tafte: as well the bread as the pappe-meat,made of Millet, is of fmall nourifhment : befides that, they make obftructions; and that, becaufe Millet is cold in the firft degree, and dree in the chird. Millet fried with falt, and flowers of Camomill, and put into a bag, doth ferue againft the paines of the collick and wringings of the bellie. To keepe Purgatiues, as Rubarb, Agarick, yea and flefh alfo, from rottenneffe and corruption. it is good to burie them in Millet.

## Sefame.

SEfame would be fowne in a blacke ground that is fomewhat roteen and moift. It growech alfo in fandie and fat grauellie grounds, or in mingled grounds, and it is verie fruitfull, euen no leffe than Millet or Pannicke. It is true, that the good houfeholder needeth not trouble his braine much with the fowing of ir, feeing it is apt to make the ground altogether barren, and yer is good for nothing except the oyle that is preffed out of it, and the cakes which liquorifh women vfe to make of the meale. It muft not be fowne but in the midft of Summer, whiles the times continue drie, ofle and cakes and that there is no raine looked for of a long time; for the raine doth hurt it after it is fowne, cleane contrarie to other plants, which (all of them) reioice in raine after they

## The fifth Booke of

are fowne. The oyle which is preffed out of the feed of Sefame, doth newer freeze, and is the lighteft of all other Oyles, and yet being mixt with Wine or Aqua-vita, finketh to the bottome. There is no account to be made of chis graine for nourith. ment, becaule it is giuen to ouercome the flomacke, and is hardly digefted, as is all oylie matter.

## Lentils.

LEntils muft be fowne at two cimes, in Autumne, and moft commonly, efpecially in France and cold Countries, in the Spring time, whiles the Moone encreafech, vnto the twelfth thercof, and either in a fmall or little mould, or in a fat and fertile ground: for when they be in flower, they deftroy and fpoyle themfelues through too much moilture, or by putting too farre out of the earth. And to the end they may grow the more fpeedily and the greater, they mult be muxt with drie dung before they be fowne, and foure or fue daies after that they haue beene fo laid to reft in this dung, to fowe them. They will keepe long, and continue, if they be mingled with afhes: or if they be put in pots whercin oyle and preferues haue beene kept: or and if they be frinkled with vineger mixt with Beniouin.
Lentils (howfocuer auncient Philofophers had chem in eftimation) are of hard digeftion, hurffull to the ftomacke, filling the guts full of wind, darkening the fight, and caufing fearefull dreames : and withall, are nothing good, if they be not boyled with flefh, or fried with oyle.
Fafels.

FAfels grow in fubbly grounds,or rather a great deale becter in fat grounds, which are cilled and fowne euerie yeare: and chey are to be fowne betwixt the tenth of OCtober, and the firto of Nouember; or elfe in March, as other pulfe, after that the ground hath beene eared about the eleuenth of Nouember. They muft be Fowne afrer that chey haue beene fteept in water, for to make them grow the more eafily, and that at large when they are fowne, and alwaies as they ripen to gather them. They make fat grounds where they be fowne : they are accuftomed to beare much fruit: they keepe a long time : they fwell and grow greater in boyling, and are of a good pleafant taft vnto all mens mouthes. It is true, that they are windie, and hard to digeft: but yet notwithflanding, they are apt to prouoke vnro venerie, if afer they be boyled, they be powdred ouer with Pepper, Galanga,and Sugar : and yet more fpecially, if they be boyled in fat milke vntill they burlt. If you mind to take away their windineffe, eat them with Muftard or Caraway feed. If you haue beene bitten of a Horfe, take Fafels, chew them, and apply them fo chewed wnto the greene wound: Young gentewomen, that ftriue to be beautifull, may diffill a water of Fafels that is fingular good for the fame end and purpofe.

## Lupines.

LVpines craue no great husbandrie, are good cheape, and doe nore good to the ground than anie other feed : for when as Vincyards and arable grounds are become leane, they ftand in ftead of verie good manure vnto them. Likewife, for want of dung they may be fowne in grounds that fand in need to be dunged, if after they haue put forth their flowers the fecond time, they be plowed vnder the ground: they grow well in a leanc ground, and fuch as is tyred and worne out with fowing: and they may be fowne in anie ground, efpecially in ftubbly grounds, fuch as are not tilled: for in what fort focuer they be fowne, they will abide the roughneffe of the ground, and negligence of the husbandman : neither doe they craue anie weeding, as well in refpect of their root, which is fingle, as alfo for that if it were bure, they would die preently, and becaufe alfo that it fhould bee but labour
loft: For they are fo farre off from being infected and wronged with weeds, that they cuen kill them, and caule them to die. And this is the caufe why mane fowe ehem in the middeft of Vineyards, to the end they may draw vnto them all the bitterneffe of the Vineyard, as being the qualitie moft familiar vnto them, and with which they beft agree. Notwithftanding they may not be fowne deepe: for when they flower, they are snade no account of. Of all other kinds of Pulfe they only ftand not in need so be laid vp in Garners, but rather vpon forne floore, where the fmoake may come vnto them : for if moifture take them, they will grow full of wormes, which eate vp that which Thould make them fprout, and that which is remaining, can doe no good: they mult be eyathered after raine, for if it fhould be drie weather, they would fall oue of their cods, and be loft.
Lupines are good to feed Oxen in Winter, but they mult be fteept in falted and wherefore La: riuer water, and afterward boyled : they ferue alfo for to feed men, to make bread pines are good. thereof, when it is a time of dearth of other corne. Some doe note this fpeciall propertie in them, which is, that they turne about euerie day with the Sunne: infomuch, as that by them workmen are taught the time of the day, though it be not cleare and Sunne-fline.
Lupines ftampt and laid vpon the nauell, doe kill wormes in little children : the wormes in litue decoetion thereof doth prouoke the rermes of women, and taketh away the ob- children. friections of the fight, by reafon whereof, manie doe wifh them to be taken of young maidens and women which haue pale colours. Their meale is fingular good in cataplarmes to refolue the fwelling of the Kings euill, and other hard cumours, as well boyled in honey and vineger, as in honey and water: and likewife for the Sciatica.

## Beanes.

BEanesmult be fowne in a fat foile, or elie a ground that is well manured, and cared with two earings: and although it be in ftubbly grounds, and feated in low bottomes, wvinther all the fat and fubftance of the higher parts doth defcend; notwithftanding the earth mult be flied and cut finall, and the clods broken before they be fowne: for albeit that amongft all the other forts of pulfe there be not any that doe fo little vvafte and veerhe ftrength and juice of the earth; notwithftanding they defire to be vvell and deepe couered vvithin the earth : they muft be diligently veeded, at fuch time as they peepe out of the earth, for fo the fruit vvill be much more, and their coddes farre the tenderer. They may be fowne at two times of the yeare, in Autumne vvhere it is a ftrong ground, and the beanes be great; and in the Spring, efpecially in this Countrie, in a vveake and light ground, the beanes being but fmall, and of the common fize : thofe vvhich are fowne in Autumne are more worth than the other, fo chat the hindes let not to fay, That they had rather eat the huskes or falkes of beanes fowne in due time, than the beanes themfelues of threenoneths old, becaufe they yeeld more fruit, and hane a greater and better fored graine. But at what time focuer you fowe them, you mult haue feeciall regard to fowe them all about the fifteenth day after the change of the Moone, becaufe that in fo doing, they will be the better loaden, and becaufe they will not be fo much affailed of little vermine, as and if the Mioone were new. The day before they be fowne, you muft ftecpe them in the lees of Oliues, or in water of Nifre, to the end that they may beare the more fruit, be more eafie to boyle, and not to be fubiect to be eaten of Weeuils or Larkes. They mult likewife reape and pull them vp in the new of the Moone, before day, and after leave them in the ayre to drie, and threfh them our before the full Moonc, and afterward carrie thern into the Garner, for being thus ordered, vermine will not breed in them. Againe, they proue more profitable, being planted, than fowne, in a yood ground, that is well dreffed, tilled, fatted, and manured: wvhich fuid gruand, if ir be fowne che yeare following with Whear, will yeeld a more copious and plentifull haruef, in as much as Beanes doe fatten 2 ground more than anie
other kind of Pulle, If you would keep them long, you muft fprinkle them with fale water: bus if you meane to boile them, you mutt bee fure to keep the falt from them, becaufe falt-water doch harden them : they muft not be left in the cold aire, for the cold alfo doth makethem the harder to boile. Tokeepe them from being eaten of wormes, they mult bee annointed or rubd ouer with oile-oliue, one after another, vntill fuch time as chey be well liquored with this oile. The flowers of Beanes, notwithftanding that they be of a pleafant and delightfome frnell, doe hurt a weake braine, and fuch a one as is eafly carried away and ouercome. And hereupon it

The caule woby chere are manic fooles, whenens Bcanes forver. commeth to paffe, that there are a great number of fooles, when Beanes are in flower.
Thus much for the French experience of Beanes, which dorh indeed more concerne the Garden-Beane, than thofe which are continually in veamongit Husbandmen. Therefore to come to the profit and true knowledge of the husbanding of Beanes, you fhall vndenftand, that they are onely to be fowne in a rich ftiffe ground that is verie fertile, as namely the black or blew clay, for in other earths they 1oy but a little: and they will grow with one earing onely, which would be done at the beginning of Ianuarie vpon fuch earth as hath borne Barly before, or elfe vpon greene. fwarth, which hath not been plowed long before: it muft be plowed deep, and haue a great furrow turned vp: then you thalllet it lye, till it hauc taken froft and rane: then vpon the next faire feafon, being about or foone after S. Valentines day, you fhall fowe it and harrow it. As for the weeding of Beanes, it is to no purpofe; for they are of themfelues fo fwift of growth, that they will out-grow all weedes. And if they haue anie Peafemixt amongtt them (which Thould euer be, for it is the fureft feed) they will fmother vp and deftroy all ferts of weedes. They are, becaufe of their vp right growing, better to be mowne with fythes, than cut or reapt with hookes: they aske little withering; for fo foone as the cod turnes blacke, the ftalke dryes. The vie of them is principally for prouander for Horfes, or to mixe with Barley, Wheat, or Rie, to make bread for hind-feruants, or for hunting or running Horfes: but then commonly they are vfed fimply of themfelues, or elie mixt with Wheat onely: for the mixture of Barley or Rie is not good for Horfes of that nature, except for fome caule phyficall, as to keepe them foluble in cheir bodies, and fo forth. The GardenBeane is good for men to eat, being boyled and mixt with butter, vineger, and pepper; or for want of butter, with oyle-Oliue. The cods alfo are a verie good food, being boyled whileft they are greene and tinder. Laftly, the water which is diftilled from the flowers of Beanes, is good to sake away the morphew or fpots in men or womens faces,

## Small Peajon.

$S_{p}^{M}$
Mall Peafe are no leffe profitable for the fatting of ground that is leane, than $\mathrm{Lu}=$ pines. It is true that if you looke to haue good ftore ofthem, and well-codded, you muft fowe them in fat and warme grounds, and in a temperate and moift time, as in Februarie or March, and fometime in September, in the increafe of the Moone: and yet it is hard for them to endure and hold out the Winters cold, for they alwaies defire the full fruition of the Sunne, and doe grow a great deale the fairer, when they doe enioy it accordingly, and when alfo they are borne vp to that end on fickes, rather than let fall flat to the ground, to creepe vpon it : they mult be fowne thinne, becaufe their ftalkes doe fpread themfelues further than anie one other kind of pulfe. They are verie fubieat to be caten within of Wormes: and yet thofe which are fo eaten of Wormes, are better to fowe than the other which are whole and found: For this caufe, it you will preuent the Wormes that they may not hure and hinder your corne, fowe Peafon firtt in the place. It is true, that for the better growth and profpering of them, the chicke and groffe feed is moft conuenient to be fowne, erpecially if it be laid in water to fteepe therein a nighe, becaufe thereby they grow the more calily, and lofe fome part of their falneffe, in being Iteept, by which meanes
they recoucr their naturall verdure againe. They mult be gathered in the decreafe of the Moonc, prefently vpon their being ripe, for elfe they drie vp , and fall out of their fwads. The carth whercin they are fowne, ftandeth in need but of ons عaring.

Cich Peafon.

CIch Peafon doe likewife grow in fat and moift places: they munf be fowne in a rainie times : they doe greatly load and burthen the earth, and for that caufe are neglected of the wifer for of husbandmen. Notwithftanding, if you will fowe them, you muff ftepe thern in warme water a day before, that fo they may grow and put forth of the earth the fooner and greater. Some to haue them grow: che fairer, doe Reepe them and their cods in nitrous water. To keepe them that paflengers and other folke may nor gather them to eate when they are ripe, you muft water them fiuc morvings together before the Sunne rife with warer wherein haue beene ftecped the feedes of wild Cucumber and Wormewood, and the dew within fue daies atter will haue taken away all the bitterneffe thereof. Such practiles are likewife good for to bevfed about fmall Peafon and Beanes: The vie of them is good for fuch as are flow to performe the ąt of carnall copulation, and efpecially to carrie away grauell, and to breake the flone, as alfo for fuch as haue weake lungs and low and weake voices. They are alfo good ayainft melancholie, and doe cut off troublefome thoughts and cogitations, and pur in place thereof iollie conceits and merrie moodes: and then they being laid forth in the Moone-- hine when it is in the encreafe, and before the Sunne rife, they muft be fprinkled with oyle-Oliue, afterward fteeped in warme wa:er, to fof fen them, and lafly, boyled for to be earen. The way to wfe them, is rather to fuppe vp their broth, made with the rootes of Parfley, than to eate the Peafon.
Small Cich Peafon.

SaMall Cich Peafe, called of the Latines Cicercula, mult be fowne in fat places, and in a moilt cime, as in Ianuaric or Februarie: they doe leffe harme to a field than anie othcr pulfe : but for the mofl part they neuer come to profit : for when they are in flower, they cannot abide drowth, nor anie ftrong Southerne windes, at fuch time as they leaue flowring.

## Great woild Tare, and bitter Fetch.

T-He greatwild Tare and bitter Ferch doe defire leane places, and fuch as are not moif : for fometimes by putting forth too frecly, and growing too much, they ouerthrow chemfelues. They may be fowne in Autumne, or in the end of Ia。 nuarie, and all the moneth of Februarie, but not in March, becaufe if if fhould be fowne in this moneth, it would hurt the Cattell, erpecially Oxen, troubling them in their braines.

## Fetches.

THere aretwo feed-times for Fetches : the firf, when they are fowne for to feed cattell, and it is about the fifteenth day of September: the fecond, in Februarie, or March, and this is for to make bread of for to car, being mist with other corne: both of them may be fowne in vntilled grounds, but it is better when they are fowne in grounds that haue had their three carings. This feed louech not the dew, and therefore it muft be fowne two or three houres after Sunne-rife, when all the moiflure thereof is fpent and confumed, cither by the wind, or by the Sunne : and it tnuft not alone be fowne, but it mult alfo be courered the verie fame day, becaufe that

## The fifth Booke of

if the nighe fhould come vpon it, and wet it but a little before it were couered, it would quickly become corrupt and putrified. The ground wherein is is fowne, nee deth not anie more than one earing, and when it is Cowne, it needeth no weeding. In anie cafe it muft not be fowne before the fifteenth day of the Moone, for otherwife the Snailes will annoy it. In like manner it muft not be fowne neere vnto anic Vine or Orchard, or anic place where there are trees growing, becaufe it draweth vnto it the iuice of fuch plants as be neere it : and yer the Fetch doth not make the ground leane, but rather fat: and that it is fo, appeareth; becaufe that fo foone as the Fetch is taken away out of the fields, there may Peafon, Miller, or anie other fort of Pulfe be fowne.

## Panick.

HE that would fow Panick, muft make choice of a light, grauellie, fandie, or tonie ground, and fuch a one as is fituate amongtt hills, and on che tops of hills, and yet whereas there is no little refort of water, for that it being hot by nature, groweth and puttech forth more eafily than Miller. It munt be fowne in Summer: and it groweth fo fpeedily, as that it may be mowen within fortie daies after that it is fowne. The inhabitants of Gafcoigne make bread thereof, but it is verie vipleafant, becaufe it is verie fhort and apt to crumble away, euen like ahes or fand. The Perigordians frie it with butter, or oyle: others eate it with milke, or meat-broth.

## Ferugrceke, Cumsmin, arad CITuftaxd-feed.

FoOr the fowing of Fenugreeke, you mult make choise of fuch ground as you would for the Fetch, which you muft not cut che fecond time, fecing the firlt, if it be done thicke and fmall, and not deepe, will feruc: for if the graine fhould be couered aboue foure fingers, it would not be able to fprout and fpring vp, and therefore the plough and harrow both mult goe but lightly ouer it. The meale of Fenu. greeke, with Brimftone and Nitre, doth take away the freckles of the face. If you mingle it with a fourth part of the feedes of Crefles in vineger, it will proue a fingur lar remedie for the falling of the haire called $T$ inea. If you boile it in honied water, putting thereto fome Swines greare, it will refolue che fwelling of the tefticles, hands, feet, and vnder the eares, and is profitable againft the wrenches of ioints. The de. coction thereof drunke oftentimes, doth infinite good to fuch as haue beene troubled with an old cough, and likewife for the vlcers of the breaft : for the diftillations and rhewmes falling vpon the eyes, you muft wet clothes in the decoction of this feed, and apply them vnto the browes. And as for Cummin and Muftard-feed, wee hane fpoken of them in the fecond Booke.

> CMedick foodder, or Snaile-clawer.

THere is not either anie Pulfe or other feeding which is more agreeable or more precious for the feeding of beafts, than Snaile-clauer, called in French Sainct foin, for that it may feeme to fpring out of the earth, and as it were of a more fpeciall fauour from God, not onely for the nourifhing and fatting of heards of catcell, but alfo to ferue for Phyficke, for beafts that are ficke, and in that refpect it is called of the Latineschedica. Some call it Burgundie hay, becaufe the Burgundians haue beene alwaies verie carefull for the fowing and tilling of this hearbe. The inhabitants of Picardie call it Foinaffe, and manie have given it the name of great Trefoile. Howfoeuer the name goe, the benefit of this grafle is fo great, as that euerie carefull husbandman oughe continually to referue the better part of his grounds, to bee fowne therewith. Make choice therefore of the fowing and growiny of great ftore of shis graffe, of an euen ground that is verie cleane and fat, cafie to be plowed, and
which hath had three earings before it was fowne, as alfo which hath beene well dunged, well harrowed, and digged and delued rather in the decreafe of the Moone, than plowed with the plough, beginming the worke in Inne, atereward in Auguft; October, December, and Februaric, to the end that the weedes that are in the ground may bee fufficiently killed, as well by the heate of Summer, as the cold of Winter. After that you haue made the ground well plealing, and fic by fuch indufrie, beginne to fow it in che end of Aprill, during the new of the Moone, and toward the latter end of the day; for being watered by the dew of the night, it will fpring morefpeedily and eafily out of the earth, than and it it were fowne in the heac of the day, becaufe it would be burft continualiy, and would come butto fmall effect and profic. You mult not bee niggardly in lowing of it : for by how much the more feed you fow, by fo much the more thicke will the graffe grow; neither will there grow any other graffe chere: and fo there will alfo the more profit grow and rife chcreupon to the good houle-holder. So foone as it is fowne, you muf harrow is euerie manner of way, aslong-waies, broad-waies, and ouer-chwart, with harrowes or rakes of wood fet thicke with teech, but not of yron, becaufe ir is an vtere enemic to yron: afterward you muft water it gently for the firft ume ; for and if you fhould waterit forcibly, and wich aboundant forc of water, you fhould driuc che feed alt to one fide of the field; and yet you muft not water it atter September vinto the end of Aprill. It will be good to cut it downe witha fieth fiut or fixe eumes she filf yeare, and fo proportionably the yeares following; for it endurech ten yeares, yea thirty as Pliny fayeth, without flanding in neede of being fowne againe. The fic time to cut it downe is May, Iune, Iuly, and Auguft, and the new of the Moone : in the meane time you fhall not let ic lye vpon heapes any longer chan a day in the meadowes, for if if fhould flay there any long time, it would raife fuch a heat, as that is vvould imother and kill whatfoeuer were vnder it,to the keeping of itfor euer growing againe: wherefore it will be good to carrie it elfewhere, and to drie it afloone as poofibly may bee, ftirring it evierie day, from day to day. Againe, you mult not let the cattell feede neere vnto this grafle, in as much as not therr toothonely, but their verie breathing on it alfo is very noyfome vnoo it, and that fo greatly, as that it afterward becommeth cither barren, or elfe diech prefencly: it mult not bee giuen greene for cattell to cate, leaff it make chem ficke by reafon of the moifture and heat that is therein: it muft fay till it be drie before you giue it them to eate, and then alfo but in fmall quantitie; for that this graffe begeteeth in hemfuch ftore of bloved, as that of the much eating thereof, they would be ftrangled therewith. The good husbandman muft be carefull to gather and relerue feed of this fnaile ciauer, to fow the fame vvhen it fhall bee requifite : it muft nor bee gathered the firf yeare that it bearech, by reafon of his weakeneffe; but in all the other following, and that in the monechs of Iune and Iuly, fo foone as the huskes wherein the feede is contained Thall appeare drie, and the feeds themfelues be turned yellow.

## CHixt prozander.

MIxt prouander mult be fowne in fat and well manured places, and fuch as haue bene twice eared: it will be verie good if it be fowne with pilde barley, fometimes it confiftech of barley, oats, fetches, and fenugrecke, vvhich are let grow hand ouer head,and are cur afterward cither greene or ripe, to make fodder of for cateell in Winter.

## Rice.

IF you will fow rice you may do it : but it is like to proue rather a worke of curiofitie than of profit, for rice is a commoditie properly belonging and growing amongft the Indians, from whence allo it is broughe hither vnto vs in France, Therei fore for the fowing of rice auther whiteor red, chufe outlome place that is veric
moift, and in cale you haue no fuch amongf your arable ground, then chufe oue tome field that is leane, foule, and nothing well clenfed, or fome other which is light and weake, but yet euen, and through which you may conucy fome little brooke, or guter of water. Eare the ground thrice, where you meane to fow your rice, and when you hane thus plowed it ouer thrice, fow your rice therein, which you mult firft feepe for one whole day in water: fo foone as you haue fowne it, draw your lictle brooke along through it, and there fuffer it to continue fiue whole moneths the depth of two fingers : and when as you percerue the blade to begin to fhoor forth his eare (knowing that it alfo flowrech and Feedech at the fame inftant) then double the quantitie of water to keepe the fruit from blafting or fpoyling otherwife. If you order it thus, you fhall not onely reape great quantitic of rice, but you may alro fow it three yeres togecher one after another, without guing any reft at all to the ground, and yerthe laft yeare will bee no leffe fruiffull than the former : yea, which is more, you fhall make the field more fat, frolicke, in better plight, and cleaner from weedes, and cleaner from noyfome beafts than it was before: yea, and furcher than this, you may fow therein for three yeares more, one kind of graine or other, whether whear, or meflin, whereot you fhall not repent you in the time of harucft, you fhall find it fo faire and profirable. There is one inconuenience in rice, which is, that it caufech an ill aire by reafon of the aboundance of water which it craueth for the fpace of fiue whole monecths: but to recompence the fame withall, it prouech verie profitable for food and fuftenance; for therenf is made pottage, and thereof alfo is bread made, cither with rie or millet, or all three together. It is true, that it is much giuen to makeobffructions, and it reftraineth fluxes as mighrily : and this is the caule why fuch as haue great loofeneffe in their budies do ve it oftentimes, efpecially, if is be parched and boild in cowes milke, wherein many litele flints of the riuer haue bin quenched : if you boyle it in milke, adding therro fugar and cinamome, it will prouoke vnto venerie. Many do thinke that it makech fat; but fecing that (according to the Phyfitians) it is not digefted in the fomach but verie hardly, it mult needs nourifh bur a litete, and then how can it poffibly makeone fat? indeed it may be faid rather to puffe vp than to make fat.

## Hempe.

HEmpe muff befowne in fat and well dunged grounds, and watered with fome lietle brooke, or elfe in flit and moift countries, where much labour and ploughing hath beene beftowed : for the fatter the ground is, the chicker will the barke or pilling be. It muft be lowne in March, and gathered when the feed is ripe, and afterward dried either in the Sunne, Wind, or Snioake, and then laid in water for to bee watered, chat fo the pilling may the more eafily depurf from the falkes, afterward to be ved in making of ropes and cloth, a labour and trauaile well befeeming and fir for women.

This is theopinion of the French, but not the generall opinion of the better experienced: for, the rich ground which is fpoken of here to fow hempe in, mult not bee taken for the rich fliffe blacke clay, or for any clay at all: for although they will beare hempe; yet they put forth fo much bunne, and fo litele pilling, hat indeed the hempe that groweth therein is good for nothing: therefore the beft ground to fow hempeon, is the richeft of all mixt earths, whole mould is drieft, loofeft, blackeft, and quicklieft ripe, with litele earing, as namely with two ardors at the moft, which vvould be in Otober the firft, and the laft in March, which is the beft and moft conuerient time for fowing. Hempe muft bee exceedingly well harrowed and clotted, and the mould muitt bee made as fmall as duft; for the feed is verie tender at the firf fprouting: but being once goten aboue the carth, it outgroweth all orher weeds whatfocier ; and out of its owne nature, it doth choake and deftroy them: whence it comes, that hempe neuer needeth any weeding: it muft bee diligently and carcfully kept and tended (after chis firft fowing, tillit
appeare aboue the earth) from birds, for the feede is fofweet and fo much defired of all fmall birds; that without great and diligent care chey will not leaue you any in the earth. Now for the beft time of gathering your heinpe, it is acording to the common cuftome of houfe-wiues, about Saint Margarets day, being towards the latter end of Iuly : But more particularly, you fiall vnderfand that it is beft pulling your hempe for the pill as foone as it doth begin to turne yellowifh, and the leaues to hang downeward looking vnto the earth: butif for feed, then not before the feed looke blacke, and bee readie to fhed: hempe muft euer bee puiled vp by the rootes, and firft fpread thinne vpon the earth, then afterwards bound vp in bundles, which they do call bayts, then it muft beecaryed to the water to ripen, of which water the rumning ftreame is the beft, and the flanding pond is the worft : yet it muft bee done with great heed; for hempe is very poyfonous, and it doth not onely infect the waters, but it dothalfopoyfon much fifh: Hempe muft lye three dayes and three nights couered in the water; then it muft beecleane wafht out of the water, and afterwards brought home and dried either in the Sunne or vpon the kilne. There bee fone houle wiues, which(either for floath, or for want of a conuenient place to water in) doe ripen thcir hernpe vpon the ground, by fuffering it to lye at the leaft fifteene nights vpon the fame, taking the dewes which do fall Morning and Euening, and other raine by which it ripeneth; prouided that it bee turned cueric day once: but this manner of ripening is nor good; for befides that it is vnkindly, and doth of entimes caufe the hempe to beeretten, it alfo ma. keth the liempe to be very blacke and foule; fo that it doth neuer make white cloth. After the ripening and drying of your hempe, you fhall brake it in brakes which are made of wood for the fame purpofe, and this labour would euer as neere as you can bee done in the Sunne-fhine: after the braking of hempe, you fhall fwingle it, then beate it, then heckle it: and if you intend to haue verie fine cloth of it, you fhall after the firft heckling, beate it againe, and then heckle it through a finer heckle, thenfpinne it, after warpe it, and laftly weaue it: Thus much for the hempe which is vfed for to make cloth withall: but for fuch as thall bee preferued for cordage, or the roper, you fhill onely after the ripening pill it, and then either fell or imploy it:

Hempe feed is verie good to make hennes lay many egges; and that in the The fedof depth of Winter, and greateft coldnes of the fame. Many doe burne the thickeft bempee rootes of the male hempe, and of the fame fo burnt and made into powder, do make To makehens. gunne-powder. The iuice or decoction of the greene herbe being fltongly flrained, lay egs, and powred in fome place where chere are earthwormes, doth caufe them to come forch by and by: likewife being dropt into the cares, it caufech the worms or other beaftes which thall bee gotten in thither to come out prefently,and this wee have learned of fifhermen, which by this wile doe take wormes to feruethem for their hookes. Hempe feede muft neither bee eaten nor drunke, becaufe it fendech vp many fumes vnto the braine, which will caufe the fame to ake, and therefore women do greatly tranfgreffe the rules of Phyficke, which giue this bruifed feed in drinke, to fuch as are troubled with the falling ficknes or head.ach. This is a thing to be wondred at in hempe, that feeing there are two forts of it, the male and the fermale, yee the temale bearech nothefeed, but the male.

## Line.

LIne muft not bee fowne in any ground, butwherethererileth great profit, and this followeth and is caufed by reafon of the feede which impairech all forts of grounds verie much, and for that caufe it muff bee fowne in a verie fat ground, and fuch a one alfo as is reafonably moitt. In any cafs the ground where line-feed is fowne, muft bee curioufly handled and clenfed, and with manifold earings plowed and turned ouer fo of and fo long, as thiat it become like dift: and furthermore the good huff wife muft be carefull when the line is growne, to frec iffrom being intan-

gled
gled with che weed vfing to wind abour it, and which of fome is called linegour, and that not once but oft : to the end that in gathering the feed, in beating it with beetles, heckling and fpinning of it, fuch filth may not remaine among the tow. It mult be gachered when it is ripe, and when the colour of it groweth yellow, and after layd vp in fome dric place, that fo it may bee defended from the raine and dew, which are vetcer enemies vnto it : wher it is drie, it muft be threfhe as foone as may be (to the end that the unice eat it nor) with wooden malless, to getche feed out of it, and prefently afere chat it fhal be caried to the water about the change of the Moone, that icmay lie therein three or foure daiesin Iuly or Auguft, till it become foft and tender, to the end that the pilling or barke chereof may the more'eafily be feperated from the falkes for the making of cloch. When it is drawne out of the water, it muft bee laied on a heape, all round, but two or three fadomes broad, loading if aboue with boords and flones, and after that fpred in the Sunne, to the end it may drie the better. The fincfline, which is withour feed (notwithflanding it bee the leaft and lower of growth than the reft) is che beft, being foft and fine after the manner as it were of filke: whereas that which is long and thicke, is alfo more rough and boyfterous in fpinning. You fhall make verre fine and white fowing threed of your fine flax in this fort : Let it be watered in running water fiue or fix daies in Iuly or Auguft in the change of the Moone: ! of oone as it is drawne out of the water,fpread it in the Sunne, that it may drie, neuer cafting it into any heapes, for that which is laid vpon heapes after the comming of it out of the water, that it may take a heat, and being preffed downe to that end, doth become blacke, and turneth into a darke and obícure colour,

This line after it hath receiued braking and the firt hackling, you fhall take the frickes, and platting them into a plat of three, make a good bigge roule thereof, and put it into a fmooth and round trough made forthe purpole : in the fame manner as you beate hempe, fo you fhall beate chis flaxe cill it handle as foft as any filke, then vnplat the flrickes againe, and heckleit through the fecond heckle, the which muft bee much firier than the firft: which done, plat vp the ftrickes againe, and then beat it the fecond time, and then vnplat as before, and heckle it the chird time throughthe fineft heckle that can bee gotten, then fpinnechis tow, and it will make you yarne either for Lawne, Holland, or Cambricke, or for the fineft fifters thred that can bee fowed with: as for the hurds which doe fall from the heckle, you hall haue a grearand diligent care to keepe them light and loofe; for by reafon of the much beating, they will bee exceeding foft; and apt to clotter together, and abide in lumpes, and in the drawing of the chred, it will handle very woollie : yet bee well aflured, that from the firft hurds, you fhall make a moft exceeding fine myding, from the fecond a very fine lyninen, and from the third a pure good holland. Many ocher labours are beffowed vpon flaxe: but in this alreadie rehearfed, confiftecth the whole art of the hufwife ; yet herein by the way is to bee noted, that euer before you beate your flaxe, you fhall befow great drying of it, letting is fland each feuerall time at the leaft foure and wwentie houres within the aire of the fire beforc you beate it, for drying onely cauleth is to breake:
Qile ofliirseed. Out of the feed of line, you may preffe an oyle which will neter freeze bee it neuer fo cold : it is ved of Phyfitions, Painters, and many other forts of workemen. It is fingular good to foften hard things,for the paine of the hemorrhoides, chaps and tumours of the fundament called Condylomata, being wafhed in rofe-water, it curech burnings : it is maruelous good in plurifies, if fo be chat it be new : for that whickis old hearech and procurech vomite.

## Nanets aud Turneps.

Auets and Turneps delight ina light and fine mould, and not in a churlifh and fad ground a and yet turneps grow better jn moift grounds \& placesjbut | àuers |
| :---: |

on the tops and fides of hills, in drie and pettie grounds, fuch as thofe are which are fandie and grauclly: Howfocuer it is, the ground where they are fowné, mult haue beene oftentinaes turned and caft; harrowed, and dunged; for by thefe meanes they will not onely grow well, but the ground (after chat they be gathered being thus prepared) will bring forth fairer cornc. Turneps are fowne twice in the yeare, in Februarie, and in Auguft, in a well manured ground, and youmay not fuffer them, after that they haue goten fome litele growth, to put vp any further out of the earth, for and if they fhould ftill grow more and more aboue the earth, their root would become hard, and full of fimall and litele holes. See more of nauers and turneps in our fecond booke.

## Gняр。XIX,

## Aduertifemsents concerning corne and prife.

納 2Ife and prudens husbandmen nuft not plow their groundes, cut theif vines, or prune or haue any dealing about treesfrom the eighteenth day of Nouember vnto the fenen and twentiech of December.
Sow your corne as foone as you can, and flay not to fow it in the Wino ter : Neither doe you euer fow the corne which grew in a fat foile, whether it bee wheat or rie, or any other fuch, in a leane and barren field; butracher fow that corne in a fat and fertile foile, which grew in a leanc and barten ground : and to be briefe, fow in a well conditioned ground that which was growne in an ill conditioned ground. In fowing your feed fee that your hand aufwere your foot, and flanding vp. on your feet, fee that your right foot elpecially be moued when your right hand doth moue. In fowing of wheat you muft calt it with a full hand, or by handfuls : but in Cowing barley, ric, oats, and many other kindes of graine, efpecially fuch as is fhuc vp in huskes, as millet, pannicke and rape feeds muft be fowne and caft into the earth with onely three fingers.
To preuent the froft that it may not hurt the corne that is fowne, efpecially, fuch Frofic as is fowne in cold grounds, as thofe which are moft fubieft vnto frofts, you mult caft and fpread lime vpon the faid grounds before they befowne: or elfe, which is better, mingle a lixt or eight part of lime amongtt the corn which you meane to fows and fo fow them together:

To keepe your feed from beirig eaten of birds,mice, or pifnyres, water it before you fow it with the iuice of houle-leeke: or according so Virgils aduice, with water, whercin nitre hath beencinfufed.
To caule peafon, beanes and other pulfe to be cender and eafily boyled, you muft lay them a day before they bee fowne, in water vvherein there hath beene nitre diffolued; or elfe to mingle amongft them in fowing of them fome dung and nitre: and if notwithtanding after all thefe meanes vfed, they cannot yet be well boyled, then put into the pot wherein they are boyling, a little muftard feed, and in a fort time they will relent and feech in pecees.
Beanes being fowne neere trees, caufe their roots to drie and wither : bearies will keepe long if you water them with fea water; notwithflanding that they will not boile any thing atall in faltor fea water.
Cich peafe will become greater, if you infure them in warme water before they be fowne: or if you fteepe them in their cods in vvater vvherein nitre hath bin infufed : if you vvould hauc them earely, fow them when you fow barley.

Lentils will grow very faire, if they be infufed in their cods in warme water with zentiks: nitre; or if they be rubd ouer with drie ox-dung before they be fowne.
You mult not fow millet thicke, if fo bee you would haue it good: for examples Milles?

## Tise fifth Booke of

fake, a handfull is enough to fow halfe an arpent withall; for if you fhould fow any more you muft bur pull it vp when you come to the weeding of it.
Sow your lupines before all other kinds of corne, without flaying or waiting for raine : before they flowre, you may put oxen in amongft them, and of all the other forts of herbs they will eate; but they will not touch or come neere vnto the lupines, becaule that they are biter: you may make them fweet, if you ftecpe them three whole dayes in fea and riuer water mingled together.

Sow all manner of pulfe in the increafe of the Moone, except peafon, and gather them as foone as they be ripe, for otherwife their cods will open and the peafe fall out.
Gather feeds and all manner of graine in the change of the Moone, if you would, haue them to keepe, and doe with them as wee haue laid before. If you haue need to fell corne, fell it in the increafe of the Moone, and not at any other time, becaufe at fuch tine they grow and become bigger in the garner, than they are woont to beeat other times.

## Chap. XX.

## Of the Bake-house.

 V vaine fhould the husbandman toyle himfelfe in tilling his ground to carefully according to the forme and manner which we haue before defcribed, and in like carefull fort to gather in, heape together and keepe his corne, if hee hoped not for fome fruit and profit of his paines and labours. But what that profit is which he receiveth of his corne, I referre my felfe vnto the fale, which hee may yearely make vnto foreine and ftrangemerchants, as whereby there redoundeth vito him an incredible fumme of money. Witneffes in this point may be the infinite number of rich husbandmen in France, and namely in Beauce, Brie, and Picardie, who liue in better eftate and fuller of money, than many great Seigneours and Gentlemen: and Ireferre my felfe likewife vnto the diuers forts of bread which they make of their corne, for the feeding and fuftaining of themfelues and their families, as allo their cakes, cheefe-cakes, cuftards, flawnes, tartes, fritters, and a thoufand other prettie knackes and daintie conceits, which may bemade and wrought of the meale which their corne yeeldeth. And yet further I report me to the beere, (which ftandeth in fteed of wine in the countries where the vine cannot bearefruit) made commonly with wheat and barley. And laftly to the fale of bread which hee may practife and vee euery day, whithout any whit difad:uantaging himfelfe; as wee fee in the husbandmen of Goneffe neere to the Citic of Paris.

Now therefore feeing that matters ftand in thisfort, me thinkes it fhould bee an vofeemely thing, not onely for the farmer, buralfo for the Lord of this our farme, to vfe to fend to the towne or elfe whither to buy bread, cuftardes, cracknels, cakes, tartes, beere, and other fuch neceffarie things, for the food and fuftenance of his houfe, either yet to borrow of their neighbours ftrangers, as bakers, pafte-cookes, and brewers for the vie, or to bee beholden vnto them for any of thefe commodities, when they ftand in need of them: For it is my intent and purpofe that this our countrie houfe fhould bee another Pandora, furnifhed and flowing with fore of all manner of good things and commodities, in fuch fort, as that the neighbour cownes might haue recourfe and feeke vnto it in cafes of their neceffities and wants, but wyithout taking or recciuing any thing at their handes bur money, as the price and fale of the wares fhall amount and come vinto, which it fendech and furnigheth them withall day by day. Imeane therefore that our farmer fhould be a baker, panter, worker in pattrie, and a brewer when need thall be : and to be briefe,
that he fhould not be ignorant of any ching which might helpe to keepe, fuftaine, and inrich his houfe.

Whereof Bread is made.

A Nd to the intent that I may enter into my purpofed matter of the Bake-houlf, I doe not here intend to tric or fearch out, who was the firft inuenter of Bread. making, or what meates were in vee amongft them of auncient time, before the making of Bread was found out, or whether it was the man or womans labour to play the Baker: thefe I leaue to fuch as make their whole profeffion that way, to difcourle of; contenting my felfe to teach andinfluutt my Farmer what graine or corne hee may imploy and vie for the making of bread. For cereaine there may be bread made of all forts of corne, but not of all forts of graine : for Pulfe (as we call them) that is to fay,fuch graine as is inclofed in coddes or huskes, and which are not cut downe with Sythe or Sickle, but gathered by plucking them from the earth by the rootes, as Peafe, Beanes, Rice, Lentils, great Cich-peafe, fmall Cich-peafe, Lupines, Fafels, Ferches, Fenugreeke and other fuch like, are not fit to make bread of, except in time of famine, and when as other corn doth faile altogether, or elfe fall to be excecding decre : according as wee fee in fuch times of hard diffreffe, bread of Oats, Barley, Beanes, Rice,Miller, and Pannicke (for fuch I haue feene in Perigord) yea of Bran, Fifhes dried in the Sunne, Acorncs, Chefnuts, and Ferne rootes (for fuch haue I feene in bafe Britaine) or which is more, of Brickes, Tiles and Slates, as is reported to hane beene made by the inhabitants of Sancerra, who during the time that they were befieged, did make and eate bread made of Slates.

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& \text { Of Corne, and of fuch differences and forts of the fanee as will } \\
& \text { make good bread. }
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THe excellenteff, wholfomeff and befl kind of graine for to make bread of, is Tomake chbife corne; of which as there are many differences and diuers forts, according to the of ofour corrae. regions, countries, grounds, and foiles where thcy grow, according to the induftrie of the husbandman : fo likewife there are diuers forts of bread, made differing as well in fauour and tafte, as in maner of nourifhing. Therefore that you may be able to make your choife wifely of all forts of corne of euery countric that is fir to make bread of, you muff fee that it be thicke, full, groffe, maffie, firme, of colour fomewhat inclining to yellow, cleane, yeelding great fore of cleane and white meale; which being fteepr and boiled in water doch quickly fwell, which being newly threfhed, commech prefently from the fheafe: for that which is old threfhed, although it be drier than that which is new threfhed, as alfo more light, apt and ready for to make meale, \&x to keep in meale, notwiehftanding the bread is not of fo pleafant a tafte, fecing it hath loft a great part of his well relifhing iuice, and hath gotten as it were another nature by the alteration of the aire : for cerrainly cuen fo deale the Corne-Merchants, who, well bethinking themfelues at what time to fell their corne, doe not threfh it before the very fame moneth, wherein they meane to fell ir; and as on the other fide the Baker will not buy (if poflibly he may choofe) any other corne to make good bread of, than that which being new threfhed, commech frefh from the fheafe.
The excellenteft corne in all France, and which they vfe moft in Paris, are thofe Good corne, forts which come our of Beauce, France, Brie, Picardie, Champaigne, and Baffignic in Burgundie : howfoeuer alfo thele in Berree, Poißtou, Zanctonges, Angoulmois, Limoges, Normandic,Limagne,Languedoc and Auuergne, be not altogether to bee reiected. The corne of Beauce maketh a fairer fhew than the corne of any other countrie, becaufe it is growing in a fertile and a fat foile, and fuch a one as is not drie, and it hath in ira band which fhewerh great when it is in bread, although therebeo leffe quantitic of pafte. The corne of France hath a fhorter and leffe graine chan that of Beauce, becaufe it growech in a ground netther too fat nor too leane, buc indiffe-
rent; fo that the bread that is made thereof, is not of fo great fhew as that of the corne of Beauce : but yct to make fome manner of recompence, more white, and fuch as eatech better than that of Beauce. The corne of Brie is of a leffe grainethan that of France and Beauce : as alfo a lofe of this corne is of leffe quantitie than that of Beance corne, and of leffe whiteneffe and pleafure in eating, than that which is made of the corne of France, becaufe that Brie is a countric of lweet cherries and yet notwithAlanding it is found, that the countrie properly and truely called Brie doth furpaffe and goe beyond the wwo other in maffineffe of corne :and the caufe making itfo to be , is the fhortnefic and chickenes of the skin thereof, which is euidently more apparanc in it than in the refl, which make it to weigh the more. The corne of Picardie is of a leffe graine than any of the other three aforefaid, and fo the bread of this corne is not fo good, great, white, or profitable : becaufe that this corne is more hard, ftiffe, fubborne, and vneafie to grind than the others, and therefore fuch as out of which the flower cannot be well drawne, which caufech men commonly to call the corne of Picardie more vile and filthic thanthereft, fecing when it is ground, the bran thereof deraineth and keepech backe of the flowre withinit. Champaigne notwithfanding that it flow and abound with corne, and make a verie faire and great fhew, yet it is inferiour vato the other aforefaid countries; becaule the corne thereof yeeldeth leffe bread than the others, becaufe naturally it is giuen to be choking, and to run vpon wreaches betwixt the milfones, and more tedious to grind than others: againe it is long, thin, and clouen in the middeft, which maketh that it carriech fo much waft bulke.

Generally whear the fmaller it is and the thinner the huske is, the better and whiter the meale is which commeth from it, as is both feene in France and in other couns eries: for in England the wheat which groweth on therich ftiffefoyles, and is called whole ftraw wheat, being a greatlarge corne with a chicke huske, is euer the courfeft and blackeft of all wheats, yet good to the yeeld, and rich in meale, but the flaxen, and chilter wheate, which are much fmaller and thinner huskt, and grow vpon barrenner grounds, as for the molt part vpon the Iunams and fuch like, doe cuer yeeld the fineft and whiteft meale, and therefore are moft fought after, for the making of finemaunchets, fweet bisket, Iumballs, and fuch like fine paftss

## To grina cornc:

THe husbandman hauing made good choice of his corne, fhall fend it to the mill whether it go with water or with wind, according as the countrie fhall be moft fitand conuenient for :or and if he haue choice and may fend it to either, then hee fhall rather chufe to fend it to a water mill, carried about with a very fwift flreanae for the more forcible turning about of the fone, and which hath his ftone of a very hard greet and all of one pecee if it bee poffible, fuch as are in Brie and Chamopaigne, ecpecially; at Ferte vnder Ioarre : for, the milftones that aretender and foff, doe cafily breake and quickely grow out of frame, and withall do continually leaue fome grauell in turning about, which being mixt with the meale, takech away all the plealantenes and good fauour of the bread, and becommeth ofentimes croublefome vnto the teeth. Many doe counfell and aduife to beat the corne ina mortar before is be fent to the mill to be ground, and in beating of it to fprinkle it ouer with water, and after to drie it in the Sunne, and then in the end to fend it to the mill. Some will not fend it to the mill except it be very drie, and when as it is not drie, they fec it in the Sunne todrie; as holding this opinion that the drier it is the more meale it yeeldech. Others befprinkle it with falt water, hoping by fuch watering of it, that the meale will become more white, and that they fhall haue greater quantitie of bran: Of old time as may be gathered out of Ariffotles problems, barley was woont to be parched before it was ground. In France none of thefe waies of preparing their corns to the mill are vfed, but as the corne is; fo they fend it to the mill. It is true, that the miller is to lay hisftones infuch fart, as that according to the owners will, hee may
make
make a greater or a fmaller meake, as alfo according as the corne it felfe fhall be more groffe, hard, fmaillor foff. Yet the leffe the corne is bruifed the finer the meale will $b e$, and the groffer your branne is, the better and vvhiter will your pafte be : vvhence it comes that the skilful Bakcr wil euer chule the greas black Cullen ftones to grinde his fine Wheat vpon, which no more but bruifng, and, as it were, crufhing the corne makes the mealeas pure and as vvhite as Snow. As for the drineffe or dankneffe of sorne, it is certaine that no graine, except Wheat, can be too drie, but that the skilfull Miller fayes fhould ever ficke to the Hopper: v vhence it comes that he will, vvher he findes his Wheas too drie, dath or fprinkle fome vvater vponit, which makes it grindea great deale the better, and makes the meale much vvhiter.

> Of Meale, Mil-dust,flomer of (Meale, Brame, fine Meale; TV beate, Starch, and mundified Barley.

THe corne being ground is curned inro Meale, in fuch fort as that meale is no o. ther thing but that vwhich commeth of the corne vvhen ic is ground : and fo the meale fallech out to be fuch as the corne was, that is to fay, very vvhite, if fo bee thas the corne were pure and cleane, thick and fhorr, fuch as the corne of France (properly fo called) is, blacke and full of bran: if che corne were flarued, frmall, wrinckled, full of filth and dire, long and flar, fuch is the meale of Rie. But he husbandman before the grinding of his corne and turning of it into meale, muft thinke with himfelfe vvhecher he will keepe it long or no: fuch as he vvill nor keep, there is no need vvhy he fhould rare of what corne he caufech it to beground, as vvhecher it be old or new threllied, neither yet how and in what maner : but fuch as he doth entend to keèp for fome time, as in a fore-houfe for to anfwer the cimes of necefficie, hee mult chufe the drieft corne that he can meet vvithall, becaufe that if it be not verie drie, itmight verie quickly take heat in the meale; and fo it is mete that it fhould bee old threfhed and not new, and comming from the fheafe (although the bread that is made of corne old threfhed be not fo good as that which is made of new threfhed corne, and that vwhich commeth frell from the fheafe) for the meale that commeth of corne olde threflied \& referued a long time in the garner, keepeth better than that vvhich commeth of new threched corne, becaule that the corne being driuen and laide naked from his firt and vemoft huske and coate, takech the aire, as affo his vndermoft coucring vvherewith it is coucred, and fo growech drier and harder, not only inhis coate, bur alfo in the meale and marrow inclofed therein. Whereupon it commeth to paffe that this meale being leff naked and voideof any coate by the grinding of the Mill, becommeth more apt to keepe in being the more drie. On the contrarie, the meale of new threfhed corne, is not of fo good continuance, but fpoilech fooner, becaule that the corne new threfhed, retaining yee his natiue moifure, mak eth the meale the more moift and heauie, and that it can nor be fo drie : vvhereupon it fallech out to be more inclinable and readie to corrupt. For euen as drineffe doth preuent and hinder purrifaction, fo moiflure doth haften and help forward the fame. And that it is fo, vve fee by experience, that the painfull husbandmen for the good keeping of their corne, do leaue it in the fheafe mowed vp in the Barne, there to Winterand fweate, caufing it after fuch fweate to be threfhed, that forthey may fhift itout of its place into another that is more drie, and laying vp higher in a more open ayre: vvhere beinïg laide and gathered rogether in heapes, after a long and not high raifed marner, he diligently beftirrech himfelfe to caufe it to be remoued from place to place, that fo it may take the aire by little and lietle, but efpecially to ayre that which lieth viderneath, by laying it abo'st : vvherefore it is not to be doubted but that the meale vvhich is made of cornethathath beene chus ordered in the Garner, is of much better continuance than that vvhich is of corne comming newly out of the fheafe. Befides, the husbandman muft giue in charge (iffo be hee vvould hauc his meale to keepe long) to the Miller, to grinde his corne fomewhat groffe: for ifit be ground firie, itis nor poffible for himro kseperitfolong in good flace and condition. Notvvichfanding, for the
well keeping of all forts of meale, whether it bee of corne new or old threfhed, you mult make choice of the higheft roome of all your dwelling place, whether it bee rowre, towne, or towne-houfe, and being placed there as in a fore-houfe, it thall bee let reft full fifteene daies, to relieue and eafe it felfe of the tranell which it hath had in the grinding : after whichtinne of reft, for the better and longer keeping of it; it will be needfull to change it oft from onc place to another, and by this meanes it will be kepra whole halfe yeare, and being often remoued and changed from one place to another, it will bee increafed a fift or fixt part at the leaft, of which, notwithftanding, there cannor be made fo good bread, as of the meale that is newly ground. And thus much for the farmers duetie about baking, which confifteth in chufing the corne, caufing it to bee ground, and laying vp of the meale in fome garner, either to bee kept, or to be prefently vied about the making of bread. The ordering of the meale, and making of the bread belongeth vnto the houfe-wife, according to the ctiftome of the auncient Romans, amongt whom, the women of fpeciall note and account did worke and knead the meale, and made bread with their owne hands, as Plutarch reporteth in his problemes. The houle-wife then being poffeffed of fo much meale in the garner, fhall goe about to doe her indeauour to make bread: but before the beginne to make it, the fhall feperate the finer part thercof from the groffer, with fome temze, fearce, or bolter, to the end that of thefe feuerall forts of meale, fhe may make feucrall forts of bread : the fineft part of the meale is called the flower of meale, and of the Latins Pollen, whereof the pafterers or cookes for paftrie doe make wafers, and fuch hike daintie knackes: the groffeft part is the brane, called of the Latins Furfur, which commeth of the coat or huske cleauing next vnto the narrow and kernell of the corne. Betwixt the flower of the meale and the bran, there are yet other parts of the meale, more or leffefine, or more or leffe grofle, according to the wideneffe or narrowneffe of the temze or bolter through which they paffe, and according to the difference and diuerfitie of thefe parts, there are made differene and diuers forts of bread, that is to fay, more or lefle white, according to the taking forth of two, three, or foure parts of the bran, by the helpe and meanes of the bolter : befides thefe parts and feuerall forts, there is yet another fort of meale, which is called mill-duft, and this rifeth vp from the corne, as it is vpon the mill, grinding vader the mill-ftone, buthereot there is no vie for bread, the millers vfe to fell it onely for the vfe of booke-binders and gold-fmiths, to make their palle withall : there is yet another kind of meale, which the Italians call Semole, which is fine meale, or courfe flower, called of the Latins Simila, or Similago, whereof wee haue fpoken before: Wec haue itnot in this countrie, it is brought vnto vs fromItaly and Naples, neither doemen vfeto make bread with this, but either thicken their meat-broths, or elfe make pap-meat. It is as fine as the flower of meale, but not fo white, notwithftan* ding, hauing a colour halfe like the ftraw colour : It is of a very good iuice and nous rifhment. There is yet further another fort of very white meale, that is very fine, which is commonly called in French Amydon, and of the Greeks and Latins Amylon, as though it were made without mill-ftones. It hath heretofore beenemade diuers waies, but in this countrie they vfe to make it in this fort: They chufe the faireft and pureft wheate that may bee got, and caufe it to bee ground verie finely: which done, they caft che ground meale into a velfell wheh the other fill vp with water, Icumming off the bran that fwimmerh aloft, and after paffing all the water through a cloth or ftrainer, and then they put new water into the veffell, which they likewife Itraine in fuch manner as they did the former, leauing the white meale in thebottome whither it is fetled : and this they drie in the heate of the Sunne about the dog daies 3 and when it is dried, it becommeth hard, and is afterward brokeninto gobbets, and fo made into fine meale.

You may make meale likewife of other corne, than of wheate, as of barley, rie, meflin $_{\text {, fecourgeon, and many other forts of graine, whereof wee hane faid before }}$ that bread is woont to bee made in the time of dearth and famine, or elfe in poore countries that hauc want ofother, or at leaft of better corne. Barley meale is very full
of branne: and hence it commeth that the bread made chereof, doth lofen the belly. Barl as necale Notwithftanding, there vvas in old time made of Barley a fortof meale vvhich vvas called Poolenta, that is to ayy, of Barley newly dried, then fried, and afterward ground: and this vvas vfed to make pappe-meate of, or elfe to put in meate brothes to thickeri them. Some doe the like vvih mundified Barley.
The Meale of Ric is likewife full of branne, bur that of Oates is yet more full: nntvwihhftanding that, Oatmeale vvhich is made of Oates husked, is a vvelcome difh to the tables of great Lords. The Meale of Rice is vvhirer rhan any of the reff. As for the Mealc of Pulfe, it is oftner made by being braied in the mortar, than by grinding: howfoeuer, it may more commodioufly and a great deale better bee made vvith the Mill:

LEauen, called in Latine Fermentum, becaufe it puffeth vp, and fwellech in continuance of time, is a lump of pafte left of the laft maffe of dough, couered and hidden in the meale vvhich is kneaded, to take away the clamminefle and cleaving propertie wvhich is in the meale that is purpofed to bee made into bread. This Leauen becommeth fowre by continuance of time, and thereby maketh the bread more delightfome, and of a more pleafant tafte. A gaine, vve feethat bread, by how much the more Leauen it hath, by fo much the more vvholfome and vell relifhing it is, ouer and aboue that veluch hath leffe fore of Leauen in it. It is indifferently hote, and a litte cold : hot by reafon of the purrifaction vvhich it is caft into, and cold by the nature of the meale. This Leauen is made diuers forts of vvayes, according to the mannets and fafhions of councries: wee make it of Whear pafte to make Wheat bread, and of Rie pafte to make Rie bread : fome pur vnto it Salt, fome Vineger, and many Verjuice made of Crabbes. The workers in Paftrie do vée the rifing of Becre to make their Wigges vvithal, as vve fhal haue further occafion to f peak of it in laying open the vvay to make Beere. People ofold and auncient times did make it diuers vvayes,as $P$ linie reporteth. The Flemings do mightily boile their Wheate, and take nff the fcumme that rifeth thereof in boiling, which they let grow thick, and vfe the fame in fead of Leauen: and that is the caule vvhy their bread is a great deale lighter than ours. Howfocuer it is, the Leauen vvhich men-bakers and vvomen.ba Lers doe vfe to make their bread vvithall, may bee kept fifteene daies and not any more, becaufe after fuch time it corruptech and de cayech. But to be fure, it is not good to keepe it fo long: for to keepe it you mult vvorke it vp into a round pafte, couer and hide itouer in meales and befides, in wvinter it muft be coucred ouer with good fore of clothes in the kneading trough. When the good vvife of the houfe is purpofed to bake her pafte, fhe mult two or three dayes before, or, vvhich is better, ouer night, kneade in herf faid Leauens vvith hote vvater, or elfe with cold, according to the etme and diuerfitie of he corne,vvhereof fhe meanerh to make her bread, as we will fpeake further of by and by. The vvorkers in pafte-meates doe vfe but verie little Leaurn in their crufts,or none at all, either becaufe it vvould make fo fmall a quantitic of pafte as they vfe to make their crufts of, too fowre; or elfe becaufe the Leauen vvould draw *nto it all the Butter, or fuch other fat as they fhould mingle amongft their pafte, for as much as Leauen hath the power to draw moiflure vnto it, as vvee may eafilyproue by Apoftumes, vuhich vvhen we vvould haue to ripen and fwell vp higher, vvee vfe to applie a paifter of Leauen to them. Furthermore, if it thould happen that the Baker, or good vvife of the houle fhould finde her Leaien too fowre, and that fhe cannot come by any other, the remedie muft be to knead her Leauen with hotter water than the would ifit vere in its proper nature and kinde, that fo by the heate of the vvater the Leauen may recouer fome flrength, and fomewhat renew its naturall force, hauing loft is na turall heat, vvhereas on the contraric, vvhen the Leauen is in its kind and as it hould be, there is not any thing but cold water to be vifed about it.

## The making of bread according to the dinerritic of corne whereof it is made.

Bread of corne groming in BC: aute。

THe houfe-wife mult bee ruled and aduifed in the making of her bread; by the natute and condition of the meale whereof the maketh it: wherefore if thee dweil in Beauce, or dwelling out of Beauce, do make her bread of the corne growing in Beauce(the meale of which corne for certaintie, holdeth the chiefe and principall place of account amonglt all the (orts of meale of France) The fhall be carefull in any cafe, to make her leuens at certaine and well appointed houres: In Sommer the thall refrelh her leuen wvith cold wvater at noone day, and renew it againe at fiue a clocke, and laftly at nine, without failing of keeping thefe houres in very precife manner : This water thus vfed in Sommer muft be drawne frefh out of the Well, or from the fountaine and riuer, becaufe that Well vvater as it is more heauy than the other, fo it maketh the bread more heauy: and on the contrarie, fpring vvater, of vvater from the riuer, as it is lighter, fo it maketh lighter bread. In Winter the muft renew her leuen with frefh vvater vvarmed ormade hot: and with this water both Winter and Sommer, fhe fhall veet her armes, and knead her pafte throughly, turning it ouer and ouer, hither and thither, on cuerie fide, for a long fpace and many times, that fo all the patts thereot may thew that fhe hath been thicres and that all the clammineffe and cleauing qualitie of the fame may bethroughly broken and dried vp, that fo the bread may beshe more fhort and finer in chawing, and not eating like pafte in the reeth,mouth,and ftomach. After fuch handling of it, fhe fhall take the pains to turne her pafte oftentimes, that fo it become not leuen, for otherwife it would not eate fo well. It is true that when the leuen is fanltie, the meale of the corne of Be auce hath fuch a band and lift as that the might eafily couer and hide fuch fault, prouided that the baker whether man or woman, at the kneading therof would buthelp. it a little wirh forme frefl $v$ vater.
Breadmade of
cime in Frase mad France, the fhall not vie fo much leuen thereunto as the did vnto the meale made of the corn growne in Beauce, both becaufe the corne commeth thort in yeeld. ing like quantitic of pafte, for like quantitie of corne; as alfo becaufe the meale hath not lo good a band, neither yer is italtogether fo clammie : and therefore you mult vfe a meane and reafonable meafure in your leuen, and withall let your water be leffo hot, than in the kneading of Beauce meale; for if you knead it vvith vvater that is more hot than needech, the pafte will fwell vp the more a great deale, and afterward vill drie out of all reafon.

To make bread of the corne that was growne in Brie, you muft vfe a quite other manner of order, becaufe that countrie corne is much more churlifh than that of France or Beauce : the firlt flower that commeth out of huske or skin of the faid corns is better bound than theothers, becaufe the corne is Thorter, and to hangeth in tho bolter as doth the oatmeale, conerarie to the nature of other corne, in as much as the faid oatemeale is fweeter than the other forts of corne, which caufeth that the bolter letteth fome fmall quantitic of meale fomewhat roundly ground to croffe it ouerthwartly, and that may bee the fecond flower : and this was not, neither fhopuld it bee fhorter than the corne of Picardie.

Picardie corne muft be much corrected, as being hard to be vvell ordred, either in pafte or in any other fuch manner of vfages, as alfo for that it craueth a very hot ouen, and when it is in it, it maketh fuch a couering to the bread, as though there were no manner of leuen in it at all. It is hard to bake, and hard to take colour, which may feeme fomwhat ftrange; for feeing that it is fo fowre and drie, it flould argue that the bread fhould the fooner bee baked in the ouen : but the hardneffe and heauineffe of the meale is the caufe that it is fo hard to bake : as alfo there may be ioined thereto for another reafon, the cruft that groweth vpon the fame prefently, for it is a meanes to hinder the heate of the ouen, thatit cannot enter inco the inward parts of the bread
fo eafily as it flould : and this is the caure that makech the bread to bee alwaies as is were far.

The meale of the corne of Champaigne craucth a newer made leuen when it is to be made into bread, becaufe it hath a Imatch of the earth, which would make it to be become worfe in paft, if it fhould not haue added vnto it fuch leuen as were exrellent good, as alfo for that the corne comming out of the fheafe, doth fmell of the ground whereon it grew, and this cannot be amended without great diligence vfed, and care had in the making of the bread.
Befides thefe breads made of thefe feuerall cornes, you fhall vnderfand that generally the breads which are mof in vfe are firft the manchet, which is she finef of all other, and is made of the pureft and beft part of the meale finely bolted or fearft, and made light with barmeonely, and not with leuen, neither muft it be made too light or fpungie, but of a good folide cemper, firme and fof wrought: che next to it is fine cheate bread, which is made of the nextmeale to the fineft, and brought onely to differ through the courfneffe of the boulter, which being a litele wider than the firf giues more libertic to the meale to paffe away and goe neerer to the branne: this muft be made ligln boch with leuen and barme, yet very well wrought and made altogether as firm as the mancher: the next to this is courfe cheate bread, the which is made of the courfeft meale as being boulted as cleane from the branne as it can pomibly be got, and the boulter which is for chis purpofe mult bee a courfe fearfe or a fine temze : this bread muft be made light with leuen onely, neither is is much materiall how (pungie or open it appeares; for this kind of bread is euer to be puftep and made to appeare in as great quanticic as poffible it may bee : the laft fort of bread is that which is made for peffants or hinde feruants, and it is made of meale vnboulted, the branne and the nicale being all knodden together, and in this cafe your meale would bee ground as fine as is poffible. There be fome that after they haue ground their meale groffe, and boulted out the manchets, they will then fend that which is rentaining to the mill againe, and haue it newly ground ouer againe as fine as it poffible may bee, and of it they make this courle hindes bread: and of a certaintie it is a well allowed husbandrie; for thereby you Thall reape a double commoditie. This bread fome mixe with leuen,fome doe not: but cerrainly the leven is beft, for it giues vnto the bread a pleafant and delightfome taft, whereas the other wanting the fame hath a very rough, waterifh and vnwholefome taft, and $i t$ is onely profitable in this, thata man not taking any delight ro eat it, it will lafta grear deale e he longer : this bread would be bakt ingreat loaues, and that fomewhat hard alfo.
Mellin thriuech not fo well, as not yeelding fo much when it is made in bread: it Bi iead mazade of is by nature fat, as allo the meale chercof being boulted: it is no eafic thing to pull meliit, but ones hands when they are in knieading of it: che good hufwife that hath not bin acquaineed to worke in this kind of corne, doth find herfelfe much incumbred ther-with, and that in part, becaufe the better part of the meale vfech to ftay behind with the bran; and therefore for the profit of the houfe it were better to bolt the mealc of rie and meflin, than to fift it, becaure the bolter with the working of the arms, doth caufe the bran to let go the meale that is within it, which is more than either the pocket or fearce will do, becaufe they make no mouing or flirring of the meale, but from one place to anocher.
Thepafte therefore being well kneaded, fhiffed; and prepared,as need requireth, it muft be parted into round peeces, of a reafonable greatnes \& thicknes, to be fet in the ouen made reafonably hot, euen in fuch fort as that the bread may (according to the grearneffe, thickneffe,\& qualicie of the pafte) be fufficiently baked: for a weightic and thicke loafe of pafte made of the corne of Picardic, would haue a longer and greater baking than a fmall loafe, and that made of the corrie of Beauce or France. If the ouen be too hor, the cruft will bee fcorched, and within it will remaine raw and wnbaked, the heat not being able to enter and pierce to the inner parts, the cruft that isfo hard dried vponit being alet thercunto.

In the meane time it muft not be forgotten that when any man is determined to make fale bread, or to mixe annife feed therwith, or any other fuch mixcure, that hee muft mingle and put the fame thereto, whether it befalt or annifefeed, or any fuch thing, at fuch time as the palt is in kneading.

There are likewife diuers forts of bread made of one and the fame meale, according as the bolter, pocket, temze or fearce fhall be, through which it paffeth. Of the meale wholly together, and hauing nothing fifted out, is snade houhold bread. And when the greatelt of the branne is caken away, then there is vfually made thereof citizens bread. Againe, when as the bran is cleane taken away, they vfe to make thereof fmall white loaues: and when as the groffef part of the white flower is taken away, and nothing left but the very fine, they vfe to make chapter bread, wafers; tarts, cakes, and other workes of paftrie. Some alfo do make bread as it were of pure bran, and therin likewife fometimes to be found Itraws and chaffe, and that for to feed dogs withall.

The fitefl place for the baking of bread is che ouen, becaufe it admiteth the heat of the fire equally and indifferently on all fides : vpon the harth or gridyron, the one pars of the loafe baketh, and the other remaineth raw : and vader the athes it is not fo well baked.

The fire that is for to heat the ouen, mult bee fagot wood, or billet, or fhiuers of thicke wood that hath no ftinking or vnfauoury fmell : or for want of woud, ftraw or ftubble, as is vfed in Beauce, or of thicke reeds, according as the countrie will moft conueniently afford.

The bread muft be baken in the otien, in a good fort and meane, and with a reafonable heate: for ouer-great a heat would fcorch the cruft that is aboue, and fo debar it felfe of inward entrance, to the cauling of the faid inward part to remaine raw and pafte-like : a leffer heat than is meet and conuenient would let it remaine all raw : after it is baken enough it fhall bee drawne forth out of the ouen, and laid to reft and abide in a place that is neitherftinking nor vnfauourie, nor yet infected with any euil aire; for the hote bread doth eafily draw and fucke in any venemous or corrupt qualitie of the aire. In moift places bread doth foone become hoarie and fuftic $:$ and in too drie a place it becommeth mouldy and ranke. The good husband that is right carefull of his profit to the end that his bread may laft the longer, and that they may eate the leffe of it, dothfectit in fome celler or place which is vnder the ground, or in fome other place which is moift : and his rie bread in fome place neere vntothe fireharth.

## The bread made of oiber forts of corne as alfo of certaine pulfe.

Barleg beread.

BArley bread mult bee made of the beft bariey that may be found or gotten, and not of the meale whole and entire, as it commeth from the mill, but of that part of it which hath beene temzed and cleanfed from his groffe bran. It is true that the bread will be very drie, very apt to crumble, and of a fowcr taft; fo that it would be better to mingle amongt this meale, fome meale of pure wheate, or meflin. The maner of feafoning it withleuen, as alfo of kneading and baking of it, is no other, than is vfed in wheate. After the fame manner is bread made of Secourgion: but neither the one nor the other is fit for the eating either of the Lord of the farme or of his farmer, butrather for the feruants, and that efpecially in the time of dearth, for their better contentation, although there bee no great ftore of nourifhment to bee looked for from the fame. A fter this fort alfo they make bread of oates, which is feldome or not at all eaten, except it be in the time of extreame famine ; for indeed it eatech very vnpleafantly.
read of millet - Bread may bee made of millet as allo of panicke, but fuch as is verie drie and brittle, and yet the Gafcoines vfe it very communly, and efpecially the Biarnoyes, who for this caufe are called millet mangers of their neighbours dwelling therabout. The Biarnoyes do make haftie pudding after this manner: They take three or foure
pounds of the meale of the millet for the morning, and as much for the euening, they fec it vpon the fire in a Ketle whereinro there is powred fiue or fixe pints of water: thus they let them boile cogether, vntill fuch time as that it fwell vp to the top of the ketcle, and chen taking it from off the fire, they ftir it well about with a round fticke, fo long as vntill the pafte be very throughly broken and made all one, then afterward taking it out of the kette, they diuide it with a thred into many peeces and eate it in that fort with cheefe, or with thin falted milke.

Bread is likewife made of rie, but fuch as eateth very clammie, whereof wee haue fpoken in the difcourle of rie: for the taking away of the clammineffe thereof it will be good to mingle barley flower with it, or rather wheate flower, or elfe to take the flower of the rie meale : it will be of a wax colour, if yet while it is hot you lay vpon it fome heauie meale.

It is vfed likewife, to make bread of rice, beanes, fpelt corne, and many other forts of corne and pulfe, and that after the fame fort chat wheat corne bread is made.

In like manner the induftrie and indeauour of the baker may be the caufe of the making of many forts of bread; as that which is called the fineft bread, or Court bread which is the lighteff of all the reft, and which is very exactly kneaded, full of leuen and of a well raifed pafte. Bisker bread which is of three forts, one that is Bisket. made of rie, another that is made of maflin, or barley or oates, or of all the forefaid mixt together, fit for Saylers to liue withall; which vndertake long voyages by fea, or for fuch as are befieged within fome fort or holde, becaufe it will keepe a long time : this kind of bread hath not much leuen init : the fecond kind of bisket is made of pure wheat without any mixture, fit for the poore that are infected with the pox, to make their diec bread vpon : the third fort is made of the flower of meale, and it is vfuall to put to the pafte thereof fugar, cynamome, pepper or ginger, and fometimes annife feeds, and it ferueth to eate in the time of abftinence, as Lent, and fuch other. At Reyns they vfe to make fpiced bread with honie and a little quantitie of pepper or cynamome. The Bakers which belong vnto the Court make their bread with milke.

Chat. XXI.

## Of the Pantrie.

(72yTis moft certaine chat bread is she chiefeft ching whereby man is fed and nourifhed : and chac it is fo, we fee that other viAtuals, how pleafant foeuer they be vnto the taft, how vvel focuer prepared and fer ourwith good fauces, do(for the molt part of them) caufe very oft a diftaft and loathing of themfelues; but onely bread holdeth out withour diflike growing therupon whe therit be in ficknes or in health, it is the thing which appetice doth laft of all refufe, and firft like of and receiue againe in time of fickenes: in health it is the beginning and ending of our meat, very pleafant and delightfome with all kind of meats. In like manner of a certainty bread is by a maruellous benefit of nature endued with all forts of taftes and relifhes, which particularly are the prouocations and allurements caufing vs to affect and eate this or that or any kind of meate whatfocuer. Some whereof do pleafe vs by reafon of their fweetnes, other fome by reafon of their fowernes, fome by reafon of their faleneffe, and other fome by reafon of their fharpneffe, and fome by reafon of their pleafant fmell : and all thefe well pleafing relifhes, making fauourie vnto vs allother forts of meate, doth bread containe and comprehend in it felfe. Againe other viCtualls, haue they neuer fo good a tafte, can neither bee pleafant nor profitable for the health in eating, if bread bee not eaten with them, in as much as the bread by its owne good nature doth correct the faults that are in other meates, and maketh them ftronger and of more power in theit properties and
qualities:
qualicies: and hereupon grew the common prouerbe, which is. that all meat is good and profitable, when it is acconpanied with bread. Againe wefuld by daily obferuation, that fuch as eate their meate, whether it bee flefh or any fuch fort of victualls without bread, haue alwaies a ftinking breath; fo that I cannot but greatly maruell who was the Author of the common preuerbe: viz. That all repletion of whatoeuer meate was cuill, but efpecially that of bread : if it be not, becaufe that bread (by reafon of much folide and firme nourifhment which it bringeth vnto the bodie, it it happen to be eaten in exceffiue quantitie) doth fill the veines with aboundant fore of bloud, but fuch as is not apt to How and ftirre, and fuch as is not ape and eafie to bee cuaporated and difcuffed, being giuento endure and continue like folide things in a conftant and ftayed courfe : of the which bloud all the bodie being nnurifhed, is made more corpulent, full and maffe; and fo by reafon of this fulnelte the leffe per. Epirable, becaule the pores and paffages of the skinne, by the which the whole bodie fhould haue meanes for the breathing out of his fuperfluous vapours, are flopt; and thereby the bodie made fubiect vnto many difeafes,and fodaine death: fuch was the iffue ordinarily befalling profeffed Wrafters, and that as we may gather by reading, procured and wrought efpecially in thofe men, by vfing of much bread and fwines flefh. And I will further confeffe (as Galenteachethvs) that of all the errors, and inconueniencies hapning to the health, through the bad digeftion and ill concoction of the flomach, thofe are the moft grieuous, which grow of the ill digefting of bread, rather than where flefh or fuch meat are badly digefted, becaufe that bread doth more trouble nature and is a longer time in digefting. But all this notwithftanding there is no caufe, why bread Thould not fill bee preferred before all other forts of vietualls, feeing thefe difcommodities arife not of the meane \& reafonable vie, but of the exceffiue vfe rather of the fame, which is the high way to mar and make hutfull not bread only, but whatfoeuer other geod and exsellenc things; fo greatly euerie where and in all good things, is the merrie meane commended. Againe whatfoever hath beene hitherto faid of bread, hath beene not to charge it with begerting the faid vices and difeafes, by any enill iuice that is in it, but indeed by the fuperfuoufneffe of humours, which may rather bee accounted for a verrue and commendation vnto it, than any difpraife : but the further difcourfe of this matter I leaue for another place: Seeing then the life of men confinteth more in the vfe of bread than of all other things, who fo is carefull of his health and life, mult make choice of his bread, according as his fubftance, calling, and naturall difpoficion thall dirett and guide him.

The bread that is made of wheat meale whole and intire, as from which there is

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 C\% nothing taken by temze, is fit and meet for hindes and other workefolkes, as deluers, porters, and fuch other perfons as are in continuall trauell, becaufe they haue neede of fuch like food, as confifteth of a groffe, thicke, and clammic iuice, and in like manner fuch bread firteth them beft, which hath no leuen in it, is not much baked, but remaineth fomewhat doughie and clamme, and which befides is made of the meale of Secourgeon, of rie mingled with whear, of chefnuts, rice, beanes, and fuch other groffe fort of pulfe.zeead of the The bread that is made of the flower of the meale, being the pureft and fineft part flamer of meale thereof, is good for idle and vnlaboured perfons, fuch as are fludents, monks, chanons and other fine and daintie perfons, which ftand in neede to be fed with food of light and eafie digeftion. Such is the white bread which is fold of the bakers, and chaperer bread: as alfo that which is wel leuened, knodden, fomewhat falt, founewhat hollow, and well rifen, like vnto court bread.

The bread that is madeonely of rie flower, is verie blacke, heauie, clammie, 1 ll mie and melancholicke, and for that caufe hard to digeft : as alfo fir to be eaten of the countrie people and poore inhabitants of the land, but not for men of note and birth liuing at their eafe : It is true that Phifitians doe chiefely commend it in Sommer in the beginning of meate for to loofen the bellie, as weefeeit practifed in the courts of great ftates: butfuch bread mult not be made of the intire meale of rie, but fuch
as is well fifed: and it mult beare the colour of waxe, and bee new baked; for that which is old growech fowre, and loofech his pleafantimel. The women of Lyonnois, to the end they may be faire and haue a frefh colour, and folide and fubftantiall bodies, do vfe no other bread but fuch as is mide of rie. Such as are much altered and changed, in fteed of ptifanes, cidre, beere, or any other fuch drinke, may drinke of breaded water, that is to fay, water whercin rie bread hath beene well beaten and laboured.
Brcad made of barlcy necale only is verie dry, eafieto crumble away, and of very finall nourifhunent, and therefore fiter ro loofen the bellie than to feed or nourih, by vertue and force of a detergenctacultie, wherewith barley is greatly furnifhed: And this is che caule why at Rome this kind of bread is made no account of, as for to be vfed of men, leauing it as a food for cattell, or elfe in reproch, for faint-hearted and daflardly fouldiers; for it was vuterly forbidden for enerbeing fer before fuch as were valiant and couragious in fight, becaufe of the fmall quantiue of nutritiue parts or nourifhment that is in it. It is true that many do imagine that the vfe of barley bread doth make shem leffe fubied vnto the gout: contrarie to that which Aristorle faith in his Problemes, That bakers and fuch as vfe baking are weakned thereby; but yet more than the reff, fuch as vee o handle and worke much in barley fuffe. The thing I leauc to be tried by the fequell.
Oaten bread is not commended, both becaule the imploying of oats that way were to rob cattell of their due food and prouander (a great argument of famine) as alfo becaufe fuch bread is of an vnpleafant tafle. It is betterto vie oatmeale made of oats fieed from their huske, as we haue faid before in the treatife of pottage vied either in flefh time, or in the time of Lent.
Bread made of millet and panicke is very common in Bearne and Gafcoigne, not only amongt the vulgar fort, but alfo in the houfes of great Lords; but thele do vefe itrather for daintinefle fake, or for want of a good fomach, than otherwife: it is verie drie, light, and eafily crumbling, and fo fit for to drie vp a fomach and bodie that is very moift. It is pleafant in taft when ir is new and well baked, efpecially when it is eaten comming hor out of the ouen, for then it taftech and eatech with a maruellous pleafant (weetneffe : Likewife in councries where fuch bread is made account of, the bakers carry it prefently after it is drawrie into the towne, and cry hot millet bread hot; but after it is become hard, it loofeth all his grace.

Bread made of pure and cleane mellin, is very good to be eaten according to the mediocritie of the fubflance thereof, infuch fortas that many compare it with the bread made of Similago, which was in old times the beft and moff excellent wheat that was.

There is no regard to bemade of the bread made of the bran which commeth of Bread of brand. the meale, that hath ist flower taken from it, and is commonly called meale bran : it is better to leaue it for the hounds or fheepherds dogs, or fuch as ferue for the keeping and watch of the houre.

In England and other places they make a great and profitabe vfe of this meale, as namely, a certaine bread which they call horfe-bread, and is fo generall among them, that you fhallnor fiad an Inne, Ale-houfe or common Hatbour, which doth want the fame : how excellent good and wholefonte it is for horfes, I will nor boaft, becaufe the bran is naturally hot and burning of it felfe, and breeds many inflammations and hor difeafes amongf horfes : yet cerraine it is, $1 t$ will feed much, and for trauelling horfes it is a good feod, and well allowable during their labour or time of trauelling: but in their time of reft not fo good nor wholefome, efpecially, that which is of the common or worfe fort; for youl muft vnderfand that there be wo kinds of this common horfe-bread: the firf kind of is, is that which is made of Branne or Chyffell onely, and knoden with cold water, withour any mixture of other meale with it more than that which they mould it in, which feemech onely to bind the chiffell together, which ocherwife would fall in funder : the other kind of bread is, when they take two buhhells of Branne or Chiffell, and adde vnto it one bufhell of
beanc or peafc meale, and fo kneade it vp in water fcalding hot, and after the loaues are moulded, to roule chem in feelted beanes crufht and brufed in a mill, and fo bake it well: This bread is not altogether fo vnwholefome as the former, and may very wel ferue tofecd horfes with all the yere'; for it is both hartie and ftrong,only a little too heanic, which makech it hard of difgeftion, and fo more hurffull to horfes of tender fomaches, or fuch as want exercife, which is the onely meanes of fpeedy euacuation.

Soft bread. Bisket.

Soft bread(otherwife called of the French Painmollet, or Painde bouche) is to be made for none but great Lords. Bisket bread made of the flower of white meale, is for fuch as take the dyet. Bisket made of rie and fuch othet graine of the inferiour fort, is for mariners and fuch as are befieged in townes. The fpiced bread is for fuch as are fweet tooched and licourinhly giuen.
The moft excellent and beft bread of all other (if you haue need at any timeto

The markes and
firgyes of good
bread. make choice) is that which is made of good and pure wheat, that is new, not old, nor corrupted, or any way fpoyled, moift, or long kept, hauing beene well ground, well fifted, well wrought into pafte with good floreof leven, and fufficient quantitic of riuer or fpring water, zather than that which is taken out of Wells, bue neuer out of fennes, pooles, or finh. ponds, nor yet out of troubled, dyrtie, muddic, vncleane or fale water : being well raifed and throughly kneaded and turned on etery fide, and let reff certaine houres, being well couered and fomewhat falted, of a reafonable maffe of pafte, not too exceeding great, that fo it may take the heat of the fire equally on enerie fide as well aboue as below : which is baked in the ouen with a reafonable fire, and fuch a one as did burne cleare, feeding vpon wood rather than vpon ftraw, flubble, reed, rotten or medicinable wood: which is indifferently baked; fo as that by ouer much and long baking the cruft is not fcorched, nor thefweet iuyce of pafte, which is as it were the life and fubftance of the meale, is not fpent and confumed: or fo as by too flightand flender baking, the inner part of the bread remaine raw, and fo become a heauie and burchenfome bread vnto the ftomach very hardly to bee digefted, and ingendring great fore of windineffe and fpettle, drawneout of the ouren in time and place, and fet vp where there is a good aire, and not in any filthie or ftinking aire, that there it may euaporate the fuperfluous moiflure that is in it. Such bread hauing beene thus prepared and ordered, muft not bee eaten too haltily, as when it is new baksd, nor yet he fame day, but the day following in Sommer,or the third day afer in Winter: for new bread cfpecially that which is hot, doth relaine a great part of the moifure, clammineffe and flimineffe which it had in the kneading, and fo being eaten new, would procure the inflamation and puffing vp of the ftomach, prouoke chirft, be hardly digefted, fubuert and ouerthrow the flomach, and caufe obftructions in the liuer and inward parts. It is true that phyfitians do greatly commend infaintings and fwounings the fmelling of the crummic partof the loafe conaming new out of the ouen, and fprinkled with wine. Old baked bread, efpecially that which is three or foure daies old, loofech all its beft grace and fauour, and in fleed thereof falleth into drieneffe and hardneffe, and fo becommeth hard of digeftion, paffech flowly downe into the bowells, caufech coftiueGrefif of broad, neffe, and begertech a melanchollie iuyce and nourifhment. The cruft of bread notwithftanding it be of better tafte and relifh than the crums, and that the common people do thinke that it maketh a ftronger bodie, yet it ingendreth a cholericke, aduft and melancholie iuice, and that is the caufe why in houfes of great perfonages they vfe to chip their bread.

> What quartitic of bread merff be eaten.

Thequantiiie
of bread that is tobe eatem

THe quantitie of bread that euerie man ought to eat euery day ; cannor precifely and frictly bee fet downe, wihh regard had to the time, (for in Winter men eate more than in Sommer) age, difpofition of the bodie, euerie particular mans maner ofliuing, and the cuftome of the countric or place, without the omitting of many
other circumftances. It is true chat Courties, Chanons, Monkes, and Schollers of Colledges do keepe and obferue fome rule that way, but not fo conflantly, but that it may bee broken, as occafions may be offered, which may perfwade either to vfe more orleffe.

## The dinters vees of bread:

BRead is diverlly vfed: but the two moft common waies are to eat it either alone, or with other meates, whereunto if feruech not onely, as wee haue faid before, in fteed of a fauce that is full pleafant and delightrfull : but alfo to correct their vices and fauls if they haue any, and to helpe and frengthen their properties and verrues, in fo much that all meate is wholefome and healthfull, if it bee accompanied with bread. Somerimes it is tofted being cut into diuers thin fhiues, for to eate after all other meate, for the drying of the ftomach that is too moilt, and to hinder efpecially in fat folkes, that the meat which they haue taken, be not fo fodainely difperfed into all the feuerall parts of the bodie. Some fay likewife, that tofted bread being often eaten, doth make far folkes leane, and confunneth fuch flegme as may be gathered in the fomach : and being eaten all drie, in a morning fafting, it likewife drieth vp and ftayech all manner of rhumes and humours falling or gathered into any part or member whatfouer. This is the caufe why Phyfirians appoint bisker bread for fuch as are troubled with rheumes and diffillations. Some vee tofted bread fleepe in Wine vvith fugar and cynamome, to procure an appectite vnto a dull fomache, cither in fickenes or in health.Some do make fippets or fmall fices (as they call them) of bread dried vpon the coales, which rhey feepe an houre or more in Water and Wine, and affer force them through a ftrainer or temze, adding thereto the powder of fome fmall fpice, and fo make very pleafant fauces therewithall.

Wafhed bread is a meate very profitable for the health, in as much as it giueth a wafed breedd light kind of nourifhment viro the bodie, without making of any obftructions: and this becaufe the wafhing of it doth wholly take away the heauines and clammines belonging vnto the earchie parts thereof, and fo makech it light and altogether airie: That his istrue, you fhall find by experience, becaufe that if you calt it into the water it fwimmeth a loft like a peece of corke; and againe, if you weigh it after chat it is wathed, you will wonder at the lighnnes of it; for indeed you fhall find is not to be fo heanie by the halfe. Oldmen of auncient time did cut it in flices, and wathing it in water, made great account of it in fharpe agues and fuch orher difeafes, becaure it is of fmal and lighe nourifhment, according as is required infuch fickneffes : and in thefe daycs we make noleffe account of it,fauc that we vfe not to wafh it in water, but in the broath of meate, as of veale or capon ponfibly, becaule of the daintines of this age, or elfe for the parties feeblenes fake, which(it may bee) fallech out to be greater than it was in the bodies of thofe which liued long a goe. In fleed of this wafhed bread, we vfe a fort of bread which we call Panade, or a cooling bread, which is thus prepared: They take and crumble fmall the crummie part of a white loafe, not new, bur old baked, or they grate it very fmall, after which they fleepe it certaine houres in warme water, or in cold water, changing the fame three or foure times, and in the end boyling it ata frmall-coale fire in an carthen pot, with butered water, or fome other fat put thereto. They that will make it after a finer fathion, fteepe it, and boile it in fome capon broth, or the broth of a puller, or fome orher fuch like meate, ftirring it a long time and off with a fpoone: this Panade is good for fuch as are troubled with long difeafes, as alfo for fuch as are in health, bur are exoubled with crudities vpon their ftomach, of what caure foener they come, as alfo for them that haue bur bad digeftion; but chicfly good for fuch as by exquifite diet do go about to cure the pox. This Panade doth not heat as bread dorh of iffelfe, not being wafhed, or prepared thus in Panade. The meale of Amydon made in bread or pap-meat, doth nourifh in like manner that Panade doth. Wee haue fet downe before how Amydon is to be made. Young children that fucke in like manner may
be fedde with Panade, and it is a great deale better meat for them than the pap-meate accuftomed to be made them with Cowes milk and Whear flower, becaute that fuch pap-meate caufeth infinite obftructions, feauers, headach and wormes.
Some vfe the meale of certaine forts of corne, and of many forts of Pulfe, after the manner of pap.meate, as we haue alreadie faid vwhen vve fpake of mundified Barley, which is a thing fo highly commended of auncient Phyfitions. But befides fuch man. ner of preparing of it, as vvee haue alreadie deliuered in the Chapter of mundified Barley, thefe two following may feeme vnto me to be moft excellent: boile your Barley ina great deale of vvater, as it were almoft to the confumption of the !water; gather the creame that is vppermolf, and take it with a foone, and make thereofmundified Barley. Otherwite thus : take che meale of Barley well fifted, put it in a bag, and boile it in a great quantity of water, the fpace of fuce or fix houres, afterward draw the bagge out ot the por, and let itdrop, and fraine it in a preffe: let it ftand \& drie, and being drie, grate it as you would doe drie pafte, and make mundified Barley of it. Some are of fiudgement that Barley thus prepared is not fo windie. Some do now and then put vnto it bread crummes and bruifed Almonds, to make it more nourifhing. It moiftneth, nourifheth reafonably, but cooleth much : it procureth not any gripes in the body, neicher doth it puffe vp and fwell the body or ftomack; but to be briefe, it performeth all the helpes wherrof Hippocrates \{peakech. Some likewife doe make pap-meare of Wheat meale and Rice, which in truth doe nourifh more than mundified Barley: butchey loade the flomacke heauily, and caufe great windineffe, and that becaute,for the moft part, they are boiled in Cowes milke. The pap-meate made of Millet, Pannicke,Oates,and efpecially of Lentils, befides thiat they are very vnpleafane, are of very hard digeftion, in fo much, as that the day after they be eaten they are to befound in the fomacke. The pap-meates made of Cich Peafe, Fafels, Beanes, Fetches, Lupines, and other fuch like pulfe, doe fwell vp the bellie, and beger grofle and melancholike bloud.

## Chap. XXII. Of Paftric or baked meates.

(5Ee haue fpoken of the making, differences, and profite of bread, which may be made of any manner of graine, corne, or pulfe: now vve will fay fomewhat of the skill to make Cakes, Cheefe-cakes, Flawnes, Tarts, and other baked meats, the which we defire to be in our houfewife, that now and then the may take occafion at fome cimes of the yeare, to prefent her Mafter and Miftreffe with one dilh or other, as alfo be able to ferue and fee before her family fome what extraordinaric at feaft times to cheere them vp withall. Such baked meates are of diuers forts, according to the matter whereof they are made, the manner of their baking, their fhape and fafhion, the time when they are to be in vfe, and the countrie wherein they are made. The matter is as it were the ground-worke of all forts of baked meates, and that is, the flower of Wheate meale forced through a Bolter or fine Searce,whereunto many other things being added, doe caule a varietic of baked meates. That it is fo, fome make $W$ afers of the flower of Wheate meale verie well foked in water, and tempered a long time therwith, vntill it come to a certaine thickneffe, mixing therewith a litelefalt finely powdred, and after caufing the fame to bee baked betwixt two irons made hote, firft with a reafonable gentle fire, and after annointed with the oile of Nuts : thefe kindes of Wafers a man may fee made in many places openly, and abroad vponfeftiuall and folemne feaft dayes. There may bee made a tenderer and more delicate kinde of Wafers, in foaking the flower of the Wheare meale in white wine and water mixt together, and throughly laboured and wrought,putting thereto afterward the yolkes of Egges, a little Sugar and Salt, and

To baking all togerher betweene two irons, hauing wihin them many raced \& checkered draughts after the manner of fmall I quares, after that the faid irons haue beene annointed with freth Butter or Oilc oliue. This fort of Wafers is wont to beefet on Tables at the fecond courfes in folemne banquets. That which the Parifians do call CMeftrer, is made of the fame flower of Wheat ineale, tempered vvith vvater and vvhite wvine;putcing theretoa listle fugar, and boiling it all becwixt two irons, after the manner vihich you ved in making of Wafers, but that it muft not be altogether fothicke. The kinde of Wafers called Oublies, are made vvish Honey in ftead of Sugar. Singing breads are made after the maniner of $O$ ublies, fane only that the meale whereof they are kneaden is not mingled vvith Honey, Sugar, or any manner of Leauen whatfocuer. Efriez and Bridawerimx, and fuch orher daintie baked things, are made of the fame ftuffe, and after the fame manner that fine Wafers are, before defcribed. Marchpanes are made of verie litele flower, bitit with addition of greater quanti- March.panes. tie of Firberds, Pine Nuts, Piftaces, Almonds, and rofed Sugar; and they are the moft vvholfome, delicate, and pleafant tarts, of all the reff. The Poplins are made of the fame flower, kneaden with milke, yolkes of egges, frefl butter. The leaued cakes take not fo much flower, and they are made vvithour milke. Tarts are made after diuers fanhions, and according to the time : fome with fruits, that is to fay, Apples, Peares, Cherries and Plumbs, efpecially in Sommer: others, with Goofeberries, kernels of Crabs and Seraw-berries in the beginning of Sommer. The Italians do make Tarts of hearbes, as Scariole, Lettufe, Blires, Sorrell, Bugloffe, and other hearbs choprfinall, and finely tempered together. The greateft part doe make them with Checte or Creame, and many of all thefe things mixt together. It fo be that the Tarts be of diuers matter and colour, that is to fay, of Plums, Cherries, Goofeberries, Cheefe; or Creame. Some make with Butcer, Checfe, and yolkes of Egges, diuers forts of Cakes, Flammickes, Cheefe-cakes, Talmoufes and litrle Lenten loaues. Wigges are made with pafte offlower of meale and frefh butter. Fritters and other fuch fweet conceits accuftomed to be in requeft vpon great daies and before Lent, are made of the flower of meale, kneaden with the yolkes of Egges anid Milke, and fried in a Skillet with frefh Butter. To conclude, looke how many countries, fo many fafhions of patte workes : in all which notwithftanding this is for the mof part common, namely, that they wfe not any Leauen in any of them all, but onely the rifing of Beere, and that becaule Leauen made of pafte would make them too fowte, or infect chem viith foime other tafte too vnpleafant and vnbefeeming baked meate, and hinder the whole and intire incorporating of things mingled amongft the meale whereofit is made.
Yetall this formerly fpoken of, doth not fo truely belong to the Paffrie as to the Confectionarie or Clofet of fweet meats, tarts only excepted: yct in as much as thicy are principall ornaments to the houfewife, hey are not meet here to be omitted. Tio come then to the true Paftrie, which is the making of thofe paftes vvhich are meet for the lapping in or containing of all manner of baked meates, whecher it be flefh, fifif; rootes, hearbes, fruits, or other compofition whatfoeuer; you fhall viderftand that they are of foure kinds : the firt for the preferuation or long keeping of meats, wh ofe proper and true natures are to be eaten colde, as Venifon of all kindés, Kiddes, Beefe, Veale,Mutton,Lambe, Turkeyes, Gamons of Bakon, or any great or daintie fowle: the fecond for the containing of loofe bodies, as Doufets, Cultards, Tarts, Cheefécakes and fuch like: the chird for the receiving of fine; daintie; and tender bodies, as Chuets, Vmbles, Chickens, Calues feete, or any other good thing which is to be eatert hote : and the laft is that vwhich is called puft pafte, being of all other the troft daintieft and pleafanceft in tafte, and may be imployed to any ve that any of the formet vvill ferue for, according to the fancie and skill of the Cooke, or the tafte of hing that is Mafter of the Farnilie. To fpeake then firft of that paffe vvhich is for the preferuàtion of meats, or to kecpe chem longeft cold in good and vvholfowe tempet, it is eivet beft to be made of Rie flower, finely boulted and kneaden vvith hote vvater, and barrelled butter, yet in fuch fort that the pafte may be fomewhiat fiffe and tough,anid thereby verie aptro rife wvithout cracking or breaking, vvhich is the greacelt dan-
ger belonging to this kind of paft, and the coffins railed hereof muft be very thicke and fubftantiall, for thereby they preferue cheir inmeats a great deale the better, and shey muft alfo aboue all chings be exceedingly well bakt, becaufe any doughineffe or rawnefle in the cruff foone purrifyech that which is baked withinit: thefe paftes mayillo for fhew or fealts( (though worfe in regard of concinuarice) be made of wheas meale finely boulted, and then it would haue much more butcer than the rie pafte, and be knodden as fiffe as is poffible, fo itrife withour cracks or breaking : as for the baking it askech much leffe chan the rie pafte, in as much as it is a drier graine and not fo moift in the working. The fecond pafte which is for loofe bodies, or any thingthat is liquid, would be made of the fincft wheat meale that can be gotten, and of the fineft boulting: it muft be knodden with hot water, a litte butter, and many egges, both to make ie light and ftrong in the rifing, as alfo to make it hold from cracking, leaft thereby the moifture runne forth and fo you loofe both cof and labour: This pafte is commonly halfe bakt before you put the moifture into it ; for thereby it is made to hold much the fronger and better. The chird paft, which is for all naaner of daintie chings which are to be eaten hor, mull be chetendereff, hoorteft, and pleafan. tell of all ordinarie paft, and therefore muft be made of the fineft whear flower you can get, and alfo mulf finely boulted: and this flower if before you knead it, you pur it into a cleane earthen pot,ard bake is in an ouen an houre ortwo, it will bee much becter: it mull be knodden with two parss butter (either frefh or falt) or with fwees feame, and but one part hot water, together with an egge or two to make it hold ryfing, and this pafte inult be made realonable fiffe, becaufe the weake pafte euer falo leth after the hand, and cither rifech not at all, or elfe folitele e hat it is not comely to looke on, which euerie good cooke muft hunne, becaufe that pie which is as much couer as cruft is ever a figne of an vnskilfull workman. Laftly for che puffe paft, you fhall make it of finer flower (if it be poffible) than any of the ocher, and you fhall to two parts of the flower adde a third part of fugar finely beaten and fearft: and this you fhall knead with cold butcer and no water a alll; and euer as you fould, curne, and mould the pafte about, fo fhall you put cold fweete butter betweene the foulds, and fo worke in to a very ftuffe and well rempered pafte, and fo roule it forth cicher for tart, florentine, pafty, or any other thing that may lie flar in the baking; for by reafon of the much brittlenes and tendernelte of the paft, it will not abide any higho er raifing, but will fall one leafe of the pafte from another, and fo loofecte firrop or grauy which fhould be held in the fame : which to preuent and to make che crult a grear deale the more delicate, whenfoeuer you intend to bake any paftie of fallow or red Deerc,or any orher flefh to be eaten hot, you fhall firt knead afufficient quan. titie of the fecond fort of pafte which is for liquid bodies, and hauing rouled it forth as thin as conueniently you can, and of a fufficient largenefte to receiue that which you are to bake, you fhallthen knead another quantitic of the puffe pafte and roulc it likewife forth, (yet much shicker) and then lay it vpon your firt tough pafte; and then put in your meate, iuet, fpice, and other neceffaries, and fo in both thofe paffes fould it vp clofe and lo bake it, and you fhall find when it comes to eating that the inmoft of thofe two crufts will giue chat admirable content which any curious taft can defire: and thus you may bake any other pie by making two coffins to paffe one into another, and clofing them vp and baking them with a moderate hear, for chis pafte of all other muft by no meanes bee either burnt or ouer-dried, but by all artificiall meanes bekept in the flrength of his moifture; and beleeue in all the art of cookerie there is not any knowledge (except feafoning) which is more excellent or more worthie to be imbraced of cuery good hufwife: and yetall manner of baked meates aremore for the pleafing of the tafte than for the health of the bodie, in as much as they are giuen to load the fomach very heauily, and not to digeft verie cafily. It is 'true that being eaten at the end of meales after other meates, they may ferue in fteed of marmalade, to fend the former vitailes downe into che bottome of the ftomach, and to preffe together the bellie.

## Сияр. XXIII.

## of the brex-house.

(7)He vine cannot grow in many places of France to profper: but torecompence fuch a want, there grawech all forts of cornc very fruitull and in great aboundance, as in Normandie, Brittanie, Picardic, and other coafts lying vpon the North fide of the land, where the cold feafech moff ftrongly, and where the rugged and ferne windes do ouerblow the earth with their colduefe, fo that in thofe countries, neceffitie, the inother of all skill and cunning inuention, hath firred vp the men to deuife fome kind of drinke made of corne to ferue them in fleed of wine: Of that fort is their drinke called beere, ale, fmall beere, meade, gootale, beere and bread, and many other drinkes, which che Germans, Flemmings,Polonians,Englifh,Scots,and other nations towards the North, doc vie in fteed of wine.

This is the manner of making beere at Paris. The faireft, pureft,and cleaneft barley and oates that may be gotten, being prouided, and thrice as much barley being taken as oates, bur of both fuch a quantitie as may bee proportionableto the intended quantitie of beere, they put them toftecpe together in a fat for the fpace of foure and twenty houres more or leffe, accord ing to the age of the corn in a fufficient quantitie of riuer water, rather than either Spring or Well water, and after this fteeping time, they take and carric them vpinto a garner, to lay them on heapes to fprout: being fprouted they !pread them abroad round about the garner for to rot and putrifie: being rotten they caft them into rowes : from out of the garner they carrie them to the kill for to drie: being dried, they carrie them againe into the garner or fome chamber, or intoforme other place for to fan them and cleanfe them from all their duft and filth, and from thence to the mill, here to grind them and make them into meale. Which done,they put this meale into a fat, powring vpon the fame hot fcalding and boiling water, proportionably and according to the quantity of the meale, that is to fay, foure barrells of water, and a tun and a halfe of water to foure feame or quartets of meale, leauing the fame for the fpace of an houre to drinke in this water, afterward they put the meale afide with their firrers: being thus clecred theone from the other, they poure in as much boyling water as they did before ; then afterward they taketwo maunds (made like vnro bee-hiues) of ozier, and thefe they finke and thruft downe amongt the corne, and caufe to be fo kept by wo or three men, to the end that in the meane time fome other man may by the infide of thefe maunds draw and draine out the water wherein the meale hath fteept, and poure it into another fat clofe by : Then they take all the wort or drained water and pourc it into fome fufficient large copper, holding betwixt fiue or fixe tunnes more or leffe, caufing it to boile in a furnace a good houre, and afterward emptying the copper of the boyling water that is therein, they put it in with pans againe very foftly, and all boyling into the fat amongीt the come, or droffe of the flower from which it was drained before, and there they let it remaine a certaine time, afterward they draw forth the thinneft of the liqour, as clecre as may bee, by a ftopple which they haue for the purpore in the bottome of the fat, and that they poure againe into the copper fuffring it to boile there for the face of twelue houres: and into this thin cleere liqour being thus in the copper, they put fomeffiue or fixe pounds of the flowers of hops very drie and (weece. When the hops and liquor thall haue thus boyled tweluc houres, they emp: rie the copper againe, and put the wort to coole at leafure into other velfelles callid flotes or coolers, and they be broad like vinto the fats, but only one foot deepe. When it is cold, they put it to turne into a fmall veffell containing a halfe a tunne, with two ketcles of beere and of the rifing of becre already throughly made, for the better Beere rijang: cleanfing and purifying of the fame. This rifing is made of the froth which rifech
out of the Fat, when the beft and cleereft Wort is newly turned in and falleth to the bottome in the Tubs, which froth turneth into Leauen, and becommeth hard, and witls the fame doe the Bakers or Cookes making baked meates, now and then ferue themfelues to make their Wigs, Buns and moft part of their fineft baked meats : they renew the force and Itrength of yeaft or leauen euerie houre with Beer alreadie made, fo long as till the faid leauen or yeaft become ftrong enough of it felfe; which you fhall know vvhen you fee that it is wellrifen : euen as vvorkers in pafte do gheffe and gather, vvhenithey fee their pafte well rifen. The Beer being fufficiently ripened and leauened, they tun it vp into barrels or halfe barrels, \& there they let it boile and vvork 24.houres in their faid veffels, then they bung vp the faid veffels, and giue them vene fomtimes,for otherwife they vvould burft. And thus much concerning the maner of making of beere amongt the Parifians : for vvith this beere thus made they content themfelues, \& it endureth all times \& feafons,\& flandech out good both Winter and Summer, Harueft and Spring. And vvhereas it goeth for good payment and found, that the beere brewed in March is the beft, it may polsibly be fo, by reafonthat then she hops are in their prime and chiefeft force and vertue.

The Germans doe make their Ale vvith Barley onely, not vfing any hops: fomed times they put thereunto a fourth or fixth part of Wheate, to make it morefubftantiall and nourifhing. Very often inftead or for want of the flowers of hops, they pui in of the feed of the faid hops.

The Bohemians and Polonians doe make theirs vvith Barley and Wheate, wvhich they fteepe in the decoction of the feed or flowers of hops, fo greatly flanding vpon the requifitenes of their hops thereunto, as that chey vvere vvont to punifh grieuoufly fuch as did cut downe, or vnprofitably deftroy any hops amongft them. A gain they husband and drefle their hops as carefully as vvee doe our Vines: they gather the flowers and fruit at a certaine time, not fuffering any thing to perifhand be loft : in as much as the decoction of hops doth not onely ferment and leauen the corne \& graine that is fteept therein, but wvithall indueth the Ale or Beere vvith a refemblance of fome fort of Wine.
The Englifh, Flemmings,as allo the Picards, do make their beere with equal quan citie of barley and vvheat verie vvell boiled, which the Englifhmen and Flemmings doe call Ale and Gud Ale, or double Beere, and the Picards call it double Quoite. They fometimes put thereto fome darnell, to giue it a quicker and fharper tafte. The Flemmings doe put thereto the crums of bread, apples, butter, and a little nutmeg, to make it the thicker. The Englifh to make it the more pleafant, do put into the veffels Sugar, Cinnamom, and Cloues, firring and rowling the faid veffels afterward verie much. The Flemmings alfo doe mixe therewith fometimes honey and fpices, and make, as it were, a kinde of hippocras, wvhich they call Mede or Mete. But howfoeuer, according to the mingling, tteeping, fermenting \& boiling together of the grain; in vee for the making of their Beere: fothe beere becommeth fharpe, bitter, fweetifh, waterifh,ftrong, mightie, weake, cleer, troubled, more or leffe durable, and of other fuch like qualities.

Yet to fpeake a little more particularly of the Englifh, which are indeede the true mafters of Beere and Ale, for as yet I haue but roaued wildely at their practife, You thall vnderftand that generally they haue but thefe two drinkes in vfe, that is, Beere and Ale : and of thefe they haue diuers kindes, as firft frong Ale or good Ale, then middle Ale, and laftly fmall Ale: folikewife of Beer; they haue March beer, Houfe. hold beere, and fmal beere : the firft is for ftrangers, the fecond for the Mafter, Mi. ftreffe and beter fort of the familie, and the laft is for plow-men or hinde feruants: As touching the making of thefe feuerall drinkes: all Ale, of what kind foeuer it be, is made of the beft, cleaneft, and fweeteft Barley maulthat can be got, withour any other mixture, except it bee in thofe countries where Barley will not grow, and then Oatmeale will ferue, or Oatmeale and Barley maultmixt together, according to the wealth of the Farmer. Now foure buflels of good Barley nault vvill make a batrell offtrong Ale, another barrell of middle Ale, and halfe a barrell of fmall Ale. Thege.
nerall vee is by no means to pur any hops into ale, making that the difference betwixt it and beere, that the one hath hops, the other none : but the wifer hufwiues do find an error in that opinion, and fay the vetter want of hops is the reafon why ale laftech fo little a time, but cither dyeeth or foureth, \& therefore they will to cuery barrell of the beft ale allow halfe a pound of good hops :ale askech lefle boiling than becre, and fo a little leffe cooling except it be bottle ale, \&then it muft no: only be coold fufficiently, butalfo blynckt a litele to giue it a quick \& fharp taft : as foone as you haue drawn of your beft ale, you mult put in your middle ale,and as foone as you draw of it, you mult put in your final ale : your beft ale muft be barmed as foone as it is coold, and after it hath rifen and wroughtaad bin diuers cimes well beaten in,then it fhall be cund in open or clofe veffells, but the open is beft if it be foone fpent, and the clofe beff, if you muft let it lie long: as for your middle or fuall ale, they would nor be barmed all at once, bur kept and put to barme as you haue occafion to fpend it, that is to fay, fome atone time \& fome ar another. Now for your beere you fhall vnderfland, that your March.beere, which is fo called, becaufe it is commoly brewed in that monech as being the principal of all other,would be made of the beft barley malt that can be got, for no oare-malt of ic felfe will make the fame : and to euery quarter of good barley malt you fhall adde a pecke of oats, a pecke of wheat, \& a pecke of peafe, and grind chemalltogecher, and they will make a hogfhead of March-beere, an hogfhead of houfhold beere, and a barrell of fmall beere : tothis proportion of malt you mult allow alfo three pounds of the beft hops; but if they be but indifferent, then you mult allow a better quancitic: you muft boile it well, then mafh it, then boile it very well the fecond time with the hops, then drawing it from the hops put it into the coolers and coole it, after put it to barme, \& beat it in as you did your ftrong ale many times for a day and a nighttogether, then tun it, and after ithath purged well in the hoghthed or other veffel, then clofe the bung hole, and giue it vent asoccafion fhall ferue, and To let ic lie till it be ripe, which will be in no lefle fpace than three quarcers or halfe a yere at the foonef: as for your becre of the fecond running, you fhall vfe it like the firft, and both put is to barme \& tun it in the fame maner, only it will be ripe in foure or fiue weekes at the furtheft : but for your finall beere, you fhall vfe it like your fmall ale,and put to the barme as you haue occafion to drinke it. There is another kind of brewing of houfhold beere (for this before mentioned is but for one moneth in the yere) and that is to allow to euery hoghead of becre halfe a quarter of barley-malt, which is a good proportiō for the familie cither of nobleman, knight or genteman: and to euery quarter of malt a pound and a halfe of the beft hops : as for the fecond running of this beere(for it will beare but one befides the beft)it will eirher be good for hind feruants, if fuch be in the familie, or elfe be an excellenereliefe for fuch as labour hard for their liuing. The graines, walhings of tubs, and all ocher excrements which fall from the brew-houfe, are a very good food for fwine, and keepe them in good plight till they come to be fatted for the flaughter.

To preuent the decay of becre, and to caufe it that it may continue and ftand good The fayltis of a long time, caft into your becre veffels a great bag ful of many tender eares of wheat, becrea and there leauc chema long time : and if it begin to fade and weare out of heart, hang two or three whole egs in the veffell.It it haue loft iss good relifh, you may recouer is againe by cafting into the veffell the roots of Ireos, ginger, cloues, nutmegs, bay berries, and organie.

As concerning the temperature of beere there is no deubt but that it is hot, and The temperai that more orleffe according to the things going to the compounding and making bure ofbere thereof: for notwichltanding that barley by nature is cold, neuerthelcte by meanes of the Iteeping,fermenting, putrifying, killing and boiling, that ic endurcth whiles the beere is making, ir is imponible but that it hould be made and become fomewhat thore, then firthermore the hops, whether floures or feeds, being mixt therewithall, doth by its heate, temper and alter very much the naturall coldneffe of the barley. 1 lf that wine(as Galen faith) be nothing elfe but a water, which in proceffe of time purchafecha hor fubftance to icelfeg in the flocke and woodie parts of the vine, by the
meanes and force of the heac of the Sunne, in like cafe, barley in the making of beere purchafech a heare by his long lying in flcepe, boiling and putrifying which it indurecth. Againe the taft and relifh of beere doth argue the fame to be hoc,fecing if it bee good it muff be either fharp, or bitter, or fweet; for that which is fowre or fharpe, like vineger, or eager, is not good nor well made: The effeets of beere do likewife proue it to be hot,for it makech drunken, yea and that a great deale more than wine doth, by reafon of its vaporous and thick fubfance : if fedech alfo and nourifhech, efpecially that which is made partly of whear or the graine called furmentie. Yet further, if is be difilled in an alembecke, it makech A qua vitx, no leffe than the wine. It istrue that beere though it be hot, yet it is in diuers and fundrie degrees of heate according to the cemperature of the ingredients: for that which is made of barley and fpels corne withour hops, or with a very tmall quantitie of hops, is the leaft hot of all the reff ; and that infuch fort as thatit becommeth a fit drinke to quench the thirft and so coole the bodie during the forching Sommer hear: that which is made of barley and oats is a litele hoter: as that which is made of barly and wheate is yet more hot and very much giuen to feed and nourifh. But howfoeuer, all beere of what corne foeuer it bemade, is of a morc thicke fubftance and harder of digeftion than wine, and which (if either it be ill boyled, ne newly made or troubled, ) ingendrech obftruations and inflations or puffing and fwelling vp of the inward parts, headach, colicke, flone, graucell, ftranguric, and heat and Icalding of the vrine, efpecially if it bee Tharp withall: if it be too old and drawing toward fowreneffe, it hurtech the fomach and finuie parts; as alfo it begettech the leprofie, if we will belecue Diofcorides: And therefore you muft learne to drinke only fuch as is well boiled, fined, and growne to a meane and indifferentage.
Notwithttanding that beere(as $D$ iof forides will haue it) be enemie to the firewes, and that thofe which are drunke by taking exceffiuely of the fame, haue cheir memıbers and parts more weake, than they which haue become drunken with wine: yet the cruth is, that it comforteth the wearied by running or much walking, if fo be that The fatiting of perfons do bur foment and bathe their feec in beere reafonably warme.
bens and dapons thembeere to drinke, or if you mingle their meat with beere.
If you boile new hops with bere and keepethem in your mouth, it will fay the Toothasho toothach.

Bakers or makers of baked meats(as we haue faid before) do ve( in fteed of leuen to knead their cruft withall) the hardned froth of beere, which becaufe it is windy and flatuous, doth make the bread light as it were full of eies.
To fowite veffel The grounds of beere doth ferue to polifh and fcoure brafen veffell, if they bee laid to fteepe cherein fone certaine time.

> The end of the fifth Booke?


# THE SIXTH BOOKE of ${ }^{\circ}$ the covntrie HOVSE. 

 The Vine.
## Clap:

Of the profit rijing of a well dreSed Vine and Vineyard.
 Itherto wee haue intreated of the husbanding, tilling,ordering and drefing of garden plots, orchards, and arable ground : it now remaineth that we fpeake of the vine, wherupon for certaintie dependeth the greateft part of the reucnues and riches of a hoirfe.holder zhowfocuer many make rmall account of the vine, and do more efteeme to haue poffeffion of meadowes, palture,woods, and other grounds, than to ftand to the revenues growing by vines, in as much as for the moft part they yeeld not the fruit which may recompence the charges laid out about them: But for all this the virie is not to bedif credited, feeing this is not the fault of the ground, bur of the people that till it, and either for coietoufneffe or ignorance, or negligence offend in the tilling thereof. It is true that the husbanding and ordciing of the vinc is chargeable, painefull, and a matter of great care, by reafon of the tendernieffe of the wood, which being well confidered, may feeme to haue come to paffe by a fpeciall proiiderice of God, directing the fame and making iifo weake, tender, and feeble, to the end that this plant might not ferue for any other thing, than to bring forth the excellent and pretious liquor of wine, which isfo needfull for the fuftentation and life of man: for if it were fit for any thing elfe, as the wood of other trees is, it would be imployed, and wine thereby would beconie a great deale more deere than it is.
The greatef part of vine dreffers do notefteeme in what ground the vine be planted, but do make choice of the worlt quarter in all the country, as if the worlt ground, and that which is good for nothing elfe, were the beff to plant vines in. Othershaue not the iudgement to know and chufe their plants, and for that caufe doeoftentimes plant théir vineyards with fuch young vines as are nought. Againe many hauing no refpeCt of the time to come, do in fuch fort orderand dreffe the vine, as if they thoughe to liue butati houre, burdening and loading it with fo triany branches and fhootes for propagation, arid leauing vpon it fo much wood, asthat it cannot profper any long time.O thers althought they know the way toorder and dreffe it well, do yet continually omit certain courfes and feafons, as being more bufily imployed about their own profit $z_{2}$ than their maifters wel-farc.

## The fixth Booke of

Likewife I would alwaies aduife the Lord of our countrie farme, that hee would not alogether commit the care and charge of his vineyard vnto his farmer, but that hehimfelfe would lay the chiefe burthen about it, vpon himfelfe: for as the matters eie maketh the horfe fat, fo the carefull induftric of the Lord or chiefe owner maketh the field fruiffull and to beare great fore of increafe; and for that likewife the owner and Lord of the vine will not onely fpare it better, but alfo fee thas it bee not defrauded of any fuch toile and labour as it requirech, contrarie (for the molt part) to the practife of fuch as are bur fecondarily interefled in fuch maters: the vine being fuch a peece of inheritance as wherein euerie fmall fault committed, doth draw after itgreat loffe, and fuch as oftencimes cannor bee remedied or repaired, but by fupplanting what is done, and replanting it a new. And that it is no otherwife, but iuft fo, marke and fee, if euer you heare the Gue!pines of Orleance or the Beaunoies, and thofe of the duchie of Burgundie (which haue large grounds imployed in vineyards) to complaine themfelues of their vines, and that becaufe themfelues take the whole care and referue the principall ouerfight vnto themfelues. On the contra-

The Parijans nieghenent o uer.
fecrs and huf. bandes about their vines. ry, the Parifianshate no other complaints or agrecuances to talke of but of their vines, and that becaufe they credir deceitfull and igncrant workemen to fway the worke; whofe couetoufneffe, ignorance, and negligence is for the moft part the caufe that they reape not the fruit of their vines in fuch plentifull manner, as they fhould, or at the leaft that the fruit which they doe reape, is not fo durableas it would. And this you muft thinke that vines will yeeld a larger reuenue a great deale than gardens or other areable grounds, if they bee well and diligently husbanded; for there are few arpents of vines to be found which yeeld not euery yeare, one yeare helping another; ten or twelue tuns of wine which is a great reuenue, and yer remaineth vnreckoned a great benefic and auailes which may be made of fmall plants and impes, which may be gathered to tranfport or tranfplant into any other place, which will eafily amoune to more than will fatisfie and aunfwere all the cofts and charges which are laid out any maner of way about the vines: wherefore either the reuenue rifing offuch plants by fale, or the hope of the vintage and gathering of wine, mult be the fpur to pricke forward the mafter of this our countrie farme, to looke to the ordering and dreffing of the vines himfelfe.

## С н \& р. II.

## what foile and aire the wine doturnost delight in.

Troothings to beconfilered in the plansing of vines.

THe vine groweth not but in certaine places that are fit and naturall for it? which is a thing to be accounted of by vs, fo much the more excellenf, becaule the fpeciall propertie of this plant is more commended by men than any other, in refpect of the good it miniftreth, which is that in fuch places as it groweth in, the men are found to be moreftrong and mightie by the vfe of it, than other menare, which for want of it, are forced to vfe other drinkes.

As concerning the foile to plant it in, there muft two things be confidered, the qualitie of the ground where is is to beplanted, and the difpofition and inclination of the aire which ruleth in that place. As concerning the qualitic of the ground,you fhall chufe fucha one as is nut very churlifh and clofe, neither yet very light and open, but yet of the two, more inclining vnto a fmall mould and open ground, neither leane nor very fat, \& yet fomewhat the rather inclining to the fat, not champion, nor a very plaine and flat, (and yet in fuch grounds there grow more wine) neither very ftiffe and ftraight, but rather fomewhat raifed than otherwife, that fo it may bee the better aided and fuccoured by the fauourable beames of the Sunne, neither drie nor moift and watrifh (becaule that in fuch kind of ground the vine continueth not long, neither dothit bring forth good wine, but fuch as is quickely perifhed)

## the Counirie Farme.

and yetindifferently ferued with vvater: nor fuch a one as hath any freth fpringsor fountaines, eicher breaking out cucn with the vppermoft face of the earth, neither yet carried along within, in the depth of the earrh below, but only in fuch fort, as thas neere vnto them there nay be water to moiften their rootes withall: and the fame moifture muft not be either bitter or falt, to the end that the taff and fauor of the wine may not be fpoiled. So that by chis it appearech that it is not meet to plant Vines in deepe and low valleres, albeit they might, and would bring forth grapes in grear abundance, and that becaule they would notripen in due time, and lo there would be made of then no better than a green vvine of frmall value : adde hereunto, hat Vines feated in low valleyes,are very much endangered by the Frofts of the Winter and Spring time, and are alfo fubiect to haue their grapes so burft, and to runneout their iuice and to rot, wvhich vvould caufe a muftie and foughtie cafte in the vvine: and therew ithall, vwhen the yeare is rainie, the kernels cleaue and burft out through the abundance of moifture ; by reafon vvhercof the grape being in this fort too much moiftened, and nothing at all dried, the vvine becommeth vnfauorie and apt to grow fowre,and fall into many other fauls. And if you happen to light on fuch a place, then chure to plant chere fuch plants, and yong fhootes as may beare clufters, not too thicke fer, but growing fomewhar thin,that fo the Sunne may pierce through them: much leffe may you plant thofe Vines vvhich haue their pith taken our, and bring forth a firme and folid grape, in cold and moift grounds : as neither yet in a hote and drie ground, fuch Vines as haue fubftance enough in them, and beare a grape fomevvhar foft. But chiefly, if your place be fo well appointed by nature, as that it confifl of and containe grounds that are fir and meet vpon the tops of great hills, together vvich fome low and fmall hills, then make choice of them to plant your Vines thereupon. It is true that it vvill hardly grow there ar the firf, but hauing once taken roote, it viill yeeld a verie pleafant and noble vvine,fuch as the vvines of Ay , Hadre, Argentucil, Meudon, and Seurre be.
In generall, if you vvould plant a Vine wvhich may profite you in bringing forth abundant fore of good fruit, you muff fee that the ground be gentle, eafic, fine, and indifferent light to beftirred : not as though fuch a ground onely vvere good for Vines, but for that it is moft kind, naturall, and beft agreeing for Vines to be planted in fandie, fonic, grauelly, and flintie ground, as alfo fuch as confifteth of a Potters clay in the bottome, and couered ouer wirh earth is good, prouided, that they be intermingled wirh fome fat earth, and that they be often refrefhed by being digged euen to the veine of fones, or rocke. In a fandie, clayie, and churlifh fubborne ground, the firf digging and cafting of it mult be good \& deepe: and fuch grounds alfo would be thrife digged or calt at the leaft. Such grounds bring forth frong and delicate vvines: but fuch grounds as haue of flones or flints great flore vpon the vppermoft face of the earth, are not fir for Vines, becaufe in Summer they fland at a ftay, by reafon of the great heat of the Sunne, being beat back vpon them by the faid ftones : and they doe no better in Winter, becaufe of the excefsiue cold which in like manner then troublech them. True it is, that if a Vine be planted in a grauelly, rockie and fonie ground, that then it will not be needfull to caft fo decpe, becaufe the roote is not fo farre downe into the carth, as is the new planted Vineyard which is made in a fandie foile, and it is contented with twife digging for the moft part. A foile flanding vpon Walkers clay or marle, as loegny vpon Yomne, is verie good for Vines, but the ground ftanding vpon a Pottcrs clay is nor good. In like fort the grauelly ground is not altogecher fit : for though it yeeld a dainte good wine, yer it yeeldech but a vesie little : and there alfo the new planted Vineyard is very fubiea vnto the hauing of his grapes wahhed away. The drie and burning earth doth yeeld leane Vines ifit be not helped by the dunghill.
As concerning the power of the Sunne, and difpofition of the ayre, the Vine de- what aire is lighteth not to be planted vpon the tops of mouncains, and much leffe in places lying open vnto the Northeaft winde : but it delightech in an ayre that is rather hote chan colde ${ }_{2}$ and faire rather than rainic : it cannot abide tempefts and formes : it reioice-

Ecc 3
chh in a fmall, genele, and friendly winde, and would bee turned toward the Eaft or South. It is true that generally in cold places vines muft ftand vponthe South, and in hot places vpon the North or Eaft: provided that they be Theltred at fuch time from the winds, as well of the South as of the Eaft : if the place befubiect to Winds, it will be better that it fhould be to the Northerne or Wefterne Windes than otherwife: in temperate places either vpon the Eaft or Weft; bur the beft is towards the Eaft.

Furchermore in as much as it is a very difficule thing to find all thefe commodities and good properties of ground and aire in cuery countrie : the good workeman thall fit the plants of his vines vnto the nature of the places and countries: wherefore in a fat and fertile ground he fhall fet the young plant of a fmall vine, and fuch a one as beareth but little, as the Morillion, the Melier and the Aubeine: andina leane ground the plant chat is very fruitfull, as that of Samoureau, Treffeau, Lombard, Ouch, Mufcader, Beaunois, and Pulceau: in a thicke and clofeground, the plant that is ftrong and putteth forth great ftore of wood and leaues, as that of Morillion, Morlou, Treffeau and Pulceau : in a fmall mould and reafonable fat ground, the plant which putteth forth but a litele wood, as that of Samoureau, Lombard, and Beaulnois : and by this meanes the defect and want, or the exceffe and fuperfluitic of any qualitie in the young plant of the vine, fhall be fupplied or corrected by the nature of the ground, and that in fuch fort and manner as that of two exceffes fhall fpring one meate and well tempered thing, which is a point to be wifhed and requi. fite in the growing of all forts of plants. Furthermore he may not plant in moint places the young plant which is giuen to bearetender and groffe grapes, as shat of Samoureau, Gouet, Mourlnus, Pulceau, Cinquaine, and Treffeau. In places cofled with winds and ftormes, he muft prouide to plant fuch a kind of vineas is woont to bring forth hard grapes and fticking faft and clofe vnto the ftalke : but on the contrarie, that which fhall hane accuftomed to beare tender grapes in places that are hot and giten to be mild. In drie countries he mult planthofe vines, the fruit whereof is woont lightly either through raine or the dew to rot, as thofe be of Samoureau, Gouce, Pinot, Blanke, and Beaunoies : and in a moift place, thofe which are woont to fpoile and perifh through drineffe. In countries which are troubled with haile, fuch as are of a hard and large leafe, for fuch are able the better to defend and coutr the fiuit.

## Chap. I II.

## How that ihere is not planted any vine by the nay of making a feed nurcerie, except it be onely for pleafure.

Am of thatmind, that a man cannot but hinder and iniurie himlelfe in making nurcerices of vines, for befides that the tree doth not grow foo ner of kernels than it doth of the plant, there is alfochis inconuenience, namely, that the vine growing of knernels doth not yecld any thing of profit or good for vfe. This is indeed a worke for fuch as loue their pleafure, and haue in their purfes largely to defray the charges thereof, being able thereby to fow feeds out of fome ftrange countrie, afterward to raife a nurcerie of flocks of the fame when they are growne vp for to beetranfplanted and remoued into a better ground, and that they may graft thercon, and afterward againe remoue the fockesfografted into a better ground alfo, that fo about two yeares after they may reapethefruit thereof, which is woont to be both great and daintie enough : but yet this fame new vineyard thus planted is the leaft durable of all others. Againe, in this countrie wee doenot trouble our \{elues in planting vines to runne vpon trees, in fuch fortas any
man may eafily fee that they doe in Lombardie andother places: neither yet with fuch as are raifed vpon fingle and double Chadowing arbours, neither yet with fuch as vines afteithes vfe to creepe along and Ipread themfelues vpon elmes or' other trees; for the wine fafion of and never proueth fo good, as well becaufe the toot of the tree is corrupted, after thema- arouit. ner as itfallech out with coleworts; as alfo becaufe this plant lovech not to be hoifed and mounted too high, neither yet fhadowed with any building of timber-worke, higherthan the flature of a perfect man.

## $\boldsymbol{G}_{\text {нар. }}$ IIII.

## Hiow tbat before your plant your vine, you mist learne out no hat wine the carth woill beare, where you are pur- <br> pofed to plant it.

(9)Hofoeuer doth purpofe to plant vines, muft not fo much truft vnto the markes and fignes of a good ground, ceclared and fet downe before, as firf to fee that he haue made crinl what wine the ground will beft beare, where he mindeth to plant his vine ; for is were but labout loft, and money caft away to planta vine for fo froall increafe as can nothing like aunfwere and content your expectation. Thus then you miay trie and proue your groind: make a pit in the ground where you meane to plant it, of two foot depth, and of the earth caft our of the pis, take a clod, and pur it in a glaffe full of raine water that is verie cleane, mingle and beate together this carch and water, thicu let it reff, vnill fuch tirtie as the earth haue made his perfęt refidence and feting in the bottome of the glaffe, which is eafily perceiued by the cleereneffe of the glaffe which will follow thereupon : and after that the earth is throughly fetled, talt thewater, and looke what relifh or taft it hath, fuch would the wine be ; and therefore a vine yeelding fuch a relifhed wine fitteft to be planted there : cherefore if you find therein a bitter taft, a faltie or allum like, or any osher fuch vnpleafant taft, auioid and ceafe to plant any vine in any fuch ground. Which if it be true, then to dung and manure vines is aloogether to bee condemned, becaule it is very hard thize earth fed and nourifhed with dung, fhould not tafte and retaine the fimatch of the dung, and fo by confequence communicate the fame with the wine. Wherefore the Parifians are fowly and foolifhly ouerfeene to load and lay vpon their vines yeare by yeare fuch great quantitie of dang, and that is the caule for the moft part, why their wines haue an vinpleafant taft, and doe eafily and very quickely corrupt : and yeef further the dung doth caufe the vines to grow old by and by and become barren, becaufe chey put forth all their goodneffe the firt yeare.

## Chip. V.

## Of ike choice of joung vine plants.

(67xyHe choice of young plants whether they bee croffers, miarquets, or the The choice of tenais, mult nor be put to the difcretion of the feller," who litele carech young vine to take the fir feafon for the gathering of the faid young planits, fitither planits, yee for the goodneffe of them, but alog gether to his diligent \& heedfull care which is the workemafter : and for that caufe it were beff for mien to take thern of their owne vines, or elfe at leaft to haue thofe which hee fhall buy, warranted to bee good: he muft allo haue regard to the quality of the aire and fituation of the ground .... io
where he will fer his plants, that fo he may fit them for the fame. For and if the ground lie vpon the South, he thall chufe the young branches of vines which he will plant from che fame part and quarter: if he meane to plant them in a high place, hee fhall gather the plants vpon fome high and tall vine : and if low, then out of fome vineyard that is very low : planting in a hot, cold, drie, or moift ground, hee fhall chufe his plants for the renewing of any failing or decaied, of the like fituation: by this meanes the plant will faften the fooner int the ground, and $i$ w will bring forth fruir fooner and a great deale better chan if it fhould bee orherwife. Likewife hee muft nos keepe the young plant any long time before hee plant it: for, no more than trees which are to bee remooued, can the vine well and eafily endure after it is cut to bee long vnplanted: neither yet would it be carried far, or remoued out of its owne foile into another, becaufe it fearech the change of earth and aire : and thercupon it commeth that the young plants broughtoutof frange countries, as of Beaune, Rochel, and Burdeaux cannot profper fo well in our foile, as shofe which grew chere firft. To make good choice therefore of croffets toplant new vines of, you muft fee that the vine from which you gather fuch Croffets bee bue fparingly furnihed with pith, becaufe that fuch a one is not onely fuiifull and bearing aboundandly, bue becaute alfo it is not fo fubiect to the iniurioufneffe of time, as Snow, Fogges, Froftes, and the burning of the Sunne in the time of Sommer, as shofe which haue much pith in chem: afterward when the vines beginne to bud, you muft diligently view, about the beginning of September, thofe that are moft laden with grapes, and which are moff fruiffull, and haue mofteies in their branches, which haue niot beene iniured or hurt by the hardneffe of weather, and which are neither young nor old, bur in their chiefelt ftrengrh, and middle age, or nor much paft. Of fuch vines mufk your branches be gathered (in the increale of the new Moone, formewhat laie of the day in theafternoone) not of fuch as grow mof low, nor yet of fuch as grow higheft, but of the middle growth, and fuch as are round, fmooth, and firme, hauing many eies, and abour three fingers of old wood togecher with the new. It muft be planted prefently, that fo it may take thefooner in the carth, whiles yet it is in life: or elfe prefently as foone a s it is cut off to wrap it in its owne earth, not tying is hard, asalfo, if you would keepeit a long time, to put it in a veffell full of carth, well clofed and ftopped perfectly on eurery fide, that fo the aire may not any way wrong it: or elfe, if it bee to bee carried into any far countrie, to flicke it in an onion, or wilde garlicke, and then before planting of it to feepe it in water, efpecially if the ground from whence it is gathered be drie by nature. The vine-dreffers of the duchie of Burgundie before the planting of croffets do caule them to befteeped one whole day or a night in running water, and find by experience that the faid croffets do take more cafily. Others caufe the branch to be fet and planted by and by, that fo it may take thefooner.

## Сhap. VI.

## The manner and way toplant Vines.

 is vppermoft, may beébrought vnto the bottome, and that in the botome may bee turned vppermoft, to moiften and refrefh that which is drie, and to heat and driet hat which is moift \& thick, and aterward made euen and caft into many furrows \& pis of a foot and a half breadth, $\&$ depth, cill you come to the hard fone in the botoome,aunfwere to the depth of the furrow, which yer mult be made hollower in a rough and crabbed ground than infandie, flintie, or wet ground :in che bottomes of the fides of which furrowes, there may bee put fones, to that they bee no bigger than a loafe and couered with earth, for the cooling of the vines in the heat of Sommer, as alfo to the end that y pon great raine, the water may find paffage, and not fand at the rootes of the plants. Whereupon your ground being well laid with ftones in this fort, and refled and fetled after the firf dreffing of it, and being in the time of this refl turned ower and wrought for the taking away of the couch graffe and other weeds, you mult fpic cutfome calme and quier weather to plant in, according to the place where you thall bee, and the nacure of your ground : prepare, make readie, fharpen, aud cut off the root and hairie chrecds of your young plants, and fit them well for the South Sunne: plant them in the middeft of the furrow, in the plaine flat, where your foot vfeth to ercad, and one right ouer againft nonothr, and after the maner of a Burgundian croffe, for to make them (after that they ate couered with earth, and old made dung, or with the earth which hath beene caft out of the furrowes, and thrown on the ridges) leape to the wo fides of the furrowes towards the ridge of either pare; for to they beare more fruit, and this is called the double plant, which muft bee vnderfood of the plants onely, which are foplanted in doubt that if one doe die, the other may efcape, or chat and if they bothtake, the one of them may bee taken vp, to put in place where others haue failed : For howfocuer the plant fet of a crofler may make the better foot and root, yet for certaine it is harder to take than the marquor, although the marquot be not fo lafting and of fuch continuance, in as much as the croffers do purforth rootes of themflues. Furthermore, you muft cut off the greateft wood, and moft knottie from the vine flocke, which you know to bee the faireft and moff ferrile, and it muft confift boch of old and new wood : It consinueth foure yeares withcut fuit, and on the orler fide, without fome misfortune it is feene to continue chirtie yeares in his vigour and luftineffe. After it is cut off, it muft be cut fir nor leauing aboue chree or foure ioints at the moft, two wherof(in planting it), may ftand aboue ground : and if it haue put forth any eielet, you may rub it off with your finger, or nip it off with your naile.
It you make leffer furrowes, you muft plant them after the fafhion called $\varepsilon$ n godean; after the Angeuin fafhion, feting enery one diffant from another twofoot,one marquot betwist two knights or guides as is vfually obferued in planting of ftocks in the nurceric of fruit trees : and after that to leaue it foure yeares in the fame fate, thas it may be laid downe againe when it is growne, that is, fome two or three yeres after it hath put forth frong and able wood, in fuch fort, as shat to vines fo planted there need no propping or vnderbearing; for the chiefe and principall foot as is is in trees, doth fufficiently beare vp the fiences putting forth of the fame. In Languedoc and Prouence they plant them in this fort, but they pricke them downe a great deale fur: ther off one from another, and fet an oliue tree betwixt cuery two, which nothing hindereth by his fhadow either their growth, or the Sunnefrom hauing full power vpon them. And yeet they leaue not fo, but as is vfed in Italy, they fet in cuery furrow fiue or fixe rowes of puife or wheat, and yet fo as that there growech no intanglea ment betwixt them and the vine, as not being fer or planted amongft then, and yet they let not to plant the oliue trees in corne fields, prouiding as hath beene heretofore faid, that the fiadow thereof doe not any thing hinder the growth of the graine.

The marquot would be planted as foone as it is raifed from his ftocke, with his To plaxat tbe whole furniture of twigs, and that alone in the middeft of the furrow, becaufe of his marquot, fmall friss, feeing therc is no doubt made of the taking of it againe, it muft haue a bed and (preading place of greatlength : ir groweth fooner (as hath beene faid) than the croffet; but in like manner as the grafted one, it indureth the leaft and fhoreft time of all the reft.
Affer that you haue planted your croffers or marquots, you muff bow them wel at the foote to make them take roote, and afterward call downe the carch of the ridges
both of the one fide and the other, that foit may fall vpon the faid plants. Ac Chablyes, Touuerois, and Auxerrois, in planting of marquots (but not hauing any hairic rootes) they writhe them about very gentlie, and vntill they crack and cleauc a lietle, not fuffering them to come together againe.

There is another manner of planting of Croifets, and not the Marquots (for his hairie root cannot endure and abide it) which is called by che termes of planting, en barrbe, en fiche, or as it is called in Aniou, en godecuu, and it is by pricking downc on a row the faid plants, or elfefo as that two may fand right ouer againtt one that isalone, as che manner is to doe with Willowes, and afterward to couer them ouer, and to pile and beate them, as hath been faid.

Furthermore, to the end that the new plant may take roote verie fpeedily, it wil be

Tocanse the newp plant to take root verie specdily.

That nothing mult be fowne amoreft the Fines. good to put to the roote thereof acornes and ferches, bruifed and ground together fomewhat groffe,or elfe Beane fraw, or dung that is old and made long fince, or the chaffe of Wheate, which is fitteft of all, if there may be found any that hath lien rotting fomewhere in flanding water for the fpace of one yeare or more, or fat earth, if in cafechat the ground where you plant your Vine bee buta leane earth : but if it bee a fat foile, it will be fit to put therin the droffe of the prefsing of grapes, mixt with dung made of the droffe of white grapes, if the plant bee of a blacke Vine, or of blacke grapes, if the plant be of white Vine. Some doc poure Vrin thereeppon, toworke the feat withall, and orhers the lees of Wine. It is true that fome hold it for certaine, that Vrin is alto yether contrarie to che Vine plant, and that it caufeth the fame to looke pale and white, and in fucceffion of time to kil the ftalke, whether it be Croffet, or a Marquot.
You muft not mingle, if it be pofsible, any other plants amoggft the Vines (howfocuer fome doc fow amongft them Beanes, Gourds, and Cucumbers) becaufe that whatfoeuer is fowen amongft the Vines, doth fteale away from them their nourihment, and becommeth wonderfull harmefull and iniurious : aboue all other thing $\bar{s}$ the Vine hatech the Colwort, as we haucalreadie faid in the fecond Booke.
That vines muf not be planted

Againe,Vines muft nor be planted of diuers plants, becaufe all vines do not grow at one cime, neither are they allof one nature : for fome beare carly fruits, and lome of divers plants late fruits. Likewife thefruits themfelues doe differ one from another : for fome are redde,fome blacke, fome white, fome fwecte, fome eager and fowre, fome durable, and other fome not durable: Wine is better old than new : fome is drunke prefently after it is made. One delightech in one manner of drefsing, and another in another $:$.wherefore you muft notmingle diuers plants together, for there is nothing that fo much fpoylech Vines, as when the grapes that are early ripe are gathered with the lateripe ones, and the white with the blacke, becaufe they are of contrarie natures. And if any manbe defirous to haue manieforts then hee muft plant them apartone from the other, that fo he may order them, inrich, cut, and gather them in their nature and feafon, that is to fay, the more forward and fruiffull firft, and the backward and late ones laft: or, which is better, ifa man defire to haue diuers forts of yong plants, zo the end that if one miffe he may be in pofsibilitie to haueorhers that will fpeed, in fead of mingling diuersplants together in the fame ground, hee muft haue fo many inclofures, or quarters for Vines (to the end they may by them bee euerie one feparated and diftinguifhed from another) as hee will have plants and diuerfities of plants.

## Gняp. Vil.

# In what grosnd, with what manner of inriching, avd at what time of the yeare, the young vire ougbt chiefely to bee planted. 

(6)Oplane a new vineyard of a French vine, it behouech the Lord of the farme (if he himfelfe would fee the fruit of his firf iabours) to haue care and confideration of the ground and of the young vineyard, which he meaneth ro replenifl wish young plants, as wee have faid: for he may be well aflured, that in a furdie, ftiffe, iuicie, and fat ground, the vine will beare much fruit, and requireth leffe to be inriched and helped, laue thar it may after fome two or three yeares ftand in need to haue fome litete fupplic of frefh and new earth, wherein puife haue lately growne, or elfe fome little reliefe at the foot, according to the time and nature of the countrie. In a grauellie and flintie ground, as fuppofe ic might be in Vaugirard and Venues, where vines yeeld not fo much increafe, the carth muft be the ofter cilled,dreffed, and dunged for the purpofe, bur fuch manuring maft bee with neats dung, and not with the dung of horle, fwine, heepe, or leiftals, with all which al! manner of ground whatfocuer, is made worfe, rather than amended : befides that fuch amends doth impaire the tafte of wine, and makech the vine fooner to grow old and ous of date, becaule that the ouermuch truft that the workeman putteth in the heat of thefe, doth make him negligent, euen as it fareth with them which purvnquencht lime to the feet of plants, to make them beare the timelier fruit, as al- To putrnguucths fo for to make them the fooner ripe: fecing alfo that the workemen giuen to follow lime to the erots thefe courfes, do not vouchfafe them the labour of digging about the feet, neitheryet of vines. to turne vp and dig their vincyards diuerstimes, as she feafon fhall fit and require, lo- The quatities of uing rather to put their mafters to the charges of dung, young plants, and props, bad dize.drefg then thatechey would in a rainy and fit time take paines and dig them off, yea rather fers. fpending the time of their labouring in tauerning; or elfe in wrangling with fome of their neereft and decerft kinsfolkes, and that ofentimes for noohing : notwitftanding that the thing which is the principal and chiefeft caufe of the bring ing forth of wine as well commendable for goodneffe, as abounding in fore, is by beflowing as many dreflings vpon the vine, as can be deuifed, or any way affoorded.

Wherefore you may vndertake the planting of the French vine in the increafe of the Moone, when ir is foure or fiue daies old, and that from about the beginning of December, or the middef of December, vntill the next frofts that follow, and then alfo according to their fierceneffe and fharpnefle, which if it fall out to be great, you fhall furceafe and giue ouer your worke, for to goe about to breake the ground, and lay open the carth, when it is taken and hardened by the froft, is but fo much labour for you, and fo much loffe vnro the earth, becaufe that vnder the cruft of the froft it inwardly gathereth its frength together affefh, that afterward is may fhew forth its whole force and power in the Spring. Wherefore in cold places it will bee better to plant your vine before the Spring, as on the contrarie, in hot, drie, and vnwatered pla* ces in Autumne, to the end that the raine which fhall fall all Winter, may fupplie the defect of other water, and that the roots may the fooner tale in the earth, and then and at that time principally when nature miniftreth moft nourifhment vito the rootes.

My counfell is, that in planting vines there be not any holes made, but rather little pits of a fadome and a halfe in wideneffe, and as much in depth, and this is to be done in OCtober if you mind to plant your vines in Februarie, or elfe in Auguft, if you meane to plant your branches before Winter.
The principall tooles of a vine-dreffer, are the matrocketo digge and turne oues the ground withall, the forked picke axe to make piss withall, the fpade, the weeds
forke to calt vp weedes withal, therake, a little faw, a great hedging bill, a little hedg: ing bill, to crop and cut off the wood, and to make young branches, and an augar to graft the Vine withall.

## Chap. VIII. Of the plant of the Blacke Vine.

Oncerning the naturall plant of the black Vine, it growech euery where : the wilde doth yeeld a fharp and roigh wine, fuchas that which groweth of ground newly broken vp : but the Vine chat is intended to be for Claret wine, is planted halfe of blacke and halfe of white Wine, and thereupon ftandech in neede of another manner of drefsing and feat than the common Vine doth : in like fort it is harder to order well, as requiring a verie great care to be taken aboutit, becaufe the wine which commeth thereof is moft plealanto the eye,and of excellent tafte, albectethat it doe not nourifh fo much.
Foure forts of
The yong plants of the blacke Vine are the Morillion, the Samoyreau, the Negrier, and the Neraut: Befides which, for to make Claret Wine, it is accuftomed to adde the yony white wine plant. And for the mingling of them afterward to make a Claret, it will in a manner fuffice, if among three or foure plants or branches of the blacke there be one of the white.

The beft of the blacke plants is the Morillion, the wood whercof being cut,fendeth forth a redder liquor than any of the other: and the beft of this fort is the fhort one, being iointed, within the bredth of euerie three fingers at the moft, and growing more or leffe thicke, according as the countrie is, bearing and nourifling it : it beareth a well packt fruit, and hath a rounder leafe than any other of that fort.

TheotherMorillion hath a long wood, iointed with ioints at the end of euerie There be three fourefingers at the leaft, it is thicker and fuller of pith within: and in cutcing alfo it soris of the Dorillion. is pithie, and fo more loofe : the barke, except that on the outfide, is verie redde, and theleafe three forked after the manner of a goofe foote, and like vnto the leafe of the figge-tree. This fecond Morillion is otherwife called wilde Pinot: it beareth but few cleere grapes, and thofealfo fmall, but the wine proueth frong, yea betterthan that of the firt Motillion.

The third Morillion called Beccane hath a blacke wood, and the fruit is like vnto it: in the bloffome it maketh a great fhew of Wine, but when it commeth to ripenes, halfe the fruit, and fometimes more, falleth away. The branch is longeft iointed of all the reft, and growerh more in length and height of wood than any of the other. This third kind of Morillion is called Le frane CMerillois lampereau: it ripeneth beforcthe other Vine plants, and yeeldeth good wine and as much as both theother.
There bee three The Samoyreau is likewife found to be of three forts: the beft of which branches forts of the Say is fhortiointed, and of a verie hard wood : the other draweth verie neere vnro it: The mogreau.

Nevcut Boursuigro\% third fort is called indented Samoyreau, otherwife white Prunelat, and that becaufe that his wood is whiter than theother : the wine it yeeldech is of an vnpleafant tafte, and it bearech but fome yeares. It hath furthermore this fault, that when the fruic fhould come to be gathered, it is for the moft part found fallen down and Thed vpon the earth.

The Negrier, called redde Prunelat, hath a redde bark : the wood is long iointed, of a thicke and grofte pitch, a leafe verie much cut, and the grape great, cleere, veric redde and laft ripe. Wherefore thereneedech to plant buta few of thefe red plants, for the colouring of the other blacke, and faftning of them : it keepeth and defendeth itfelfe from the froft, becaufe it hath a high focke.

The Neraut, called the blacke Bourguignon, hath the fame nature with the white Bourguignon,a hard and a veric blacke vvood, a faft and fmall pith, ioints one vpon another, an indifferent leafe and altogether round, the foot thereof being verie reddes
the fruit very thicke and clofe flanding one by another, as though it were a piled or packed thing: ir lauech it feffe better trom the frof than any ocher: there needech not fo much to be planted of it, for it makech a deep colour, in fuch fort ast that they which haue great fore of it planted, make wine for woollen-diers, and fell it very deere.

The fmall Rochell and Bourdelais of the fame nature, are fcarce to bee found, becaufethey are not any great bearcrs, weither yer zood for any thing but making of arbours : the wood is red, as hal be faid a ferward in intreating of the whire vine,except becaufe is is found a litele redder, \&- of a very vermillion colour where it is cur off

> Chap. IX.

## Of the plants of the white vine.

He beff young plant of the white vinc is the Frumenteau, whofe wood Frumentean: draweth towards a yellow colour: next vnro it is she Mufcadet, which bearech a red wood: next vnto the Mufcadet is che fine Pinet of An- Purceder. jou, which hath a wood drawing neere vnto a greene, and the fruit yel.
low as wax.
There is no young plane that is more apt to beare and indure the frof than the Go- Gousf. ueff, which beareth a tawnie coloured wood, and is very thicke in his llociee, hauing a round leafe, and yeelding mucl fruit. There s another kind of Goueft which is called fage Goucf, fo called becaufe ot the taft that it makech in the mouth : it is fmally in requeff,notwithflanding that it yeeld great fore of wine, and be no more fub. ject to the froft rbanche othcr Goueft of the fame fort.

The fruiffullef of all the white vine planes, is that which is called the white Bour- The Burguig: guignon or Mourlon, or elfe che Clozier, whofe ioints are diftant fome two fingers nono and a halfe, and the fruit hauing a fhort taile is thicker and clofer grown than the Rochelle, the leafe is very round, after the manner of Gouffs : in continuance is defendeth it felfe from frofls.

That which the Parifians by reafon of his operation do call Foirard, and the Bur- The Foiratd? gundians Cinquian, becaufe it bearech but vpon the fift part of quantitie, notwithflanding it bring forth very great fruit, and the wood thereof is drawing fomewhat neere vnto a blew, and as it were affoording much worke for the hedge-bill, yet notwithflanding it is the leaft of all in value and goodneffe of iuice.
The Meflicr, otherwife called the Sarwinien, beareth nuch fruit; and for this The IMefier, caufe many giue chenfelues to plant it aboundantily. It hatha wood of colour betwixt a yellow and a red, and yeeldeth not very much to the froft: the leaues thereof are in a mamer round. As concerning the differences of this kind of vine branch, I find them to be three: the one is called the common Meflier, and this beareth great fore Threc forts of of fruit : the other is called the groffe Meflee, as hauing his wood \& fruit very grofle onflier. and great : and the third is called the franke Meflier, and this bearech a better and an opener fruit than thic reft.
The Bourdelais, ocherwife named Legrais is beft to make arbours of in gardens: The Besirdelā̄s: and yet fome plant it becaufe it is a great bearer of fruit : the wood thereof is red, and groffer than any other young vine plant, and accordingly growing vp in greatce hight, crauechallo a longer frame to run vpon: in like manncr it yecldech a groffer fruit, and for a good planr, there is fmall need of it as there is alfo of the Rochelle, which hath a whiter wood than any of the blacke vines haue, and notwish ftanding it is but little fubiect to the frof : bur howfoever, itripench more flowly, and there muft not be fet aboue a quarter of a hundred of branches in a quarter, for it makech a greene wine, notwichflanding that is giue it his fharpneffe, and make it drie, and holding litele of the liquour.

# Chap. X. <br> <br> Of the manner of dreffing of the Vine, as well that which is <br> <br> Of the manner of dreffing of the Vine, as well that which is newly planted, as that which is gronone newly planted, as that which is gronone <br> <br> opand old. 

 <br> <br> opand old.}
Fter that the plant hath beene dreffed and ordered in fuch fort as hath alreadie been faid, and that you may perceiue that it beginnech to pur forth wood the firft yeare, and to take earth (which is a thing that flould bee knowne by mid-May) when alfo you find that his fhoor is able to endure drefling,you mult begin with it and cut it with a hedge-bill: this may bee done if it haue any hoots put forth more than one principall branch, that fo by this meanes it may ioine all his force and frength togecher into one ftocke or leg, but in cutring it, you mulf take heed and fee that it be done, as farre off from the bodic of the flocke as poffibly may bee,and not betwixt two earths, leaft the bodic and trunke thereof might drie vp: fo likewife you muft fee, not to let it enioie his wood, but to prune and lop it, taking away fuch frrigs as may grow vponit, that fo it may fwell vp into a firmer falke, asis woont to be practifed in Anjou and Languedoc. It muft likewife beeobferued that the cutting of ir in the old of the Moone, caufeth the flefhic parts of the grapes to be more groffe and better fed, and that fuch cutting doth ferue and profit nuch in Vines growing in a groffe ground, or in vallies, as alfo in thofe vines which are giuen to bee ouer ranke of wood: afterward you mufterim them, for the firft drefing of a plant hath his firft manner of worke and trauell. In crimming of them the fecond time, there muff paines bee taken about the ridges, leaft that weeds fhould ouergrow and get the head of the plants, and yet alway with this charge and care, that in digging and flirring of the earth you doe not wound the rootes of the vine, being aflured that it alwaies more feareth and is hurt by the encounter of edge-tooles than a man could thinke: and itmult notonely bee digged with a mattocke fomewhat deepe, or forked pickaxe, but alfo the weeds which could not be wholly caft vp, muft be turned in, bearen downe, and broken in their roores: and firft before this be done, there muft good regard bee taken euery where, what plants of branches or vndergrowth are dead fince the firff feating of them, which was in the end of December, or in the beginning of Ianuarie, and in their place to plant others in this time of May, if fo bee you beedifpofed: in which moneth, they are fometimes feene to grow and profper, but and if you do not in this monerh make fuch fupplie of thofe which are dead, then you thal flay till the beginning of December following, and you fhall note very well the places where any are wanting, that fo you may the better beare them in mind.

The fecond yeare you fhall begin to giue to the young plant all fuch helps of dref. fing and erimming as are thought meet for the vine chat is alreadie growne, and hath beene planted a long time, the matter of propagating of it onely excepted; for the more paine and labour that is beflowed vpon this new and young plant in the new of the Moone,and in a time of mild and gentle raine, by fo much alwaies it proueth the better and the more precious.

If the third yeare when you dig and trim them, there be any perceiuerance and fhew that the bud will likewife bloffome and flower, you muft nip it off with your naile.
In the fame yeare, the planss firft planted muft be dunged, and the furrowes made very cleane, and fcowred of all manner of weedes, and by the fame meanes there mult be dung laid vnto and fpread about it, which that it may bee the beft and moft agreeable, would bee Cowes-dung, but for want thereof, the beft next is Horfedung, and laft Swines-dung, and whereit cannot bee come by, then any fuch as the
poore workerman can get, except it be marle, or feefi and blackemould which is the beft help of all others for the vinc : and yet the good vine-dreller faith that the good vine of Pierrötte or Griotre craueth and louech more paine, and leffe manuring, that it may not be conftrained to caft and lee fall his fruit before the due tirime.
The fourth yere likewife it muft be picked and freed with the hand in very nimble and fine mianier, and not to be to ouched with any yron inftrument, to the taking away of the feeble and bad buds, the faireand beautifull being let alone, to fee if they will proue as good as the young planted braunch iffelfe out of which they fprung: and this muft be done about May.

Therefore to fpeake in generall of the tilling, ordering and dreffing of the vine whecher it benew planted or old growne, the firt labour to be befowed vpon it, is called the dig ging of itafter the firlt faffion, which others call the tanning of it; for by it the earth is made the morefupple and tractable. In this peece of worke is concained the laying bare of the roots of the principall flocks, and if the plant be grown high, then this mayy be done in the calme and quiet time of March, according to the difference and alteration of places: for in this chill and cold place, which is fubiect virco frofts and blaftings, as alfo in places feated in the vpper parts and tops of mouintaines, this firt order and fafhion of dreffing them, nuft be done in the after end off Winter which is called mid-May.

The fecond fafhion of dreffing and tilling the vine, is to weed, rake, and cut the To digit offer fame, as hath beetre faid before: but before this worke come in hand, the plants mult bee fitted by being cutt, that fo they may beable to continue in the place where ring windes.

The chird fort of labour to beperformeed in dreffing of vines, is to propagate shem : but this worke fittech them not, for the fecond yeare, no nor yet for the third yere, except in fome certaine places, and infuch vines as at that age are growne to very fronge wood.

Toprune and picte the new vine.

The third yere befides the forefaid defeffings, if the plant be frong and feated in a good ground, and that it hath put forth faire and goodly wood, it is woont to be propagated berwixt mid-Aprili; (and for furenes fake) vito mid-May, and then the propagated branches are buried in the places where the ridges are broken \& caft down, and that alike on both fides, by which meanes is made the checker whereof Columellia fpeaketh.

In this fame third yeare of the new plant, according to the ftrength of the wood which it hath putforth; notwithflanding for the caule aboue mentioned; you haue with your naile enipped off fuch buds as were readie to bloffome : yet according to the fore that it hath of flrong wood, after you haue crit it and amended the ftocke; fome begin to prop, vnderfet, and bind it, for the bearing vp of the firire and iolly branches therof,that they may not fall and lie flat vpon the ground : which done, you muft go ouer it with the fecond fafhion of drefling of it : and yet before this be done, ft mult be raifed, thiruft $v p$ and bound with his firft band.
Vines are propagated in Aduent and Ianuarie after they haue beene cut, howbeit The propagase in places that aremore chill, they be let alone till Februaric and March, and for the vines. doing hereof, they make choice of the faireft branch, that they can find growne out of the ftocke, curting off the reft of the branches fome two ioints from the ftalke. Sometimes if they were of a faire flocke, fome vee to take two of the faireft branches of the chiiefeft plant, and then lay theni veric gently one after another low vider foot, if a pit that fhall haue beene made in the ridges, afterward they inuft bece couered with earth : fome do lay the chiefe branch chat is ro be propagated very decese, to the end that the yeare after that it hall haue beene drefled; and the bran ${ }^{6}$ ches handforicly laid downe in the earth withbut any offence or hiurt done vinto them, it maya abide the manuring with dung; for the chiefe and mother braunch is not woont to bee manured at aniy time, but rather it is to be incoliered and layed optn at théfoot in Lanuaric; \&s in the beginning of December; whers che propagated
braunch is manured, to the end it may the better take in the fnow and raine water which may make it to haue a thicke foot: In Chablyes and throughout all Tounerroies and Aunerroies, they vecto propagatethcir vines in October, and in the beginning of December when they fall calme, in ftonie and grauelly grounds. And from mid-May vnto mid-A prill they propagate their vines in the faid conutries, in their fandie grounds, and fuch as fland on a potters clay, and not fooner than that, becaufe che warer that would ftand in the pits, would rot and kill the young braunches newly planted, becaufe of thefrofts there contioned both in Winter and in the Spring.
After Auguft you muft drefte your vine againe, whecher it be young or old, bin-

The Pecrud
drefly of the vins.

The third drefing of the vine, rat you would haue them to profper, ralcally fellowes or maides, efpecially the propagating of them, and the ftripping of them of their buds. To conclude and fhut vp the whole mater of the dreffing of the vine fet downe in his diuers forts heere before, it is to be vnderfood in generall, that in the monechs of December and Ianuarie, the new propagated plant mult bee cut, and the old one of the yeare palt looked vnto, in laying barethe foot of theold, and drefing a new the propagared one, and manuring of it, if there be any need. In fome lay baretheir vines, and manure fuch as haue need: within a thore time after, they muft belaid bare againe, as alfo conered againe afterward: before they blofo fome and flowre, they muft bee ftripped of their buds with your hand, efpecially whilesthe branches fhallappearefo tender, as that they will fcarce abide touching with ones finger, for feare of fpoiling and breaking off: then fhortly afterwards to prop them vp with railes and ftayes, to tie them with fof and nimble bands, and of all this while, not to forget to giue them their feuerall orders,fuch as haue beene msntioned and fpoken of before.

## Chap. XI。

## Of the manner of grafing the vine.

 He vine in this countrie is feldome grafted, notwithftandiug wee wilf fpeaka word or two of it, hauing alreadie in the third booke handled this point more largely, where we haue fpoken of all the forts and properties of grafting. The vine then may bee grafted either vpon it felfe or on other trees. The vine grafted vpon a vine, is after two maner of waies, the one in the ftocke, the other in the branch. To graft a vine in the ftocke, you muft make choice of a groffe\&firm one, and fuch as is ful of moifture, not being too old, cutcing it clofe by the ground, or which is betrer a foot within ground. The grafts that you - $1+\frac{1}{2}$

## the Countrie Farme.

meane to graft, muft be round, firme, full of little eies and fet one neere vnto another, and cut in the decreafe of the Moone, and taken from the focke and foot of the vine. The manner of grafeing of them, is to infert and fet the grate into the bodie of the vine about two fingers deepe. And you fhall do the like, if you would graft the vine vpon the branches of the vine.
At Auxerrois and efpeciaily at Chablies; they haue another manner of grafting befides the former and dhey vfe it much, it is in this fort: They cut off all the greene buds and fprigs from the flocke, except onely the fhoor or branch which was put forth the y care before, which they leaue of the length of fonee ewo foor. This branch they cleauc the breadth of two or three fingers, they hollow and alfo make fit the clefs within on euery fide, to the end that the graft of the branch being made cornered, may fir the faid cleft the better, and in this cicfe they put the grafe (confifting both of old and new wood) made fharpe at the end, which hall go into the cleft with his pith, fhaped in manner of a wedgc, oucr which they caufe the faid clouen branch fo to clofe and come together in fuch proportion as that the rindes of eurery part of the cleftmay ioine, after which they binde it gently without ftraiting of it much, with a clouen ozier hauing the woodie part taken away, in fuch fort as that there remaine almoff nothing but the very pilling, that fo it may be the fofter to tie them and the foo. ner rotten. This done, they lay the faid graft in the earth about halfe a foct, and couer it with foft earth. Neither do they forget to pick off the buds or fprigs that may grow on the fame flock that yere, to the end theremay be no attraction or rifing of the fap, for the puting forth and feeding of any thing elfe but the yong graft, which for the firft yere growech for the moft part about two or three foor. Then at the end of two yeares they propagare the flocke and the graft, which by fuch meanes will put forth many new fhootes. The like may be pradifed in one of the twigs putting vp at the foot of the flocke.
The vine is grafted after the fame manner vpon trees, as cherry-trees, plum-trees, and others fuch like, and thereof Columella intreatech very largely in his Elme groue, whereunto I will refer you, fecing in this our countrie of France there is accountor eftimation made of the grafting of vines.

## Сhap. XII.

## Of certaine pestic practifes and experiments toucbing and concersing the rines.

 Ou fhall have your vires to beare aboundantly, and withall a very good Alouzdazeco of and durable wine, if your vine-dreffer weare a garland of juic attuch grepets, time as he croppeth and suttecth your vines, if we may belecue Palladius: but indeed the fureft way is if there be caft into the pit with it when it is planted, the acorns of okes brayed, and ground-fetches.
You fhall perceiue before the vintage, that there will bee a great aboundance of Absyrdanes of wines, if whiles you plucke very lightly with your fingers one grape off from the wines bunch, there follow and iffueforth fome liqour after it. In like maner a plentifull harueft of wheat, doth prognofticate a plenifull vintage of wine. Raines in the Spring time do forefhew that the wintes comming after will be ftrong and mightie.
Men of old and auncient cimes paft haue highly efteemed of the ereacle vine, in refpeit of the great vertue which his wine hath againft the bitings of ferpents, and other venimous beafts : and not only the wine but alfo his leaues flamped and applied in forme of a cataplafme vnto the greeued pare, as alfo the afhes of the branches: The maner of preparing of it, is to cleaue three or foure fingers of the neather end of the branch, which you meane to plant: and after that you haue taken out the pith, you mult put in fteede of the pith fome quantitie of triacle : afterward you muft
couer it and wrap it in paper, and fet the clouen end into the ground: fome others not contented with this courle, doe poure treacle vpon the roots of the Vine.

Tle laxative
Vine.

A Vine may after the fame manner be nade laxatiue, as, if in the clouen branch you pus fome foluble purge, or if the rootes thereof bee watered with fome laxatiue things. Note notwichflanding that the branch, taken from the treacie or laxatiue Vine to be planted, will not hold the properties of the faid Vine whereof it was gathered, becaufe the creacle and laxatiue drugs doe loofe their force and power in the Vine in proceffe of cime.
To planta Vine Your Vine will beare a Wine apt to procure fleepe', if after the manner vfed in wholofe wone flal your creacle wine, you put Opium, or the juice of Mandrakes, in the cleft which you plucure fleepe.

Grapeswill ast persecs.

Grapes in the
spring.
TomakeaVire to bud early.
cluflers bearing

## bothredde and

 monute grapes. Thall haue made in the bodie of the Vine.To make grapes to grow without kernels, take the pith out of the branch that you meane to plant, and yet not from the one end to theother, but onely fo much as is to ftand within the ground : afterward wrap it in wet paper, or graft it in an Onion (for the Onion helpeth the branch verie well to grow) and fo plant it. There are fome that doe aduife to water it oft with water wherein hath laine to fteepe fome Beniouin, and chat fo long as till it hath put forth fome buds.
To baue grapes in the fpring, you muft graft the branch of a blacke Vine vpon a Cherrietree.
To caufe a Vine to budde betimes, you muft rubbe the eies of the branch newly cut, with water wherein hath beene fteeped Sal nitrum, and within eight dayes atter it will budde.

To make your clufters to confift partly of white, and partly of black grapes, you muft take two diuers branches, differing the one from the other, and cleaue them in the midft, hauing regard that the cleftrun not through any of their cies, as alfo that there be not any part of eheir pith loft: chen afterward you muft ioine them together, and that in fuch fort as that their eies may be neere one vnto another, and that in fuch fort as that they may touch, and of two, there may become but one onely : afrerward the branches mult be well tied together with paper, and coner them with clammie earth, or with the leaues of the heads of Onions, and to plant them in this order, and to water them often, folong as vntill the buds doc put forth.

To kecpe grapes all winter long, you muft cut them downe after the full Moone in a faire and calme feafon, about eight a clocke in the morning when the deaw is va. nihhed, and afterward dip them in the Sea water ouer head and eares, or elfe in fale brine mixt with a little boyling wine, laying them afterward vpon barley ftraw. Som putthem in a veffell full of new wine, or elfe in a veffell clofe couered and luted: O . ther fome doe keepe them in honie,others anncint them ouer with the juice of Purflaine, others keepe them in Oate chaffe.

## Снар. XIII.

## Of the difeafes of the vine, and the remedies for the fame.

 Omtimes the Vine is troubled with violence of windes, or elfe by che vnwarines of the Vine dreffer, wounding the fame with his pickaxe : in thefe cafes you muft couer the bruifed or hurt place with goates dung or Theepes dung, mingled amongft verie choice earth, and caft the ground round about them of tentimes with the pickeaxe.The Vines will not be fpoiled with the froft, if in diuers places amongft them toward, to fet che fame on fire, for the fmoake rifing thereof will breake the force of the froft : notwithflanding, if it come to paffe that the Vine bee alreadie fpoiled, and the fruit deftroyed, it mult bee cut off verie fhore, that fo his ftrength may yet continue
continue in the remainder; for the yeare following it will beare twice as much fruit.
The vine will not be blafted, if when it is about to bud, you cut it as lateas it may; The blafing of for this late cutring of it, will make it to be in bloflome at fuch time as the Sunne is in zixes. his greateft and moff feruent hear.
To breake off fuch mifts and fogs as are alreadie gathered in the aire, for feare they $A$ Again $\beta$ mile fhould fall vpon the vines,you mult make a fmoake round abour the vincyard, with the dung of yoats well kindled and fer on fire. Againff fuch fogs as haue already hurt the vines, you uult ftamp the roots or leaues of wild cucumbers, or of coloquintida, and lay them tofteepe in water, and with the fame to water the vines, after the milfs. Soume fay that if there bee many bay trecs planted in the vineyard, that then all the malitioufneffe of the mifts wil fall ypontheir boughs.

Some fay that the barren vine will become fruiffull, if the bodie thereof bee wate- To mate the red with mant or womans water that hath beene made long before, and dropt ypon the vine focke by litele and lietle, and if therewichall prefencly after it be laid about with dung mixt with earth, and ehis cure muft be done in Autumne.
Vines are perceiued to want moifture, when their leaties turne very red: this dif- The withered eafe mult be holpen by watering them with fea water, or man or womans vrine.

The vine fometinies pourech forth great fore of teares, whereupon it commeth to palfe that it loofech his force altogether. The remedie is to breake the barke of the Remedies for of vine vpon the bodie therof, and to annoint the wound with oyle boiled to the halfe, the vixe. or elfe with the lees of oyle not falted, and afterward to water it with the ftrongelt vineger that may poffibly be found.

The vine fometimes falle h intof fuch a fcattering difeafe, as that it lettech iss grapes The fattering fall off: the markes and fignes thercof are when the leaues thereof become white and vine. drie, and the branch fallecth broad, lenow, and foft: this is to be remedied with afhes beaten and mixt with ftrong vineger, and rubd about the foot of the vine, and by watering all that is round about the flocke.

The vine fhouting our into ouer many branches, muff bee cur off verie fhort, The vine that is and if for all this it giue not ouer, it muft bee barred at therootes, and riuer grauell toofull of bran: Jaid round about the flocke, togecher with a few afhes, or elfe fome flones,for to coole the fame.
If the grapes wither and drie away as they hang vpon the vine, you muft take away witherisg? fuch as are alreadie withered and water the reft with vineger and afhes of vine bran- grapes. ches : or for the more cerraintie, water the foot of the vine with ftrong vrine which. bath ftood a long time.
There are fome vines shat do rot the fruit which they haue newly brought forth, The rotting of before fuch cine as they become fully growne and ripe: to cure this mifchiefe, you grapss. mult put old afhes vnto their roots, or grauell, or elfe barley meale mixt with feed of purcelane about the flocke and bodic.
To preuent that the biting or breath of oxen and kine(which are very hurfful vnto vines) may not do them any hure at all: you muft water the foot of euery vine ftock with water wherein the hides of oxen or kine, or fome fuch orher beafts haue beene fteept and mollified; for oxen and kine haue the fench of this water in fuch deteftation, as that they will not abide to come neere vnoo the vine.

Caterpillers, lice, and fuch other like fmall vermine will not hurt the bud, or the Sainfl cakr: leafe of the vine, if the hooke or hedgebill wherewith you prune and cut away the pillcrs and licco. fuperfluous boughs of your vine be annointed ouer with the bloud of a male goat, or the fat of an affe, or of a beare, or with the oile wherein caterpillers, or brayed garlicke haue been boiled, or if you annoint and rub them with the purfe arid fheach of a badgers ftones after that ic hath been ground.

To driue away little noifome beafts which are called locufts, from the vines, you Agginf lechilso mult procure fmoakes to be raifed amongft the vines of the dung of uxen,or Galbanum, or of fome old thooe-foles, or of harts-horn, or of womans haire, or for to plant amongft the faid plants fome pionie.
To preferue the vines from being annoied of the fmall beafts called flurewes, you mult

Againf the muft cut them in the night when the Moone is in the figne Leo,Scorpio,Sagittarius, moufe.like beaf or Taurus, or elfe you mult water your vines with water wherein haue beene feeped callid a Shrew. in the Sunne for the fpace of ten daies, ten riuer or fea craiefifhes.

Pifmires.
Pifmires fretting in funder the wood of the vine, euen vnto the marrow, will not hurt the fame at all, if you annoint and rub the focke with the dung of kine or greafe of affes.
That coleworts The bay-tree, hafell-tree, and coleworts doelikewife hurt vines very much if they are barifulb to be planted in the fame ground, but efpecially the coleworts, which the vine hateth vines. aboue all the reft, there being a naturall and deadly contrarietie betwixt thofe two plants, in fo much as that coleworts are a preferuatiue from drunkenneffe, as wee ihall further declare by and by, wherefore the good vine-dreffer fhall neuer fow or plant any coleworts, baie-trees, or hafell, in his garden of vines.

## Chap. XIIII.

of the mamer of gathering grapes, or of vintage.

The gathering of the fruit of vines.
To known when grapes areripe.

The time and
boure of gathe ving grapes,

The dutie of
grape gathe-
勋erers.

Tresiders of quapes.

酸He laft paine and labour to betaken with the vine is the gathering of the fruit, which may not be attempted by the vine-dreffer, vntill the grapes beripe, which is manifeflly perceiued by their growing blacke, as allo by hauing their kernels blacke and all bare, as being altogether íperated from the flefh or pulpe of the grape, iffo be that there be any preffing of the graps. Orelfe, if after taking away a kernell or two out of a grape, you find that the ronme whereout they were taken, doth not leffen, but abideth as large as it was, not being filled vp by the other kernells comming in place. You mult gather them in faire and calme weather, not in rainie weather, nor when the grapes are full of dew, but when it is wafted and gone, and the aire is become fomewhat hot rather than cold, for fo the wine will be the better, and endure good a longer time, yea(if it be poffible) in the waine of the Moone, and when is is vnder the earth; atthe leaft after that the Moone is eighteene or twentie daies old, for fo the wines will bee ftronger, and laft better, than if the grapes fhould be gathered in the new of the Moone.It is true that before the gathering of them, you mult haue all the furniture neceffarie thereto in readines, as baskets and veffels to gather them into, great hedge-bills, and friall ones verie tharpe, caske well hooped, and made very cleane by wafhing, cleane fats, and euery way well fitted, tubbes, great and fmall ftands, well pitched and fitted for the purpofe, and preffes aired, fcoured, waht, and furnifhed with their neceffarie implements.

The grape-gatherers fhall doe their indeauour to put afunderthe leanes, greene, fowre, withered, and rotten grapes, from thofe that are ripe and whole, to the end that the wine may not beindammaged and made worfe than it would bee. And for the making of perfeet good and daintie wine, to chufe out the fineft of the grapes from amongft the commonand grofle ones, as alfo the white from the blacke, not mingling the two beft fortstogether of any kind, as if there fhould bee a mingling of the well tafted grape with thofe which are fweet, or of the white which is ftrong, with another which is weake and of a fad colour. The gathered grapes muft be left in the ground at the leaft for a day or two, and that vncouered (prouided that it raine not) for fo they will become better, in as much as both the Sunne, the dew, and the carth doe refine and purifie them, as taking from them whatfoeuer bad and vnprofitable moifture that is in them : then after that to leaue them in thefat, but not aboue two daies, after which time, the next morning they muft betroden out equally, and infuchfort, as that there may not any of the grapes of theclufters remaine whole. It is true that the treaders muft not goe intothe fat before their feee be well warhed, and their whole bodies be made very cleane,and couered with a fhirt, to the end that their
sheir fweat may not hurs the $W$ ine, \& they muft likewifc abftaine from eating therin.
The grapes being troden, the wine or liquor mult be let boile and worke together what time for the Ipace offoure and twentie houres, more or leffe, according as it is purpoled that the wine fhould be : for the longer it workech together, the groffer, dceper coloured, and mightier it will be; as the leffe it worketh togecher, the finer, more chinne, fubtrile, and delicate it will be. Likewife, if you would haue a ftrong \& mightic wine, you mult in this time of the working couer your Fat with lom coucr, that fo the vapor thercof may not breathe out, or his force and ftrength (pend.
The droffe and groffe parts of che grapes chat aie trodden, which fhall haue fome. iuice and liquor yee left and remaining in them, fhall bec carried to the preffe for to bec preffed out, and there it fhallabide threc or foure ftrokes. It is true that this which is thus preffed out will make the other leffe pleafant, and chercfore is will bee beft to putchat which floweth and runnech out of tis own accord by treading, by it felf; and the other which is preffed out, by it felfe. But howfocuct you beflow them, the caske into vvhich you fall put them muft not be quitefilled vp: but hauc fome fpace left emptie for the boiling vp of the new Wine, and the cafting forth of fuch f cumme and froth as fhall rife out of it with eafe: It is true chat you mult be filling vp of it euerie day, folong as till it appenire chat the Wine hath ridde it felfe from all iss fcumme and froth. And yer as then it may not be bunged vp, but rather fome fone or wifpe of Hay laied vpon the bung-hole : and after,vvhen it fhall manifefly appeare that the vvine is throughly feted and pacified, then you may bung the caske. The caske muft be all this while either in the open aire, or elfe in fome barne that is vvell aired : for it is notto be layed into any Cellar vider ground, before fuch time as che new vvine haue vtterly ceafed and caft off his rage. And withall, you muft beware not to fill vp the wine alreadie cooled and turned vp with wine vvhich is yet hote and boiling,for be it either white or claret, it will make iffat.
After that the vvine is shroughly feted, and ceaterh to boile and work any more, it may be carried downe into fome Cellar, which muft ftand vpon the North, paued vvith grauell or dric earth, and free and farre off from all ill fmels, horfe-ftables, finks, bathes,and marihice places, not hauing any, thing fhut vp and kepr in it vvhich is of cuill fmell, as Cheefe, Garlike, Onyons, Oiles, or Hides: for there is nothing more fubiect to be infected than wine, efpecially that which is new.

Your veffels muft be fo ranked in order, as that they touch not one atiother, hauing fome diftance left betwixt them, that fo they may the more eafily be looked vnto all the yeare. The veffels to auoide the vencing which commonly hapneth vnto vvine, muft haue the bungliole very well fopt with grauell, and not flirred or touched atanie time, vnill the time to drinke the vvine be comic. If, vpon forme hap, the good houfholder prefently, or a lirtle after the cime of Vintage, be not minded to fell fome part of his Winc,according as opportunitie may feruc for his profite: notwithftanding I find that men in times paft to the end they might haue a purer, neater, and more fubtile wine, after that the vvine hath purged and caft forth his fcumme, ceafing to boile) did vfe to pur it into new veffels, that is to fay, did change it out of one veffell into another,hauing this opinion, that vvine feparated from its lees, doth make a more fubrile kinde of mother in Winter, and becommeth more delicate and durable, and refinech it felfe farre better in the fpring time, than it would haue done vpon the firt lees; as alfo that when vvine ftandech long vpon the firft lees, which are thicke and fowre, it cafily loofeth its naturall verdure, and gettech a fharpe and vnpleafant tafte, and a thicke fubftance. They did furthermore obferue the time and courfeof the heauens : for they neuer drew vvine out of one veffell into another; but vvhen the Northren vvinde did blow, vvhen the the Moone vvas either new or vnder the earth, and vvhen as Rofes had put forth cheir firft flowers, and the Vine his buddes. And Hefiodus following this cuftome, doth counfell men that in changing vvine out of one veffell into another, they flould feparate the Wine vvhich is the vppermoft in the veffell, from that vuhich drawech fomewhat neere vnto sholees, and both of them from that wvhich is in the middeft of the veflell, becaure
that the wine which is next vito the bunghole, is cuaporated much,as being next vn- to the aire : and that which is in the bottonie corruptech very eafily, as being neere vnto the leefe : but contrarily that which is in the midf is moft durable and conucnient for nourifhment. Such cuftome vfed by thofe of auncient time, is noto obferued now adaies, efpecially in the countries of France, and therefore we will not fay any thing of this chinging of wine out of one veffell into another.

## Chap. XV.

$$
\begin{aligned}
& \text { of the time of pearying the vefsells and tafing the wine } \\
& \text { and bow to draw it without cainfing it } \\
& \text { to take winde. }
\end{aligned}
$$

The time to pearce zoines according to those of aunc ent time.
*
The way 10 pearce wines.

Totaftaine.

At what time and bow wine is to be tafied.

To gine vent wnto zine.
 En of auncient titne did ateributefomuch vnto the influence of the flars, as that they did pearle their veffells cither for tafting or drinking of their wine, at the rifing of the Sunnic or the Moone, hauing this opinion, that at fuch times the wine doth moue, and therefore ought not in any cafe to bee touched or dealt withall. Wee doe not fo curioufly prie into the mater, buis wee pearfe our veffells at all times, and às oft, as eicher neceffrite or commoditie will perfuade and doth require. Notwithiftanding in pearcing of them, you mult haut this wifdome, as to beware that they take as litele winde as polffibly may bee, and when there is buta verie lietle deawne of it, you muift prefently fill vp the veffell againe for feare of fpending of itfelfe. As concerning the talting of wine, whietliet it bee to fell or drinke, or if it be to finde out whether there bee any that is in daunger to bee turned, fome doe giue coiinfell, that is is good to make the affay at fuch time as the North-Eaft winde bloweth, becaule at fuch timesit is more purie and neate than at others: others thinke it beft whien the South-wind bloweth, becaufe this v vind firrech and moueth the winie verie nuich, and heweth it in deede to bee the fame that it is: but howfocier it is, it is not good to tafte the wine fad fting; for before meate vvinie hath but a dall and deadd tant, nieither yet after thas you haue drunke of other vvine, nor aftei you haue gota full bellie. Furthermore the aflaier of wines muft not haile eaten any fourecthing, falt, bitter, or any ocheř thing which may alter his taft, but muff only haue eaten fomething witliout hauing digected it.

When our houfe-holder is difpofed to pearce his ivine, and that hee meaneth to draw it by alittle and a lictle for his ownedrinking, and leafurably without giuing vnto it any vent at all : hee mult pearceit in the vpper part of the velfell with a pearcer which is for the famic purpofe, and put into the hole thie quill of a feacher which mult be open on both fides, and itmult bee as long as three fingers are broad : and that vpon the top of that end of the quill which hall be vpward, hee put fome cotten, couering the faid cotten âferward with hialfe a Walnut-fhell, and vpon it againe fome afhes or veet lime laid: and when he hath done all this, lee him fet the tap in the veffell: and by this meanes he fhall draw his vvinie eafily, and vnto the lees withour giuing of it any veit.

## С н а р. XVI.

## Certainefmail things tobe obferved concerning wine.

 Hen the cafe foffandech, as that the Vintage prouct fmall, and that the Lord of the farme, in refpect of fparing, defirech to make a fmall Wine, wherewith he would paffe ouer the requifite prouifion of his houfe in ftead of a better and fronger wine, hee ilall make it in this fort after the manner of a rappe Vine. In the cime of Vintage he fhall caule to bee taken a good quantitic of the knots of the grapes called Pinots and Sarminians, when they are verie ripe and haue a hard skin, and of thefe knots alone and whole, wwithcut burfting of them, he fhall caufe a veffell to be filled neere full ; which hee frall caule to be fer downe vpon one of the ends, and afterward caufe it to be taken downe againe, and fet vpon a cancling, and to fhall caufe to be turned into it two pints of good wine that is olde and mightic. This being done, he fhall caufe there to be water boiled, wherof when it is hore, he fhall goe forward, and proceed to the filling vp of the veffell, and fo thall leauc it vntill his fmall wine haue done boiling, and be become throughly cold (which is fometimes fooner, fometimes later, according as the yeare prooueth hoteor cold) whereunto he may then puta tap to draw out of the fame, and to beg in to drinke thereof. And as of as he drawech out thereof, he fhall fill vp his veffell againe with fo much cold water as he drew forth of his wine, and fo by that meanes kecp his veffell al waies full. And by this meanes his faid fmall wine will paffe ouer the greateft part of the yeare in oneltare of goodnes. And when this fmall wine fhall beginto grow too weake, he fhall draw out thercof a quart, and put in place chereof as much good old wine. And in drinking of it he fhall holde on (iffo it feeme good vnto him) his putting in of warer, as before,except that it be found roo weake to put in any more wine, and then he fhall make his worke-folkes to drinke of it, filling it vp ftill daily with vvater, as before. The colour of this frall Wine is verie pleafant and fairc.
The way to keepe new wine that it fhedde not in the time of the boiling in the ofithe bosting veffell, is to pur about the hole at which che new vvine commeth forth, a wreathe of outer of the Pennie-royall, Calamint,or Organie : or elfe you fhall annoint the edges of the faid hole within with Milke, or Cheefe made of Cowes milke : or elfe you thall caft into the veffell of Wine a morrell of Cheefe, for it will keepe in the grcat heat of the new Wine.
To caure new Wine to be quickly purged, you muft putinto fifteene quarts of new Wine, halfe a pint of Vineger, and within three daies it vvill be fined.

How nexo wine If you defire to haue new Wine all the yeare, you muft take the new Wine which difillerh by it felfe from the grapes before they be croden, and put it the fame day in To baue neew veffell pitched vvithin and vvithour, in fuch fort, as shat the veffell may be halte full, weere conds. and verie vvell fopt vvith plaifter aboue: and thus the new Wine vvill continue a long time in iss fweetnes: and yee it vvill be kept thus a great vwhile longer, if you put the veffell in a Well or Riuer, couercd vvith fome litete skin, and foleaue it there thirtie dayes: forin not hauing boiled, it vvill continue alwaies fweete, and vvill bee preferued by the heate of the pitch: or elfe it vvill be good to bruife the grapes verie gently, vvithout much ftraining of them, and the new Wine vwhich thall iffue out of them by that meanes, vvill keepe new a long time. Otherfome do lay their veffel! filled vvith fweet Wine in moift grauell: fome doe pitch cheir veffels vvichin and vvithour, and fo lay it only out of the vvater : other fome do couer it vvith the droffe of the vvine prelfe, and afterward to heape vpon it moift graucll.
To know if there be any vvacer cither in new Wine orochcr, take a vvihhered rufh, To know if and caft it into the Wine, and ifthere be any vvater in it, it vvill draw chereof vnto it: there be any or elfe take raw and vvilde Peares, and cutting them in the midft, make them cleane: Water in tbe or, if your wvill, take Mulberries, and caft them into the Wine, for if they fwimme
aloft it is a neate Wine, but and if they finke there is water therein. Some do annoine a reed or a peece of wood, or paper, haie, or fome other little bundle of berbes, or of ftraw, which they drie, and put into the Wine, and after drawing themout, they take triall and knowledgethereof; for if the Wine haue water in it, drops thereof will gather vnto the oile. Others caft vnquenche lime into the Wine, and if there be water amonglt the Wine, the lime will diffolue and melt, whereas if the Wine be neat, it will bind and faften the lime togecher. Some take of the Wine and poure it in a frying pan, wherein there is boiling oile, and if there be any water it. will make a great noile, and will boile ragioully: againe, others caft an egge into the Wine, for if the egge defcend and finke downe, then there is water in the Wine, but if it do not defcend, then there is no water in it.
The way to correctine ouer much watrifh. neffe of Wine are fallout rainie, and that it happen that the grapes hanging yet vpon the vine be much wet, or if it fall out that after the time of gathering them, there fall fome great fore of raine, fo as that the grapes are watered and weet more a great deale than is needfull, they muft of neceffitie be trodden, and then if you perceile the new Wine comming of that vintage to haue fmall ftrength in it, (which knowledge you may come by, in tafting itafter that the Wine fhall bee put vp in veffells, and fhall firft begin to boile and worke in them) it muft prefently bee chaunged and drawne out into another veffell, for fo all the watrie parts that are in it, will itay behind in the bottome: for as much as the Wine will yet ftand charged, you fhall put to euery fifteene quarters of Wine one pint and a halfe of falt. Others do boilethe Wine vpon thefire, folong, as till the third part be confumed, and the reft they vfe foure yeares after.

If it fhould happen that the new Wine prepared in fuch fort as wee haue fokers

Torecouer the nexpwinevobich beginnech to fowere.

To caufe new woine to fitble quackly.
-
$\rightarrow$
To feparate woater frum poine.

Tomake an oderiferous Frinc. of, after long time fhould begin to fowre and turne eager : tomecte with chis mifchiefe, you muft cant to fteepe therein a pint of grapes boiled, till they be full fwolne, afterward fraining them ourinto an eight part of new Wine, or elfe caufe the faid new Wine to run through iucr grauell.

If you would hane new Wine fetled in foure and twentie houres without boiling of it, that fo you might prefently vefe it, fill a veffell wish the fimall chips of wood calIed in French Sayette, which the inhabitants of Champagne do call Buchettes: vpon thefe clips caft your new Wine, and within the forefiaid foure and twentichoures, you flall haue a fceted Wine withour hating caf any fcum. The inhabitants of Champagne, efpecially the cownes men of Troy, ve this reccit not onely to caufe Wine to efetle quickly, but alfo to make rap Wine withall.

If it come to pafle that Wine haue water in $i t$, and if we find $i$ to befo, by the meanes lately laid downe : to feperate then this water from chis Wine, you mult pue into the veffell of Wine melted allome, and after fopping the mouth of the faid veffel! wich a fponge drenched in oile, to turne the mouth of the veffell fo fapped downward, and fo the water only will come forth :or elfe caufea veffcl of juie wood to be made, and puthercin fuch quantitie of Wine as ir will be able to hold, the water will come forch prefently, and the Wine will abide pure and neare.
You fhall make an odoriferous fweet fmelling Wine in chis manner : take a few myrte berries, drie and bray the fame, and putchicin in a litele barrell of Wine, and letting them foreff for ten daies, afterward open the barrell and vfecthe IVine. You Thall worke the like effect, if you take the bloffomes of the grapes (thofe efpecially which grow vpon the fhrubbie vines) when the vine is in flower, and caft them into the veflell of Winc, the brims of the IVine veffell being rubd ouer with the leaues of the pine and cypres tree, and after caft into the Wine, for they make it very odoriferous: or more eafily, you mull hang thercin an orenge, or a pome cyeron which is not very groffe and thicke, and pricke it full of cloues, and that in fuch fort as it may not touch he Wine, S\& a fer fhut vp the veffell clofe, or elfe infufe and fteep in Aqua vite the fimples or fuch matter as you haue your Wine to fmell of, and afterward Atraining the fame Aqua virx, to put it into the veffell amongft the Wine.

## To make red Wine of white, and contrariwife of red Wine white: Take common

falt cight drams and put in in fiue pints of red wine : or elfe poure into red wine fone To make ewhile whay, with the afles of the branches of the white vine, and turne and roulc it well pine red,snd for the fpace of fortie daics, then lerit refl, and it will become white wine: On the red mine inbite concrarie, white vvine will become red, if you put into itthe afhes of the branches of the red vine : or if you caft into white wine the pouder of honic boiled to the hardneffe of a flone, and then made into pouder, changing if from one veffell into another to mingle them togecher: yois may do this the more eafily, if you caft into the vyhitc wine the dried or grcene roots of all the forts of forrell.
To make clarret wine, beate clie wvhites of three egs in a difh, vntill the frosh arife, To make clarse and adde thereto fome white falt, and as muych vvine, beate them all together againe wine. vntill fuch time asthat ehey. become very whte, afterward fill $v p$ the platter with vvinc, and putall into the veffell of vvinc aud keepe.ir.
You fhall.makea wine that wil beare great torc of water, if drying the roots of hollihockes you fhaue and frrape them, cafing the faid fhauings into the winc, which afterward you muft roule and mingle together very carefully.
Wine will haue no flower, if you pui in the vvine the flowers of che vine gathered wine that foso: and dried, or the meale of fetches, changing che vvine into anocher veffell, when the rett not. meale and the flowers are fetled do wne to the bettome.

You fhall make the boiied wine called Cute, if you boile new wvine that is good, Boild woins, louely, and very fweer, vititilthe third partethereof be confumed, and then when it is growne cold, youm muft put it into veftells for your ve.

To make fweet vvine that will fo continue all the yeare, you muf gather your Tocont:nus grapes whole, and lee them lie fpread three daies in the Sunne, and tread them the worne fyeset alb fourth about noone. The fweet vvine, that ist to fay, the very liquor vvhich thail run thejere ling, out into the fat, before the droffe fubtance come vnder the preffe, sault bec taken away, be put by its felfe, and boiled, and after it is boiled, put to nineteene quarters of it an ounce of Ireos or corne flag vevll braied, and fraine this vvine vvishourthe lees, vvhick being done, it wvill continue fweer, firme and vvholefome for the body:

To make vvine like vnto Greekıh vvine, you muft gather from the vines earely grapes very ripe, and thofe you fhall drie in the Sunne three daies, and tread them out in the fourth, and the wvine thus made you fhall pur in a veffell, haung care to caufe it to purge and caft out the filth vvichini it, as alfo its lees, at fuch time as it fhall boile。 And the fift day after that it fhall be purged, you fhall put into it two pounds of reboiled falt, or very fmall beaten falt, or at the leaft one pound in eighteene quartes and a halfe of veine.

To make a veake and feeble wvine to become an excellent good wine : take a handfull of the lcaues of Tota bona, and a handfull of fenncll and finallage feed, and caft them into the veffell.
To make good houfhold vivine, you muft caft how much the renth part of the wine commeth to which you haue drawne or made in one day, and to caft as much fpring water vpon che droffe, out of which the faid wine was gathered and preffed : with this you mult mingle the fcum caken off from the wine in the boiling or fee. thing of it, az alfo the lees remaining in the bottome of the treading fat, which fhall bee let lie and feepe in the fance a whole night : the day following, you umuft tread them all together with your feet, and afterward preffe them out : then you muft pur that which fhall come forth into veffells, and fop is vp when it hath boiled and purged.

To caufe troubled wines and fuch as are full of lees to fertle, poure into thirtie To caufe etron: quarters of wine, halfe a pint of the lees of oyle boiled till the chird pare be wafted, and the wines will fertle by and by and returne vnto their former effate: or elfe, which is better and more eafie, caft into the wine veffell the whites of fixe or feuen egs, and fir them togecher very well with a fticke.

You may take away the force and frengch of vvinc, if you put into is fome iuice The tahing of coleworts, vwhich you fhall haue bruifed before hand, and thereupon drawne out the inice.

To drinte much mincandy:t not to be dyunke.

Tobate winte.

To make them
sohichare dirunke fober.

To caufe roine that it fhall not beconse Arong.

To make old wince of tuew.

Wine that will krepe long.

To drinke great fore of Wine and not to be drunke, you muft eate of the rofted lungs of a goate: or otherwife, eate fixe or feuen bitter almonds fafting: or otherwite, eate raw coleworts before you drinke, and you fhall not become drunke. Some fay that a grear drinker flall nener become drunke, if he weare a wreath of Iuam ofcat about his head: or, if at his firt draught he repeate this vearfe of Homers, Iupiter bis alta fonnit clementer ab Ida, which is to Cay, Iupiter was heard fpeaking in a foft and gentle manner from the high mount of Ida.

To prouoke hatred of Wine, you muft take the thin liquor which drop. peth from the braunches after they bee cut, and put it in the drunken mans glafe aganft fuch time as he fhall drinke, but fo asthat hee know not any thing of it; and thereupon his appetite and luft to drinke IVine will departquice away from him: or elfe, caufe him to drinke with white wine the bloflomes of rie, gathered at fuch time as the rie bloometh: or elfe, take threcor foure eelesaliue, and let them lie in wine till they die, and afterward caufe this wine to be drunke off by fuch as are giuen to be drunke: or elfe, take a green frog, which is ordinarily found in frelh fprings, and let the fame lie in wine till he die : otherwife, marke diligently where the owle haunteth, that fo you may get fome of her egs, trie them, and giue them to the drunken gallant to eate.

To make drunken mento become fober, you muft make them eate colewoorts and fome manner of confections made of honie : or elfe drinke great draughts of vineger.

To be the meanes that wine fhal not become ftrong, take a peece of falt larde, and tie it to the hole by which you turne vp your wine into the veflell, with fo ftrong a thread as may beare vp the lard, which lard muft hang in fuch manner, as that it may but touch the vppermoft part of the wine : and this will keepe the wine from becom. ming frong, through his farneffe and faltriefle, which hinder the feparating and refining of the fame, which is the thing that giueth ftrength vnto the wine.

To caufe new wine to becomeold by and by, take bitter almonds aud melilot, of each an ounce, of licorice three ounces, of the flowers of lauander as much, of alocs hepaticke two ounces, bray them all and tie them together in a linnen cloth, and fo finke them in che wine.

You thall finde out and know, whether the wine will keepe long or not, after this manner : when the wine thall be curned vp , you muft, within a certaine time after, change it into another veffell, leauing the lees behind in the firft weffell, which muft be very well ftopton euery fide, and then afterward you muft diligently trie out and fee, whether the lees do change and beginto get any ill finell or no, or whether they breed any gnats, or fuch other listle wilde beafts, and if you percciue that nothing of all thefe fallethour, then you need not feare the turning of your wine: but if it fallout otherwife, you may affure your felte, thatluch wine is apt to corrupt and become nought. Othersdo put downe to the bottome of the veffell an elder pipe, or fome other of fuch like wood, as may bee made hollow, through which they take the fent of lees, and fo are throughly cernfied how they imell, and according as they find the lees to be conditioned, fo they udge of the ftate of the wine. Some take vpon them to foretell by the couers of vellels, wherein if they find and perceiue the fauour of wine, they by and by iudge the wine to bee good: but if in them they find the fauour of water, they make no great reckoning of any fuch wine. Others rudgethem by the fauour and relifh of the wine, which if they find to bee fharpe in the beginning, they hope well of the goodneffe thereof: but and if they taft flat and foft, then they feare the contraric : if when the wine is put into the veflells, it be fat and glewie, it is a good figne: but if it bee void of all ftrength, it will eafily bee turned.
The keceing of sist.

Tokeepewine at all times, caft of the powder of roch allome powdred verie finely into the veffell, whereinto you fhall turne your new wine : or the'powder of falt finely powdred: or pebble ftones, and little flints, taken out of fome brooke: or aqua viræ: or elfe hang in the veffel by the bung, a glaffe violl ful of quick filuer, bue
very well and clofe ftupt eucrie where, and lee it lower and lower as the wine fhall finke lower and lower, fo chat the violl may hang within the wine continually: or elfe powre common oyle vpon it.

## Сhap. XVII.

## A dif courfe of certaine wines that ferve for the vee of Phyfock.

 we haue faid in the fecond Booke, that the prouident hufwife muff fowe To make midiand plant vpon fome bed in her Kitchin garden certaine medicinable cinabicewines. hearbes: in like manner it will not be amifle, that the farmer or his wife hould yecrely, in Vintage time, make and compound wines for the neceffries that may grow by reafon of difeafes happening amonght their familie. Wherefore, to the end we may not forget any thing which may fall out to be neceffaric for the better keeping of our Countrey Farme, wee would not omit the manner of conipounding fuch wines: which notwithftanding the good wife mult not vfe or giue others counfell to vfe hand ouer head, at hap hazard, and without good reafon: ior it is not good to vfe them where there is an ague, neither yet till fortie daies palt after that they be made. Their veffels muft be alwaies kept clofe fhut, for elfe they will grow fowre, or elfe fipend themflues very eafily: and after that it is perceiued by the taft, that they retaine che relifh of the funples infufed, it will be good ro take the faid fimples out of the veffels.
To make wine of Rofes : take dric Rofes of the mountaines, A nnife, and Honey, Rofe-wine e. of euerie one alike, and a lietle Saffron, bind them together, and put them in the wine: this wine is very good for che weakeneffe of the ftomack, and for pleurifies.
For to make wine of Wormewood: take Sea Wormewood, or for want thereof, wormewoodcommon Wormewood, efpecially that which hath the fmall ftalkes and fhort leaues, wine. about eight drams; fampe them, and bind them in a cloch which is not ouer-thicke wotien, and fo caft it into the veffell, afterward poure new wine in vpon it, and that after fuch a proportion, as that for euerie chree pints of wine there may be an ounce of Wormewood, and fo to hold on till the veffels be full, leauing a vent open, that fo it may not fall a bryling againe. The vfe of this wine is good for the paine of the ftomacke and liuer, and to kill fuch wormes as are in the guts.
To make winc of Horchound that is good for the cough in the Vintage time, you wime of Hore muft gather of the crops and tender falks of Horehound, growing efpecially in fuch bound places as are leane and vntililed, and aferward caule them to be dried in the Sunne, \& made vp into bundics, tying them together with a rulh finking them in the veffell: in fixtie fue quarts of new wine, you muft put eight pound of Horehound to boyle therewith, after that the Horehound fhall be taken out, and the wine ftopt vp veric diligently.
The wine of A nnife and Dill,againft the difficultie of vrine, the wine of Peares a- Wine of Annife, gainft the flux of the bellie: the vvine of Bayes againी the ach of the belly \& wring- Dill, Pcara, ings in the fame : the vvine of Afarum bacchar, againft the Iaundife, Dropfie, and $\begin{aligned} & \text { Bayes, Afarumb } \\ & \text { bactoar, and }\end{aligned}$ tertian ague: the vvine of Sage againft the paines and weakencffe of the finewes, and Sage. they are made as the vvine of Wormewood.

For to make vvine of Thyme : you muff gather the Thyme vvien it is in flower, Wine of Tbmeo and drying it, flampe it and put chereof the quantitic of a twelfth part in a veffell of thirtie quarts of white wine.
To make vvine of Betonic : take Betonie the leaurs and fced about one pound, put Betonie wine: them in twentie quarts of new wine : vvhen feuen monechs are paft, clange the vvine into a new veffell.

For ro make wine of Hyfope: take the leaues of Hyrope well pouned, make them Hy/ope winse, faft in a very fine cloth, and caft chem into twentie quarts of new vvine: this vvine is

Wine of pome. granats,quinces, mulbervies and Seriuces.
good againt the difeafes of the lungs, an old cough, and fhorenes of breath.
Wine of Pomegranates is made of Pomegranates that are fearce ripe, being throughly bruifed, and put in a veffell in three quarts of thicke red Wine, to vee againft the flux of the bellie: to the fame end ferueth the Wine made of feruices, mulberries and ciuinces. You may fee a largedifcourfe of Wines in the fifth Booke of Diofcorides.

## Chap. XVIII.

## Of fuch faules and acciderts as bappen to wine.

How Witues mull be oidcyed incellersor roames under griund.

Asainft the eagerneffe or singrenelfe of wines.

At what time wine is mof apt to turac ard corrupt.

To belpe :be wine that is turned
Ine is not exempt from loffe and inconueniencies any more than all other things which are contained vnder the cope of Heauen, therefore to meere with all the inconueniencies which may happen'to Wine, you mult carefully and often looke vnto the Wine-veffell: notwith tan:dung, from the cime chat the faid velfels are coucred and fopped vp, vito the Spring Equinortiall, it will be fufficient to fill vp and handle the Wine once euerie fixand twentie daics, but after this time, twiceinthefaid fpace: and if the Wine begin to flower, then you mun looke to it more oft, leaft the flower thereof fhould fall to the bottome and fpoile the Winc. Looke by how much the heat is the greater, by fo much you muft vifite and looke to your Wines the ofter, and ener kcepe st with filling of it vp, refrefhing and giuing of it vent, for fo long as it holdeth cold, it will remaine and continue found and intire.

If your Wine fhould begin to wax fowre, you mult pur in the bottome of the verfell a por full of water well ftopt, and thereuponalfo, fopping the veffell, leate thereinforne fmall hole to vent at, the third day after, you muft draw out the pots, and you fhall find she water there in finking, but ehe wine found and neate.

Wines are moff fubicet to iurne, efpecially about the elcuenth day of Iune, being the Sommers folitice: and the time when the vine flowreth, fomewhat before the dog daies enter through the great change of heate and cold, and generally when the Southerne wind bloweth, whether it be in Sommer or Winter: as alfo in time of great raine, of great windes, earthquakes, or mightie thunders, and whenas vines or rofes begin to flower: to keepe them from turning, youmuft put into them when they boile up and worke, boyled falt, or elfe the feede of fmallage, barley bran, and the leaues of the bay-tree, or afhes of the braunches of the vine, with tenneillfeede brayed.

Others do appoint thefe remedies : take the rootes of mugwort, and cinquefoile, make them in powder, and when the Wine fhall haue boiled, put them in, and it will not turne nor change. Likewife if youlay your veffells in vaulted cellars, or if you put in them a plate of yronor flint flones, or leuen made of rie pafte, or a coucring vpon the veffell, you keepe your Wine fromall inconueniencies that might happen vito it by thunder and lightning.
Sweet almonds caft into red Wine,keepe it from turning : the afhes of oake-wood caft into the Wine doe the like : the meale of the white fetch doth faue the Wine from turning, and keepeth it in his foundneffe: allome broken in peeces doth the like : as alfo brimone, lime, fand and plaiter.

If it happen that the Wine be curned, you muft caft into the veffell a good quancitie of beaten pepper, and which is beeter, change its veffell : take cetaine whites of eggs, which after that you haue beaten them very well a long time, and taken off the froth rifing vpon them, calt them into the veffell and roule it : or elfe, take twelue kernels of old wal-nuts, draw a thread through them, rolt them vnder the afhes, and whilesthey are yet hot, hang them in the veffel within the IVine, \& leaue them there fo long as vncill you feethe Wine to haue recoucred his former colour.

If the Wine be become croubled, it will quickly grow cleare and become fined againe, with the kernell of a pine apple, or of peaches, or with the whites of egs and a litele falt : ocherwife, take halfe a pound of roch allome, and as much fugar,make a very fmall powder thereof and caft it into the veffell.

If it appeare and fhew manifeft viro you that your Wine would marre and fpoile, take this courfe with it: If it bee claret Wine, take the yelke of an egge, and if it be white, take onely the white of an egge, putting thercto onely three ounces of cleare bright ftones taken out of fome fwiff running riuer, make them into pouder with two ounces of falt poudred very fmall, and mingled all together: after that, put the IVine anto another veffell that is neate and cleane, and not tainted with any maner of fmell before hand : which done, calt into the fame all the forefaid compofition, and mingle it with the Wine fiue or fixe times a day, vntill three or foure daies be paft: remember and marke to doe this fame before fuch cime as the Wine bee all together marred; for when it is once throughly corrupted and marred, this compofition will ferue you to no end, and the labour and time is but loft that youbeftow about it,

To reftore againe into his former and found eftate, the Wine that is growne fat, fuftie, and hath taken winde :caft into the veffell cowes.milke fomewhat falted: fome caft thereinto allome, lime, and brimfone, but not without their great hurt that fhall drinke the fame : but indeed it would docbeter, if they would put into it fome Iuniper berries and Ireos roots.
If that your Wine do continue to hold and fill retaine any ill qualitie by its hauing taken wind, you muft make it loofe the fame, by making two orthree towres in the velfels, and afterward fetting it againe vpon his cantling, and then to fill it vp.

Torake away the fufte fmell of wine, you mult take medlers ripened vpon the totakeaway ftraw, and opening them in foure quarters, ciethem with a fmall threed, and thereby the fulie jnociof make them faft vnto the bunghole of che veffell, in fuch fort as that they may hang all couered ouer in the Wine: hauing left them thus for the fpace of a moneth, then take chem out, and by this meanes you fhall likewife take away the ill fmell of your Wine ; or elfe rake bay-berries, and boiling them in Wine, caft the fame afterward in to the faid veffell : otherwife, make a bag and fill it with fage, putting it in the veffell, but not laying it in the Wine : the fame remedie ferueth to recouer Wine that is become foure; if you had not rather chufe for the helping of your Wine to caft inte it fomeleeke feed.
To keepe Wines from fowring, you muft place the veffell in a cold place, very ful To heepe the and well ftopped, fo as they may not haue any breathing place: or elfe if you want wine from the benefit of a cold place, and that you are forced to fet it in a place that is hot: or elfe if the Wine faile through hauing beene a long time pearced : to keepe it from falling quit foure, you mult hang at a fmall coard a great peece of larde well wrapped in a linnen cloth, and let it downe by the bung. hole intothe midft of the Wine: and as the Wine fhall grow lower and lower, fo you mutt till iet lower the lard, that fo it may alwaies continue in the midf. In the meane time, the veffell muft be con; tinually well couered and ftopt: and by how much the peece of lard hall bee the greater, fo much the better will it keepe the Wine from fowring. Some aduife and oplealinea give counfell for the fame purpofe to put into the veffell oylcoliue, in fuch quantitic prexenter oftbe as that it may only couer the vppermoft face of the Wine: and when the Wine is all the formerefigs drawn out, the oyle may cafily be feperate from the lees, and gathered into a veffel by it felfe.

Totake away the waterifhneffe and ouermuch moifture of Wine, you mult put For matrivib into the veffell the leaues of the pomegranete tree.
If any beaft be fallen into the veffell of Wine, and dead thercin, as an adder, rat, or moule, fo foone asthe dead bodie is found, you muft burneit, and caft the cold afhes into the veffell whereinto it had fallen before, and fir it about with a wooden fticke : others giue counfell to put hot bread intothe Wine, or any yron ring, and then the venime will vanifh and depart.

CHAP。

For tronbiad Wine。

To bepet the fowireneffic of fowring.

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#### Abstract

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Ton

## C inap. XIX。

## Of the manner of making Vineger.

Finegeris a fauli of wine.
Ineger commeth rhrough the defeat of wine, as wee may vnderftand by thas which is cone before: the riotoufneffe and pleafure of men, hath beene the caufe that Vineger came euer in requeft, notonely for fauces, but alfo for many other vies: It fhall not therefore be thoughe vnreafonable to vfea word ortwo about making of Vineger.

The moft common way to make Vineger is on this fort : They vfe to take good wine, and therewithall to fill the veffell to the halfe, leauing it vnftept and fet ini hot place, as in fome corne loff, or in fome guter betwixt the tiles.

If you defire to make Vinegar in haft, you muft caft into your wine, falt, pepper, and foure leuen mingled together : and yet to make it the more haftly, you munt heat red hot fome ftone, tile, or gad of Ateele, and put it all hot into the wine, or elfe the mouth of the veffell mult itand alwaies open, or elfe the veffell muft be fet in the Sunne three or foure daies, and therewithall a little falt put in the veffell : or elfe fill a new earthen pot that is not halfe baked with wine, and ftop it well, afterward put is in a kettle full of boiled water vpon the fire, and letting it there remaine a long time in the boiling wate, it wwill grow foure : or elfe put into the wine a beete root ftam-
Radilf and becte roots make vineger. pa ars, or a Thiue of barley bread new baked : or elfe you mult take of the bloffomes of the ceruife tree in therefeafon, and drying them in the Sunne after the manner of rofe-leaues, either in a glafte veffello or in one of blacke earth, fill vp the fame veffell with pure Vinegar or Wine, and fo fet it forth againe imto the Sun or in the chimny end to the heare of the fire, and in a fhort time it will become ftrong and very fharpe Vineger: but if you would reftore it againe to his former flate of wine, then you muft caft, of The reots of sole-worts make Vineger to turne againe anto zoine. colewort roots into it.

Chap. XX.

## Of fome ob ferwations and inftructions concerning Vineger.

StrongVinezer.
 O make frong vineger, take the fruit of the cornell tree, when it beginneth to grow red, and of bramble berries, fuch as grow in the fields, when they are halfe ripe, drie them, make them inro powder, and with a little ftrong Vineger, you fhall make little prettic balles, which you fhall drie in the Sunne, afierward you muft take wine, and heate it, and when it is hot put into it this compofition, and it will bee turned very fpeedily into very ftrong Vineger.
To make Vineger with corrupted wine : take a rotten and corrupt wine and boile it, taking away all the fcum that rifeth in the boiling thereof, thus let it continue vp. on the fire till it be boyled away one third part, then put it into a veffell wherein hath bin Vineger, putting thereto fome cheruile, couer the veffell in fuch fort, that there getno aire into it, and in a fhort rime it will proue good and ftrong Vineger.

Tomake drie Vineger to carrie whither a man lifteth, take of wild cherries when they begin to be ripe (and yet the fruit of the cornell tree is better) of mulberies when they bered, and vnripe grapes that are very thicke, and of wild acornes beforechey bee ripe, ftampt all together, then take of the beft Vineger you can finde, and mingle themall together, make vp the maffe into fmall loaues, fetting them to drie in the Sunne : and when you would make Vineger, temper fome of thefe fmall
loaues
loaues in wine, and you flall haue very good Vineger. Otherwife, take ethe vnripe iuice of corne that is very greenc, and ftampe the fane putting Vineger thereto, and thercof make apant, wherof you thall make lietle loaues to be dricd nit the Sumne, and when you would hauc Vineger, tomper of thefe loanes in fo much wine as you frall fee lufficient, and you fhall hane very good Vineger.
To make rofe-vineger, take good white Vincger, and put cherein red rofes, either RofeVingest; new or dried, liceping them many daies in the veffell, and afterward caking them out, putchem in another glaffe, and fo keepe them in a cooie plase: afcer the fame manner you my make Vineger of elder-tree flowers.

To make Vineger without wine, pur into a veilell foft and daintie peaches, and vpon chem pearched barley, letting them purrifie ali a whoie day, then fraine them and vfe che liquor: or elfe take old figs and burnt barley, together with the inner parts of orenyes, putall chefe inro a veffell, and flir them vp very well and off, and whenas they are becone putrified and refolued, ftrainethem out and vee the liquor.
To nake fweet Vineger, take fiuc pints of frong Vineger, and with a s much new wine referued vpon the treading out of the grapes, adde fome quantuic of picch, and and put altogecher in a veffell which you muft fop very carefully: and afecthat all thefe haue contsured together for the fpace of fonie elurtie daies, you may vie thereof for Vineger :otherwife, take a vefiell of new wine, and mingle it wich two veffels of Vineger, and boile chem oogether till the third part be conlumed. Some doe adde three velfels of fpring water viro two of new wine and one of Vineger, boiling them all togecher vntill the ehird parr be confumed.

To make mightie ftrong Vineger, drie che groffe of grapes two whole daies, then pur it in new wine, pue thereto fome of the vnlipe iuice of corne, and you fhall makc a fltong Vineger, whereof you may haue the vee withinfeuen daies after: or otherwife, pur pellitoric of Spaine into Vineger and it will make it frong. Furchernore, if you boile the fourthor fifth part of Vineger vpon the fire, and pui it vnto that which is before prefcribed, putting it after all this in the Sunne fome cight daies, you fhall haue a plealant and ffrong vineger. The rootes of couch-graffe when they are old, boiled grapes, the leaues of the wild peare tree flamped, the roots of brambles and whay, the quicke coales of burned acornes, and boiled ciche peafe and hor tilcs, euen euery one of thefe by themfelues being caft into Vineger doe make the fame frong.

Pepper vineger is made by cafting into vineger or hanging therein whole p $p$ pper made vp ina linnen cloth, for the fpace of cight daies,
You fhall know if there be any water in the vineger, if you put into it any §alnierum, for then if it fwell vp as though it would boile, you may boidly fay chat there is water in it.

To make vineger good to lelpe digeftion, and for your health, take e eight drams of the fea onion, and two pints of vineger,put them tógether into a veffell, and vvith them as much of pepper, mints, and iuniper berrics, then vfe it afterward.

- To make vineger of fea onions, you muft put ten fuch onions falsed into fiftie quartes of fweer new vvine, and foure pints and a halfe of flrong vineger, and if it be not tharp cnough, then twice fo much, in a pot holding fifie four quarts, e- boile chem till the fourch part bee confumed : or if the wine beetiveete, it mult be boiled to the fpending of the third part, but fuch wine may be of his owne diffilling out of the grapes before they be trodden and very clecre: otherwife, put into a veffell thirtic pints of flrong vineger, wherein lee fteepe for the fpace of twelue daics, the inward part of a white fea onion which hath beene in the Sunne thirtie daies: after that, take the vineger and let it fettle and abide in fome place where you wil to vfe it afterward. Dioforides in his onc and twenciech chapter of his fourth booke difcribech anotiner manner of it.
It is to obferued and noted that all forts of vineger are beft helped to kecpe their cartneffe, by puting into their veffels at the bung hole a flicke of red withie.

CHAP。

## Cнад. XXI.

Of the manner of making of Veriaice.
He moft common manner of making of Veriuice in this countrie, is to gather the greene grapes from of the vine frames, or the grapes which are not yetripe, and areleft vpon che:vines after vintage, and hauing gathered chem, to tread and preffe them afterward, after che manner of ripe grapes, putting the liquor or iuice thereof into veffells, and falting the fame by and by, after shat it hath purged out all iss fcum and filth, by boiling as new wine doth. In the Northren countries they do alfo make Veriuice of crabs mingling a little falt cherewithall.Some make a drie Veriuice after this manner : they take the greeneft that they can ger, prefing the iuice thereour, which afterward they boile in a brafen veltell vntillit become thicke, and as it were congealed, then they drie it in the Sunne, and keepe ir for cheir vfe : otherfome boile it not a all, but drie it in the Sunne, ill it come to the chickneffe of honie.

To make your Veriuice looke more greene, and to be better, and to preuent that it may not turne and become mouldie or hoarie, you muft the day after it is surned vp into its veffell, plucke a bunch or two of blacke grapes, and caft them into the veffell at the bung-hole, cuen in whole clufters, and thento falt it after that it hath beenes boiled.

## Chap. XXII.

## Containing certaine difcourfes by the way of inuention, nature facsilties; differences and neceßitic of wine.

5ivaSwe haue in the former booke at large intreated of bread, and of the differences thereof, according to the vie wherein it is imployed, namely, the nourifhment of mans bodie; fo now after the manner of ordering and husbanding of the vine, and fo of the fruit which commeth of fuch hufbanding thereof, which is Wine, it fhall net feeme vnreafonable, if fummarily, wee difcourfe and ftand vpon the necefficie, nature, faculties, and differences of Wine, whereof we make fo great account ordinarily in our drinking thereof.
And to the end that we may now come to the mater: Seeing not only the fubftance of mans bodie, but of all other liuing creatures is fubicet, (through vitall heare consinually working in them) vnto a perpetuall waft, and expending of it felfe : nature being prouident ouer her owne workes, hath giuen vnto and put in all forts of liuing creatures, an incredible defire of eating and drinking, to the end that chis wafte and loffe of fubftance mightbee repaired and reftored by the well bounded increafe comming of eating and drinking; forotherwife, naturall heare deftituse of fuch her food and nourifhment, would quickly be choked and quenched. Now the fubftance of cuery luing bodie is threefold: the firftis, and confifteth of fipiris: the fecond of humours : the chird of folide parts: all which three fubfances may pof fibly be repaired by a folide fubfance, if fo be that fuch folide nourifhmert could eafily bee digefted and diftributed, throughout the whole habite and vniuerall maffe of the bodie. Bur feeing that fuch is the folidneff, hardneffe, and grofeneffe thernf, as that it cannot, it was needfull that it thould be accompanied with fome floting and fluide liquor, which might ftand in fteed of a wagon or chariot to conueigh and carrie it vp and downe the bodie. Ioine alfo thereunto, that this fluent liquor hath without comparion a greater power than the folide nourihmento let and hinder
the drying vp of the folide parts, and to eemper all fuch heat, as othcrwife, vpon cucrie light motion, might at ciurie moment offend and hurt them. This lofe and continuall expence of this threefold fubltance (which in the end doth firt bring old ase, and afterward death) doth grow through that iarre and difagreement which is in the foure clemenes, vehereupon the whole bodic is compounded and framed: vvhich elemenss alfo, nowwichfanding that chey may feeme vnited and ioyned together in a cretainc kind of harnenie, confent, amitie, and inuiolable bond, yet by reafon of feeret rancour and numall difagreement happening through their contrarie qualitics, they doe fo warre one vpon another, as that by lietle and intete they do procure the raine, diffoution, and veter outerthrow of that bodie which before they had confented to frame and compofe: Phyfitions outr and befides this, do acknowiedge anocher caufe of this expencc of nature, and bringing in of old age, and laftly death, vvhich is fore-flowed and kept off by eating and drinking; and that is naturall hear, vvhich feedeth vpon the radicall moifture, feated in the fubftance of the folide parss: vwhich moifture, the fooner that it is dried vp, wafted, and confumed by the forefaid heat, fo much the fhorter is the courfe of life. Butchis radicall moifture, and the continuall loffe of fpiriss, is repaired by the addition of cating and drinking, and to the life drawne forth to a longer terme. Wherefore, Nature being carefull of the preferuation and long concinuance of the bodies of liuing creatures, wvhich otherwife, for the occafions aboue named, vvould grow old and perifh in a few houres, takech not anic othcr courfe for the fame but by eating and drinking, which are the two meanes to fuftaine and preferue (fo much as is pooffible) the liues of all liuing things. And as for eating, let vs leaue off to haue anis thing to doe wish it, as having fooken thereof in the former booke, and let vs come to the fecond, vvhich is drinking.

The commonn drinke of all liuingy creatures is water.

OId and ancient Hiftories doe fufficiently teflifie, shat water was the firf drinke which men vfed generally throughout the world, and wherewith they contenned themfelues a long time, to ve it onely for the quenching of their chirt : bue afterward, wvhen voluptuoufneffe feized vpon mens appetite, they inuented and fet before them diuers forts of drinkes. Wherefore hauing reiefted water as a tafteffe and vnfauourie thing, they have in place thereof (in all fuch Coafts and Countries as where the hcat of the Sunne might bring forth and lead along the grape vnto his full ripenefie) chofen Wine for the moft excellent and delightfome drinke of all others: as in other cold Countries, and fuch whereas the Vine could not grow, they hauc cither ftill continued their drinking of vvater, or fetched and procured vvine from other places, or elfe hauc prepared fome other kind of drinke comming neere in fome meafure vnoo vvine, vvhich by the deli cateneffe thercof might reioyce the heart, and gratifie the taft. Whereupen, fome in ftead of waacer haue taken vp the vfe of Wine, and others of Beere and Alc: fome of Cyder and Perric, and others, of all foits : fome of honied vvater, or vvater fweetened vith fugar: and ochers, of orher drinkes preffed and ftrained out from fruiss, or the decoctions of rootes. All France, Italie, Sicilic, Spaine, and all other Countries which are farre off from the North, doe content themlelues with vvine, the Nation of the Turkes exccpted: vyho, being incenfed cither by the fuperfition of CVabumet, or firred vp thercunto by the ancient cuftome of Turks, do viterly abhorre vvine, and vfc in ftead chereof honied water. England, Scotland, Dalmatia, Polonia, Sarmacia, and other Northren Councries doe vec partly wvine, as procuring the fame from other places, and partly Beere, in fuch fort, as that by how much the Councries are the colder, by fo much the more they are giuen and addited to vvine and drunkennes: vvitneffic hereof is not onely Germanie, bur alfo Frizelauid, Dalmatia, and Flanders, the inhabitants of which countries doe not onely friue who fhall drinke moft, and extoll drunkennefe vnto the skies, but alfo doc fooffe at fobrictie, and fo highly difdaine fuch
people
people as ftriue to liue foberly and temperately, as that they think them the molt vinworthic of their alliance and companic. And yet(notwithftanding that fo many forts of drinks be growne in requeft in fead of water in many cuuntries) wine feemich to me to beare the bell, as being the moft pleafant, delightfome, and excellent drink that can be found or shought vpon.

## What is meant by wines.

THe iuice then of the grape, which either runneth from the grape being full ripe, or is prefted out with feet, or the preffe, before it be boiled, is called new or fweet wine, but afer that it hath boiled, and thereby caft forth all his fa!mme and dregges, it is properly called wine. Wherefore this boiling or working, by which in fine it is fined and fetled from all his excrements, is not any manner of purrifaction, but rather an effect of naturall heat engendred and naturally rooted in the fame: for whereas the iuice newly drawne out of the grape, doth containe in it many excrements, and thofe diuers in nature, which the naturall heat thereof cannor (without great flrife, enforcement, and contending) concoat and ouercome: it is neceflarie, that in this contention it hould worke out a heat, boyling, and verie grear perturbation, by reafon of the fruglings of the two conerarie heats: that is to lay, the naturall, which doth conco $C$ the crude and raw matter of the new wine, and by that meanes feparateth the excrementous parts from $\mathrm{i}:$ : and on the other fide, the flrange and accidentall heat which is kindled and raifed in the crude and raw parts of the new wine, which enncomntring the naturall heat no otherwife than is done in the crifes of Garpe fickneffes, at fuch time as naturall heat doth concoct the crude and raw matter of the difeafe, and attemptechen make feparation of the noylome and annoying matter, many difturbances, thakings, heats, and other gricuous fymptomes doe fiercely affaile the partie, vntill fuch time as naturall heat (hauing ouercome) proceed to the feparating of the good and naturall humors from the excrementous ones, and expell thofe which were the caufe of the maladie. And cuen fo it falleth out in the boiling or working of new wines, wherein the accidentall heat is ouercome by the heat of nature, without any worke of putrifaction: the heterogene and vnnaturall matter being feparated from the homogene and naturall : the viprofitable and excrementous humour confumed, and the flatulent orwindie parts thereof difcuffed : and to be briefe, all the profitable iuice is in fuch fort concocted and digefted, as that that which before was crude, flatulent, and hard to be digefted, is bccome gentle, tractable, fauourable, and verie agreeable for mens vfe, as though it were quite changed and altered from his nature. Of new preffed wine is made the wine called Cute, in Latine Sapa: and it is by builing the new preffed wine folong, as till that there remaine but one of three parts. Of new preffed wine is alfo made another Cute, called of the Latines $\mathcal{D e}$ frutum: and this is by boilng of the new wine onely folong, as sill the halfe part be confumed, and the reft become of the thicknefle of honey. Sometimes there is a pafum. wine made called Pafum, and it is when the grapes haue endured the heatalong time vpon the Vine.

The inuenters and firft finders owt of wine.

Noe.
why roine is Greehe.
J6arnss;

Chas haue written in Hebrew, as alfo the Scripture it felfe, doth teftifie, that $\lambda V_{0 e}$ Swas the firf author of wine. Nivander Colophonius faith in his verfes, that wine was called beros in Grecke, of the name of a man which was called $O$ enus, and firft preffed out the new liquor out of the grape into his drinking cup. Others write, that Icarus was the firf inuenter thereof: and that verie fhortly after his inuention he had condigne punifhment therefore, as being flaine of the dreffers of his vineyards, they being drunke. Whereupon ${ }^{\circ}$ Propertius Gaith,

O Icares, th' Atbenian clowne
Deferuedly thy life throwes downe.

Atheneus faith, That the Vine was firt found neere vnto the Mount Etna, and that a dogge pafling that way, plucked vp a little branch of Vine tree out of the earth,and that Oreffews 'Tonne of Descalion, which raigned in chat Councrey, caufed the fame branch to be planed againe, vvhercout thele fprang manie fhoots of Vines, wvhich he called Oenius, of the name of the dogge which had pluck the fame branch out of the ground : vvhereupon alfo the auncient Greckes called Vines Ocmas. The Latines fay, That the Vine is called Uitis, quafivita, becaule that vvine doth quickly reftore the vitall fpirits being wafted and Ipent, and doth comfort, repaire, encreafe, and Arengthen the naturall heat that is weakened, wvhich is the principal: inftrument of life, infomuch, as that by the $\mathbf{v}$ fe of vvine it is made more freely dilpofed than it was before to performe all manner of aCtions's requifite for the life of man. Old Writers are not of oine mind concerning the firft originall and ınuention of the Vine,for euerie one of them almoft hath his feuerall opinion. But as concerning my felfe, I thinke that the Vine was brought forth of the earth, as other graffe, hearbes, and trees were from the beginning of the world, and that it brought forth grapes of it felfe without any tilling or dieffirg; and thofe like vnto them which the wild Vine(called of vs Labrufoa) doth now bring forth, but that the firlt fathers did not fo quickly know the vfe and profit of the Vine. For in Ainerica, Florida, and the new-found Couneries, there are great fore of Vines growing plencitully, and in great aboundance, without any art or induftrie of men, al hough the vfe of wine be as yet vnknowne to the inhabitants of thofe Councries. Plato in his Cratylus faith. That wine is called in Greeke äros quary itormer, that is to fay, iudgemene, confiderateneffe, and aduifedneffe, becaute if furnifheth the intellectuall part with iudgement and aduile, becaufe by his quickneffe ir reftorech the fpirits, whercby ie ftrengthenech the mind as well as che bodie, as $M$ nefthens hath verie well reported of it. Some likewife fay, That the Greekes call troes quafis òmsis, that 18 to fay, profit and veilicie, becaufe it is infinitely profitable. The Latines call it $\mathcal{C}$ inum $\alpha$ vi, by reafon of the violence it offerech to whyit is calked the fpirit of man, vvhen it is taken our of meafure. The caufe likewife why the old $V$ nuum. Writers called it Temetum, was becaufe the immoderate vie thereof holdech captiue why Temetum, and corrupteth the mind, that is to fay, the vnderttanding. We will define wine to be a iuice extracted and preffed out of ripe grapes,purffied and fined,contained in The defnitions veffels fit for the receiuing of the fame, conuenient and agreeable vnto mans life, and of wime. therefore the liquors of the grape newly prefled out, is not to be called wine, becaufe it is not fined, neither yet doth veriuice deierue the name of wine, becaufe it is preflied out of grapes as yet not ripe.

> The temperature of Wine, and of the liquor newly preffed out of the grapes.

THe new preffed iuice of the grape is of temperature hot in the firf degree, but wine is hot in the fecond degree, yea in the chird, if it be old : it is likewife of drineffe proporionable to his heat. It is true, that according to the regions, grounds, inclination, and difpofrion of the yeare, and luch ocher differences, which doe alter and change his temperature very much, it fallech out to be fometimes more, fometimes leffe, hot. The wines chat Spame, Italie, Languedoc, the Countrey of Narbone in France, Gafcoigne, aind other hot Countries dne bring forth, proue hot and drie in the end of the fecund, yea in the beginning of the chird degree, efpecially when the conftitution of the yeare fallech out to be hot and drie, and when they are of a middle age. But fuch wines as grow in grounds about Paris, or other Countries vvhich draw toward the Wefterne or Northerne quarter, doe fcarcely fall out to proue hot in the beginning of the fecond degree, no not in a hot and drie ycare, and though they be growne to a middle age,as nor hauing paffed the ege ot che firft yeare. For when the yeares fall out cold and moitt, all there kinds of wines for the moft part growing in thefe Countries, become greene and raw, and for the fame canfe called greene wines, and thofe fo weake, that hardly may they bs iudged to be hot
in the firf degree, and the yeare expired and gone about, their heate being likewife expird and fpene, they either become altogether fower; or hauing lof their fruell
oldewincsare boter ibantion new.

New wine bo. ter thanoid in France. and tafte proue to be naughe and corrupred. Whereupon that which she old writers haue deliuered concerning the temperatures and qualities of old.Wines, ciannot bec proved true of fuch Wines as grow in thefe countrics, wherein the greatelt part of French Wines within three or fixe moneths, or at the furtheft by the end of the yerc, grow to the full top and perfection of theit goodncffe : whereas on'the contrarie, fuch as grow in hot couneries, and become themfelues more hot, will not bee at the beft, before the fifth, lixch, yea before the tenth yeare; which if it bee fo, you muft thinke that the finewes and other fenfes of the bodie; doe receise mof harme by old Wines which grow in hot and drie countries: and that they are the leffe offended and hurt of the old Wines which grow in this our French foile which is more cold. In this countrie new Wine being fufficiently boyled vp and fined, as it is more pleafant to the taft, foit is more hot, cleane contraric to that which groweth in hos countries. Diofcordes writeth that old vvine, for as much as it is horter, duth hurt them very much which feele fome weakeneffe in fome of their inward parts: bue wee cannot fay the like of our vine vvhen is is oid, but rather of oir vvine when it is new, for the famereafons. Whereforcit followeth, that the opinion of Diofcorides and diuers other Phyfitians, touching the heat and remperature of old wines; is to bee vnderfood of vvines that grow in countries that ate more hor, and not of fuch vvines as (if they bee daintie and delicate vvines) vwill attaine the height of their goodneffe, and fumme of their perfection in fixe or eighe moneths, or ar the furtheft by the end of the yeare, in fuch fort, as that the fame being ended, they waxe fower: yea, if they beright noble vvines, they bee well forward vpon and toward their perfeation in the beginning of the fecond yeare; or fomew hat atter. The force and naturall heate of the dilicateft French vvines is gone after the firf yeare is once paft: but in a noble vvine it fadeth and falleth away by litele and little, not before the fecond yeare be paft. The vvines of Gafcoigne and Aniou, growing in a hot and drie feafon, draw very neere vnto the nature and remperature of the vvines, whereof old vvriters haue fpoken : becaule the greateft part of them may be kept vnto the the third yeare. The vvines of Orleance are at the beft the fecond yeare,and it flayeth with them to the end, but when the fecond yeare endech, they begin to loofe their goodneffe.

Now if the cafeftand thus in hot countries, it is better to abftaine from old vvines, than from new which are alrogether fined : for their old vvines do heate out of medfure; but the new vvines ftir not vp any heate that may moleft and trouble, and yet they alfo be very hurtfull, becaufe they digeft very hardly, and beget many obftruetions. Wherefore in countries that are more hot, new vvines may be drunke without any preiudice to the health, being of a thin fubitance and wel fined, becaufe they haue but a weake heat. But in thefe our countries which are cold and moift, old wines may be vfed, as allo the new which are of a thinnefubflance, well purged and fined. Notwithttanding our countrie old vinines, in as much as after fome long time they loofe their hear, and thereby heat the leffe, are not \{o hurfful. vnto the head as the new, or thofe which are of a middle age.
The iuite of the grapes not hazingyetworought and of hard digeftion, if therewithall it do notouerturne the ftomach, and prouoke flux of the bellie) doth ftay a long time in the ftomach and places thereabout, fwelling and blowing vpthe fame, and thercin begetting rebellious obftructions hardly taken away and remoued, as allo it caufeth troublefome dreames, and cold and dura. ble difeafes.

New wines which are not as yet throughly digefted, are intemperature and facul:

Ners roines or
the unice of grapes wobich bane lately
wought vp. tie very like vnto the new preffed liquor of grapes, for euen they are fo far off from perfection, as that they alfo become of hard digeftion, and which is more, doe not eafly pafle through the bowels and veines, or prouoke vrine any thing at all, being the greatand foueraigne helpes which are to be looked for so come from wine. Yea
further-

Yea furthermore, they oftentimes hang and lie long in the bodie, and become very fubiect to foure in the fomach, if there bee butfome fmall quantitie thereof taken more than is conuenient.

Wine which is well and fufficiently digefted and wrought, and thereby purified and fined from all fuch excrements and lees, as either the new preffed liquor is woont to caft vp, or the fame after further digeftion is woont tofettle downe to the botrome, hath its vertues and properties all quite contrarie, vnto the vices and inconueniencies which accompanie the raw liquor and newly concoeted wines: for it is cone cocted eafly, and caried through the bowels and veines quickly, it bringeth downe and affwageth the fulneffe and fwellings rifing about the principall parts of windic or diftending caufes, as crudities and fuch like : it deliuereth the wombe or matrix fromfuch obftructions, as the naturall excrements thercof are woont to breed therein ;it increafeth the frength of all the inflrumentall.parts: it makerh way forthe euacuarion of all manner of excrements, and fo prouokech fweat, but principally vrine : it caufeth fleepe, and cureth cold poifons: it ftrengthneth the fromach more than all the reft of the parts of the bodie, as being firft receiued and intertained into the fame, and hercupon in becommeth a great friend to digeftion, prouoketh appetite, fuccoureth and relicueth the heart by fpeciall propertie, thereby fpeedily repaio ring fuch narurall and vitall fpirites, as haue beene wafted by fodaine euacuation, waltings, or ocher occafions : it nourifhethalfo, preferuech, fuftaineth and frengeth. neth naturall heate, whereas it beginneth to faile. Heereby it worketh vpon the vnderftanding, awaking, and raifing it vp,cheereth, and encourageth the faint and languithing, and recreateth and reiviceth the fpirites, in regard whereof, Homer (aith, that the Gods have giuen wine to men, for the driuing away of their cares and troubles. And Socrates a gueft at Platoes fealt, praifeth the moderate vfe of wines in feafts and banquets, becaufe (as hefaith) it quickneth a man to that which is good, and maketh the minde more readie to execute his offices and dueties. Laftly, wine maketh the colour more liuely and cherri-like, and is found a moft excellent, fpeedie, and fingular remedie againft all fownings and faintings which happen through exceffuc euacuation, or crudities molefting and troubling the vpper mouth of the ftomach. And in as much as it attenuateth, concoctech, and difcuffeth crudand cold himours, and flatuofities abounding in flegmaticke and melancholicke perfons, it becommeth a moft excelient drinke, not onely for flegmaticke and melancholicke ones, but alfo for all fuch as are of a cold and moift difpofition of bodie, but efpecially for old folkes, and principally in Sommer, in fuch countries as are giuen to be cold.

## The amoiances, burts, and difcommodities of wine.

ANd yee notwithftanding that wine furpaffe in excellencie and goodneffe all other forts of drinkes, it worketh many annoiances by reafon of its quantitic, qualitie, or vaporoufneffe. The moft notorious and common annoiance that the vaporoufneffe of the wine doth caufe, is drunkennefte, which as Athenzus recordeth, makech men fots and fenfeleffe, and yet fo talkatiue and prating, as that they cannot hold their peace, neither yet conceale any thing they know : wherupon the prouerbe wine gocth groweth, that wine goeth barefont, becaufe the drunkard lieth open and naked on bare-footo euery fide, and couereth or hideth things no more than the fteele-glaffe, for which caufe the Poet e 1 /chilus hath written, that the pictures of mens bodies are commonly to be feene in brafle: but the fhape and fafhion of the mind in wine; And Plato affirmeth, that the manners and difpofition of euerie man is knowne by wine. The Poet Theognis doth likewife aduertife vs, that as gold is proned in the fire, fo the vnderftanding parc of man by wine, in thefe verfes:

$$
\begin{aligned}
& \text { Quale fit admotis explorant ignibus aurum: } \\
& \text { Q Menshominis vinum, fana fit anne probat. } \\
& \text { Notwithftanding, when the braine is full of flegme, the immoderate vfe of wine } \\
& \text { Wh } \mathrm{h}
\end{aligned}
$$

doth noi fo much makefuch men to be giuen to much talke, asto feele a great heanineffe in their heads, and to fall into deepe and found fleepe. Auncient writers, as faieth Plutarch, confecrated the difeafe called the Lethargie, vnoo Dionyfins, becaufe that fuch as fpoile thentelues with drinking of wine,for the moft part fall into fuch kind of blockifhneffe, feeling fuch a drowfie heauineffe in the head, forgetting to remember what they fhould do, and fuffering themfelues to fall right downe like dead men:

For wine (ascfirfiotle obferuech) fitceth the feucrall natures of diucrs humours, and
wine filteth the dispofsieens of the drinters. applieth it felfe thercunto, howfoeuer that when it maketh drunken, it driueth the viderftanding from her accuftomed eftate, corrupteth the memorie, and difturbeth all the fenfes, Notwithtanding, it maketh not all drunkards in all points alike, for fome it maketh lumpinh and drowfie, as fuch (as I haue faid before) as hate their braines repleate withflegme : other meric and iocund, and thofe which are fanguine: many to be given to contentions, and much prattle, as fuch as are fubiect to yellow choler: otherfeme be ginento picke quarrells, doe wrongs, and worke much harme, and thole are fuch as are fubiect to blacke choler: and againe, other fome mute and dreaming, as thofe which are fubiect to a cold melancholicke humour. Furthermore, fuch as become foolifh and fenfelefle by hauing drunke too much wine, their braine being filled with great quantitie of bloud and fpirite, doe feele a heate throughout their whole bodie, but chiefely in their head, except they be fuch as wax cold and benummed through their folly, as in whom the naturall heat is not quickned and kindled, but rather fmoothered and choaked by reafon of the exceffiue quantitie of wine which they hauetaken: no otherwife than the fire is quenched when there is too much wood heaped vponit, and the flame of the lampe putout when there is too much oyle in the lampe. For as a little deale of fire is choaked fhrough a great heape of wood: euen fo naturall heate is oftentimes frangled vpon the feidden, by the exceffiue and immoderate drinking of wine. But and if it be yet fo drunke immoderately, as that it cannot extinguifh and fuddenly deftroy the naturall heate, at the lealt by fnubbing and checking of naturall heate, hurring and infeebling his aetions, as alfo in diminifhing the ftrength of the bodie by furcharging of it with heauie loades of fuperfluities: accidently it cooleth in fuch fort, as that ic bringeth to nothing and quite vadoeth the prouocations and adts of luft, which of it felfe and by its owne nature it mightotherwife marueliouThatdrurkards lly prouoke. And hercupon it is that eArifotle fayech, That che feed of drunkards
their feed and. becommeth dead and fruitlefle, and their children blocke-headed grouenolles. nature is not apt Whereforecuen as wine (when as by its feruent vapours it affaileth the head, and
filleth the braine) prouoketh drunkennefle and foolifhneffe: fo when the faid vapours are thickned fomewhat and congealed ino a ferous and watcrifh fubftance, by the coldncffe of the head, if they bee nor. difcuffed and feent by the power and force of nature, the excrement which fhall be thereby ingendred although that the drunken fit being paffed ouer, the parsie come againe to the enioying of his former effate, and feeme to bee well) if it remaine long time in the braine, and being faft fetied therein, grow further and gather more vato it, doth in the end firre vp many difeafes of the head, as hardneffe of hearing, deafeneffe, noyfes inthe eares, blindneffe, the faliing fickneffe, conuulfions, palies, apoplexies, and many other fuch like, of all which, it is not otherwife to be accounted the caufe and originall, than by way of accident, as alfo of that fudden ftrangling difeafe, which it caufeth not but very feldome. On the other fide, if this excrement gathered in the braine by the inmoderate vfe of wine, happen to fall downe vpon the inferiour parts, it will breed many diftillations, and catarrhes, hoarnes, rheumes, coughs, gouts, difficulty of breathing, and many other fymptomes, very hard to be cured : yea and by irs vaporoufnes, how foberly, and in how moderate quantitie foeuer it be drunke, it becommeth noy fome and hurffull to fuch as haue a weake braine, and their finewes and ioints infirme and feeble; for vntofuch people it becommeth fo egregious an aduerfarie, as that if one troubled with the gour, fhould at the fame time that this paine is vpon him, talt but fome few dropsthereof wafhing his mouth onely therewithall, he fiall prefently
feele
fcele his paine incieafed, and falling into a far greater rage. Yea which is more, fuch excrement ingendred in the head, gettech there fuch a kind of enimitic and aduerfe qualitie, and that fo at iarre and malitioufly bent againft the ioints, as that it ruheth is felfe in ies difthllations, xather vpon the ioints than vpon any other parts, and fo cauferh gouts and iointaches. Finally, this excrement being of a fubtile and flarp fubftance, fallech and penetrateh eafily into the lungs, as alfo corruptech and exuiceratech them. Theet are allo other nooll daungerous annoyences which wine of in felfe and by its very nature caufeth. For in as much as it is of a hot and drie temperature, if if be not drunke moderately and well delaied, by the long vee thereof in hos and drie bodies, it is woot to oucr heat and drie their nobie parts, to ingender grear of cholericke hurnours, which flanding withour remooue and motion, muft needs breed many maladies and difeafes.

From hence fpring out agues both continuall and intermittent, inflamations of the inward parts, as the liuce, fpleene, and lungs, the plurifie, paffion of the reines, and fuch orher inflamations of many other parts, which haue not as yet any proper name. affigned them. Hence filkewife grow all itches, tetcers, wild fires, flying fires, cankers, and all forts of vicers. Thofe therefore that are prone and apt to fall into fuch inconueniencies of difeafes, or which arealreadie through the ill ordering of their life fallen into the fame, muft altogether abftaine the drinking of wine, or at the leaft drinke buta very little, yea though it fhould be very weake and well delaied with water. The old writers, and amongft others, Cicer o in his third booke of the nature of the gods, thought it good, that feeing wine doth feldomene profit, and hurt veiy often, that it were better not to permit it at all to be vfed of thote which are fick, rather than vnder a conceited hope of fome doubrfull healch, toexpofe and lay them open to manifeft daunger by the vfe chereof. Notwithftanding we dayly find, that the vie of wine is very commodious and profitable for cold and moift complexions being fuch as are troubled with cold and moift difeafes. Wherefore che wife and well aduifed Phyfitian may toller2te the ví chercof, when he knoweth that there is need for the concoction of fome cold difeafes : yea and oftentimes allo in cold difeafes, as infuch whofe conioy:ed and next caufe, he findeth to be nourilhed and maintained by fome primitiuc and antecedent caufe that is hot:

## That it is not good for fuch as arc in bealth to vefe pure ard vamixixt wine.

THe learned of auncient time haue aiwaies permitted the moderate vfe of wine being delayed with water, when it fhould be vfed of them which were whole, but haue alwaies reiected and difallowed pure and vndelayed wine, asalfo furfeting, windereme for and that in their feafts and bankers. For Hefoodus comnaundeth that there fhould fucb as $b e$ ing, be threethirds of water mixed with one fourch part of wine, and this not to be vfed, commonly, but at fome folemne feafts and bankers. Atheneus writeth, that the Grecians vied to drinke two glaffes of wine, delaied with fiue glaffes of water, or one glaffe of wine delaied with three glaffes of water. And in very truth, our ancient pre-- what qusontilie deceffors did puc and mingle wine amongft water, and not water amongft wine: for of watce isto they pur but a very litele quantitic of wine into their water, as Theophraftus repor- 6 bg gita inwel teth. Which cuftome and vfe of fobrietie muth be followed and immitated by the decrees and appointement of Phiftians. And as for the quavtitie of wine to be drunken, the poet Ebulus bringeth in Diony)ius fpenking to that end in this fort.

Trestantume pateras, quibus of mens fana propize:
2uarum giua fucrit.prima, falubris crit.
Proxima delicias factura eft, tertia foxnmim:
Luxus erit pofitum tranafiliffe medum.
This decree and ordinance hath bin approued by them which haue forbidden by their laws, that the Romane priefts fhould not drinke any more than three glafles at; imeale.

And as concerning age, vvine is hurtfull vinto young children, as alfo vnto them For what geses which are growne vp to greater yeares; becaufe that vvine by his very much drineffe wine ismylf fito deftroyeth and ouerhrowech their hot and moift confliution, vvhich Hippocrates commandeth to be maintained by things chat are moif. And that it is fo, we fee, that fuch children as vfe to drinke vvine, howfoeuer it be dilayed (their huer being dried and ouer-heated by the contiuall vfe of the faid vvine ) doe fall, for the moft part, into a long and lafting flux of the belly, and in the end into an irrecouerable hectick feuer, villich the common people call a withering and pining away, and out of which there is nor one of a hundred that efcapeth. For this caure Galen was aliogether againft the giuing of children any taff of vvine, as allo any others, who like children are of a hot and moift temperature and conftitution, becaufe that by his vaporoufneffe it fillech the braine, and doth infinite hurt and mifchiefe. Plato in his precepts of ordering a Commonwealth, commaundech children to be kept from vvine till they be fifteene yeares old, and his reafon is, for that fire muft not be added vnto fire : from fifteene vnto fortic he permitecth the moderate vife thereof: and after this age he aduifeth to drinke much, and that very good, for the mitigating and qualifying of the difcommodious, troublefome, and noyfome occurrences which may happen in the life of man. And this his opinion is notaltogecher to be reiected : for as vvine is altogether enemie vnto children, fo it maketh recompence in the good it doth vnto old perlons. Plinie faith, That vvine hindereth thofe which prepare ehemfelues to doe, (peake, or enterprife any good thing : and this was the caure why Plato forbad the vfe of vvine to fage and learned men, except it were in their feafts or facrifices. The Romans for fundry reafons did likewife forbid the vfe of vvine to women and feruants. We reade in hiftories, That the vertues of many famous and great perfonages, haue beene obfcured and eclipfed by the vfe of vvine. Of chis, wee haue Ly fander, Captaine of the Lacedemonians, for a vvitneffe, who was a prudent, wife, and good dilpofer of all his maters and affaires, faue that of the vec of vvine; Antiochus the great, Demetrius lying for a pledge and hoftage at Rome, Alexander of Macedonic, Dionyjus the younger, the cyrant, $Z$ cnocratos the Philofopher, Anacreon and Alcaus the Lyricke Poets, and Ariftophanes the Comedian, Ennius, 'Marcus Antoriuss Trumuir, Cato Uticenfis and fuch others. For this caufe the Locri inhabiting the Promontorie Zephirium in Greece (as Atbcneus recorderh) thought it to be an offence worthic death for to drinke vvine. Of the fame opinion at this day are the Sarazins, moued thereto as well by C Mabomets law, as allo by the imitating of the ancient cuftome of the Gentils and Arabians. Let vs then conclude, that vvine, not onely

That wine is burt fuld wnio bos and drie natures, ana good znto moijt ones. in excecflue quaantirie, and by reafon of his vaporoufncffe, doth caure all the annoyances alreadie fec downe, but that alfo in refpect of his heat and drineffe it is mon per-nicious vnto hot and drie natures, as alfo vnto hot and moift ones, if it be not well dilayed, efpecially if it be continually vfed, though it be taken in neuer fo moderate a quantitie: And yet notwithftanding more or leffe, according to age, cuflome, and manner of liuing, the feafon of the yeare, and conftitution of the ayre : becaife that inold folke, and all fuch as in vvhom crude flegme and melancholike juice doth abound, his heat and drineffe is in fuch fort rebated, that for the moof part it is vied of them very fafely and fecurely, both as a well nourifhing, and likewife as a good Phyficall helpe, efpecially in Winter and cold Countries. You muft thêrefore, inall forts of natures,fo temper all his noyfome qual icies by the mingling of water, as that it may be taken with the leaft hurt that poffibly may be. When as therefore the vvine is mixt with the water, the parts both of the one and the other are broken and parted (as it were) intofmall inuifible portions, vvhereupon there arifeth betwixt them both a mutuall doing and fuffering, and their qualities fo confounded and becomming one (notwithtanding their former contrarietie) as that into how much the leffe parts the divifion is made, by fo much the more apt and eafie they proue to be mingled and made one. Whofoeuer therefore fhall minigle vvine vvith vvater, or vvatervvith vine, mulf firft firre them a long time, and then before he drink them, lee them fettle and reft a while : becaule for certainetie, the contrarie qualities of
the wine and water will be fo much the more repreffed, corrected, rebated and vnired, by how much they are the longer time and the more exactly mingled togerher. Alchough that (if we will examine che things a lietle neere) we fhall find that euen wine delayed, ceafech not to offend and do harm, if it be taken in ouer great quantitie, or at vnfeafonable times, efpecially of fuch as are of a hot and drie difpoffition, as we fhall declare hereafter. But this is enough which hath beene faid of wine in generall : now let vs examine all the particular differences of the fame.

## The differerces of Wine.

IN wine wee are to confider the colour, relifh, friell, facultie, and confiftence, for The differences 1 from thefe are takeri and gathered the principall differences of Wine. As concer- of wize. ning the colour, fome is white, fome of a light, fome of a fad yellow, lome betwixt red and white, like to the colour of honie, other fome of a deep red, and others of a pleafanter red, blacke,or darke fhadowed.
White wine generally is of a thinner fnbftance than the red, it is eafily conco\&ted and digefted, it pierfech fpeedily through the whole bodie, workech more vpon the veines, but nourifiech leffe. That fort of white Wine which is thinne, hot and full of Wine, is concocted and diftributed more fpeedily than any of the reff, purging the bloud by vrine: but it offendech the head moft of all, efpecially French white Wine. Water by reafon of jes coldneffes, and red or darke fhadowed Wine by reafon of its thickneffe doe flowly paffe away by vrine. The contrarie is found in white Wine; efpecially fuch as is of a thin fubflance, and which is hot. That which is of a deepe yellow, or fomewhat inclining to a yellow, hath his vertues, approching very neere to thofe of the white Wine.
Red Wine is woont to be more flow of concoction than all the refl, as alfo to bee diftributed throughout the whole bodie, or carried away by vrine, becaufe it is.of a groffer. fubftance than any of the reft; but yet to recompence thefe difcommodities withall, it nouriheth more, and offendeth the head leffe. The lighter red Wine holdech the meane and middle catch of all the reft. White Wine which is of a thin and waterie fubftance without any verdure or fharpnes of taft, fuch as we haue great ftore of here in our countrie, is likewife of an eafie digeftion,and quickly paffing and diffributed through the body, and yet notwithftanding hurtech not the head, neither increafech any great fore of heate, in fo much as that this kind of whire Wine is more wholefome and fafe both for the found and ficke, than the white Wine which is thinne and full of WVine in tafte, efpecially in perfons that are fat and full Bodied, becaufe it nourifheth leffe than all the reft. (jalen is of iudgement, that red and thick Wines are turned without any great paine into bloud, and fo next vnto them the blacke or deepe red and grofe wines, if fo be they be accompainied with fomefmall fmatch of fiweetneffe : and next vnot thefe which are of a lightred, thofe which are of a deepe red, thicke fubftance, and aftringent facultie, nor for that they can be digefted mote eafily, or diftribured more fpeedily, than white or yellow Wines, but becalife that being once concocted in the flomach, and fent vnro the liuer, they are eafily changed and turned into bloud, notwithflanding they feemie not the leaft remoued and differing from the nature of the fame : for white and yellow Wines of all other are woont to be the fpeedilieft conco 2 ted in thie flomach, and to bee conueied vnto the liuer: but they yeeld leffe fore of bloud then thofe which are thick and red, and fo doe fat leffe. Wherefore yellow Wine,or the redlike Wine being of a thinne and pearfing fubftance, by how much it approcheth the niecerer vnto the fa* culties of thinne white $W$ ine, by fo much it begetteth the chinner and more fluent bloud, and therewithall hot if it be hot, or temperate if itbee waterifh and weake, fuch asthe Grecians vfeto call Oligophorum, which fignifieth a Winc-adaniting but fimall quantitie of water to be mixed therewith : yea a reafonable cold bloud, if it be yet fomewhat greene and vnripe. But the deepe red Wine which is liarfh and rough, wherens for its thickeneffe it is profitable to comfort che loofe and wearifh
ftomach
ftomach, but nourifherh notmuch: foin like manner it increafeth and redoubleth the obftructions of the liuer, fpleene, and reines, as alfo it maketh a thicke, feculene, and melaucholike blood, \& fo withal begeteth many melancholike difeafes. The red wine that is fomewhat clecre and thin, feemeth to hold of both, and fo ftandeth as a meane betwixt them both. Wherefore Diofcorides following the opinion of Huppocrates hath rightly faid, that deepe red wines were thicke, and of hard concoction and digcftion : for all thicke wines, whether they be of a deepeor light red, do nourifh ( to fpeake the trueth) aboundantly, and fat the bodie, but they pur the ftomach to more paine in concoting of them, than thofe which are fomewhat cleere and of a thinne fubftance. Furthermore, they being of hard digetion and diftribution, and not eafily paffing away by vrine, through the long and continuall ve of them, they ingender flatuous fwelling, and windieneffe in the bellie and bowels. Wherefore yellow and white wines, that are of a fubtile fubftance and very ripe, are to bee betteraccounted of, andiefteemed as more wholefome for all fuch as haue need, or defire to bee heated, as old folkes, flegmaticke, and melancholike perfons that be cold of nature, as alfo for them that lead their liues in idleneffe, in cold couutries and cold feafons, as in Winter, heapinging vp great fore of fuperfluities and raw humours in the veines: for they are likewife more profirable for the furtherance of concoction to bee made in the fomach, liuer, and veines, than ehofe which are waterifh and fweete; but very many timesthey offend and hurt the head and finewes, and make a full braine : for this caufe they are enemies and contraric to fuch as are hot by nature, or haue a moift braine, or their finewes and ioints weake and fubiect to diffillations : for vnoofuch bodies, the wines that are a little red and fomewhat aftringent, are farre more meete and conuenient, becaufe they bee not fo fuming, and therefore doe not charge the head fo heauily. But as for deepe red wines; they aremoft fit and conuenient for diggers and deluers, husbandmen, dreffers of vines, and others which liue a toilefome and painefull life. Wherefore white wines; yellow, red, or claret, and of thofe onely fuch as are of a fubtile fubftance, delicate and watric, (called of the Greekes incrópopas which is to fay, admitting but fmall flore of water to be mingled with them) are harmeleffe to all, and to be vled with all fafetie and fecuritic.

Thewhite and yellow, or redlike wines which are of a thin and fubtile fubftance ${ }_{\text {}}$ together with the claret, weake, waterie, rawe, and greenifh, being of a cold and moift temperature, (fuch as are very vfuall and common in the grounds about $\mathrm{Pa}-$ ris) do nourilh the bodie very little, and are harder to be digefted, than thofe which will beare but a little water, but they coole and moiften more than the reft, and where as they nourifh but a little, they are faid on the other fide to make the body leane: They bring not any detriment or harme vito the head, liuer, reines, or bladder; but being long vfed, they hurt the ftomach, bowels, matrix, and fpleene very much : and which is more, are profeffed enemies to all fuch as are cold and moift by nature, and efpecially vnto old folkes. Contrariwife, they are fomewhat profitable for hot and drie natures, and if naturall heat be ftrong, they pafle away; and are euacuated eafly by vrine, and this is a thing that is commonto all greene wines which are of a fubrile fubftance. The like iudgement is to bee had of difeafes, for as they are tolerated with all fecuritie in hot natures, fo in like manner they prolong and increafe cold difeafes. And thus fufficiently as it feemeth vntume, concerning the nature; qualitie, and vfe of wine, gathered from the colour thereof.

As concerning the relifh : fome wines are fweet : fome fharp: fume bitter : fome rough and harfh : fore fower and tart, and both of them aftringent : others of a mixt nature, betwixt fweet and rough: others greene or greenifh, and thefe are very common and vfuall in the grounds about and belonging to Paris.
5wect wines.
In generall, all fweete wines, whether they be white or red, do nourifh more than other, heat indifferently, prouoke thirft, fwell and ftop through the much vee thereof the prnicipall parts, but the liver and the fpleene more than all the reft, efpecially if they be groffeand thicke,for looke how much the thicker they bee, fo much
the more nnwholefome they are.Sweet wine (faiech Hippocrates) doth leffe burthen and charge the head, then that which is itrong and full of wine, it leffe offendech the vnderftanding alfo, yea it loofeth the bellie, but it is not good for fuch as abound with colericke humours, for chat it prouoketh thirt and windineff. True it is that it is. good for fich as are much troubled with the cough, becaufe it raifech vp flegme the more eafily in all fuch, exceptethey be fubiect ro thirft and drinefle.

Sweet white wine is of a thimer fubftance, than fweet red wine. It helpethfpitting more than any other, fo that it bee not too groffeand chicke, for it conco tech raw flegme in the breft, it frooothech and maketh plaine the roughneffe of the inward parts, and inthac refpeet is profitable for the lungs, reines, or bladder being rugged or rough: but in the meanc time it hurtech the liuer, becaufe that as 1 haue here while faid, it fwelleth and puffech it vp, and caurech obfrustions thercin. It cauferh thirf likewife in hor and drie natures, becaufe it makethobftections, and is eafily turned into cholecicke nateer, as all other things are which are fweete. Notwichifanding, it procurech drunkenncitc leffe than any other, in as much as it offendech the head but a little. Diof corides hath fpoken very rightly thereof, faying, that fuch fweet wine is of thicke fubflance, that it paffech notfo eafily throught the bodie, and that therefore it nourifheth more than that which is of a chimie confiftence and fubftance. Hice faiech furcher, that it fwellech vp the ftomach, and like the liquor of grapes before it hath wrought, it looferh and troubleth the bellic and inward parts. And this mult bee vnderfood of fweet wine, which is not come yee to his full ripeneffe, and not of that which is thinne, cleare, ripe, and alreadie throughly concocted. Which kind of fwecte white wines are fent hidher in great aboundance from the councrie of Aniou, and they hold their fweetneffe two or thres yearcs.
Such fweet white wines are not fo hurffull as thofe which are not ripe, or which are chicke : they prouoke vrine fufficiently, loofen the bellie, and moiften. Wherefore you muft diligenely and wifely difcerne anddiftinguifh the fiveet wine which is crud and vnconcted, from that which is already ripe, and fif for to bevfed.
All fweet white wines do nourifh aboundantly, but yet more or lefte, according to the proportion of their thickneffe and grofneffe, and for this caure fuch as haue need of reftoratiues muft vfe fweet wines, elpecially if their reines liuer, and fpleene ftand found and free from all infermitie: for when the principall parts be obftruEted, and the veines full of groffe bloud, then wine that is of fubtile fubltance is moft needfull and profitable. When the veins are replete with cold and groffe bloud, then fharpe, ftong, and mightic wines are more conuenient. If the veines be full of hot and thicke bloud, the wire that is fharpe and old is not gocd, but rather a claret or white wine chat is very watrie, yea, and fomewhat greenifh, if the flomach wil beare it,and the folle of the countrie permit it.
Cjaleraffirmeth that no white wine heateth greatly, and that fuch as heateth much, Galensiuidge. cannot bee fwecte. And yet notwithftanding, there are brought vito vs out of hot mentiof whitite countries many white wines that are very hot. And we haue likewife fweet vvines mine。 partly growing in our owne countrie of France, as at Longiumcau, and Tonncrrois, called vvhite beaten vvine : partly brought from the countrie of Anjou, excellens good, and very hot, which in tafte refemble the fauour and relifh of a Hippocras made of vuhite vvine, and will hold and continue found and perfect good, thrse, foure, yea fixe yeares. In Greece thirir vvhite vivines arenot found to bee very pleafant and fweet,as in chis our countrie there are notto be found any red wines very pleafant, except vpon their news preffing our. Notwithfanding the countric of Bordelois dorh furnih vs with fufficient quantitic of red wines, that are very fiveet, buthey are all of them of a thickefubflance, and their iuice or liquor breedech very many obftruftions.
Harh and courfe wvines do procure vrine more than the fweet, but leffe than fuch Rowh and as are of a middle kind betwixt both, and yet againe, thofe which are tart and fower, harflavinssia doc alfo prouoke vrine more weakely than thofe whhich are of a middle iemper.

The rough and courfe wine doth corroborate the ftomacke and principall parts by his aftringent facultie, prouided that the ftomack be furnifhed with fofficient ftrengets and force of heat, for otherwife in a cold and weake fomack it proueth, for the moft part, to be hardly concocted and digefted. Of all other vvines, it leaft hurtech the head, but therewithall it proueth to be the floweft in diftributing it felfe abroad into the veines and fubftance of the bodie: for which reafons, it falleth out to be vnfic to be vfed in fwownings, fodaine faintings, and all otherfeebleneffe, loofeneffe, and languifhing of the ftrength, as alfo where there are any notorious obftructions in the principall parts. But which more is, it bindeth the bellie, or elfe loofeth it not fufficiently.

We haue foken of greenifh white wines, whercunto the reddifh greene wine hath like qualities, efpecially if it be of a chinne fubftance and waterie; and yet more, if is bethinne, waterie, and pale.

Generally, the greene or rafpe wine, in as much as it containeth more waterthan wine, nourilheth the bodie bur a littie, is of hard digeftion, and fo it moueth windireffe and wringings in the belly, becaufe it is of a cold temperature. Hence it commeth, that old folkes, cold and moift natures, and fuch as haue weake ftomackes, receiue damage by it: and next vnto thefe,fuch women as haue not their termes aright, and are fubiect to pale and fwarth colours. Notwithftanding it paffeth away peedily by vrine, becaule it is thinne, and annoyeth not the head: and for this reafon it is very profitable for all hot and moift natures, as for young folkes, which hauea boyling and burning bloud in them, if their fomacke be in good fate, efpecially in Summer time: for which refpeat, being dilayed with a fufficient quantitic of vvater, it will ferue very fitly (in like manner as the vvine called of the Greekes Oligophorum) in all fuch agues as wherein wine may be permitted, faue onely that it is fomewhat hard of digeftion, and caufeth many obfructions. Such greene vines, as togetherwith their greeneneffe are altringent or fowre, are without comparifon more hurffull than any other euery way, and in all refpects, becaufe they hardly ripen, and concoet, ingender obftrictions; and paffe very flowly either by vrine or ftoole. Notwithftanding, they become ripe in time, if they be let alone in cellars till the raw and crude parts thereof be ouercome by their owne proper and naturall heat. But it fhall not feenic to exceed the bounds of reafon, if wee difcourfe fomewhat more freely of the verdure of our vvines, to the end wee may be able to difcerne and find out that which is in vvines by way of purchafe, from that which is naturally in them. Galen writeth, That the aftringent qualitie in vvines is feparated and remaining apare from their verdure, as their goodneffe is from their badneffe: befides, it is very likely , that in hot and drie Countries there are not any greene vvines growing naturally: but in this our Countric of France there are many greenifh vvines preffed out from grapes that are not yet ripe : but efpecially in cold and moift yeares,fome which are verie thinne and waterie: others more thicke and groffe, and by that meanes either aftringent, or elfe rough and harfh: ftrong and mightie vvines, if they be neuer fo little tainted with greeneneffe, prefently they become fowre, and altogether vnmeet to be drunke. But fuch as being preffed out from grapes, farce halfe ripe, differ not much from the greenenefle or fharpeneffe of common veriuice, if they be not concocted by little and little chrough a ftrong and forcible heat contained in their crude and raw matter, and fo in the end become ripe, their greeneneffe being by little and little diminifhed : and fuch are not pafing of a yeares continuance, feruing rather for the rude and homely people, than for daintie and delicate perfonages. For certaine, all greeneneffe in vvine is a fault in thofe vvines vvererein it is: but yet that is the worft of all the reft which happeneth vnto vvines fometimes good and commendable, either by being kept too long, or elfe by hauing beene ill kept, or otherwife by fome other occafion : leffe difpraifeable and hurtfull, vvithout comparifon, is that which happeneth in our French wines, which by the weakeneffe of the heat of the Sunne, comming fhort of their fufficient concoction, become greẹe from their firltoriginall and growth,as they which are greene, by reafon of the greene
and vnripe grapes, from whence they are preffed. For fuch greeneneffe as happesiech vinto vvines once good and conmmendable, is hurfull vnto all men, and cannos be redreffed, thereby making fuch vvines vnfit to be employed about any other vfe than either for medicine or fawces: vyhereas that which is borne and ingrafted into fuch greene vvines, if it be not fuppreffed and digefted by naturall heat, becommech onely hurffull to cold and moift conflitutions and old tolkes, bur not vnto ftreng, luftie, and hor natures, neicher vnto them which are accuffomed to trauaile, and to auoid idleneffe. You flall find many harfh, rough, and fowre vvines, vvhich are alfo grence: and in like manner, you flall find fome that are greene, and yee not rough and courfe. Such as are rough and greene, through their vehement afringencie, doe clofe, hut vp, drie, and dull the throat, congue, and other parts of the mouth: whicreas iuch as are fimply greene, doe not the like, but coole them onely. The rough and harth veines, in as much as they are raw and crude, and cannot be concocted and digefted of their naturall heat that is but weake; yee they clofe and bind the flomack, and by fuchoccafion tay the flux of the bellie. Wines that are fimply greene, doe not the like, if they be not harth, rough, and aftringent withall: and they doe rather annoy the fomacke and all the membranous and neruous parts by realon of their cooling propertie and qualitie:v vhich being fituate in a thinne and futrile matter, and therefore apt to pierce decepely into the parts, and by their qualities protioking and difquieting the fubttance of the faid parts, doth corrupt and diffolue the laudable temperature, force, and conftiturion of the faid ftomacke, and of the faid membranous and finewie parts. Whereupon it enfucth, thar fuch greene vvines doe for the moft part caufe crudities, wringings, and the flux of the velly, manifold obfruCtions of the liner and fpleene, befides the difeafe called the Hypochondriake melancholie. Galen denieth, that vvines which are hard and greene, doe hear at all, and that the fowre, rough, and harfh rellifh doth actually confift in a meane matter, participating beth of the waterie and earthic elements : but that the hard,greene, and fowre relifh doth confift in an earthie and drie fubftance, wvhich doth not manifeffly participate of the water, or any móifure. Whereby it may manifeftiy appeare, that neither the one nor the other relifh hath any heat ruling in it, but cold, and that in the tars, harfh, and rough relifh accompanied with moifture, but in the fowre with drineffe. But for as much as vvines are feldome confilting of one onely fimple and pure relifh, and that all vvines (of what taft or relifh focuer they be) are in temperature hot and drie, you muft vnderfand, that fowre and harfh vvines are accounted cold, or elfe not hot, not fimply, but by comparifon, becaufe indeed they heat leffe than other vvines, and that not quickiy, and fo foone as they be drunk, bur in the end, and after fome continuance of rime : for otherwife the opinion of Galen were not to be receiued, feeing that we obferue and fee euerie day, that all Corts of vvines, of what taft or relifh foeuer they be, be they hard or harfh, doe heat manifeftly, and make men drunke fooner or later, if they be recciued into a hot and ftrong ftomacke: for their heat; as a thing buried in crude and raw matter, although it be a long time firft, and with grear difficultic, breakech furch at the laft, manitefting it felfe in the end, and bringing forth the fruis of his maturitic: and this wee may finde in our French vvines, which nourifh, maintaine, recreate, yca, and make drunke the Husbandmen, Vine-dreffers, and other perfons of poorc handicrafts ving to drinke the fame. But let this fuffice which hath beene faid of the naturall taft and relifh of vvines: and now let vs fearch out the caufes of the fowreneffe or tartneffe, incidene to good and conmendable vvines. Some thinke, that vvines grow fowre through The caule of heacs; becaufe chat daincie; weake, and feeble vvincs are changed and turne fowre in fowreneffe in the Spring time and Summer, and in Winter retaine thicir naturall quialitics eirtire ${ }^{\text {zointese }}$ and found. This opinion is confirmed, becaufe that weake vvines being flirred and tumbled in forcible fort, or carried farre; or laid in cellars that are open vpon the South or Eafterne quarter, doe quickly become fowre. And contrarily, fuch as are nor toffed to and fro, or remoied; but kept in cellars lying vpon the North, doe not fowre at all: as if it were by the cold, that their vertues and good qualities were preferued,
and by the heat, that they were changed and corrupted. So as the like in all points doth befall vwines which are weake and waterinh, to that which happenech vnto a burning candle, and to fmall and weake fparkes of fire, vwhich if you lay open in the hot Sunne, or before any great and vehement flame, you fhall fee them languifh, yea waxe darke, and alcogerher to fade away and goe out. It is then through hear, that all the weakeft vvines turne fowre, and that by hauing their weake heat fpent and ouercome by an outward and accidentall hear, which is more ftrong, caufing the fame to fade, and for the moft part vanifh quite away : For a weake nature cannot endure eidher any frong hear, or vehement motion, but fainting vnder them, it becommeth wanted and fpent, and in fine perifhech. But contrariwife, wines which haue their heat flrong, and confift of fuch matter as is not eafie or apt to be wafted and fent, being removed, rolled, tranfported, or elfe laid open to the South Sunne, or isept in any hot place, doe not onely not fowre quickly, and in a fhort time, but. rather becomea great deale the more ripe, and are made more readie and better to be drunke. For that which befallech through long continuance of time to frong, mightie, and noble vviues, wwhich are thut vp and layd in cold caues vnder the earth, by the meanes, power, vertue, and efficacie of their owne and naturall heat, which concoatech, digefteth, and ripeneth by litele and litele their crude and raw matter: the fame is effected and wrought in a fhort time in vvines which are heaeed by art, chat is to fay, by ftirring and rowling, and by the heat of the Sunne, or of fome fine fubrill fire, vwhich doth concoit and diget the moft crude and rawe matter chae they can be found to hauc. For as the enduring of the heat of the Sunne, and the vinder-going of vehement exercifes, maketh ffronger and more able the bodies of men that are hor and luftie, but on the contrarie, doth ouerthrow, weaken, diffolue, and coole weake bodies : euen fo, hor wvines are fooner ripe, conco zted, and digefted, by heat, or mouing either of the Sunne, or of fome hor fire made neere vnto them: but thofe which are more weake and waterie, if you heat them ouer-nnuch, doe take grear dammage and harme, and are weakened more by the working of fuch vehement heat, either of the Sunne, Itirring, or fire, vvhich corrupteth and fpendech at once, and in a moment, forme part and portion of their weake and feeble heat, vvhich afterward, in like manner, by little and litete, will be oucrcome and wafted, and thereupon fuch wines weakened and made vnfauourie. It is the meane and middle heat cherefore that all things receiut profit by: feeing the immoderate and extreame is no leffe harmefull than cold. Wherefore, after that the weake heat of vvine fhall, for the moft part, become wafted and fpent, by the outward hieat of the ayse compafing it round about, it groweh fowre: and Io likewife it is wont to fall out by the malicioufne fe of frong and piercing cold, breaking the heart of the weake heat in the vvine, and thereby killing the fame. For when the faid heat is quite ouercome and banifhed, fo as that the vvine loofech his fragrant odour and pleafant fent of vvine, is is not faid to fowre, and therefore not called vineger, but indeed is called by the name, not of vvine, but of decayed and fpent vvine, which the Latines call $U$ appru. Furthermore, vvhereas amongft wateric, weake, and feeble wvines, there are fonte raw and greenifh ones, vvhich wee haue declared alreadie to be enemies vito cold and moift natures: and other, which are neither raw, nor grcenifh, but delicate ones, and throughly ripe, but therewibhall of a thinne and fubrile fubfance, and which for their eafineffe to be concoted, and fpeedineffe in being diftributed, become very good and profitable both for found and ficke, and are called of the Greekes oligophora, becaufe they will not admit the mingling of any great quantitie of water with them: The firft may, without any iniurie offered vnto their ftrength, abide to be firred and carried to and fro, efpecially if with this naturall greenenerfe there be ioined fome harfhneffe and roughneffe. But the fecond cannot endure to be remoued or carried to and fro: the reafon is, the heat of the firf is hid, and lyech in a crude and raw matter, whereof it fandech itvpon, as much as lyech in it, to acquite and rid it felfe: a readie helpe whereunto, isthe moouing and Itirring of the fame, becaule hereby it is enabled the fooner to fhew
forth
forth it felfe, and to manifeft his force in more powerfull and chearefull manner than before, becaufe the crude and raw matere wherein it lay, as it were coucred and hid, is become refined and concoted in proceffe of time. Contrariwife, the weake heat of the fecond fort, which confifteth in a thinne mater or fubftance, and that alread de concocted, is fpent and ouerthrowne with the leaft motion and hear, and therefore doth very cafily euaporate and breach out all his force and ftrengch. It feemeth that the opinion of Galen and other auncient Writers, affirming that no greene wine doth heat, muft be viderflood of this fecond fort of vvine, called of the Grecians Oligophora, for that it is poffible, that the old Writers neuer knew, neither cuer heard deill, that any greenifh vvines were naturally growing in places and countries that are hot and fcorching. Certainely, there is great difference betwixt that tartneffeor fowreneffe, which is an accidentall vice orffaule in vvines, and that greeneneffe or fharpeneffe, which is a naturall caft and relifh in them, prefled out cirher from grapes natu- betwixit o ourcerally greene, or elfe from grapes which haue not as yet growne to their tull maturitic neffeand green and ripencfle. For the cartneffe nf vvines, befides the great fharpeneffe and acrimo. nee cherein, being fuch as is in vineger, whereby it difquietech and offendech the flomacke, membranes, and all the finewes, is likewife of that nature, as that it cannot by any skill or cunning be fubdued and corrected in fuch manner, as that the vvine once tainted chcrewith, can at any time be reffored vnot his former goodneffe, and made fuch as may be drunke without the preiudice and hazard of mans health. But on the contrarie, the greeneneffe which continuech in vvines, as bred in them, befides that it is alwaies free from the forefaid flarpeneffe and a crimonie, is found not to continue any long time, in as much as the raw and cold matere, vvherein the heat of greene vvine confifteth, is concocted by litele and little, and thercupon this heat (thus as it were buried in this crude matter) doch by litele and lictle grow frong, and fhewech forth his force more effectually : fo that the faid greeneneffe is by degrees diminifhed and wrought out, and the vvine made a conuenient and profitable drinke for the vfe of men: yea, and that alfo cuen where chis greeneneffe, through the weakenefle and imbecilitie of heat, cannot any whit be wrought out and taken away : for fo wee finde it, feeing that greene wvincs are not refrained, but ordinarily drunke, and vfed:
Diofcorides was of iudgemene, That fowre and rough vvines caufed headach and drunkenneffe, vvhereas our harfh and rough vvines, the rougher they are, doe offend and annoy the head fo much the leffe. And for a certaintie, all manner of drinke, by how much it is. che morc odoriferous, and of a thinne and fubele fubftance, fo much the more it difquieteth and diffurbeth the braine with his vapours, and miniftrech larger matter for the nouriflment of rhewmes and diftillations. Norwithflanding, if fowre and rough vvines doe happen once to caufe drunkenneffe, then fuch drunkenneffe fallech out to be of the worff fort, and mof rebellious and hard to be ouercome. So then, all our fowrifh, harfh, and rough vvines, fuch as are chofe of Burgundie, as they are nothing fo odoriferous, fo neither doe they caufe any whit like fo many exhalations and vapours, and therefore alfo doe they leffe offend the head, and procure drunkenneffic, than any others: And fo as that Galce hath therefore ceffified of them, that they ought to be well accounted of and efteemed profitable and fit to be vfed of fuch as haue the gowe, as alfo of all orhers which are fubieft to the diffillations of the braine.
Such vvines are called mungrell or baftard vvines, vwhich (betwixt the fweet and what wiizes are aftringent ones) haur neither manifeff fweetneffe, nor manifeft aftri\&tion, but indeed to be callod bax parcicipate and containe in them both che qualities.

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AS concerning the confiftence of vvine, fome is of a thinne, fubele, and clecere The confifence fubflance, and otherfome of a chicke and groffe, and fome of a meane and mid- of poine, die confittence betwixt both. Of thofe which are of a thinne and fubtle fubftance,
fome are weake and waterifh, which the Grecians call ixeropopes, that is to fay, not admitting the misture of any quantitic of water, of which we will ipeake more amply hereatter, being (as it were) like vnto water in thinneffe and colour, and hauing little or no fent in them, neither yet any manifeft heate. They nourinh but very litele, for there is is but a very litele of their fubftance turned into bloud: but they caufe great ftore of vrine, and agree better than any other wines, with all forts of natures, if wee may belecue Galen. There are other weake, waterifh, and greenifh wines, very ordinarie in this countric, which are hurffull vnto old men, and all other cold confticutions; as hauing in them very fmall fore of heate : and yet fometime profitable vnto het confticutions, as in Sommer, according to our former aduertifement. There are others that are very good, but hot and Strong, of an eafie concoction, and fpeedily diltributed, but nothingleffe vapourous than white wines, whereupon they trouble the braine, and make men drunken, and fo proue hurffull to fuch as are rhcumatike and fubiect to diftillations. Such wines are broughe hither outlof Gafcoigne, very well pleafing princes, and men of great eftate, all of them being of a yellow colour, either deeper or lighter: The wines of Ay, as they are inferiour to them of Gafcoigne in ftrength, fo they are better, and without comparifon more wholefome.

The grofte and thicke wines, fome of them are fimply fuch, and confift in mediocritie, and otherfome are very groffe and thicke. We haue heretofore declared that groffe wines are of a more hard concoetion, and flow digefion than other wines are; but being once concozted and digefted, they yeeld a more firme and folide nourifh. ment vnto the bodie. And of them more than thereft, fuch as are very groffe and thicke, which for certaine are hardeft to be concocted and digefted of all others. Thefe forts of wine, for that they ingender many rebellious and obftimate obftructions, are not fie to be vfed but of dreflers of vineyards, and fuch otheras leade a toilefomelife, as wee haue declared before. Such wines as are indifferenthin, and indif: ferent thicke, are profitable for many purpofes, and the rather in that they charge not the head as the ftrong wines do, and chofe which are of fubule fubftance: neicher yet ingenderobftructions, as thofe which are thicke and groffe doe. The wine called of
the Grecians Oligophor um, is the holefomeft of all others.
The Jauour or swell of mine.
and commodious for sery ape the powers of the bodie, bur chey affile humours, and to recreat and fetch againe fubtile fubftance, and of a reddifh or yellowifh colour, or of a pecially, if it be of a are alfo more hot than the other forts of wines. For that which is fuch, doth help very much for the making of concoction eafie, and for the begetting of fine and fubtile bloud, but itfilleth the head full of vapours and heate, and greatly offendeth the finewes and vaderfanding: whereupon it proueth very apt to caufe headach and a world of rheume. The wine that hath fmall or no fmell, no not any more than water, is called waterifh. Such vteer depriuation or want of fmell in wine, is a mightie note, and moft certaine marke that the fame is but a weake and cold wine: as the ftrong and mightie fmell of the fame, is a very notable figne of his force and ftrength. Such wine as is neither of an ill fmell, neither yet withour fmell, but hath a certaine flinging and vnpleafant fent, which it hath gotten either of the foile, or of the veffell, or by fome otheroccafion, is not good for any bodie.F or as nothing (as Columella teftifieth) draweth to it ftrange and vnnaturall fents more (peedily than wine. In like fort nothing impaireth or communicateth his hurtfull qualities fooner to the heart and noble pars, than wine when it is drunke of winongt wines, fome are generous and noble wines, and therefore faid to be full of wine, contrarie to thofe which are waterifh, and admitting the mixture of much water. Thefe heate much, hurt the finewes, make a full braine, ftir vp frenfies, mightily increafeth the heate of agues, and to be briefe, they are not delayed with a great quantitie of water, and doe good butto a few. There are other which are weake, and for this caufe called Oligophora and waterie. Thefe wines are of two forts,fome gree- nifh which haue a fenfible cooling facultie, fiting cholericke fomachesand hot
comntrics, if fo be that a fiong ftumacke can beare them, and of thefe wee haue fpoken before: others which are wateric, and of a thime fubftance, not retaining any fmel!, but agreeing with all natures, be the fomacke neuer fo weake, and cfpecially with thofe which are ofentormented with the megrim or long continued bead-ach: they comfor concoction, prouoke vrine and fweat, and offend the head nothing as all : nore harmelefle chan any other fort of vvine: they may be permitted to fuch as are ficke of agues, for that they cannot be faid to be of any manife? qualitie, as other veines may: for they are neither \{owre, nor aftingent, neither yet Iwest or tharpe, nor yeeldug any kind of fmell. Of thefe kinds of vine, fome (as Galen faith) grow in euery counerey and coaft, butmuch more in this of France than in any other, the greatelt part whereof doe participate a certaine grecnereffic, efpecially vwhen the yeares fall out cold and moint. Such vvincs are called of the Grecians oarcópepa. They are not any way noyfome or hurtfull to the head, bur very profitable, becaufe (as Galen laith) they alfwage and take away head-ach, rifing of the cruditie of the fomacke : chat is to fay, when the fenmacke being weakened, and (as it were) relaxed by the eating of fome hurfull victuals, or by the drinking of fome fuch like warer, is made the receptacie of fome offending humour, flowing thither from the whole bodic. Which offenfue humour fo contained in the ftomacke, becommeth corrupr, and from that corrupion tendeth vp burnt and aduff fumes voro the braine, which caufe like paine in the head to that which commeth of falting: and from chefe annoy ances the head is dehuered by the vfe of this vvine, whhich by and by cempereth thefe purrified fumes, efpecially if the vvine have any aftringencie in it, whereby the formacke may be fortified'and frengthened. For fuch vvines doe by and by driue downeward that which is hurtfull in the flomacke, carrying it along with it felfe, and cafting it forth: and cherefore veric auaileable for fuch as lise a loitering and fieting life, and apply themfelues wholly vnoo the reading and ftudying of good Auchors.

## The differences of Wines, according to the propertics of the Countries.

T remaineth now, that we briefely difcourfe of the wines which we ve in Paris, and Sthofe fuch as are either growne there, or broughe thither out of other Countries and Regions. The French wines offer themfelues in the filt ranke, which growing in the grounds \& borders neere about Paris, and the whole Ifle of Fraunce, and other places adioyning thereunto, are amongf all ochers, and aboueall others, beft agreeing with Audents, Citizens of Townes: and to be briefe, with all fuch as liue a quier, idle, and reffull life, efpecially thofe which are made in well feafoned yeares, or fuch as fhew forch their feuerall qualities, cueric one in his proper and due feafon. For fuch wines doe not hear, burne, and dry the inward parts of the bodie, as the wines doe which are brought vs from Gafcoignie, Spaine, and other countries more hot, vvhich by reafon of exceffiue heat, and too great drineffe, do burne the liuer and fpleene infuch as drink them : Such wines doe nor make areplete, heanic, or offended head with multitude of vapours, as other vvines of Orleance doc. In like manner, fuch wines doe not load the bodie with fuperfluoufneffe offerous excrements, as doe the crude \& greenifh wines, which grow in thefe grounds in cold and moift yeares, or which are brought vs hicher from vother cold Regions and Countries. Such wines likewife ingender no obftruatis, ons, neither doe they gather any quantitic of melancholike humour, as doe the thicke and red vvines, vwhich are fent vs by fea from Burdeaux. Thefe vvines, vwher they be through ripe, they are of a very pleafant taft, efpecially fuch as are yellow, claret, and white, which are of hot \& dry temperature, as other wines, but not abouet the firf degree, or the beginning of the fecond: on the contrarie, the wines of Spaine, Gafcoigne, and others fuch like, are hot \& drie in the end of the third degree. Wherforethefe our French and natiue wines oughe to be preferred before all ftrange \& forraine ones, feeing they burne and heat the bowels \& inward parts ouer-much, and that as wel for the
vee of fuch as are in health, as of thofe that being ficke, are yet permitted their vvine. Amonght thefe our French vvines, fome are whice, otherfome are of a deepe yellow, commonly called clarets, or reddifh v vines, which are the moll wholefome of all, fo that they be nor accompanied with any fowreneffe and harfhneffe:for rough \& harfh vvines, and orhers which are greene, if they become not ripe and mellow in time, by the concocting of their cruditie \& greeneneffe, they ftand forthings not fit to $b s$ vfed of any but rude and rulticall fellowes, which liue by toyling their bodies vvith great labour and tranell. The reft are all red, more or leffe. But of all other French vvines, there is very fmall fore of fad and lightred coloured ones.

White claret vvines being bright, cleare, and through ripe or mellow, in as much as they are of a fubrle fubftance, are eafily concoeted, digefted, and diftributed: they prouoke vrine, nourifh the bodie bus a little, but they reioyce the fpirit, and are for the fame caufe taken, longed after, and defired of all. Some of them are readie to be drunke the fecond or third moneth : otherfome not before.the feuenth or eight moneth. All of them begin to fade and loofe their goodneffe in the beginning of the fecond yeare. The red, although they be bright and cleare, are not of fo fubtile a fubftance as the former, and therefore they nourifh more, and are more fit for fuch as liue hardly, than for fuch as liue delicately and nicely: and what although they cannot bee fo eafily concoeted and digefted, nor fo fpeedily diftributed, neither yer caufefurh aboundance of vrine, as thofe which are yellow, claret or white: yet trawell, often exercifes and labour doth ouercome all thefe inconueniencies, yea, and whatfoeser greater that fuch red wines may ingender and breed. Annongft them, thofe which participate and haue any fourenes or aftriction, become not mellow before the Sommer heat, whereupon it followeth, that the fecond yeare, their crud and raw parts being concoeted and digefted, they grow to bee more excellent than they were in the firlt.

The deepe red and vermillion coloured arefor the moft partharfh and rough, and fothe moft vnpleafant and vnwholefome of all other: for tbat they are woont to beeill concocted and digefted, and flowly diftributed, as alfo to ingender many obftructions, and begeta groffe and melancholicke bloud. And for thefe caufes are not conuenient but for fuch as labour and lead a very toilefome life, in whofe bodies they being once concocted and digefted, do nourifh very much, and make them more ftrong and luftie to go about and finifh their worke, and therewithall corroborate their fomacke.

Of white French wines, thofe are moft accounted of, which are cleere and brighe as rocke water, of a fubtile fubftance, neither fweet nor greene: fuch do nourifh the bodie a great deale leffe than the yellow and claret wines ; but in recompence thereof, they are more eafily concocted, digefted, diftributed, and carried more peedily and readily through all the veines. True it is, that they are accompanied with this inconuenience, namely, that they do more affault the head, (and therefore are to bee accounted greater enemies vnto goutie perfons, fuch as hate weake braines, and are fubiect to rheumes and difeafes of the ionts, and fuch likewife as haue weake ioints) than the red which are not yet come to their liuelyhood and maturitie, which frengthen and corroborate the mouth of the ftomacke, by reaion of fome eafie aftringencie that is in them. Such as in the firft moneths become fomewhat fweet, if they bee keptany time, in the end grow fo concucted and ripc, that hauing left their fweetnes, they proue ftrong, mightic, and moft excellent wines.

Greene wines whether they be white or red, (fuch as we oftentimes fee in thefe countries, efpecially in cold and moift yeares) if they containe any ftrong heate, as it were buried in their crud and raw parts, if they be keptany time, are woont to concoct themfelues, and attaine to fuch a degrec of ripeneffe, as that they arefound good, well contenting the tafte, and pleafant vpon the tongue: fuch as thofe are which are not fimply greene, but together with their greenenefte doectafte fomewhat rough and fower : the other become ipent,faded, \& decayed in the beginning of Sommer, by reafon of the faid euaporating and waft of their weak \& feeble heate.

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Wherefore you moft drinke fuch vvines as are greenith and waterie, not hauing any tharpeneffic or fowrenefle in them, in the beginning of Sumner, that fo you may be fure, that the great Summer heat fhall not caufe them to fade vererly, and quite tail away, by the feending of their feeble heat, caufed through the vehemencic of the Sunmer heas: but thofe which are greene, raugh, and hath, hauing a ftrong hear couched and lying in grofte and thicke matecr, may be kept very fecurely vinto Aucumac or Harueft timc. Such as arecnely and fimply grecne, are good and fit for feruants drinke, and other fuch folke as liue hardly and in zreat labour, as alfo for all fuch as feele a fire and extreame heat in the liner and other inward parts: for fucls vvines in idle and delicate perfons, as allo all fuch as are of a cold cemperature, or are growne into old age, doe not oncly not become well concoated and digeted, but withall engender a mafle of many crudities, and much flatuoufnelle, become flowly diftribured, procure many obfruitions, offend the formacke, entrailes, and matrix: notwithfanding, they fomecimes appeafe the paines of the reines, and become foueraigne for the weale head. And thus much ingencrall, and funmarily, of the nature, temperature, qualitics, and differences of French vwines. For the diuerfitie which is found in them, by reafon of feuerall Soilcs, Townes, Villages, and great or frall Boroughs, where they grow, doth in fuch fort alcer and change yerely, through the variablencffe of the contticutions of the yeares, as that it would belard, yea impofible, to lay them downe in a certaine and affured defcription. Notwithtanding, the moft excellent of and ouer all the reff, are the French vvines of Couflyejappoino red and ordinarily taken for the Kings vfe. Then thofe of Seure, both of weni being red or claret, noble, ftrong, and mightie vvines, moft proper and fit for fuch as are altogether caft downe, and in whom nature is (as it werc) wholly fpent, falling thereby into many fansings and founes, whether they be fallen hereinto ly exceflue and infatiable vfe of vvomen, or through any other notable and immoderate cuacuation. The vvines of Vanues, Argentoile, and Montinatre, and all other vvines which grow ingrauelly or fandie grounds abour Paris, are the more healthfull. For all thefe wines, in as much as they arc of a thinne and fubtill fubftance, without all greene or manifert harflitaft (efpecially in hot and well tempered yeares) keeping their proper and naturall temperature, are eafily concocted and digefted, and fpeedily and quickly diftributed through the veines: and vwich yee notwithtanding doe not much pe.. fter the head, and that becaufe they are not very frong, and therefore doe not heat much.

The vvines of Burgundie, which are fent vs from Sens, Auxerres, Tonnerre, Ioigny, and Chablie, are generally all of them red : manic of them, yea the greateft part of them, are in their finf moneths aftringent and fomewhat rough, and thereby doe make more folide, bind, comfort, and corroborate a lanke and Loofe ftomacke, and fo they nothing annoy the braine by any great flore of vapours or funcs carried vp from them: by which reafonchey proue the moft wholefome and contienient of all ccher for fuch ashaue the gout, and are fubiect to haue the diflillations of the head falling vpon the inferiour parts. Notwithftanding if youdrinke them before they be come co their full and perfect ripeneffe, you fhall wel! pereeiue them fomewhat the harder to be digefted, and to bee more flowly diftributed than the French claret wines are.

Wherefore I would adiufe men, not to vfe them in the beginning of the yeare, but rather in the laterend, if fo be they be fubiect to the obftructions of the liuer, fpleenc, and CMefenterium, or fuch as lite idly, or yet fuch as are dilicately giuen, and haue but little naturall beate within then, as forfooth being the time wherein they abound with much harffneffe and aftringencie: which yee may cuen then bee verie well vfed of them which are accultomed to cravell, and hate a ftrong and good ftomake. Likewife if youlet them ripen and loofe by little and litele their aftringencie and harfhneffe, you fhall find chem as good and pleafant as the French wines. This is the caufe why good houfhoiders do lay them in cellars, \& referue them diligently to the end of the firt yeare, or to the beginning of the fecond to fend them
inro forreine countries by fea: which being fo tranfported proue better and more excellent than they did in France, or whiles they lay couched vpon their cantling, as men call if, becaufe the carrying and cranfporting of them, increafeth their naturall heate, as wee haue before declared, and caulech it by fuch motion to growe moreripe and concoard. Notwithflanding, very many of thefe Burgundian wines in hor and drie yeares, are in fome countries found good the firft yeare.

Amongft the Burgundian wines, thofe of Beaune are mof highly commended, for they are fo good as that I dare bee bold to prefer them before the wines of Orleance and Ay, which are fo much eftecmed of in Paris, becaufe they are of a fubtile fubftance, of the colour of a partridges cie, not giuen tof fume or fill the head full of vapours, and thereby leflic aflailing the head, and hurting the braine, than thofe of Orleance. Likewife ethe common verfe made of the wine of Beaune, hath beene alwaies receiued for true and currant:

Vinum Belwenfe, super omniazina recenfe.
Such as take a very good raft of thofe wines, doe compare and match them with the wines of the Kings yard at Coufliy, whofe plants when they were young, were otherwife brought from Grecce, in fuch fort, as shat the wines of Coufly and Beaune come very neere vnto the goodnefle and perfection of the Greekifh wines. Some alfo do compare the wines of Beaune to the wines chat grow in the yard of the King
wines of Trepaton. of Nauarre, whith is fome fiue leagues from Vendofme, called Prepaton, and this name was giuen it becaufe the plants therein were chofen and taken out of the beft in all places. The wine is a claret, of the colour of a partridges eie, of a thin fubftance, not fuming or being vaporouss, of a pleafant caff, and delicat to drinke, if there be any wine in the world fo qualified. All thefe three forts of wine, of Coufly, Beaune,and Prepaton,are the moft excellent hat are to befound in all France, \& chat becaufe both in good and euill yearcs,they are found and tried to be better than any other, and readier to bee drunke vpon. A mongt the wines of Beaune, the wine of Dijon mulf be
reckoned, and they are thofe which grow in the Kings vineyard at Chenoue, For.taine, Plombiere, and Tolent. True it is, that before a man iudge of the goodneffe and qualities of wines, he muft cuery yeare confider the eftate and confticution of the feafons of euery yeare, as alfo takea diligent tafte of the wines, thercby to give the more affured iudgement: becaufe if fallech out fomtimes the French wines,fometimes she Burgongnie wines, and other fome yeares the wines of Orleance doe proue moft excellent, and fometimes the wines of Anjou proue better than all the reft. Yea, and as the number, and to be reckoned vp amongft the reff, are the winesof Ay and Ifancy, and doe for the moft part hold the firt and principall place for their goodneffe and perfection, wherein they excell all other wines, and are in all good or cuill yeares found better than any other, whe.her they be French, Bourgongnie, or Anjou wines. The wines of Ay are claret and ycllowifh, fubrile, fine, and in taft very pleafing vnto the palate, and therefore cagerly fought after, for the vfe of Kings, Princes, and great Lords, being yet therewithall fuch wines as the Greekes callo ligophora, and will not admit the mixture of much water. The wines of Ifancy are of a middle confifence, and red of colour : when they are come to their ripenes, shey proue ftrong and noble wines, in fo much as that you may iuftly comparc chem in goodneffe with the wines of Nerac, notwithfanding they be fo highly. efteemed of, and had in requeff for great perfonagecs.
The wines of Orleance are fet in the firft ranke and chiefe place for goodneffe and perfection, amongftall the wines of France : Such are red, for the moft part, of a middle confiftence betwixt thicke and thinne, of a good taft, ftrong, and profitable for the ftomach and inward parts. They heate more without comparifon, and more nourifh the bodie than any French wines, a few excepted, as the wines of Couffy, and Seure. But in the meane time they fill the head and hurt the braine, more than any other, if you continue the vfe of them any long time, efpecially infuch as haue a weake braine, and are fubiect to caufe many diftillations, as alfo in thofe which
are fubiedt to inflammations of the lungs, and difpofed by their bodily conftitution ro fall into pleurfies: yea, thefe vvines are worfe than any. ocher for gowtie folke, as alfo for fuch as are troubled with agues, and others, which haue their principall and inveard parts of a hot and drie conftiution, and to them that are troubled with the difeafes of the skinne, as the itch, leprofie, benummednefle,tettars, wild fire,feabs, and others fuch like. But on the contrarie, they are moft apt for, and beft ayrecing, with natures and difeafes chat are cold, and mooued of cold caufes, in fwounes and faint:neffe comming of aboundant and exceffiue euacuation, by too much vfe of vvomen, vvatching, or other fuch like caures, and in like manner, of them which languifh vpon cold and long difeafes. And thus much of that which wee can iudge to be in the vvines of Orleance.

For as in orher Countries and Soiles, fo likewife in the grounds about Orleance The diuerfitics the carth doth naturally engender diucrs qualities and faculties in wine. For amongft others, fuch as are yellowilh, claret, and bright cleare, are accounted the excellenieft and befl of all: fuch are they which grow and are gathered neere vnto Orleance, in the boroughes of SainCtay, S.Hillaries Chappell,S.Meffmain the long, of the Loyre, wires of Sainor at Checy. Thofe which grow at the village of $S$. de Bouc, are(in good fooch)all cay S. Sillaries of them right noble and excelient vvines, burfomewhat of a more grofle and reddifh confiftence, vwhich is the caufe that they come not to their beft cill about Eafter: The weakeff and feebleft are thofe of Liuct, S. Gy, and Nigray, vvhich yet are more healthfull for fuch as liue idly, and follow their fudie, than the wvines vvhich are fronger. At Paris wee account for very precious thofe vvhich are brought vs from Meffay, vwhich although they be farre behind in goodneffe and perfection winesof mefs vnto the beft vvines of Orleance, becaufe they are of a thicke confiftence, and coft fay,of orteance. not much : notwithftanding, feeing that by tranfportation and carriage they become thinner and more ripe, they are the better accounted of, of the Marchants. .
Such as grow neere the Abbey of Neighbours,are coufingermans and muchalike orleance wines to the vvines of Meflay.
The vohite vvines of Orleance doe furrender and partly giue ouer the praife vinto French white vvines, vvhich is the caufe chat chey aretranfported but as litele as may be out of the Countrey.
The vvincs of Lourye, which doe taft fomewhat fweet, are accounted the chiefe of all the reft in that place, as likewifechofe of Rebechi. The vvines of Aniou, fuch of them as are good, are (in a manner) all of them white and fweet, and fot the moft part tempcrate, or hot and drie ( when the temperature of the y eare fallech out hot and drie) frong, noblc, and mightic ; in fuch fort, as that amongft all French vvines they keepe the firft place for goodneffe. All the while they are fweet, thick, and vnconcocted, they fwell the fomacke and the flankes, foppe the veines, fwell the noble parts, and prouoke thirf, efpecially in cholericke natures: and fometimes alfo they loofen the belly. But when as, through their working and boyling vp, they haue caft out all their drofle and dregges, and that they are become fufficiently ripes concocted, and digeched, that is to fay, in their middle age (vvhuch they attaine vnto the fecond yeare) as then they become faire, bright, and cleare, as alfo very pleafant : fo, hauing loft their ill qualities, mentioned before, they get fuch qualitics, powers, and vertues, as are altogerher contrarie vnto thofe which they had, at fuch time as they were fweet, and of a groffe confiftence : for they become cafily concofed, quickly piercing, fufficiently prouoking vrine, and caufing to fpir aboundantly. When the yeare falleth cold and rainie, the moft part of the vvines of Aniou become raw and greenifl, as by experience wee plainely faw in the yearcs 1576 . and 1577.
When the yeare is hot and drie, the wines growing in Aniou are ftrong and mightie, and keepe their vertues and qualities entire and whole cill they be:fixe or feuen yeares old. But when the yeare falleth out cold and moiff, they proue to be of cleane contrarie qualities.
The vvines of high Normandie (I meane not thofe which are gathered and beacen wines of bigh)
Iii 3
downe
white wines of Orleance.
downe wish poles) doe fomewhat re(emble the French vwines, wvhen the yeares fall feafonable, and keepe their naturall temperature : fuch,for the moft part, are of a yellow colour: but not continuing fo any long time, they by and by loofe their force: which is the caufe, that they are eafily digefted, and quickly diftributed and carried along all the veines, vvithout annoying the braine any whit, in as much as they be not itrong, or mightie, but oligophorous. But when the yeares fall out cold and moift, the greatelt part of them will not keepe well, becaufe they be greene, and that in fuch fort, as that their greeneneffe cannor be concoEted and digetted by reafon of the weakeneffe of their heat, and therefore it behouech to drinke thern in the begin-

## wines of Cow

 peigne. ning of the firt yeare. The vvines which grow in Compiegne, and ocher parts of Picardie, are of the fame confiftence, qualitie, and vertue that thofe of Normandie are, and therefore deferue not to be much fet by, or defired, but when ochers are wafting.The Countries of Guyenne fend vs varictie of vvines. The beft of them, are thofe which grow about Nerac, vvhich come very neere vnto the goodneffe of the Frencl vvines of Couffy, which, by reafon of their ruffer colour, are called in the Countrey Ruffec wvines: in the number whereof, are contained the red vvines, or fad, and lighte red. They nourifh fufficient aboundantly: but in that they make obftructions, and encreafe great mafles of melancholike humors (efpecially thofe which are fweet)chey muft not be vfed but of them which liue in toile and trauaile. Thofe which are of a thinne and fubref fubflance, whecther they be white, clares, or of a light yellow, for as much as they haue a very pleafant taft, and are cafily concocted, and quickly diftri-, buted, they are defired and much required at the Tables of great men.

Let vs conclude then, that among ft all the vvines wwhich we vfe at Paris,as conccrning the red, the beft are thofe of Couffy, Seure, Vanues, and Meudon:and as concerw ning the white, thofe of Argentenell:and then chofe of Ay, Ifancy, \& Beaune in Bourgongnie, being wel ripened: next, thofe of Orleance. As concerning whice, the wines of Longiumeau, Palefiau, Maffy, Pont d' Anchony: then thofe of Barfurabe, Anicu, and others, which are brought vs from Arbois, Galcoigny, \& Languedoc. The wincs of the grounds neere vnto Paris, as of Villeiuifue, Vitry, and Iury, which are white; of Fontenay and Montreuill, which are reddifh; are not to be much fee by, becaufe they are greenifh, and of an vnpleaiant taft. The vvines of Gafcoignie are vvithout comparilon more hot and drie than the vvines of Orleance, and yet they be not fo vaporous; neither yet affaile the head fo mightily, as I haue proued that the vvines of Orleance doc.

The vvines vuhich Greece, Languedoc, and Spaine doe fend vs, or rather, wvhich the delicacie and voluptuoufneffe of our French throats caufe to beferched from beyond the Sea, fuch as arc Sacks, Mufcadels of Frontignan,Malmefies, Baftards (which feeme to me to be fo called, becaure chey are oftentimes adulterated and falfified with honey, as we fee vvine Hydromell to be prepared) and Corfick vvines, fo much vfed of the Romanes, are very pernicious vnto vs, if we vfe them as our commondrinke. Notwithflanding, we proue them very fingular good in cold difeafes, caulcd of cold humours, without the hor diftemperature of the liuer, or of any other noble part:but chiefely and principally Malmeley, vvhich we daily note and oblerue to be very foueraigne in the crudities of the flomacke, and collickes, by reafon of the fingular force and vertue it hath in concocting of crude and raw matter, and in diffoluing of vvinde and flatuoufneffe. But howfoener forraine vvines, vvhich are fetched from farre Countries, may feeme pleafant vnto our tafte, yet indeede the truth is, that we are not to vfe them, except it be with as great aduife and iudgement as may be, becaure that befides their manifeft outward qualities, they have alfo clofe and hiddei ones, vvhich indeed may become familiar and well agreeing,through fome fympathie, vvith the inhabitants of thofe Countries vvhere the faid vvines grow: but vnto vs they are enemies, by an antipathic or contrarietie vvhich is betwixt them and $v s$, which are of a foyle and countrey farre vnlike. Which point if we regard not, we cannot but for the mof part offend againft the rules of art, and commit
infinite
infinite fauls in prefcribing and laying downe fuch diet, and order of gouernment, a3 fhall be for the direction of other mens liucs.
Some do make and compound ficed wines which fomewhat refemble the forefaid forraine wines, and chat not fo much for the neceffrice of life or health, as for pleafure, and the deligthing of the fwallow : of which fort are the claret, the preparing whereof we haue fet downc before, and hipocras, fo called, not that Hipocrates did euer inuent it or ve it, but (of the mixture and temperature according whercunto the faid wine is compounded and made)it is fo called of the Greeke verbe cimexfarvuм, which fignifieth to temper. Men oughr feldome to temper thefe wines, becaufe that by their vn'woonted heate and grear vaporoufneffe, they procure many troublelome difeafes, as the fquinancie, ftrangurie, apoplexic, palfie, and orher fuch like: notwithftanding fuch as feele a certaine coldeneffe and weakenes in their fomake,may wfe them, nor as their common drinke, but fometimes only a semedic or medicine.

And thus in briefe you haue whar I thought good to deliuer concerning the qualities and vertues afwell of fuch wines as grow in France, as alfo of them which are brought vs from ftrange countries. By the reading of this fight difcourfe, the Reader which is carefull of his health, may learne to make choice of fuch wine as isfiteef for his owne drinking, as he fihall perceiue to be agreeable and proficable, not onely for his nature and difpofition, butalfo for his healch. As for example, he that hath a very hot and drie liuer, his lungs fubiect to inflammation, and readie to receiue fharp diftillations from the braine, and his braine very moint, thall not vfe hot and drie wines, fuch as are thofe of Languèdoc, Gafcoignie, and Orleance : but he fhall content himfelfe with fome frall French wine, fomewhat greenifh, and which bea*
rech but fmall fore of water. He likewife which hath a cold fomake, and is
fubiect to cold and windied difeafes, fhall vie the wine that is good,
and haue nothing to doe with the frall and greene wines, and for this purpofe hall make his aduantage of this
our difcourfe, which will inftruet and teach
him the diuerfitie and qualities
of wines.

The end of the fixth Booke:

Chapo. I. Of the fituation of the Warren.

The profit of the Warrch.


Itherto we haue as briefely as poffibly we could run through whatfoeuer thing belonging to the tilling and drefling of the earth, as gardens, meadowes, arable grounds and vines: now it is requifite, that following the order before propounded, we ipeake of the Warren, of wood, timbertrees, parks for wild bealts, breeding of herons, and of hunting.

We will begin therefore to defrribe the Warren, the profit whereof is not inferiour to that of the pullaine, pigeons, and other fmall cattell, which are bred and fed about our countrie farme, but chiefely in refpect of the felling of conies, which the good houfholder may doe yearely, and that fome yeares betwixt foure fore a hundred doEen, befide all thofe which the Lord of the farme flall ftand in neede dayly to vie, either for eating in his houfe, or for to giue away and gratifie his friends withall. Againe the indeauour, care, and paine about a Warren is nothing fo great, as that which is required in the ordering of other furall catell; for conies ftand not in to haue a fpeciall and fet gouernour, to take care continually to houfe, handle, make cleane, heale them when they are ficke, or to dreffe them their meate, becaufe that of of themfelues they build earthes and little holes to hide and repofe themfelues in: and feeding, they looke not for any thing but that which the earth of its own accord, without any tilling doth beare and bring forth for them.
Wherefore for the moft profit of your countrie farme, you mult prouide and pren pare a Warren infuch a place, as hath before beene fpoken of, that is to fay, betwixe your corne fields, vineyards, and grounds bearing timber trees, if peraduenture you haue not the benefit of fome vnder wood neere vnto your houfe, where thie conies may fettle themfelues and make their abode. Notwithftanding in as much as the hunting and taking of conies, which haue their couerts and boroughs in fuch voder woods, is fome what more hard and difficult than that of the Warren: and becaufe alfo that conies living in fmal woods multiplie nothing fo much as thofe in the $W$ arren, and that efpecially by reafon of foxes, woolues, and other field beaftes, whereunto they are oftentimes made a pray by being deuoured of them: it will bee better, and for your further both eafe and profit, to make a Warren apart by it felfe.

You

Youmuft then for the making thereof, referue fome fine or fixe acres of fine duStic, or fandie ground, fuch as is not fat, ftrong or clofe, in a high place lying open vponthe Sunne, and not in a marifh or waterie ground : for together with that, the conic hateth aboue all things,moifture and cold; yet for the conteniencie of her making of here earthes, it is requilite that the be in a place, where the may dig with eafe for the making of her bed and couert. This peece of ground fhall be compaffed and be fet about after the manner of a parke, with reafonable high walls to keepe out foxes, woolues, and other wild beafts, that they may not iniurie or make war vpon this little beaft. IVithin this comgrie, you muft plant great ftore of brambles, mulberrie trees, and floe trees, Atrawberrie plants, wild pine trees, hurtle berrie bufhes, goofe berrie bufhes, mirtle trees, and grear ftore of iuniper, for the conie loucth the iuniper berrie aboue all orther rhings. And as concerning hearbes,you muft fow (if fo be the earth bring nor forth fome of it felfe) great ftore of fowthifte, groundiwell, fuccorie, coleworts, lettuces, clarie, taragon, thiftles, turneps, cich peafe, and other fuch like for thefeeding of thefe little beaffes. Asfor the drawing of fome fmall brooke, or beflowing of any water conduit vpon them, you need nor trouble your felfe, feeing the conichath moifture more than any thing elfe. Neither yet doe you trouble your felfe to prepare them any other lodging, than the holes which they fhall dig and worke out for themfelues.
And thofe burroughs or clappers which fhall be meet for them to worke in, which borrough would (if the nature of the ground doe not allow it) bee caft vp fomewhat high and lloape wife, fo as the water may by all means deffend, and pafle from the fame without foaking into it, or drawing it vpon any fluxe of raine whatfoener: vp on the tops of thefe burroughs or clappers, for the better ftrengthning of them, and holding the loofe mould together, you fhall plane good fore of alders and other rough buhes which are quicke of groweth, whofe roots once entring into the earth and twinding abour the mould, will keepe any from falling, more than that which the conic of her owne felfe diggeth : and although out of the precifeneffe of choice we defire a feeciall place for the conie Warren; yet you fhall vnderftand that the moit barrenneft ground whatfozuer (fo it lie drie) will ferue for the conie Warren, as namely the moft dryeft heath or downes, or thofe earths which are ouer runne with linge, gorfe, whynnes, braken, broome, ferne, and fuch like, for a conie feedech as a Sheepe doth, clofe and neere to the ground, and will gather vp the fmalleft chiue of graffe that may be, and alfo delighteeth to crop vpon weeds or any other tender bud that groweth within the compafte of her feeding: the fnow is her greateft enemie, yet not fo much for the want of food, as for the ouer moinning of her food, and fo bringing rottenneffe: thercfore it is mecte rohaue cuery Winter in your Warren a little cob or flacke of hay, wherewith in thofe extreame times you may fodder your conics, pricking yp little tufts thereof in clouen ftickes clofe by the ground, which they will eate with all greedineffe, for it is a meat at thofe times which they loue exceedingly : for proofe whereof doe but fodder theepe neere vnro a connie Warren, and you fhall fee how enening and morning the conies will fwarme vnto the fame, eating vp what focuer the fheepe fhall leaue, which is not too hard or rough for their eating.

## Снар. II.

That theremuft aclapper be made for the better storing and planting of your Warren. done round about the Warren, as to haue fenced it, with whatfouer is neceflarie for the preferuing and nourifhing of conies; but you mult alfo ftore and plant it: for no more than arable ground beareth fruit, exceps there be feed caft into in : nor the vine any grapes, except it bee diligently planted
and dreffed: fo neither thinke you that your Warren, be it nerier fo neatly and neceffarily appoined and erimmed vp, can breed and feed conies, except you firf pue them there. Wherefore for your floring of your Warren, it is requifite that you caft vp a clapper, wherein you may put your males and females to kindle euery moneth: for to buy fo many as hould be necdfull would be too coftly and chargeable for the farmer or houfholder. Seeing alfo that it commeth to pafle oftentimes, that after hee hath fold many vnto the vitailers, or for that the foxes have eaten vp fome great number, the Warren remaineth quite foiled, and defticute of conies, in to much as that he muft be compelled to fore it againe. It is better cherefore, in refpect of the greater commoditic and lefle charges, to make a clapper in fome corner of your court, kitching, or garden, which may be foure fquare, narrow, and fenced in with bords, or plaiftered walls: indeed it were better to be prouided in the Warren, for fothe young ones might more commodioufly our of the clapper paffe into the Warren at foncone fide ot the clapper, which fhould beecroffe wronghe with lattife worke, and frould haue the holes thereof left fo wide, as that the young ones might paffe out and in vnto their dams.

Whether therefore the clapper be prouided in the Warren, or elfewhere, youmult build certaine fmall lodgings paued with boords, and thefe mult haue holes in them like to thofe which the conies make themfelues in the earth, and euery one feuerall from anocher, for the conies to betake thernfelues into : and is will be enough for to allow in fuch places one male to eight or ten females ; and yet therewithall to keepe the bucke clofe thut vp in his lodging, for feare he fould hurt and wrong the young ones, for the male conic (contrarie to the nature of all other manner of buckes) deuoureth the young ones. It is very true, that fo foone as it is efpied, that the Doe hath kindled, , the muft incontinently be put into fome otherhole with the male, that fo he may Bucke her : for this is a moft certain thing, that fo foone as the Doe is emprie and deliuered of her young ones, euen fo foone the is full againe of young, in fuch fort, as that the bringeth forth young euery moneth in the yeare :yea, and being great with young, the lettechnot to takethe Bucke, and ro continue a fecond burden, which fhe bringeth forthatierward in due time. So as that this fruiffulneffe in conics hath become fo admirable vnto many, as that fome haue vpon too flender grounds thoughe and belecued that the Bucke fhoold conceiue aud become great with young afwell as the Doe, which is very falfeand altogether contrarie to all naturall courle in the action of generation, fecing that by natures courfe, it is ordained that the female only amongt beafts fhould conceiue and ingerider, and not themale.

Afcer that the youngones are growne fomewhat great, and become able to leaue their dams, you thall carrie them into the Warren for to Itore it therewish, and fo let them grow wild: otherwife if you keepe them fhut vp, and faft inclofed in the clapper with their dams, they will become tame, and alwaies continue as it were flumbring and heauie, like vnto thofe which are continually fhut vp inclappers made for the purpole; and fo will haue a grofler and more vnpleafant flef.

And yee nowwithfanding, you mult beware not to put abroad into your Warren, the old clapper conies, either males or females: for feeing they haue not had their free fwing to run abroad as thole of the Warren, and haue not learnedio fauc them. felues from dangers and violences offred them by foxes and other fuch wild beafts, they would bee by and by deuoured; fo that thereupon it feemes better to containe and continue ehem fill in their accuftomed clapper.

Conies in the clapper are to be fed with coleworts, lettufes, groundfell, clarie, fuccorie, fowthiftle, tarragon, thiftles, cich peafe, oats, barley and bran wingled togeiher, and other fuch like things, as we haue foken of berctofore. In fome countries shey feed them with mans bloud, fuch as is to be come by when ficke perfons are let bloud: bucfuch manner of feeding of them is ftarke naught, and maketh their flefh vnfauorie in eating, and very preiudiciall vnto health.
And furely to fpeake the truth there is no food that a man can bind a conie to eate which is wholefome for them, becaufe they are beafts which aboue all other defire
freedome of feeding, and to make choice of their owne meat. Whience it comes, that the eame conie is nothing fo pleafant to eat as the wild, but is of a much ranker tafte, and mofteafie to be difcerned.

## С н ар. III.

## How the Conies in a Warren ought to be bindled and ordered.

 Lthough the hauing of a clapper be very neceffarie for the ftoring of a war. ren, againc and againe (as we haue faid before) notwithftanding, for need, one may leane off all vfe of the clapper, and fo, withour any further charge or expences, coneent himfelfe with putting a certaine number of conies, both males and females, into his warren, of them to haue fufficient fore by encreafe of young ones. True it is, that they are not fo fruitfull, nor of fuch plentifull encreafe, and therefore the warren will not be fofoone flored by them: for they being accuftoined to the warren, become more fauage and ftrange, but leffe giuen to engender: and thereupon it commeth, that the Does of the warren bring forth young ones onely elixice or foure times a yeare, and thofe that are kept in houfe-clappers, once euerie moneth: But howfocuer it be, if you find it more for your profit to furnifh your warren with fore after this later manner, it will be iufficient, for fix dozen of Does, to put in nine Bucks, hauing more regard and confideration flill vnro the Does than to the Bucks, to fpare thent, if at any timic you would take any.

Their feeding thall be no otherwife than hath alreadie beene mentioned: and yee notwithtánding, befides that manner of feeding, if you would have great ftore of conies in your vvarren, and that they fhould be fo fufticiently fed, as that they fhould become fat, it will be good to fowe an acre of ground, or two, with Barly or Oats, noe for to make any further harueft of them, than that which they fhall leaue vneaten. You muft hate a fpeciall care, that they feed vpon good nourifhment, becaufe their flefh (in like manner as the flefh of Partridges) doth retaine the fmell and fauour of that whereupon they feed: as for example, of Iuniper, if their vvarren be full of Iuniper, and fo femblably of other things.

If you fee any conie-hole ftopt with hay, or fraw, or fuch orher like thing, doe not viftop ir, but content your felfe onely to obferue it, and to geffe that there are young ones vvithin, vvhich the dam nourifhcth: for this is the manner of the Doe, that from the time that fhe hath kindled, vwhether it be in a houfe, clapper, or in a vvarren, fhee Thuttech \&f foppeth vp her hole with hay, Araw, or fome other gralte, fuch as thee can gather together, and to no other end, but that the Bucke may not find her yong ones, or goe into her hole, vvhere if hee fhould once come, hee would eat vp all her young ones: this thing being affuredly and vndoubtedly conceiued of the Doe, whether the be in her hole, or elfe goe forth ro feed, fhe ftoppeth her earth: and if fo be that at her rcturne fhe find the mouth of her hole ncuer fo little vnftopt, fhe her felfe will by and by kill her young ones, hauing taken opinion, that the Bucke is gone in thither. And this is the caufe why good hunters will neuer put their ferret into any earth, vvhofe mouth they fee fopt, for feare of difquieting the dam, and caufing of her to kill her young ones. True it is, that fhee doth not keepe her hole cuermore fhut: for at fuch time as fhee knoweth her young ones to be growne great, and become ftrong ynough to feeke their meat, and to runne withothers, fhee beginneth to make a little hole for them to iflue and goc out at.

Furthermore, you muft not thinke, that conies, either males or females, doe at any time forget their earth, be it neuer fo farre off : for howfocuer fome fay, that conies haue no memorie, notwithftanding they are alwaies mindfull of their hole, be they ftrayed or wandered neuer fo farre from the fame. And this is the reafon likewife
why
why fome fay that a good conic will neuer dic out of her earth. You muftlikewife

Agrod conie diethalwaies in herearth. coniecture, that the conie is taught by nature to be afraid of the fox, as the Cheepe of the woolfe, which is another cate befides his wild and ftrange nature, why, when he goeth out of his hole, his mind runneth vpon nothing but running, thereby forget. ting to thinke vpon other conies holes, and fo of the Does, and of the cating of her young ones: for although he bee mindfull of his owne earth, yet hee taketh no care, neither calteth any whitabour, how he may find out or fall vpon that which belongeth to another : likewife the Doe to take from him all occalion of any whitregarding hers; is woont to fop the mouth thereof as hath beenefaid.

Furthermore, you muft bee carefull round about the verdge of your conie iVarren in the moft fecret and obfcure places, and where you fhall find the greateft fufpition of the trackt of vermine, to place trappes and ginnes which may take and dewoure them, neirher fhall your trappes bee made all of one fathion, but of diuers fanions, as fome of them muft bee hollow and paffable both waies, the which are called coffer trappes or hutches: fome frall-traps, which are to cruh and kill fodainely: fome fpring-crappes, to fnickle or halter either bird or beaft, as alfopit-falls, and other ginnes: all which the Warrenner fhall diligently and carefully looke vnto, and baite with the liuers of conies, or fome other fuch beaftes:and in the higheft part of the Warren, the Warrenner Chall place a paire of gallowes made of croffe poales, on which he thall hang all the vermine which he fhall kill, as Foxes, Faulmars, Cats of all kinds, Buzards, Crowes and fuch like, (all which breed great deftruction in the $W$ arren) as well ro fcar away other from hunting thereabours, as alfo to gilue ceftimonie to the owner of his care and diligence in preferuing his ground fromfuch like incumbrances.

## Chap. IIII.

## Of the difference betwixt the warren and clapper conie.

 He Warren conie hatha redder and thinner baire, a fwifter and flenderer bodic, the is alfo more watchfull and wild, hauing a pleafanter flefh, and leffe ingendring melancholic than the clapper conie: for the clapper conie lacking libertic, cannot runne nor ezercife her bodie, and fo becommeth nore familiar and tame, more groffe, fuller of haire, more heauie and drowfie, and therefore leffe pleafant: againe, if it happen by chance that fhee come intothe $\backslash V$ arren amongt wilde ones, the is by and by deuoured of Foxes or other beaftes, enemie vnto her, hauing neuer beene acquainted with the the affaults and enimities of the faid beaftes before. As concerning other matters,

## The vertuesand

Bpeciall properbres of conies. bothof them are better to be eaten young and frall, than when they are great. Their braine is good to affwage the paine that young children doce endure in the breeding of their seeth : notwithtanding, fuch as would preferue cheir memorie muft beware and eate as little thereof as they can poffibly, becaufe it furthereth forgetfulnefle. The far of conies is much more to bee commended than any other part, becaufe it is better than any other helpes to make liniments of for the reines which are grieued with the grauell or the ftone.

## Of Wood.

## Снар. V.

## What is to be confidered before a man go about io plant noood.

O order and caufe a new wood to be planted, you muft know the ground wherein you would plant any thing, as whether it be fat or leane, whether ir be of a reafonable depth of earth or no: and likewife if it bee fubiect to waters; becaufe that fome crees by nature loue the water, as the aller an dothers of the fame nature : and according to the nature and propertic of The aller. the ground, you muft applie your felfe to fie it with fuch, as it may nourihh moft, both for your profit and pleafure.

You mult fee and fet downe firft and before all other things, that the ground bee of fuch goodnefle as is requifite : and you muft likewife vnderfand thattwo of the nobleft trees and efteemed worth mofl Giuer, are the oake and the cheinut tree, and The oake. that for two principall reafons: the one becaufe chey beare fuch trutes as whereuf mised with a little barley or oates, one may make bread in the ume of tamine: the other, becaufe it is not in the nature of any tree to affurd fo good timber as the fand two, the oake and chefnut tree do, being either of them confidered in its proper qualitie.
The third excellent fort of trees is the elme : and notwithftanding it be inferiour to the other, becaufe it beareth no fruit, and for that the leafe thereof is nothing fo pleafant, in relpect of the leaues of the oake and the chefnut tree : yet the tree is worth the hauing, cuen for that it may be headded after the manner of willowes, and cut enerie foure yeares to make props and fagots: but the chefnut tree is a great deale better, more neate and fine, and bearing more fruit than other trees which are of its nature : neither doth it fland in need of io good and fat a ground as doth the oake, and againe the Caterpillers and fuch other vermine doe not haunt and fall vpon it as they doe vpon the oake and eime. And further when the locuits come, which is euerie three yeares, as I my felfe haue feene, they eate not the leaucs of the chefnut tree.becaufe they find leaues vpon the oakes: for the yeare of the locults doth hinder fome wood more than of a yeares growth, whereas befides that priuiledge, the chefnut tree doth ordinarily grow more in one yere than the oke doth in two.

Yet is the oake accounted the King of the forreft, both in refpect of hislargenefleand hudgencfe, as alfo for his hardnefle and long indurance; for of all tim:bers not any is is fo long lafting, or fitfor building either vpon the land or water, as oake is: it is alfo the moft principall timber that may bee either for boordes, plankes, wainfoot, or any other feeling whatfocuer, and of all manner of oakes, thofe are preferued and kept as the beft and principall which grow vpon the clay grounds, as being the fineft, hardeft, fnundeft, and moft durabletimber : thofe oakes which grow vpon the fandie grounds being much more brickle, talfer hearted, and much leffe able to endure the violence of the weather, or the cont nuali beating of the wet, when it muft neceffarily fall vpon the fame: whence it comes that the Ship-wright or the Mill-wright euer make choice of the floong clay oake, and the Ioyner of the fand oake, which though it bee leffe durable, yet it is taireft and whiteft to looke on. The elme befides the benefit of his head (which is commonly for the fire) is a moft excellent timber for the ground worke of any thing, or to be lodged in the ground for any neceflarie purpofe, efpecially to make pipes for the conueyance of water; for it is a wood of that infinit toughneife, that if it lie clofe

## The fouenth Booke of

and well hid in the carth, it feldome or neuer confumeth in the fame :itt is alfo rarely good to make bow-flaues withall, and excepting the yew is the principall beft for that purpofe : it is no leffe good to make axel-treescither for Wagons, Carts, or Waines, being neither fo brickle, nor apt to heate and breake as the ah is: the young plants are good tomake beeles for yoakes, by whichoxen draw either in waines or ploughes : and laftly, is an excellent tree to plant in alleyes or walkes, or about houfes for fhade, bearing a large head like the Cicamore, and fully as round, and as much extended: and the leafe naturally of it felfe being broad, and growing fo thicke, that hardly neither the Sunne nor the raine can poffibly pafle through the fame, neither isitender but very apt to grow, and may beremoued at any time or age, as long as it is porrable and meete to be wielded by the ftrength of any one man.
It is very true, that the elme growech eafily and plentifully, after that it hath taken with the ground. And who fo would for varietie fake mingle diucrs forts of trees of diuers natures, as maple, beech, afpe, and fuch other kinds of wood, may do it, but the moe okes and chefnut trees a man groweth, the better he doth.

$$
\begin{gathered}
\text { CHAP. V1. } \\
\text { Of the feating and dißo ofing of a arood for growing of bigh } \\
\text {, and great timber trees. }
\end{gathered}
$$

5Ho foever hatha faire plot of eightor ten acres of ground, and would make it hhew taire and beautifull the firt yeare, and that by bringing the wood into fome fhape and cominendable forme; with hopeot further delight \& pleafure from the fame in time to come, muft for the firft yere wall it about or elfe ditch it fo well, and plant it with hedges of quickfer, as shat no cattell may poffibly be able to enter thereinto. And if the fard plot fhould come to be ditched, then I am frecly contented to vtter my opinion at fome other time, concerning the fanhion that they are to bee made after, as alfo how, when they aremade they muft be planted or fer with quickee.
But prefuppofe that the faid fquare plot is inclofed with a wall, and that the faid fquare hath foure fide's, fhat is to fay, two of length and two of bredth, mine aduife is that all the fides of the faid wal fhould be coucred and clothed with greeneneffe, and with foure forts of trees, and fix foor thicke and large, fecing that nature reioiceth in varietie, hhat fo both the walls may be kept from being feene, and there may be a walk betwixt two greenes.

The faid couerts fhall bee made according to the good liking of the Lord, as for example, oneof the fides if it fhould foleeme good vnto him, cuen the Souch fide wish hafell and white hawthorne, becaufe thefe are the fiff leaues hhat doe firft put forth in the fpring time, as thofe alfo wherin the nightingale doth make her neaf: another of the fides with barberrie erres, which are beautifull and ferue for very many vfes, fpreading themfelues in comely fort, when they meet with a good ground: The third fide being that whereupon the Sunne beatech athis rifing, with tame ofiers, which may ferue in husbandrie, and therewithall alfo make a faire fhew: and the fourch fide with yong peare-trce plants, wish fome white thorne plants amongf, as at the end of eucrie foure foote iquare, which aremore greene than any other forts of trees, and they will bee of vlefor to graft many faire grafis vpon, and good ftore of great medlars.
The alleyes about the faid wood mult be eiwelue foor broad, and vpon the edges of all the faid alleyes, as well on thofe that are toward the wall, as on the other, there muft be planted elmes eury one foure fadome from another, hauing their heads cut off, and their bodics remaining a feuen foote high or thereabour, to giue fome
grace and comlineffe vnto the faid alleyes : becaufe that if a man fhould walke in the faireft place in the world, if there be no fweetneffe to be found in it, it prouech redious and irkefome. For this caufe, if it pleafe the Lord of the farme to plane along the faid alleyes certaine fruit trees, as alfo wallnut-trees, and thofe fuch as may fute euery feafon of the yeare, he may do it.

Furcher, it may feeme that all the faid trees fhould be fet from foure feet to foure feet, and that by the leuell of a line euery way, afwell to pleafe the fight of the eie, as alfo for that fometimes men are defirous to make alleyes within the wood, and then if the draughts be fraight, it is more eafie for to make them.

Снар. VII.

## Of the manner of planting trees in woods of bigh and tall growth.

 F you purpofe to plant thefe trees well, you mult prefently make dithes in manner of furrowes, as you are woont to doe in the planting of vines, wherein they mult be planted, to the end the earth may feed it felfe in aire, and that is may batcle and grow fat, with the raine and fnow which fiall fall during Winter vpon them vnto the end of December, or vnto the beginning of Ianuaric.

Theferrenches are not to be made aboue two foot deepe; but they mult be well handled in the bottome, and that by laying the good earth vpon one fide of the furrow, and that which is lefle worth vpon the other, and not to caft it abroad, to the end that if the bottome fhould proue bad ground, or otherwife to bee ouer deepe, then there might be caft into the faid furrow or trench fome of that good earth which fhal be on the fide, to the end that the roots of thetree may not bufie themfelues in fearching a bad bottome, infteed of ftretching forth themfelues in largeneffe, and you mult foleaue the trenches and furrowes all Winter long, for the receiuing of the rain water when it commeth : and they mult be fo wide, as that one may turne a yard euery way round within.

Thefaid trees muft be planted in December, if it be pollible, and that the times be The time to fauorable, as when is freezeth not: for great frofts are great enemies to the good pro- plant trees. ceeding of this worke.

You fhould rather caft to plant trees that are alreadie growne vp, than to deale with the fowing of acornes or chefnuts, becaufe it requireth great care and induftrie to make the faid feed to grow : and as concerning the feed it lelfe, that of the chefnut groweth fooner than that of the acorne. And whenas you go about to fow them, it muft be done with leauing a foot diftance betwixt one and another with the largeft, and in the end of great frofts : becaufethat during the faid frofts, the mowles do eate the chefnuts inthe ground.

As concerning the planting of trees alreadie growne, they muft be taken vp with as many roots as they can poffibly, and after they be taken vp, if therebe any of their roots broken, to cut the fame : and thofe which are not broken, to cut their ends for to refrefh them, the length of three or foure fingers, more or leffe, as the roots may beare it. You muft makechoice of a young plant, that hath a lively and cleane barke, not rough and ouergrowne with moffe, a good and handfome root, a ftraight fhanke, and long without fares or frets: and before you plant it, it will bee good to caft into the furrow fome good earth, taken from the fide of the fame trench, to the thicknefle of a finger or two, and ypon that, to fet the tree which you are to plant, then couering the rootes with earth, to fway vpon them gently with your hands, that fo there may not any aire ftay about them, and in filling vp the faid furrowes, you muft prouide that they have fome floping of earth, both on the one fide and on the other, in maner of a gutter, to the end that if it raine, the raine and moifture may run away the more cafily.

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And to the end that the planted trees may grow the better, you muft lay their longeft roots all along the trench, on the one fide, and on the other: and if by hap it fall out that there be long ones on enerie fide; fo as that they cannot eafily bee laied along in the furrow, you mult inlarge the furrow a little in the place where fuch roots require it to be enlarged, to the end that the faid roots may not touch the firme and faft earth, but may bee buried and wrape infofe earth that hath beene moucd and ftirred.

You mult likewife cut off by the top of the fhanke all the trees which you plant, that is to lay, fuch as you plant to make high and tail tymber trees, or which you mind to fet along by the fides of the alleyes, till you haue not left aboue the length of fiue or fixe foote to fland out of the earth, to the end that they may the fooner beare a great quantitie of woode: but the trees which you are purpofed to plant forlowe and fmall wood, mult beecut, that there bee not leftaboue a foore and a halfe, for it will bee fufficient if they haue the length of foure inches out of the ground: neither is there any danger in mingling chefnut trees with oakes, excepta man bee purpored to plant one wood with oakes onely, and another with chefnut trees: and as concerning the thickeneffe of the faid trees, it needeth no deepeaduice, for they may bee either of the thickeneffe of a chefnut, tennife-ball, or fome other fuch like : but rather the care is, that they bee well and newly taken vp, and planted the fame day they bee taken vp, or at the farthe? the day following.
Neither is it doubtfull, but if they bee of muchlarger and bigger compaffe, as feuen or eight foot in length, (aboue the ground) and twentie inches in compaffe: yetthey will grow as well and as faft as the younger, efpecially, the elme aboue all other trees: nor would I wifh you, if you can gee them, to chufe plants of any leffe bigneffe. And howbeit that fome Woodwardsare of opinion, that the afh would bee planted but of a meane length, becaufe fay they, looke how mnch it is aboue the earth, fo much it will hoot out in roote vnder the earth, before it begin to profper aboue: yet it is but a falfe coniecture, and if you intend to hauc a faire and a large tree, you muft chufe the fairent and largeft plants that you can get, and then planting them in a conuenient and due time, and in a fic earth, they will in one Winter recouer that roote which thall preferue them from perifhing ever after: againe you muft remember that as foone as you haue fixed your plants in the earth, and couered them wel \& clofe, which is a principal care, you mult then forthwith couer the top of the head all ouer, and at leatt halfe a foote downeward with clay and moffe ftifly well tempered rogether, and if the clay be apt to chap or riue, then you thall mingle a few athestherewith, and fo keepe it clolfe coucred till the new branches fpred forth and couer the head all ouer, then when thofe branches are putout, and are tender, you fhall plafh and order them at your pleafure, whecher it be to make a tree for timber, or for thade,for foeciall marke, or for anyother deuice whatfocue.

The wood thus planted, mult bee twice laboured and tilled, once in the end of A prill, and the fecond time at theend of Iulie, after the fall of fome great raine vpon thunder : and if the caterpiller fhall fall vpon it within the yeare, it muft bee clenfed and freed from them.

## Сhap. VIII.

## Of the time when wood is to be tilled and busbanded.

That direfoing of the earth is neceffarie for yong planbs. $T$ is here to be nored that the chiefe \& principall furtherance and como
 ifort that can be giuen to trees, either reclaimed or wild, is the labour beflowed vpon them in due \& conuenient time, for the more they are hufbanded \& tilled, fo much the more do they grow and profper in greatneffe: wherfore drefing and labour is neceflary for young planis of all forts of trees,
as well fmall as great, and efpecially the foure firt yeares, they muft be husbanded throughly, and pled with two fenerall dreffings euery yeare as vines are, that is to fay, towards the middeft of A prill, whenthey begin to pur forth their buds, and towards che end of Iune, $\&$ e chis mult be done in moilt \& rainie weather, and not when drying winds or hear doth raigne, becaufe che ground ther ftirred would do norhing but turn to duff, which would deftroie the young fprings, and caufe chem die : againe the faid earth dreffed at fuch time doth more eafily conucighthe drienefle of the drie earch cursed dowse, vinto ile rootes of the trees, which is very contrarie vnio them; feeing that moifture is the thing that is required for the nourifhment of plants : and againe if the ground be moilt, it ioinech it felfe clofe vnto the roots, and lendech vnto them of his moifture. The other reafon is, for that the earth being newly opened, by ies lying open, giuech paflage for the water, raine, or dcw, to enter more eafily vnto the faid roots.

The principall labour to be made about all crees, is to root out all weeds, feeing they are giuen to grow euery where in all grounds, and which, it chey be fuffered to grow vp, fucke, purloine, and carrie away the lap and fubftance of the earth in fuch fort, as that there is nor left fufficient vertue and power to nourif the rootes of the late planted crecs well and in good order, and this is perceiued by the labour made in drefling of the vine and gardens, the which the more they are husbanded and tilled, fo much the more fruite, and young fprings they pur ferth, and become fo much the more beautfull and faire. So is will bee che chitefe worke after you haue pianted trees, to caufe chem to be fodreffed in feafons char are moift, and that twice at the leaft: and that will caule then to grow greater of wood, greater of boughes, and to yeeld double profic.

And if extraordinarily she Sommer proue rainie, fo as that your plants become The third drefe. ouergrowne wich much wecds, is fhall be leff to the difcrecion of the husbandman, Sing of reess. if hefee that his plants be not cleane, to beftow a third drefing vpon them, to the The eyropoth of end that the weeds may not friother the bad, and deuour the fubfance of the earth: plants commete and for all plants comic of heate and moilture; and if they be fuffered to bee incangled moifture . with weeds, they will be frmothered and in danger to be loft.

## Снир. IX. <br> That wood divigently dreffed and husbanded, doth profit more than that which is not fodreffed and busbanded.

RentKnow that there are many trees which are dayly feene to grow withouit fuch great paines taking and induftrie, freely receiuing their naturall nourifhment without aide or affifance, and that by reafon of the fruitfulneffe either of the ground, or of the countrie; and yec if fome one do fo efcape, a hundred die for it : and this I fay for cheir fakes, who hauing once planted would be loath to loofe cheir paines, and do conceaue chat all or che greateft part doe thriue and profper : which conceat is nowwithftanding like to deceive them, if they proceed not to drefle and husband them in convenient fort, after they haue beene well planted, as is aboue declared.
Wherfore I haue applied my felfe to trie the ifflue of tilling of them according to art and knowledge, as alfo of leauing them vntilled : and I find that although the tree which growech in the deferr do grow yp fomecimes vpon a perfect yrowth, not- and of telues withftanding it growech not in fo fhort time, and the greatelt partof it diech: and of them go vino withftanding it groweth not in fo fort time, and the greacelt part of it dicth : and
that which iswell tilled and planted, doth grow twice fo much, and that not one of ten of them is lof, but that all profper, of what fort of wild trees foeuser they by.
Butfome may replie, that labour is chargeable and coftech much, but in as much as it laftech niot :alwaies, being to continue not paft foure or fiue yeares at the enof,
much like vnto the young plant of a vine, it will be found that the coft will nor bee great, feeing efpecially thatafter fuch coft, it is freed from any more for euer. For after that wood is once grown vp to fuch height,as chat weeds cannot ouergrow nor ouercrow it,(which will be in fourc or fiue yeares if it be husbanded) then it fmotherecth the weeds thar grow vnder ir, and keepech away from them both the Sunne and the aire with iss fhawdow, in fuch fort as that they dic, and are not able to ouerhadow or do any hurt vnto the wood.

## Сhap. X.

## Of remouing, lopping, pruning, and making cleane of wood.

Wood of SO
longe. Hat your plant may grow the better, it is likewife requifite to remoue trees from a high, drie, and bad foile, into anocher ground that is more moif and fat, if it may be: by this meanes, in finding a better foile, the tree will take more eafily: and there is no doubt, but the better the ground is, and the better that the plant is ordered, the fooner it will grow, become bigger, beare greater boughs and leaues rather than leffe, as may be feene in oid forrefts which are fituated in fertile and fat councries, or in chofe which grow in fandie and bad grounds, as in Solonge, where woods concinue very fmall and vncimely.

Woods planted and ordered (as is abouefaid) the firft, fecond, and third yeare, muft not bee touched with any edgetoole: and yet notwithftanding towards the third and fourch yeares, and thofe that follow, if you perceiuc your wood fo chicke fet and fpred, as that it rifech not, neither groweth high as it ought, you may cull one and cut away the fmall fprigs and litele boughes as you fhall find them, feeing they are good for nothing, and leaue behind you fome three or foure of the principall braunches fo ftripped of their fmall twigs as your owne difcretion will beft direet your. This pruning of them would beetowards the moneth of March, after that the cold is paffed and gone, that fo the froft may nor hurt the boughes that are cut and newly lopped, and you may continue thus to prunc them vnto the middeh of April, at what time they begin to bud and put forth, but then it mult be done gendy, holding the fhanke of the tree faft and firme withour mouing or fhaking of the rootes: And this pruning may be done cuery yeare, if you will, and by chis meanes, you may caufe a new fpring of fmall woods to grow, and to put forth eight or ten branches, fif for to bee plants for high and tall trees, by cutting away the fide ones, and leauing three or foure of the faireft branches growing from the foot of the faid fmall wood, fo cut downe, according as you fhall think good, fo that you make choice of tuch as grow vp high and fraight : and if chey be not altogether ftrong enough to hold vp themielues, you may helpe them with fome prettie fmall props and flickes, the better to hold them vp.

## С нар. XI.

## Of the manner of fowing acornes for the growing of oakes.


$L 1$ fors of wild trees grow of remoued plants, hauing good rootes, or of branches, or of the feeds and fruits which they beare, and wherby they renew themfelues. Of the remoued plant, there hath alreadie enough beene faid, as that it is more profitable, and of a more fpeedie and certaine growth : and therefore the fooner able to beftow paftime vpon his mafter.

The fecond way to grow trees, is to grow them of branches writhen and buried inthe earth, gathered in fuch fort as that they may put forth roots, and sake againe, as Celtsmella hath very well fer downe at latge: notwichfanding, this way is long in taking root, and putting forth ; and not to be practifed, but where there are no plants to be come by. Wherefore I will not meddle with it in this place, becaufe if is not done withour difficulcie and vncertaintie, and for that the pleafure thereof is long bebefore ir is reaped: as alfo for that in this our counrrie of France, there are many vnderwoods and flrong hedges, where are to be gathered very cafily, and that in great quancity, plants of all forts of wild trees.

The third way is to fowe them of feed, as of acornes, beech mafte, and of the feed that is in the leaues of elmes, for they bring forth fuch trees as thofe whereupon they themfelues did grow: and fuch feeds may bee fowne in lietle furrowes made with a hacke or grubbing axe, and thofe not aboue foure or fiue fingers deepe, and therein to couer them againe very lightly with broken mould :or elfe they may bee fowne with the plough, as beanes and all ocher kinds of graine are: or with a debbell, by which name thcy call a litele fticke of halfe a foot long, and a finger or inch thicke. And of the three waies, the beft is to plant or fow the acorne or other feed with the dibble, cueric one halfea foot from another, or onefoot cuery one from another, by a fraight line, or after the mannet vfed in grounds broken vp with the hacke, making a fmall open place in the earch, and therein putting the acorne in the like diftance of halfe a foot all along the furrowe : norwithftanding, it is not needfull to plant them fo neere euerie manner of way; for the earth would not bee able to bearefo much fruit as would growe, and fo it muft either be tranfplanted, or elfe it would proue out of courfe like a misborne thing. Wherefore you may leaue betwixt euery two furrows and plants, fourc, fue, or fixc foot diflance fidewaies : and againe, if all profper not, the worlt and moft ill fauouredly growne may be pulled vp.

And euen as fmall and great wood is to be dreffed and husbanded, fo alfo muft their feed be ordered, but noe after the like fort : for the mattocke would pull vp the feed, and thcrefore they muft be vnderdigd very defly, and the weeds weeded out all along the furrowes where the feedes are fet, to the end that the weeds do not fmother them, and that they doe not blinde them, taking away their aire, Sunne, and fubflance of the earth, whereof eueric young feede and plant flandeth great ${ }^{-}$ ly in neede, as to bee holpen thereby to gather root and life, which is as yet in them very young and tender. By which meanes, you fee that paines and labour taken about acornes and other fecdes of trees, caufeth them to grow and prof per fo, as that they get the beter of other plants, which in continuance might ouergrow them: but if they remaine as foraken things without husbanding, they vvill bee choaked vp viith vveedes, and the greateft part of them dic: and thofe vvhich fhall efcape, vvill bee but of low growth, and appeare like an vntimely birth, lacking helpe and dreffing, except through long continuance of time they preuailc, and then they which planced or fowed, fhall not reape any pleafure by them, but their heiresonely.

And in all fuch forts of planting and fowing of vvild feeds, it is neceffaric to fence a place fowed or planted, fo vvel and fufficiantly with ditches, hedges, or vvals, as that no beaft, horfe, or other may enter or get in : as alfo that thercby the vvood may beè kept from being handled or cut downe by paflengers : for if thefprig bee brufed or broken, the tree remaineth all parched and readie to drie.

According to this manner of planting of acornes, or chefnuts, they may very wvell and conueniently bee fet and planted amonglt the plants of trees, and rootes that are planted farre enoughoff one from another, for fo they may haue roome betwist two plants, being diffant the quantitic of nine or ten foot,orthereabout, feeing it is meet and convenientto nourifh trees, and to deftroie vveedes. By this meanes the acornes and chefnuts, or any other thing planted vvith the dibble, or fowne infurrowes, is drefled amonght the reft, and made to enioy fufficient fcope betwixe
two plants, there to take their full growth, vntill they become like high, or very neere with the trees planted or cur, neither do they coft extraordinarily for their drefing, becaufe the whole gromed is to be drefled, becaufe of the other plants that are in it. And in as much as it is oftentimes found in countries that there are neither vnderwoods, woods, buffes, nor hedges whereout any may get a plant growing from roots, I haue thought good to intreat a little of the meanes of making it grow of feed. Like as is woont to bee done with fruiterees, and thofe which are taken from their nurceries, to bee tranfplanted into gardens: fo may you doe with wilde trees, which after that they are growne to a fufficientehickeneffe, and come to beare feede, may be otherwhere either grafted or planted, as you fhall wifh or defire. For which caufe heere fhall be put downe a treatife and chapter thereof, feeing the former intreatech of the intermingling of feed with plants, for to helpe out the foring of woods which are alwaies to continue.

## Сhap. XII.

Of the may to make wild trees grow of feede, to be remoued aftervard into fome ot her place.
Ertaine it is (as hath beene faid before) that euery tree groweth either of a plant, or of fome grear fruit, or of a writhen branch : and for that there are many places where one cannot come by planes eafily, it is to be attempted to malee the faid plane to grow of feed, as is practifed in the nurceries of tame aud garden trees, by drefling and dunging fome halfe acre of good ground, and then to low it with fuch good feed as that the trees beare, whereof you would haueplants.

That is to fay, with acornes, if you would flore your felfe with oakes: or with chefnuts, if, you defire chefnutrees: or with the graine and feed which groweth in elme trees, if you would haue elme plants. The faid grains and feeds mult be fowne in a far, fertile, well dunged, and fomewhar moift ground, and that reafonably thick, therein couering the faid feeds two fingers thicke, and caufing them to be well watered afterwards, and couered with bright Atraw, to the end that this fruit of young trees fprouting out of thefeed, bee not eaten and broken by birds: but when they begin to grow, the ftraw mult be taken away, and the weeds growing amongft them weeded out with the hand.

For which caufe the quarters wherein the faid feeds are to be fowne;muft be made long and narrow, that fo the weeds may eafily be puld vp out of euery place, without treading vpon the quarters, and that the faid weeds may be gathered gently, to auoid the doing of hurt vnto the roots of the young trees: and oftentimes they mult be watered at night after Sunnefet, and in the morning before Sunnerife.

And after they be growne three foothigh, you muft remoue them into fome other ground before they take any ftronger roor, and let them good two foot diftant one from another, till they haue got a comperent chickneffe, fuch as is before defcribed, and dreffe and clenfechem from all weeds, and water them. in the time of droughr. Thus you fhall reare planes of all forts, and of all manner of wild trees, to remoue af. terward into fuch places as you will, and fuch trees will grow very well being tranfplanted, as are of like age and fort: for fo the one of them cannothurt:or iniurie another.

This is to be practifed in places where no plants of trees can be found infufficient ftore: for otherwife in countries furnifhed with vaderwoods, and woods, there are inough to be found without taking this plant, and redious protract of time : where fore this article will be of vfe, where there is neither vnderwood, wood, nor plant to become by in hedges or bufhes, and not in this countrie, wherecthere are many to be gotten, and thofe very good.

Снар。

## Снар. XIII.

## Of the pleafure that commeth of the planting of wilde <br> woods, as alfo of the profit comming <br> of the farne.



Mongft the chings required for the making of a plase of perfeet beautie, Cato in his booke of Husbandrie faich, That it is needfull to hauce nine principall things: The firft, is a Vine, yeelding great quanticie of vvine: ${ }^{q u i j f t e f}$ for the the fecond, a Garden, full of littile riuers: the third, a Willow groue, and bexuty.juppare Oziar plot: the fourth,a grear Riuer : the fifth, a Medow: the fixth, a great channpion ground : che feuenth, Coppies of vnderwood: the eight, plentic of Bu!hes, and a Warren: and the ninth, forreft of great Trees or O . kes to beare A cornes. Now amongft all thefe feurall points of perfect beautiie, we may fee, that the principall is vvater and vvood: becaufe that hauing vvater; one may eafily make Medowes, Garden plots, Oziar yards, and Willow plots all along the vvaters and riuers: and hauing vvoods, one may make Vnderwoods; Warrens, Bufhes,and high great trees alfo, if it be lope and pruned vnderneath, to make is fhoor vp and grow on high. And he muft not leane aboue three or foure branches at che moft, and then they will become call and high by and by, becaule that the roor is disburdened of all the reff of his boughes, by hauing them cut downe : in like forr, the ground fendeth all fuch nourihunent vnto thele three or foure branches, as it had imployed in the nourifhment of many branches of fmall vvood, and affoordech growth vnto the ftraighteft and faireft branches, which are left behind to come to perfection: thus in a fmall time they become tall and great trees, and beare acornes. So, in like manner, there is not that vvood of high and great growth cut downe in good and feafonable time, vvhich puttech nor forth frmall vvood and bufhes, if cattell and bealts be carefully keptour.
Whereupon I will conclude that in planting of wonds, there are three things prinI wron thoods haue in cipally requilite to the making of a beautifult place, hat isto hay, wote wreat them three wood, bufhes and a warren : for it is the like reafon to plane the one and theother; for commoxitits. of the one the other is made : wherefore in refpect of the pleafure, profit, and beaury of the place, it is meet and conuenient to plane woods.

But the chiefe pleafure and paftime which commeth by wild woods, is, that being The pleafires ioined to your houle and champion habitation, (which is the place, where it mult be and pafimes feated or planted) it is pleafant to the fight: for by its diuerfity of grecnenefle, it that the weild maruelloufly delightecth, and with great contentement recreateth the fight.

The fecond pleafure or paftime is, that the woods 'being neere vnto your lodging) are alwaies full of all forts of pretic birds, which fing Sommer and Winter all the day: long, and moft part of the night, as nightingales, and fuch ocher like, whereby their fongs become ioy full and delightrome to the eare, and fo there is a pleafure and great contentment to the care cuen to them in the houfe if it be neere vnto.

Another pleafure is, that in the faid woods there are alwaies great fore of wood coifts, popingaies, ftares, cranes, and other forts of birds, which make you paftime to fee them flie : and there may alfo pleafure be reaped in taking of them with lietle engines, as, with a cali, nets, the tonnell,or ocher fuch like.

The fourch is, that in the woods there are to bee had conies, hares, 〔quirrels, and other forts of (mall beafles pleafant to behold, and of great feruice for prouifion of vitaile.

Thefifth is, that in hot feafons you may purchafe a coole aire within the faid woods, as thofe which will couer and defend you from the iniurie and vexation of the

## The ferenth Booke of

Sunne, and contrariwife, cooling you, whether the heat will or no: and therein you haue alfo to behold a comforrable greeneneffe, both vpon the boughes and ground, vvhich keepeth his graffe greene through the cooleneffe and fladow of the trees.

The fixth is, that in Winter being in the faid vvoods, you are out of the iniurie and force of the vvinds and great cold, becaufe they breake them off: and furcher, in thefé vvoods you are folitarie, and may vfe your leafure, in reading,writing,or meditating vpon your affaires, wvithout being difquieted or diftrated, or drawne to caft your fight abroad ouer any farre diftant place ot countrey, in as much as the fight cannot pierce through the boughes or bufhes.
Befides the faid pleafures, there commeth much profit thereof, as well for the fee-

The profit of woods. ding of cattell, and that in the fhadow, and with fore of graffe at commandement at all eimes, as alfo in refpeft of the Oake maft, Beech maft, Chefnurs, and other fruits vvhich the trees beare, vvhich ferue for the fatting of hogges, and are very neceffarie for other beaffs: and for that alfo you may, vpon certaine yeares, make fall of your vvoods, to make faggors, fire vvood, flakes to hedge in garden plots, and other inclofures, as alfo rods for Vines to runne vpon : and if there be cur downe any Chef-nut- trees, or Harels, you may (befides the things alreadie named) make your profic of hoopes and boords for vvine-veffels, in fuch fort, as that thefe yourvvoods flall not onely doe you pleafure, but profit alfo, if fo be you be fo difpofed to make your vfe of it.

The profit of ground imploi. ed about the bearing of mood

By this meanes you may conie ature, that the ground which is imploied in bearing of voood, is not any thing inferior in profit vnto others which are imployed in bearing of Corne and $V$ ines.
It is very true, that the commaundement, or vea and profit of it, are longer time in purchafing; and more hardly come by, than that of Corne and Vines, but it recompenceth it with the double in the end : for the firtt charges once defrayed, nature bringeth forth both the greater and the fmaller vvood vvithout the helpe of man, and vvithout any labour: v which happeneth not in Corne-grounds and Vineyards, feeing they beare not, except chey be continually husbanded and tilled. Wherefore, the ground imploied in Beech malt, and vvood, yeeldeth as much profit as any other, and will ftand the houfe in as great ftead, feeing it cannot be any way held or inhabired without vvood.

I haue heere beene the more vvilling to declare and lay downe in briefe the pleafure and profit that commeth of vvoods, tu the end, that they which take paines in thofe courfes, may not thinke that they haue loft their time and coft beftowed thereupon, and that they may not be afhamed at the firft blow of their trauaile and long attendance, feeing that afterward both the pleafure and the profit doth abide and continue vvithout any further colt, and that vnto them and sheir pofleritic.

Wherefore,my counfell and aduife vnto the good husband and mafter of the fami$l_{i e}$, is, that he apply himfelfe to fuch planting of $v$ voods becimes, that fo he may the fooner enioy the pleafures thereof: and that in fo doing, he caft them fo, as that they may grow as neere vnto his lodging and houfe where he meanech to dwell, as poffibly may be, for his further both profit and pleafure: for if no good elfe fhould come thereof, yet they would ferue to breake the raging and bluftering vvindes annoying the houfe, if they be well placed, and fo conueniently, as a man may be able to difpofe them.

## Chap. XIIII.

> Qiventif of the nature, properties, and differcmecs of woilde trees, and what ground they delight mof in.

5Eeing it hath beene deliuered and laid downe here aboue, what time and manner is to be obferued in the planting of a!l wild trees, and in giuing chem fuch tillage, as may eafily, and in hort time, procure their growth; it hath feemed good vnto me, to write fome little ching of the nature and forts of trees which are planted and found ordinarily in the vooods and forrefts of France, and to declare briefely what manner of ground they delight in, and in what folle they proue greateft and mont profitable: to the end, that the planters of them be not fruftrated of their paines and purpofe, and that that which requireth a drie and hot foyle, be not planted in a moift and low foyle : as alfo, that the trees vvich delight in a moift and low countrey, be not planted in mountaines and drie countries: for this falleth out oftentimes to be the caufe, that fuch as beftow their coft in planting, doe miffe of their intent, and that the plant being in a ground cleane contrarie vneo it, doth not come to any profit. For which caufe, I will here in a word expreffe my mind concerning that point, not with any purpofe to defcribe or comprife all the natures, vertues, and properties of trees, neicher yet to fpeake of all kinds of trees, but onely to defcribe and declare the places and grounds wherein they profper and grow moft, as alfo to make knowne the diuerfitie that is amongft trees of one and the fame fort, and of one and the fane name : as which are moft fic to be planted, and beft for to make finadowes to walke or fic in.

I know, that there are diuers forts of trees that grow both in the Eafterne, Northerne, and Southerne parts of the vvorld, vvhereof we are almoft altogether ignorant, and which, in refpect of the diverfitic of the regions, doe not grow at all in this climate : and of thefe I mind not to feeake at all, becaufe my purpole is only in briefe to lay downe that which is neceffarie to be knowne about the planting of common trees, fuch as are ordinarily to be found in our owne forrefts, and not of ftrange and forraine ones, the trouble abour which would be more than the pleafure. And as for fuch as are defirous to attaine the perfect knowledge of all manner of trees growing in any part of the world, and their vertues, properties, natures, and feeds, they may fee the fame at large in $T$ heophraftus, in his fourth booke of the hiftoric of Plants, and in the third booke, vvhere hee particularly enereateth of the kinds of wild and fauage rrees: for he particularly runneth through the nature, force, vertue, feed, and manner of planting of cuery wild tree, as well thofe of the Eaft, North, and South, as thofe of the WVeft : but it ihall be fufficient for vs at this time to declare the nature of flue or fix forts of trees which commonly grow in the countries hereby, and of their kinds, and what ground euery one delighteth in.
Now therefore to begin, there are two forts of trees in generall : the one is called vvater-trees, or trees delighting to grow in or neere vnto the brinkes of vaters, in medowes, and in low and watrie places : the other land trees, or trees delighting to grow vpon the firme and folid land, and vvhere the waters by inundations or ouerflowings vfe not to come. But firft we will fpeake of the trees liuing in or about vvater.

CHAB.

## Chap. X V.

> Of the Aller, Poplar, Birch, willom, and other thets baunting the water.


Ou fhall vnderftand, that there are foure or fiue forts of trees, wvhich of their owne nature grow neere vnto vvaters, and which, except they haue
 mongft the reft, the Aller is one that moft couetech the vvater : for the Aller is of that nature, as that it would be halfe couered in vvater, and at the leaf, the moft part of the rootes muft of neceffitie be within, and fland lower than the vvater, for otherwife they would not take, infomuch, as that trees of fuch nacure ought to be planted in moift medowes, and neere vnto the brookes running along by the faid medowes, or in marhhes, for in fuch grounds they take and grow exceeding vell. This rree is apt to take in moilt places, becaule it is a wvhite wvood, containing much pith, and puttiigg forth great fore of boughes in a hhort time, by reafon of the monthefle ot the vvaters vvherewith it is nouri!hed and fed.
The faid Aller trees may be planted two manner of wayes, as namely, either of branches gathered from great Allers, or of liue roors digged vp in moift places, together with che earth, and iet againe in the like ground,and that in fuch fort, as that the halfe of the faid roots be lower than the water, and the vpper part couered with earch the depth of one fing er: and in the meane cime, before they be planted, they muft haue all their branches cut off too, within a fingers Tenget of the root, and it will put forch againe many youns fhoors,after the manner of Hafel trees. You may read more of the Aller tree in the fourth booke.

There is another fort of vvater-wood, which hereabout is commonly called white wood: of this kind, are the Poplar,Birch,and other forts of wood, which grow clofe by the water fide, and vpon the banks of ditches, /prings, and litte brookes: and it is a common practife in Iealic, on lay their conueyances and pipes to carrie their vvater from rivers throughout their grounds, of thote woods. And thele kinds of trees may be eafily planted of young roors along by the vvater and riuer fide, both moft conueniently and profitably, efpecially the white Poplar, otherwife called the A(pe tree, whofe leaues are apt to fhake with euerie fmall winde. Where rootes cannot be got, there may, in their feead, be raken taire and frong plants, fuch as are vfed in the planting of Willowes. The Birch doth fomewhat refemble the white Poplar in his barke, and the Beech tree in his leafe, but it crauech a colder and moifter foile than the Poplar. And this is the caufe why it growech fo plentifully in cold countries.

The other fort of vvater-wood is the Willow: vvhich, as wee finde by proofe, groweth nothing well, except it be in a molf and watrie councrie, and neere ioyning to vvaters. The manner of planung of IVillowes, is commonly, by fetting of Willow plants, and thofe fuch as are of a good thickneffe and ffrength,as namely as great as one may gripe: for looke how much the ftronger and thicker they be, fo much the moe fhouss will they pue forth, and fo much the ftronger. This tree differech much from the Aller : for the Aller will haue his rootes all within water, but the Willow would ftand higher, and ipread his roots along into the ground that is wet and moift, and neere vnco water, vvithout hauing his roots altogether in the water: according whereunto, it is continually feene, hat Willowes planted vpon caufeyes \& banks, hauing fome ditch of water ioyning thereunto, \& that in fuch fort,as that their roots may reach but to the brinks and edyes of the warer, proue fairer, taller, and more plentifull than thofe which grow in waterih medows, becaufe that for the fort part cheir roots fland moift in water. You may read of the Holme tree in the tourth booke.

I fay not that Willowes, Allers, Poplars, \& fuch white wood will not grow in high places, notwithftanding that it is cheir nature to grow necre to water, and doc profper beft in fuch places: and if they be planted in high places, and farre from vater, they are hardly nourifhed, and put forch very little in growth: infomuch, as that a' hundred fuch trees as are planted in waterie countries, veill yeeld more vvood than a houland planted in a orie countrey, nowwithnanding all the indeuor and husbandrie that can be vfed, yea, and they will perifinand die a.great deale fooner.
This I fay, becaufe it is eafie to make them grow, and to !msband them in a high or hillie place, by watering and drefing of them in contenient fort: vwhich labours, as they are not performed without great coft, fo if they happen to be negleeted, it proucth to be the lofle and fooile of the erces : whicreas if they be planted in fome place that is fit for them, and necre vno vater, according as their nature requireth, they vvill profper veithour the toile or induftic of wan vfed cherein. Notwithfanding, for as much as the firft yeares after they be planted they hane much to doe to fhoot and nourifit their roots and fuch branches as are alreadie put forth, it wil be beft to free them of all fuch wwigs as they thall pur forth the firf yeare, to the end they may more cafily feed thicir roors, as alfo that there by the force of winds, which would take fuch hold of offall, may not thake and loofen thofe which are alreadie faft, for vpon fuch caufes trees doe many times, die, be they neuer fo well planted.

I know that it is not alwaies required, that fuch paines fhould be taken (efpecially about thofe which are orderly and conueniently planted) in planting or pruning of them: notwithftanding, I fay thus much for them vohich goe about the making of clofe alleyes for walkes and fhades, that they may caufe them to grow much in a fhore time, for this they thall effect by planting of them in furrowes, and not one of them perifh: and as for their paine and labour, they flall hauc the pleafurethercof inforcer time and larger manner.

Herewithall it muf be noted, that whenfocuer you fet or plant any fuch trees, you Treesmul be mult fo doe it, as that it need not a fecond doing: for if any of them fhould dic, it well and furely would be the harder to fet others in their places, lo as that they would thriue, becaufe the ? hadow of the other which liue, would caufe the fame to die, Ieeing it is vfually feene, that the elder and ftronger ones doe oppreffe the weaker, keeping them vinder, and cauling them to mifcarric. Wherefore the greater care is to be vled in the firft planting of them, and the more paine to be taken with them, feeing the fequele is a thing that is fo hard to be redrefled.

The time to plant Willowes, Allers, Poplars, and other fich vvoods, is alwaies found beft in the beginning of Februarie, or at the later eqnd of Ianuarie, vvhenthe great cold is paft, being otherwife ape to hure fuch plants as are new fet, as hath alreadie beene faid.
As concerning the properties of thefe trees thus delighting in watrie grounds: the leaucs and flowers of the white Poplar, although they be a little hot, doe notwithftanding make a very cooling ointment called Populeum, good to take away the heat of inflamations, as alfo the milke out of womens breafts that are newly deliuered.

Birch-sree yeeldethtwigs, which ferue to make rods for the punifhing of theeres withall, as alfo to make baskets, little maunds, beefomes, and couerings for earthen bottles. Of the flocke is made charcoale, feruing for the melting of mettall: And of the rinde are made links to giue light in the night feafon: for to luch end doe country people vfechem. The iuice of the leaues mixt amongtt the runner of a Calfe, doth keepe cheefe from wormes and rottennefle. If you pierce the flock of the Bircl-tree, there will come forth a water, which being drunke a long time, is of power to breake the ftone of the reines and bladder: being taken in a gargarifme, it drierh the vleers of the mouth: and being vfed in lotions, it cleanfeth and takech away the filthineffe and infections of the skin.

## Сияр. XVI.

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\text { Of } 1 \text { AJbes, Elmes, and CMaple-trees. }
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25 (5enHe Alh doth naturally craue a low and waterifh countrey, and therefore doth grow more plentifully in fuch placesthan in high grounds: and therefore, for the molt parr, they mult be planted in fuch low and waterie grounds, though not altogether folow and wateric as the Willow, Poplar, and Aller doe crase : howbeit notwithftanding they may be planced in indifferent grounds, and Elmes will grow well therein. Their proper nature is to delight in moilt valleyes, for therein they profper well, and grow vp to a grear height, with ftraitneffe and beautifulneffe of Timber: Notwithftanding, this is a common vvood, vvhich may be planted in all forts of grounds, howfoeuer that it like better in fat and moift grounds, than in thofe which are bur indifferent: but they much diflike the drie, rough, ftiffe, and grauellie grounds, if they be not mingled with moifure. The auncient Woodwards vfed to plant them moft in hedge-rowes, and on the tops of great bankes or ditches, where they might haue drie ftanding, yee be continually fed at the root with a little moifture: vvhich fure was a very good and husbandly manner of planting the ATh, neither thall you at any time fee it profper better, than when it is planted in fuch places. It is naturally of it felfe a little more tenderthan other wild trees, and defireth a more gentle and loofe mould, which maketh them profper the beftin mixt hafell grounds, or in moift fandie ground: yet if they doe take in clay grounds, as doubrleffe with a verie litele care they will doe, one Afh fo growing, is better, tougher, and more feruiceable than any three which are taken from the fandie or mixed earths. It is a timber of no leffe precious vfe than any other whatfoeuer: for of it are made all your beft Pykes, Byll-fhafts, Halberd.fhafts, and diuers other engines for the vvarres: of it alfo is made all manner of Plow and Carttimber vvhatfoeuer, as Beames, Heads, Skeathes, Hales, Spyndles, Shelboords, Cart or Wayne bodies, rings for Wheeles, Naues, Harrow-buls, Harrow-teeth, Axle-trees, and any other inftument or engine which defirech a firme, gentle, yet a verie tough vrood: a timber that mult bend before it breake, and not by any meanes be too exexeame portable or heauie in the cariage, but both light for the hand of hime that thall vfe it, and alfo frong ynough to endure the freffe or labour is fhall be put vnto; allo it munt be gentle and foft to cut: all which the Ah is, more than any other tree whatfoeuer.

There are three forts of Elmes : The one is, of thofe vwhich haue a fmall little icafe, and a blacke ftalke: The fecond hath a large leafe, and a reafonable vvhite falke: The third of them liath a verie large leafe, and the falke as it vvere all vvhice. Thofe vwhich are to be chofen for planting, are thofe two later, for they are of greater growth, and are vvoont to profper better : befides that, they are fairer, and put foorth moe boughes, making thereby a greater fhadow.

Thale and fe, analc Elmzes.
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Of thefe three forts, there are both males and females:-vvee call thofe females, wwhich beare moft fruit, and the thicker feede ; and the males vvee call thofe vvhich are leffer, and beare their fruir of feede, in the middeft of the leaues, and that in fuch fort, as that they feeme to beare neyther fruit nor feede. And for this caufe there are manie that vvrite of Husbandrie, affirming the faid tree to beare no fruit or feede, and that it groweth either of a plant or thoot. And of this opinion voas Tremelius. Notwithftanding, it is certaine, that eueric leate beareth his fruit contained within the middeft thereof, and thereof vvill Elmes grow, being fowne in due time. And of this opinion is Columelle; and experience it felfe doth fhew the fame : hee making two differing forts of Elmes, calling the one fort, the faireft and talleft Elmes of France : and the other fort,

## the Countrie Farme.

Italian Elmes. And as concerning thofe faireft Elmes, if they be to be found, they mult be planted, becaufe they grow vp the fooner that way, and put forth much larger boughes. Theophraftus and fome other vvriters doe make them leffe differing, Theophrafuss. according to the countrey wherein they grow. I haue beene the more willing to defcribe them according to their kind of leafe and voood, that you may the more eafily know them. I would haue you to looke backe into the fourth booke, and there you fhall find their natures and verrues more at large defcribed. The folles in which they moft of all delight, is a veriefliffe clay : and the principall vfe of them, oucr and aboue the making of Bow-ftaues formerly nentioned, is the making of naues for vvaggons or cars-vvhecles, for vvhich they are more excellent thän any other vvood vvhatfoeuer ; and the more knottie and twound they are, a grear deale the fitter they are for that purpofe : fo, that as the cleane growne, fmooth, and euen Elme fertues for other purpoles, to the knotrie; vneuen, and moft crooked Elme will ferue for this.

Amongtt thefe forts of trees wee may place the Maple-trees (called of the Latines Aceres) becaule in their nature they fomewhat refemble the Elme: They craue the like ground, namely, a fat and moift ground : they grow (as the Elmes doe) in all arable grounds: they put forth in a fhort time great branches, and but little greenenefle. This tree hath a verie white bodie, beareth friall leaues like the leaues of threeleaued graffe, and doth not breed or gather any great ftore of vermine. It naturally groweth fhorts crooked, rugged, and beareth feldome any great length of timber: yet where it groweth otherwife, the timber is verie firme, white, clofe, and durable. It ferueth for diuers excellent and good purpofes: as namely, it is the beft of allother, by reafon of the wonderfull whiteneffe thereof, for all manner of inlaid works, vvhich Ioyners vfe: alfo it is excellent for all manner of Turners vvare : as for the making of trenchers, difhes, bowles, fewing kniues, and other implements for the Table, prouided, it be euermore of ar leaft a yeare or more feafoning: for if it be wrought greene, it will warpe, ryue, and be indeed for no purpofe. Many vfe to feafon it in a drie houfe, but then it asketh a longer time, and the fappe will be much longer in confuming: but the beft way is to let it lye abroad all the firft Winter, and take all wee which falls, for that will driue the naturall wet of the fappe fooneft out of it, and then houfe it the Summer following, and then after you may fafely worke it at your pleafure.

The ATh is contrarily inclined : for thereon breedeth oftentimes fuch abouri- The Ahb: dance of vermine, as that thereby all their leaues are eaten and bored verie full of little holes. Of this fort of Trees, as well Elmes, as Afhes and Maples, the beft are thofe. which grow the fooneft, and fpread out the largeft boughes in a fhort time.

As concerning the properties of thefe three kinds of Trees, wee haue foken in The vertues of the third booke, in the Chapter of Balmes, how there is made a fingular balme of the Elme the little fruit that is found inclofed in the leaues of one of the forts of Elmes. Furthermore, the vvater vwhich is found inclofed in this lietle fruis, maketh the face neat and fhining, if it be vvafhed therewith: againe, double linnen clothes being vvet in this iuice or vvater, and applyed vnto children vvihich are burfen, becommeth a fingular remedie for them. The fame iuice alfo put into a glaflebottle, and buried in the earth, or dung, for the fpace of fiue and twentie daies, being well ftopped, and hauing the bottome fet vpon a heape of falt, proueth fingular good to cure greene yvounds, if they bedrefled vivith tents fleeped in the faid juice.

The Maple-tree in this countrey amongft other things is had in requeft, becaufe shooting bowest: of the boughes thereof there are made Bowes, and that becaufe chey are ftiffe and hard to bend.

The Anh-tree hath a fingular vertue againft the venime of Serpents: for it is fuch an enemie, and fo contrarie vnto them, as that they dare not draw neere or approach vneo the Phadow thereof: and againe, as hath beene proucd of many, if you

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make (as it were) a circle of the leaues or boughes of the Ath-rree; and pur within the Game a Serpent by the one fide chereof, and a burning fire on the orher fide, the Adder will rather aduenture to paffe through the fire, than ouer the Afh-cree leaues. For this caufe Nature, as one carefull of the good of mankind, hath prouided, that the Anh fhould flourifh before chat Adders and Vipers doe vee to come out of their holes in the Spring time: as alfo, that it fhould not fall his leaues in Aurumne, till they haue taken vp their Winter refting place. Wherefore, if it happen, that any Horfe, Cow, or other beafts of the Farmers fhould be bitten by fome ferpent or other venimous beafts, there cannot be found a more foueraigne remedie, than to flampe the tendereft leaues that are to be found vpon the Ah, \& ftraining out the iuice, to giue it the beaft to drink, and afterward to lay vpon the grieued part the drofte of the f tamped leaues: this is likewifea good remedie for men that are bitten of any Adder or Viper. The decoction of the rinde of the Afl-cree taken, is fingular good ro open the obfructions of the Splecne, and to draw our grear fore of water from fuch as haue the Dropfie, as alfo to make fat folks leane. Allo the keyes of the Afh,orthat which is thefeed thereof, is of molf fingular vle amongft Painers, and beng ground, makech him diuers pretie and moft vlefull colours. The Ahh is onely an enemie vnto corne, and will not fuffer any to grow by any meanes within the compaffe of the Chadow thereof: and therefore it thould as feldone as might be, be planted in, corne-fields, except you leaue fuch large fpace of greenefwarth. betwixt it and the corne-lands, that no part of the fhadow may extend to the fame.

## Снар. XVII. <br> of Cbefnus.trees.

(6)He Chefnut-tree is a frong and mightie erre, much like vnto the Oake. It is a faft wood, and good to build withall, as alfo to vnderprop Vines, and make other workes, which are made of Oake. It growech of the feed of the Chefnut, which is lowne aferche manner of the Acorne, and fo it growerh and putrech forth his fhoots both fooner and more effectually, and taketh commonly in all grounds, yea euen inthe fandic or grauellic grounds: bur yer ic fhunnech the ground s that lie open to the pearching heat of the Sun, affecting altogether the litele hils and mountaines that are cold and lie vpon the North. The feed or fruit thereof (catled the Chefnut) is fometimes fpoyled, and that: after che fame manner thatche Acorne is, as by too much drineffe, vvhich maketh it that it cannor bud or bloflome : or by too great flote of vvater, putrifying both the Chefnur and Acorne, before it can fpring out of the earth: or elle by cattell, moules, field-mice, and fuch forts of vermine, which eat or wound the Chefnut \& Acorne within the ground. The nature of the young plants of Chefnut-rress and Oakes are much alike, and the manner of drefling them alfo: and if you would haue them to pur forth flore of boughes, you muft cut them after they haue beene planted three or foure yeares, and not before, and that in the beginning of the Spring time, for fo you Thall make thenr put forth twice as much: and yee it is not without danger to vfe any edge-toole in cutring them, for thereby they oftentimes die. So then, if there put forthany branches or fprigs along the ftem, in the firft, fecond, or third yeare, you may at the be ginning of fuch their putting forth crop them off, and breake them away with your hand whiles they are young and tender, and not to take any knife vnto them, and then you fhall doe beft.

## Chap. XVIII.

## Of the Oake and the differences thereof Hornebeame, Beech, $^{2}$ Linden wrec,and others.



Ou fhall vnderftand that the oake is a tree bearing moff fruit, and affoording the moft commoditie of any tree in France. And for this caufe ic hath been accuftomed to preferue and keepe flore of chefe kinds of trees in old woods and forefts, as being moff neceffaric and profitable. Some do make three forts of this kind of tree, and of euery fort a male and a fermale : for notwithftanding that the common people call them all by the common name of oke, yet the Latins atrribute to euery fort his fetrera! and proper name, calling one fort thereof Robur, another 2 uercus, and the third Ilex.
Thefirt of thefe forts is a kind of oake which is very thicke and flrong, hauing a bodie that is very thicke below, and full of knots, and very mightie, hauing greas roots, and fpreading far and wide in the ground : and at the top of the bodic or bole which is but hort, it beareth many and great quantitie of boughes that are alfo thick, fpread abroad and lons, taking grear roome : and for that caufe are planred the one from the other a great diftance, that fo they may haue roome for cheir boughs to fpread. The wood growing vpon this fort of okes is fitter to make fire wood ot, than timber to build withal, becaufe it hath but a hort bole, and rifech not vp to any great height and fquareneffe, hauing his boughes therewithall crooked and writhen. There are many forrefis so befeene, whercin this kind of oakes doth grow, as namely thofe whofe oakes are thicke and fhort, ftanding far a funder, and yer fpreading on a greac breadth aboue.

The other fort of oakes hath both a reafonable thicke and long bodie, as namely of the height of foure or fiue good fadomes, as alfo foure or fiue reafonable tall and ftraight boughes growing thereupon, but not fread forthinto any great breadth, as neither the bodie is fo well couered and fhadowed therewith as the former. And this fort of oakes is good for beames of houfes, and great peeces of cimber, to be put in buildings, as alfo for to faw and cleaue, becaufe it is nor knottie and hard as che tormer. And of this fort there are to be feene many forrefts planted in France, and they are more thicke and clofer growne with timber, chan theothers which I amabout to fpeake of, becaufe the boughes of thefe doerife more ftraight vp , and take not vp fo much roome.

The third fort of oakes hath a fmall bodie, but very ftraight, and growing to the height of feuen or eight fadomes withourany boughes, and atthe top of their faid bodies, bearing butfnal fore of boughes and wood, in fuch fort, as that all the wood is in the bole, feeming to beconely a nofegay at the top. And this kind of wood flandth very neerethe footone of another, rifing vp equally and alike vnto a great height and greaeneffe, and the forrefis furnifhed with this kind, are very profitable to make all forts of buildings, whecher it be to make the joyces thereof, or any of the other forts of long and middle timber, as thofe required for for walls or roofes. And of this kind of wood there aremany forrefts in this countric.

All thefe three forts of wood do beare a great leafe, and that euery one like vnso another, faue that they arefome of them large and great, fome but indifferent, and the third fort frnall and litele. A gaine, they beare fome of them acornes that are more long and chicke, otherfome, acornes that are more thiche and hort, and againe other fome of them, acornes that are fmaller and longer.

Furthermore, there is not any of thefethree forts which confifteth not of male and The mate and female. The female is commonly called that (as Theophraftus (aith) which bearech fenate of oakes. the moft and ftrongeft fruit: whereupon it followeth, that if thofe are to bee cal- Theophrafius. led the females which do beare molt ftore of fruit; wee mult needs call thofe males,
which beare leaft fruit. When they beare fruit, or when they beare none, the barren

The barien is called the male and the fruitffill the female. are called the males, and the fruitfull the females. T' beophraftus puttech another difference bewwixt thofe which are fruitleffe: but I meane not to write any thing thereof at this prefent, purpofing to be briefe, \& to referre fuch as are defirous to fee the fame, to Theophraftus his third booke of the hiftorie of Plants, vader the citle of the Oake: as alfo in like manner for all other forts of trees, vihech I fpare to fpeake of, that fo I may not exceed my former purpofe and intent.
All thefe forts of Oakes are of great continuance and length of life, infomuch, as that fome allot vuto them to liue three hundred yeares: that is to fay, one hundred to grow, one hundred to ftand at aftay, and one hundred to decline and fal away:which may cafily be feene in the old and auncient forrefts.

And whereas the Oake is long in comming to his growth, and long in dying, it is no maruell, if the Elme, the AM, the Maple, andocher vooods, fet in the like and no better ground, doe put forth their boughes and branches more fpeedily and mightily than the Oake : for the nature of thofe trees is to grow vp foone to their perfection, and fo to die and fade foone; and the nature of the Oake is to grow by leifure, to flonrifh a long time, and to be long before it die. Now Nature will not be ouer-chafed: as may befene in a horfe, which commeth to his growth in flue yeares, and man not

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 fiutt grompth at fure, and a mana at fiue and twentic. before he be fiue and ewentic; and lo the whole continuance of the one is more durable than that ef the orher. This I fpeake in refpect of fuch, as by and by looke to haue vvood to become growne according as they can wifh: giuing them to know, that to anfwere their haftie defire, it will be beft for them to plant Alhes, Elmes, arid Maple onely, feeing they are giuen to fpring mightily, and in a Ghort time, purting forch more boughes in fixe yeares, than the Oake in tenne. Whereas they which de. fire to haue a more pleafant, profitable, and durable vvood, though it be longer in comming to perfection,muft plant Oakes, Chefnut-trees, Horne-beames, and Beechtrees, for they are reafomably long in growing, and of like durablenefle, and put forth but fmall fore of fhoots, like as the Oake, in fuch fort, as that they become trees of one and the fame fort and growth, and to be planted after one manner, and at one time, as hath been faid before. It is very true, that the Oake delighteth in a fat, good, and drie ground, euen as che Horne-beame and Beech-tree doc: notwithftanding, the Hornebeame and Beech will grow more eafily in a fonie ground or countrey, although that eucry fort of trees whatfouer be given to grow the better, by how nuch the ground is better wherein they are planted. But fome doe naturally delight in and crane a good ground, as for example the Oake, if you would haue it to prolper well: for and if you plane it in an indifferent ground, it will profper but indifferently: and if it be fer in a hard and barren foile, it hardly profpercth, and doth nothing but burne away with the heat of the Surne: and yet Horne-beames and Beeches doe grow in grounds that are but indifferent : yea, they may be feene to profper well in hard and fonic grounds.The pit3 are in good feafon opened, and all the faid trees more conueniently planted, in the moneth of Februarie, when the flrength of Winter is well broken, as alwaies hath beene faid.
Horncebeame. - The Horne-beame-tree (called of the Latines Carpinus) groweth in the fame ground, and after the fame fanion, that the Maple doth. The vvood of this tree hath intimes paft beene vfed to helue husbandmens tooles, and to make yokes for Oxen: but now it is made matter for the fire, being a wood that hath lealt moifture, but more drineffe, and which maketh the beft coale. Which proceedeth not from the naturall defeet of the Tree, but from the ill husbanding and planting of the fame, vvhen either it is not regarded at the firft hooting vp, or is cropped by cattell vwhen it is tender, or elfe planted in aftiffe.binding earth, in wvhich it ioyeth not at all, any of vvhich makes it grow crooked, knotrie, and vvithout forme, and fo confequently of fmall vie: but being planted on good ground, vvhofe mould is loofe and yeelding, and husbanded and defended from other annoyances, it vvill thoot forth ftraight and vpright, and beare a verie fmooth and moft delicate timber:
which timber is of great price and eftimation among (Fletchers, for it makech the ftrongeft and bef arrow of any wood whatfoeuer, and is preferred farre before cither birch or brafill, as being of an indifferent and true poife, neither fo light as the one, nor fo heanie as che other.
The beech (called of the Latines Fagus) as it refembleth the horncbeame veric Beect: : ncere, fo it crauech the like foile and drefling for the making of it to thriue and grow well: it is true, that therefore it is worthie to bee had in requeft; becaife it bringeth forth its fruit which is called beech-maft, and that of noleffie profic than the acornie, at the leaft the fquirrells, cturtlc doues, cranes, and fuch other birds doe fat themfelues thereupon. The men of auncicne time did make theirwine veffels, fats, and drinking veffell of the rind of this tree.

It profperech exceedingly well in grounds that are full of pyble, flint, and other: finall fones, whecher mixt wich fand or clay it mattereth not, proiided that the mould bee not too much tough and binding, neicher exceeding hard and rockic, but apt to breake and yeeld to the roote, which by reafon of the greatnefle of the boale or bodie of the tree, which may euer compairewwith the oake, ought to hanc both a frong and a deep hold. The eimber of the beech is good for boards or planks, or for any Ioiners ware, as bed-fteeds, tables, tooles, chaires, cubbords, chefts, or any other thing, except wainfoot, or feeling, which by reafon of the foftnefle of the timber, it is not fo much allowed cherefore: it is alfo very good for Turners ware, and efpecially, for great walhing bowles, traies, and fuch like,or any other houfhold neceflarie, which defirech a plaine fmooth wood, which is gentle to cut, and delicate for the cie to looke on.

The linden tree groweth very well in hillie and high mounted places, fo that The lindentree they bee notwithfanding moift and fomewhat waterifh : the wood thereof is fit to snake coffers and boxes :and the rinde to make cradles or baskets to lay young childrenin.

The corke-tree cratuech the like foile with the afh and oake : it is no where to be found in all the forrefls of France, but in great fore in the countrie of Bearne and Foix. This is a thing worth the noting in this sree, namely, that it may haue its barke pilled off withour doing of any iniurie vnto the fame: and this is ordinarily imploied about the making of hiues for bees, and for the foles of flipper and pantoffes,vfually worne during the cold time of $W$ inter.
The yew-tree (which the Latines call Taxus) is very common inour forrefts: it The eementreen groweth well vpon mountaines or rockes. The wood thereof is good to make coffers, foote-ftooles, bowes, arrowes, darts, and other fuch like fately Ioyncrs works of, becaufe it hath diuers veines, and is nor fubieat to be eaten of wormes. Some there are which report, that it is deadly cither to cate or fleepe vnder the fhadow of it, and that if a man cate of the fruic thereof, it caftech him into an ague and bloudie fluse.
And feeing Thaue refolucd to be bricfe, and not to paffe beyond my bounds, it fhall be fufficient to haue made this fhort rehearfall, comanending fuch as are defirous to fee further into this skill and knowledge, to fuch bookes of husbandrie as throughly intreat of all the parts of the fame, fecing they are to be had euery where, and feeing that in them fuch things are to be attained to the full, as I for breuitie fake hauc omited and left vntoucht.
As concerning the vertues and properties of the forefaid trees, the oake hath ma. ny things, and thofe of great commendation. The leaues, his nuts (which are called gals) his meffeltoe (as being called the meffeltoc of the oke.) The tender leates therof which are but as yet budding and putting forth may be diftilled, and the water thereof is fingular againft tinc fluxes of the liuer, to breake the flone, and to ftay the whites of women. The greater fort of gals or apples hauc this propertic in them, namely to prefage and forecell three things, that is to fay, war, dearth, peftilence: for if you open them which are whole, you fhall find therein either a litele flie, or alittle (pider, or a litte worme: if the flie flie away, it betokeneth that there will be warre:
if the litele worme doe creepe, it is a figne of dearth chat yeare : and if the fpider doe run to and fro, it prognofticatech an infinite number of peftilent difafes. The oake apples dried and made into pouder, do fpeedily flay all manner of flux in the bellie. The miffelto of the oake taken inwardiy, doth greatly affwage the torments of fuch as are taken with the falling ficknefle.
The beech-tree is much vfed to make baskets and maunds of for to gather grapes in. And hereof likewife men in old time were woont to make veffels to facrifice vnto
chaps of the lips. The graiull. The flene.

The profit of the parke.

The filuation ef the parke. their gods. The leaues of the beech-tree chawed, do heale the chaps of the lips, and the frettings of the gums. The fruit of the beech-ttre, which is called beech-matt, dried and made into afhes, being mixt with liniments, is of great force and power againft the fone and grauell.

# Of the Parke for the keeping of wilde beaftes. 

Crap. XIX.

## Of tue fituation of the Parkes, and of the maincr of ordering the woild beasts therein.



O the end we may not leaue any thing out of this defrription of a countrie farme, whereof the Farmer or Lord of the foile may make any proofir,or elfe take any pleafure, my aduice and counfell is, that according as the places and grounds may conueniently affoord, there bee parkes made neere vnto the farme, therein to breed and keepe hares, wild goates, or fallow deere, wild f wine, and fuch other like wild beaftes, to the end that the Lord and Mafter of the place may now and then recreate himfelfecherewith, and take his fport in feeing the faid wild beaftes hunted; a salfo that if he bee difpofed to make any greac feaft or banket, he may therein be fure to find as in his kitching or larder houle for to makereadie meate of, befides the benffit which the good fiusband may make yerely thereof by felling of them.
The parke would be feated (if it be poffible) within a wood of high and tall timber trees, in a place compafled about, and well fenced with wals made of rongh fore and lime, or elfe of brickes and earth-lome, or elfe with pales made of oake plankes. You muft forfefe that there bee fome litele brooke of lpring-water running along by the place, or for want of frting-water and naturall ftreames, you muft prepare ditches and pooles walled and daubed in fuch fort as that they may receiue and keepe the raine-water.
Nu: ought the parke to confint of one kind of ground only, as all wood, all graffe, or all coppife, but of duers, as part high wood, part graffic or champion, and pare coppife, or vnder-wood, or thicke fpring : nor mult thefe feurall grounds lie open, or as it were in common one with another; but they muft be feparated one from the other by a ftrong rale, through which deere or fheepe (but no greater cattell) may paffe, for they mult haue the full libertie of euery place: neither muft the parke be fituated vpon any one entire hill, plaine, or elfe valley, but it muft confift of diuers hills, diuers plaines, and diuers valleyes: the hills which are commonly called the viewes or ditcoueries of parkes would bee all goodly high woods of tall timber, as well for the beaurie and gracefulneffe of the parke, as allo for the ecchoe and found which will rebound from the fame, when in che times of hunting, either the cries of the hounds, the winding of hornes, or the gibbetting of the huntimen pafterh through the fame, doubling the muficke,and making it tenne times more dejightfull: the plaines, which are called in parkes the launds, would be very champion and fruitfull, as well for the breeding of great fore of graffe and hay for the feeding and nourifhiug of his deere or other wild beaftes, as allo for the pleafure of
tourfing with grey-hounds, when at any time the owner fhall be difpofed to hunt in that manner; for when the hounds fhall hauc hunted the game from the chicks vnto the launds, then the grey-hounds being placed thereupon, may in the view of the beholders courfe vpon the fame, and beget a delight paft equall.T The valleyes which are called the couerts or places of leare for wild beafts, would be all verie thicke fprung or vnderwood, as well forthe concealing of them from potchers and purloyners, as for giuing them reft and fladow in the day time, who cannot indure to lie open to the view of paffengers, or vadefended by darkencffe and obfcuritie: alfo thefe thicke couerss are defences for the wild beaftes to faue them from the cunning fents or noles of hounds when they purfue them, making thicir doubles and windings cherein fo intricate and cunningly, that they fcape many times their -moft mortalleft mifchiefe : alfo in thefe thicke couerts, the hunted deere finding an vnhun. ted deere where he lodgeth, will forchwidh beate him vp and lie downe himfelfe in his place, making the hounds vndertake the frefh deere, and fo efcape his owne dan. ger, which in the open places he cannot doe: and the parke is a place that muft containe all things for the good and fafetie of the game it keepech. Thus you fee the parke muft confift of view, laund, and coucr, and the fituation of hill valley, and plaine. Now for the water of which formerly we fpoake, you fhall know it is very right neceffarie in parkes, as well for the rcliefe and fuftenance of wild beafts, as for the wa. sering, wafhing, and nooifning of the grounds to make them fruiffull. Befides whenfocuer your gane is extreamely hunted, and brought to the pinch of excremitie,then he will flie to the water, which is called the foile, and there find reliefe and reffue : for according to the faying of the profic Dauid, As the Harr defireth the water brooks © $c$. fo a deere in his greateft extremitie findech reliefe and is refrefhed by drinking or bathing in the water. For a betier proofe whereof, I will repeate vnto you a noeable erue and very memorable experiment.approued by a genteman of good worThip and place in his countrie, who being a very good huntf. man, and very well experienced in the nature of wild deare, It was his chaunce to bring vp a tame Stagge, which by the excellencie of his keeping and full feeding, grew a verie faire and grear decere, asfoone as the deere was three yeares old, hee caufed him to be broke to the faddle, and being himfelfe a good horle-man, and hauing a good horfe man then attending vpon him, what through the ones inffruction and the others paine, the Stagge became fo well reclaimed, that not any gelding in his fable was more obedient to the man, better mouthed, or more crątable to carrie his rider thanthe Stag was; info much that when at any time the gentleman went forth a courfing, or to other pleafure, he would caure the Stagge to be ridden forth with him, alfo when he traueild any fmal iournie the Stagge alfo carried a man with him : but the rider of the Stagge found that after hee had gone three or foure miles, the Stagge did euer faint. and grew wearie, which as foone as he imparted to his mafter, he prefently commanded him to ride the Stagge when he fo fainted to the next water, and there caure him to drinke, onely calling to mind the faying of Dauid before rehearfed, and he found that fo foone as the Stagge had drunke, hee was as frefh as at his firf fecting forth, and by that obferuation onely could make che deere crauell twentie and fiue and twentie miles a day without any trouble, by which it is moft credibly found, that not any thing can be more neceffarie in a park than fore of fweet \& cold water, of which the riuer is beft, the fountaine next, and theftanding pond the worft, notwithflanding. the flanding pond how euer it is the worft water, yet it is very commodious, becaule in it you may breed all forts of daintie frefh fifh, as che carp, bream, pike,tench, and perch :alfo in them you may both feede and breede all manner of swild foule, by framing liette Infands in the middeft of thofe lakes or ponds where the fwans, buflards, elkes, and other finail foule may frame their nefts and lay their eggs out of the daunger of the water. In the moft conuenienteft laund of the parke, which is moft fatious and fruiffull, and which hath the greateft profpect into the parke, and where the deere take greateft delight to feed, there you fhall build the lodge or houre for the Keeper to dwell in, and it fhall by all meanes fand cleane,and open

cuery

cuerie way, fo as there may bee no fecret approch made vnto the fame, but fuch as the Keeper may eafily behold from his windowes : and it fhall ftand fo faire in the view of the lannd, that from thence a man may fee euery way round about the fame, and fome part vp into the high woods, and other moft fecret parts of the parke, fo that when the leaft difturbance or troble is offered vnto the deere, a man may from that lodge take notice of the fame : this houfe mult bee made like vnto a litele forcellet or fort ftreng and with diuers angles, the windowes whereof fo flanking one another, that when any approach by fealers or other malitious perfons thall bee made to the fame, the Keeper may from thence either with his bowes or with fome other engines fo annoy them, that they fhall by no meanes befiege or coope hins vp in his houfe, (which is the practife of many fubtile knaues)but that hee may difpighe their force, iffue forth and defend himfelfe and his charge againft them: if there bee any part of the houfe which the windowes cannot flanker as the doores, iaumes, or fuch like, then ouer them Thall bee made little loopeholes, through which the Keeper may either fhoot, caft ftones or fcalding water to make them auoid from the fame : clofe by this lodge Thall bee built the kennell for the Keepers hounds, and the cocke-houfe where hee fhall keepe his fighting cockes and hennes : allo without it fhall bee made a place for him to hang the hornes which his deere fhall caft at the latter end of the Spring time : alfo in your parke as well at both the ends of your laund which are the next adioining to the couert, as in all other fufpitious places where any man may in the night, courfe your deere, you fhall place long ftickes or ftaues which are foure or fiue foot in length, and wo or three inches in compaffe, with both the ends fharpned exceeding fharpe, and ftuck floapewife into the ground, and flanding not aboue a foot and a halfe or two foot aboue the the ground at moft, and thefe you thallfer croffewife very thicke, that when a flealer fhall come to courfe in the night, his grey-hound may run and goare himfelfe againft the fame: you fhall alfo by no meanes alongft your pale walke plant fruit trecs, blacke-thorne, or bullies, for they are the occafion of much hurt and defruction to your pale, vnder the colour of gathering the fruit, and breed a great decay to your quickfet, befides many other mifchiefes which are exculfed by the pretence of getting that fruit onely : yet would I not haue the parke vnfurnifhed of all manner of fruit, for befides the pleafure thereof, they are an excellent maft in which deere infinitly delight, and are fed very much with the fame. You fhall nor by any meanes in one parke mixethe red deere and the fallow decere together, for the red deere is a mafterfull beaft, and when the time of bellowing commeth, he growes fierce and outragious, fo that hee will bee entire Lord of thefield, and will kill the fallow deere if they but croffe hum in his walke : and therefore each muft bee kept feuerally in feuerall parkes.

Againe Cranes, Rauens, and wild-geefe are excellent things to be nourifhed in a parke, and will ftand in fteed of Keepers vnto the fame : for in the nighttime, if any thing fir about the ground to which they are not continually accuftomed, they will with their clamours and noifenot only gine warning to the Keeper, but any that Shall dwell neare to the ground, not ceafing their noifecill the ground be at peace and reft againe.
Prouifon of food for woild

It is meet alfo that there fhould bee great ftore of graffe ground in the place, and beafles. trees bearing fruit : amongft all other trees there is fpeciall account made of acornes, wild apples, wild peares, frawberrie crees, \& other fuch like, for the feeding of thefe wild beafts. Notwithfanding the good farmer mutt not content himfelfe with the prouifion which the ground bringeth forth of it felfe : but at fuch times as the earth is barren, and when there is nothing to feed vpon in the forefts, they mult haue given vnto them of the haruelf fruits, and be fed with barley, pure wheat, beanes, the droffe of the wine preffe, and whatfocuer elfe is yood cheape.
And to the end that thefe wild cattell may the better know that there is fuch prouifion of meate for them, theremuft bee amongtt them fome tame ones, and fuchas hauc beene trained vp in the houfe, for they will follow any whither, and draw the other
other after them, and fo bring them to the place of provifion for their feeding. And this order muft not oncly bee obferuedin Winter, but alfo when they be great with young, and when they haue calued, that fo they may feed them the beter. And to chas end there mult regard be had to fee when they haue fauned, that there may be corrie giuen them,

The wild bore would not be lee grow elder than the age of foure yeares, for hee groweth vnoo chis cime, but aferward pairech and beconmech leane by reafonof old age : wherefore it is meete that hee fhould bee fold whiles he is in his beaurie and primc.

A Stag may be kept a long time, for he is yourg a great time, and liuech a great while.

But as concerning frmall beaffs, as hares, they muft not be put in a parke fenced only with pofles and pales: for feeing they are fmall, chey will eafly palfe chrough the gaping and open fpaces, and hauing got chrough, run away : Their parkes cherefore muft be walled abour, and their feeding of fourage or maflin corne, fuccories, lettufes, cich-peafe, barley feeped in raine water; for leuerets are not greatly in loue with drie corne.As for conies we haue fpoken of them in the treacife of the Warren.

# Of the Heronric. 

## Chap. XX. Of the fituation of the Heronric, and of the ordering of the Herongbewes.

 E hauc intreated in the firt booke of cerraine ftrange and wild birds, as peacokes, curkeies, phefants, and frmall hens, and haue faid chat it is a curious and difficult thing to breed and bring them vp : and we may fay as much or more of the herne, which is called of the Latinse Arden, as a man would fay eArdza, becaufc he is given to fle on high: for there is nothing buc charges in this bird, without any profit. True ir is that princes and great flates, which loue che game, may take fome pleafure and delight in the flght of the hauke for to take the herne, as alfo fome good liking in fwallowiry the fweer morfels in eating of the herne, but efpecially of che flomake and breft : in like manner there are fome thas fay, that a Herne is a princely difh, and meat for a king; but all this pleafure is not come by without double coftes. Let vs then put cafe and admit that the Lord and Mafter of the farme bee a Prince or greas Lord, and that hee bearech a verie good will to all manner of game, and tofare dainily, then hee may fo prouide, as that he may now and shen haue fome fport and paftime with che Herne, ecther in taking or cating of the fame : wherefore it fhall nor bee a miffe if we fpeake a word or wwo of the Heronrie, co the end we may notlet flip and oucrpaffe any thing in generall of all that which may be neceflatie for the beautify ying and perfecting of our farme and countrie houfe.To prouide thercfore fora Heronric or place to breed herons in, being if you what place is meane to haue is, not onely for pleafure bur alfo for profit vatu the Lord therenf, fitutif tor a you muft firft confider that the herne is but a gucff for a time, affecting foliiarineffe, and very fantafticall, as not giuen to flay in any place, buc fuch as pleafech him verie well: and for that caure it is not to be taken as an indifferent thing to place or beflow their prouifion for their nefting and abode in any place but onely where it is conicEtured, that in paffing along, they haue begunto reft \& fectle chemfelues, as in a place that is moft pleadane and delightfome to them. For the Heronrie muft in prouiding be two manner of waies confidered of : as firft there muft confideration be had of their food and nourifhment, that fo when it fhall pleafe the Lord of the位 farme to hauke the herne, or to make any great and coflly banket, he may haue them place jor abee readie ronrie.
readie at his commaundement. And fecondly to allure and draw herons as they flie along: for the herne that is fhut and made faft in a heronrie, calleth vnto him fuch as flie by ; for they hearing the voice of the hernfhew fo fhut vp and made faft, do thervponftay and make their nefts vpon the vppermoft and higelt part of the heronrie, whereupon it commeth, that hauing laid their egges, by and by their young ones are taken to be fhut vp and made faft in the heronrie.

Let vs conclude then, that before there be any coft made in building a place for the heronfhewes to build in, there muft diligent care bee had in difcerning of the commodioufneffe and fimeffe of the place, and that is gathered by hauing knowne the herne now and then to haue contented and pleafed himfelfe therewith: for if a man fhould go about to fhut vp a herne in fuch place as he taketh no delight in, hee would neuer haue young, but dic out of hand. Furthermore, it is requifite that here fhould paffe fome finall ftreame of water throughthe middeft of the heronrie, for the heronfhew is a water bird, \& taketh delight and pleafure in water, as liuing altogether vpon eeles, and other fuch like liuing fifhes. The building of the heronrie muft bee made altogether for light, wrought with verie clofe latifes and clouen plankes, about the height of fix fadome from the ground, and well couered aboue, to the end that the heronfhewes flying by may make their nefts vponthe heronrie in fit and commodious fort.
Their meat muft be liue eeles, and other fach like fifhes, fometimes the inner parts
The frod and naurifhment of of wolues and dogs cut into imall gobbets and they mult the beronflem. haue given them to cate vntill they be fuil, that fo they may be fat againf the time of hauking or bankeiting, and not for increafe or ftore; for there are but a few hernes that will lay egges being reftrained of their libertie.
And yet this I will tell you by the way, that if the Lord of the farme doe take any

What place is beft to fic at the heronghew.
be properties
of the heron-乃ew.

To procure reft and Jlcepe. herne out of the heronrie to make him fport by flying him with the hauke, that then he muft beware not to do it neere vnto the heronrie, for otherwife he fhould take away the good liking both of flying and inclofed hernes from the heronric, and fo the heronihe wes haunting the fame in nefting time, wold forfake it, and the inclofed would grow difpleafed, and fall in feare of the like danger.

Although the heronfhew be a royall meate, notwithftanding in as much as he is a water bird, his flefh is full of excrementuous parts, hard to bee digefted, and that aboue any other foule of the river. There is nothing more to be efteemed of in him for to be eaten, than the flefh which is gathered about his ीomake or bref. Moreouer, fome hold and are of opinion that his bill being fteeped for fome time in wine, doth make the wine forcible and able to procure lleepe, and bring the bodie to reft.

## Of Hunting.

Chapo. XXI.
How that thereare three forts of bunting.
 Ollowing our purpofed determination, we will intreat a word or two of hunting, not that weewould with our farmer otherwife to affect the game, than by making it fometimes his recreation, and that in the cime of vacation, and furceafe from his other bufineffes, as when hee fhould do nothing but fleepe, or keepe holiday at home.

Now there are three forts of hunting, the one of fifhes, the other of foules, and the third of fourefooted beaftes, as are the Stagge, roe Bucke, fallow Deere, wild Bore and Hare. In all thefethe Lord of the countrie farme may find occafion to exercife himfelfe, but efpecially in the hunting of the foure footed beaftes; for fifhing is more fit for the farmers feruants, as thofe whom it beft befeemeth to bufie their
braines
braines on vacantand feftiuall daies, with catching fifh with the angle or pots made of ofiers, that fo they may haue any extraordinarie fare for their afternoon drinking or fupper. The catching of birds is very prettie and pleafant, but yet if we will beleeue Plato, a practife moreficting a feruile eftate than a Gueuernor or Commander, The hunting of foure footed beaftes, as an hoinct exercife hath beene recetued arall The profit of times, and permitted by the lawes, efpecially that which was not vndercaken in the huntine forme night, neither yet vponflothfulneffe and contempt of labour : but rather for the bet. footed beafs. ter obtaining of a greater readineffe, nimbleneffe, checrefulneffe, and ftrength of bodie : but howfoeuer it is, the mafter of our countrie farme, efpecially if he be any great lord, may exercife himfelfe fometimes, and take fome fort in hunting after hee hath giuen order and direction for the doing of all his bufineffe, afwell in the citie, as at his champion or counirric houfe.

# Of hunting or chafing of the Stag. 

## Сhap. X XII.

## What dogs are beft for the courfe or bunting.

至開He hunting of foure footed bealtes, as the ftag, wild bore, the roe bucke, and the hare, is performed principally with dogs, horfes, and ftrength of bodie, Cometimes with ropes and nets, and fometimes with toiles: but thefe two forts of taking of beafts are more fit for holiday men, milkefops, and cowards, than formen of valour, which delight more in the caking of fuch bealtes, in refpeat of the exercife of their bodie and pleafure, than for the filling of the bellic.

Thofe dogges which are fit for the chace or for hunting, are moft generally but of two kinds, yet particularly of diters. The two generall forts of dogges, are thofe which are called Grey-hounds, or Hounds: Grey-hounds are thofe which belong to the leafh, and are onely for the courfing of all forts of wilde beaftes by maine fwiftneffe of foot, or by running : they doe not any thing more than their cies gouerne them vnto, being led by a naturall inflinct or hatred which they beare to all forts of wild beafts. Hounds are thofe which by vertue of their fcents, fmells, or nofes do find out all manner of wild beaftes, following their footfeps by a leafurely and moderate fpeede, not fuffering the beaft to reft till they haue tired him, and made themfelues Lords of the the pray: all that they doe, is as it were blindfold, their eies feldome or neuer feeing the game till they come to deuoure it: and as the Grey-hound through his extreame fwiftneffe and running, fhewoth the greedie delight which hee takech in the fport, without once opening his mouth or making the lealt figne of any noife, but being as it were dumbe and mute; fo the hound taking a greater leafure, fheweth the delight and pleafure which hee taketh in the game, by his continual clamours or opening, (pending his mouth in fuch liberall fort, that he makes the woods, valleys, and hills refeund the eccho or doublings of his voice; and it is amonglt huntf-men taken for a moft excellent muficke: yet this crie of hounds or opening of their mouthes, is in no fort allowed to the liam hound, fo long as he draweth inthe ftring, all which time hee mult be exceeding filent, and mute like vnto the grey.hound, as well for the difcoueric of the game, or footfeps whatfocuer hiee draweth after, as to hinder all preuentions that the aduerfarie may feeke when hee hath a warning giuen him by fuch clamours, for this drawing in the ftring, is the moft fweetelt difcouerie of all other, and muf bee done with the greateft diligence and priuacie. Now to fpeake of grey-hounds, firft they are of all dogs whatfoeuer the moft noble and princely, ftrong, nimble, fwife, and valient, and though of flender and verie fine proportions, yet fowell knitand
coupled torecther, and fo feconded with fpirit and mectall; that they are mafter of all other dogs whilatiocuer : nay, it is moft certain, that the perfeet and true Grey -hound will euen face to face and tooch to tooth coriquer the firmgeft and fierceft mafture whatfocuer : they ate of all dogs the foreft biten-and ieaft amated withany cruclic in their enemie, whence it comes that men eftecone them and prefer them before all orher dogs for thice encouncring of the woolfe, and other beaftes of his equall cruelty.
Troo forts of Grys.bobidds. Now of thete Grey- hounds, their bee two kinds, the long fhag- haired, and greas
boned Grey -hound, and the fmoorh, flender and fine fhapt Grey-hound Now lome will adde a thind fort which is indifferently mixe betweene both : but in as much as he is a mungrell and bafterdly bred betweene the two former, we will allow him no other place than as contained in the firt: of thefe ewo forts of Grey-hounds, the firlt which is the fhag-haired dog, is held moft proper for vermine or wild beafls which arc rauenous, as the Tyger, the Leopard, Woolfe, Foxe, and fuch like: the other which is fmooth and more delicately proportioned, are beff for wild beaftes of pleafure, as the Sta, the Bucke, the Roe, the Hare, and fucl like. Thefe Grey-hounds are of duers colours, as fome white, fome blacke, fome fallow, fome dinn, fome brended and fome pied, as hauing white mixt with any of the former colours: and thefe colours hauc (as rouching any particular goodncffe) no preheminence one aboue another, bur are all equall. Many good aud fasmous dogs hauing beene of all hefefewerall colours, onely the white is efteemed the mof beaurifull and beff for the cie, the blacke and fallow hardef to endure labour, and the dunne and brended beft for potchers and night-men, who deligh to haue all cheir pleafures performed in darkeneffe. Now for che choice of a good Grey-hound, there are but two principal ithings

How to chr: agood Gris. . bownd. to be obferued, that is to fay, breed and Chape, Breed, which is eier as towething his defcerte and yencration: for it a dog be not wel defcended, that is to fay, be bor by an excellent dog,or an excelicnt bitch, there canbe litele hope of his goodnefle. Nuw in the breeding o! Grey-hounds, there are diuerfities of opinions, for forme gentlcmenrof the lealh defirc a nifl primcipall bitch, though she dog be but indifferent, and fuppofe that fo they thall haue the beft whelps, fuppofing (according to an old coniecture) that a biech is fwifter than a dogge; bur it is an erronious fancie, for the good dogge will euer beate the good bitch, and the good bitch will euer beate che bad dogge : againe it is moft certaine, that the dogge hauing aduantage both of length, itrengrh, and courage, hee muit conifequently haue the aduantageof fpeed allo. I doe not denie but that the bitch being much leffe than the dogre, (as nacurally all are) may haue fome aduantage of nimblenef(Te,and fo in curnes, flpp, and wries, may get much ground which the dogge eommonly loofeth: buit yet notwithttanding, when the full account is caft, the good dogge will equall alt thole aduantages, and wherefoener the courfe fhall fand forth long will bear out che grod bitch and make her giuc oucr.
There be other gentemen of the leafh, which defire a good dog, and refpeef noe though the bitch be but indifferent, and this is the better choice, yee both defeftiuc; for where there is any imperfection atall, there nature can neur be fully compleate. To breed then a good whelpeindeed, you mufl be fure to haue both a perfect giod dogge and a pertect good bitch, and as neere as you can make choice of that bitch which is moft large and deepeft chefted, for from thence fpringech both frength and wind. For the trrie fhape of a good grey-hound, becaufe it is the very face and charracter of goodneffe, you fhall eftecine thar dog which hath a fine, long, leane fnakes head, with a cleere bright cie, and wide noftells, a round bending necke like a mollard, with a loofe ehropple, and a full falling at the fetting on of rhe fhoulders, he mult haue a long, broad, and a fquare beame backe, with high round fillets, and a broad fpace, hee mult bee dsepe fwine fided, with hollow bended ribs, and a full breft, he muft haue rufh grownel limbes before, and fickell houghes behind, a fine, round, full cats foot, with frong cleyes and tough foles, and an euen growne long rats taile, round turning at the lower end from the leafh ward, and hee mult bee full fee on betweene the buttockes, and laftly hee muft haue a very long, flender
clofe
clofe hid pizell, and around big paire of fones. The food which is belt for greyhounds, as touching their diet, is chippings or houfhold bread fcalded in beefe broth or other broth that is not too falt, and after made white with mulke, or elfe che bones of veale which are verie foft and tender, or the bones of lambe, rabits, or other fcraps comming from the Farmers table. In the time of courling, or atother times, if your grey-hound be leanc or out of heart, the beft meace to raire him is fheepes heads boiled wooll and all in water togecher with oatemeale and fynage, fuccorie, langdebeefe, and violet leaues chopt verie finall together, and fo boiled to pottage, vneill the flefh fall from the bones. The beff food when a dog is in diet for a courfe, is to make him bread of wheate-meale and oate-meale mixt together, and fincly bolted and knodden with a litele water, whites of egges, barme, licoras, and anyfeeds, and fo bakt in good houfhold loaues, and given morning and night with new milke or potrage which are warme. If the dogge at any time grow coftiue, you fhall giuc him toftes which are made of the fame bread, or of manchects, and feept in fallet oilc. Grey-hounds when they are for the courfe, muft bee walkt forth and ayred both morning and euening excceding earely, as before day in the morning, and verie late, as about fuen or cight of the clocke an night: and when you bring your grey-hound home at night, you fhali bring him to a faire fire, and there let him beake and ftrecch himfelfe, and doe you ticke himat the leaf an houre or more before you puthim into his kennell. You muft hane a very greatand diligent care that when you courfe him hee bee exceeding emptie, as at leaft of twelue houres fafting more than for fome finall fop or bit or two onely to cherifh or ftrengthen Nature. A brace of grey-hounds are enough at one cime to courfe either Hare or Bucke withall, and two brace are fufficient to courfe the Scagge or Hind. Much more might bee faid of the natures of grey-hounds, and the manner of ordering and dietting them for the courfe, but this (mall tafte is fufficient both for che farmers vnderftanding, and to auoid redioufneffe. Now for the hounds whofe natures I haue alreadie in patt difcribed, and which hunt in great numbers, or as it were flockes together; you fhall vnderftand that they are of foure forts, and difhinguifhed by foure feuerall colours belong ing to the foure feuerall forts of hounds, that is to fay, the white hound, the fallow or taund hound, the grey-hound, and the blacke hound.

The white are the beft,for chey are of quicke fcent, fwift, hot, and fuch as neuer giue ouer for any concinuance of heace, or breaking off, becaufe of the fecting of the horfemen, or the cries and noifes of men, keeping the turnes and croffing better than any other forts of dogs,\& are more to be truffed : notwithftanding they loue to be astended with horfemen, and they do feare the water fomewhat, elpecially in Winter when the weather is cold. Thofe which are alogecher white arecthe beft,and likewife thofe which are red fpotted. The other which are blacke and dirtie, gray fpotted, drawing neere vnto a changeable colour, are but of fmall value, and whereof there are fomefubieft to haue far and tender feet.
The baie coloured ones haue the fecond place for goodneffe, and are of great cou- The bay brfal. rage, ventring far, and of a quicke fcent, finding out verie well theturnes and win- lew cllowred dings, almof of the nature of the white ones, faue onely that they doe not indureche dogso heate fo well, neither yet the treadings of the horlemen, and yet notwithfanding they bee more fwift and hot, and feareneither cold nor water: they runne furely, and with great boldneffe, commonly louing the Stagge more than any other beaft, but they make no account of hares. It is true, that they be more head-ffrong and hard to reclaime than the white, and put men to more paine and crauell abour the fame. The beft of the fallow fort of dogges, are thofe which are of a brighter haire, drawing neere vnto the colour of red, and hauing therewithall a white Ipot in the forehead, or in the necke, in like manner thofe which are all fallow: but fuch as inclinie to a light yellow colour, being graie or blacke fpotted, are rothing worth : fuch as are truffed vp and haue dewclawes, are good to make bloud-lounds. The white and baie dogs are not fif for any but Kings, Princes, and great Lords, and then not
for genelmen, becaule they courfe only the hart, and not all forts of game.
The graie dogs do run well at all forts of game, that a man would hauechem to hunt, butchey are not fo fwife nor luftie as the others, efpecially fuch as haue their legs of a bay or fallow colour, drawing fomewhat vnto a white: and yet notwithftanding they are hot and flout, not learing water or cold, running with great courage, and neuer giving ouer the game till they have killed: butindeed they auoid and fhun heat, the footing of horfes, and the noife of men, neither dothey delight in the hunting of any beaftes that are giuen to wiles and croffe windings : but in recompence hercof, it is poffible that you may fee them to ouerrun the moft fwift and beft dogs, efpecially after beaftes that vfe to run out right.

The blacke dogs are ftrong bodicd, but they haue low and fhore legs, in like manner they bee nothing fwift, howfocuer they may bee of a quicke feent, fearing neither cold nor waters, and they doe delight moft in courfing the rammifh and Atrong fcented beaftes, as wild Bores, Foxes, and fuch like, becaufe they neither haue mind, nor yet fwiftneffe to courfe and take the beaftes that bee fwift in running. But whereas it is commonly giuen out and reported, that their are good dogs of cuerie fhape, it may bee fo brought to palle, as that the hare may not make much for the arguing of the goodnefle of the dogge, and that there are found of all colours good and faire dogges: for this caule it is both meete and requifite that adogge (of what haire or colour foeuer hee be) to the end hee may be faire and

The markes of
a good hunting dog. good, haue thefe notes and markes following: his head mult be reafonably thicke, rather long than flat nofed, his noftrells very wide and great, his eares large, and of a meane thickeneffe, his backe crooked in compaffe wife, hisloynes great and thicke, his lippesthicke and large, his thigh round and truffed, his houghs Itraight and well fet together, histaile thicke neere vnto his backe, and the reft of it fmall and leane cuen to the end, the haire vnder his bellie fliffe, his legs great, the fole of his foot drie, and Chaped like vnto the foot of a Fox, his nailes thicke, his hinder parts as high as his fore parts. The male kind muft be thort and crooked : but the bitch or female long.

Thereafon of thefe markes of a good briting dog.

The fignification and meaning of thefe fignes is fuch : his wide noftrels do argue his quicke feene : his vaulted backe and Araight hams do argue his fwiftnes : his taile thicke aboue, and flender downe to the end, doth fignifie that he hath a ftrong back, and wind at will: the ftiffeneffe of his haire vnderricath his bellie doth fhew that he is willing \& painfull, fearing neither water nor cold : his thick leg,fox foot, and thick nailes, doth fignific that he hath no fat or gouty fcot, and that he hath frong limbs, to run long without griefe or annoiance.

But for as much as it is hard to get fuch hunting dogs when one would, as are both good hunters and faire withall, it will be requifiteto prouidea faire bitch of a good race, ftrong, and of wel proportioned limbs, hauing great and large fides and flanks: and to procure her to be limed with a faire dog, hauing the markes that we haue fooken of, before, and that at fuch time onely (if it be poffible) as when the Moone is in the fignes of Gemini and eAquarius, for the dogs that are gotten at fuch tinies are not fo fubiect to run mad, and befides, there will be of them moe dogs than bitches. When the bitch is with whelpe, and beginneth to have a bagging bellie, fhe may no befet to courfe, leaft her young ones fhould bee kept from euer thriuing : her walke then muft not be paft the courr or houfe, neuer fhutting her vp in any kennell, becaufe fhe is wearifome, aud giuen to loath all meat. When the hath whelped (the fitteft time for which is in March, A prill, and May, rather than either in Winter, or in the time of great heat) and that the whelpes begin to fee, they muft beefed with cowes milke, flicepes milke, or goates milke, vnmixt and made warme, neither muft they be taken from fucking the bitch, till they be two moneths old, and then feedingthem withmilke meats, bread, and all fortsof portage, till they be cen moneths old, and all this while thus to keepe them in the kennell.
The hernell for
hunting dogs. to the end they may know and heare one anorher: becaufe that thofe which are fed
sogether, they become the better acquainted, and agree better in hunting than thofe that are of diuers kennels and places.
Their meat fhall be bread made of a third pare of wheate, a third part of barley, and a third part of rie, becaufe that being fo mint it keepeth thein tare and fat, and curcth them of many maladies: for and it it thould bemade of rie onely, it would make then foure too much : if of pure wheat, it would bind too much in their bellies, and therefore the one mixt with the other. There muft bee giuen them fome fielh meate in Winter, but efpecially vito thofe thatareleane, and hunt the ftag: Fiff-meate. but to thofe that hunt the hare you muft nemer giue any, leaft they flefhing themfelucs vpon the greater game, they make light account of hares, which thrult themfelues commonly into the middeft of tame cattell, to thift off the dogges by that meanes, who vpon fuch occafion might leauc off the hare, and fall to courle the came cattell : but the dogs which hunt the hart would nemer do it, becaufe theftag is of a more full and frong feent than the hare, as alfo becaufetheirffefh is more dantie and delicate than any other. The beft fleflmeat that canbee ginenthen, and which doth frengethenthem miont, is horfe-flefl, afle-fent, and mules-flefh : but as foroxen, kine, and other fuch like, their flefh is to them of too eager and fharpe a fubltance. Their flefh meate mult firft haue their hide pluckr off, that fothey may not haue any knowledge of the bealt, nor of his haire. Good huntfmen make great account of pottage made of mutton, goates flefh, and oxe heads for their leane dogs; which hunt the hare: and you muft mingle fomecimes amongft thefe pottage a litele Pottage; brimftone to heat them withdll.

As for your raw flefh ineate (which amongt huntimen it called ker) if you do not cate it all at a meale, you fhall preferue it in fome cleare running ftreame by fuffering it to lie hid in the water cill your nextoccafion to vee it. Oates ground hulls and all, and fo fealded in hot water, is a very good mange or meate for hounds, and to is alfo your mill-duft falded in the fame manner. But if your hounds happen to fall weake, or ficke, or bee ouer huated, then youthall take the bagges and intrailes of fheepe, hauing turned the filth and excraments forth, and waht the bagges weil, and allo the Cheepes pluckes and boyle them in faire water with a good quantiof oatemeale, till the pottage bee thicke, and fo giue it reafonably warme to the hounds : chis is a foueraigne good meate, and it is very comfortable for weake and ficke dogs, of what kind fueuer they bee, and bring them into luft and ftrength fodenly.

Their kennell muft be made in fome place ftanding vpon the Eaft, through the midft whereof doth run fome little riuer or fpring. The place wherein the dogs fhall lie, hall be builded with very white wals, and foores of boords clofe ioined, for feare that fpiders, fleas, wal-lice, and fuch like fhould breed there. He that fhall be appointed to kcepethem mult be gentle, mild, and courteous, louing dogs of his naturallinItinet, and fuch a one as will make them cleane, and drefte them carefully with wifps of flraw and little brufhes: being readie to giuechem fome prettie dainties to cate, and to draw them alongt the greene corne and meadowes, as wel to gine them appetite to their meat, as alfo to learne them to run, and to caufe them to paffe through the the flockes of theepe and other tame cattell, that fo they may bee accuftomed vito them, and be made to know them.

If the dogs beficke, you mult vfe the remedies following: for lice, fleas, and other the difeafes of vermine, wherewith dogs are loden oftentimes, efpecially in the umes of great heat, hinnting ciozs. you muft bath them, or at the leaft wafh them and rub them with a wifpe, with a decoction made of large quantitie, with ten gond handfulls of wild creffes, wild marierome, fage, rofemaric, rue, patience, and lix handfulls of falt, all being well boiled togetlier to the confumption of the herbs.
Todriue out wormes, you mult foke perrolin made into pouder, aloes poudred, Wormes. vnquencht lime, and liue brimftone made likewife into pouder, euen all thefe in one oxe gall, and with this liquor rub the place infected with wormes.
If dogs be bitten of ferpents, you muft caufe them to take downe the juice of the Mmm 3
leatus

The feeding aiad kceping of bunting dogsa
leaucs of afh tree incontinently :or elfe a glaffe full of the decoction of rue, white mulicin, mints and broome, whereunto muft be added the weight of a French crown of treacle,applying treacle in like manner vnto the bitten place.
The biting of
mad doss,or nad wolues.

Signes of madnefle.

Gaules.
Tetters.
frab.
Scab.

Wormes.

Hurts giuen by wild bores.
wounds.

When the dogs are bitten of mad dogs,they muft forthwith be caft intoa veffell of fea water nine times one after another: or for lacke of fea water, into common water wherein hath bin difolued foure bufhels of falt; \& this will preferue them from going mad. And if it happen that you haue not prouided this remedie timely inough,but that now the dog is fallen mad, to the end that you may keepe the other from the fame mitchiefe, you thall be carefull, that the mad dog run not abroad, and therefore you thall kill him by and by, for it is but all in vaine and aloogether umpoffile to goe about to cure fuch madneffe : the fignes of fuch madneffe are the drawing vp of of his taile at the vpper end, hanging the reft ftraight downe, a very blacke mouth without any froth, a heauic looke and that afide in ouerthwart and croffe manner.
Againft the fcabs, tetters, itch, and gauls of dogs, you muff take chreepounds of the oile of nuts, one pound and a halfe of theoileof oile of lees, two pounds of old fwines greafe, three pounds of common honie, a pound and a halfe ot vineger, and make them all boile together, to the confumption of the halfe of the vineger, putcing thereto afterward of perrofin and common pitch, of each two pounds and a halfe, of new waxe halfe a pound, meltaltogether, cafling in thereto afterward the pouders that follow, a pound and a halfe of brimflone, two pounds of reboiled coperas, and twelue nurces of verdegreafe, making them all vp together in an ointment $:$ but they muft be wafhed with water and falt, before they be annointed with this ointment.
For the wormes in dogs, you muft make a drinke of the decoction wherein haue beene boiled wernewood, fouthrenwood, and the fhauings of hart-horne: or elfe caufe them to (wallow downe pils made of hart- horne, brimftone, aloes, and the iuice of wormewood.
When the dogs are tired, rub their feet with this reffrittiue, made of the yelkes of egs, the iuice of pomegranets and foot finely poudred, all of it being wel mingled together, and left to Fettle one whole day.
Dogs are often hurt of wild bores in many parts of their bodies, and then according to the places where they are hurr, they mult bee ordered and looked to with drefling of their wounds.If the wound be in his bellie, and that the guts come forth vnhurt, you muff firft put them in againc, and then afterward put into the bellie in the place where the hole is, a flice of lard, and fo fow vp the skin aboue : bur che chred muft be knit of a knot and made faft at euerie flitch of the needle, and wilhall cut off the thred at euery flitch fo fattened: as much is to bee performed in the wounds chat fhall be made in other places, al waies obferuing to put fome lard into them.

For wounds which dogs fhall receiue, the iuice of the leaues of red coleworts is a very fouerainge balme (being applied prefently vnto the wound) healing them yp very fpeedily : or elfetake the ıuice of Nicotiana, whereof we haue fpoken in the fecond booke.

Againft che canker breeding in the eares of dogs, taking a dramme of Sope, of oile of Tarıar, Salarmoniacke, Brimfone, and Verdegreafe, incorporated all together with white vineger and frong water, and rub the cankered eares therewith nine mornings.
If the dogs after they haue run in froft after raine, and fuch other bad weather, or fwum the riuers \& lakes, after the game,come to take cold, prefently as foone as they come to their kennell they mult be chated and dried at a great fire, and after that their bellies rubbed and wiped with wifpes, thereby to wipe away the dirt flicking vnto them.

Arong vineger, and the iuice of the herbe called Pilofella.
It in courfing they fhall haue taken any thrufhes vpon any part of their bodies, Kxoctsor with the the tip of the harts horne, or with the bores tuske, you muft applie to the tbrubbes. place a plaifter of the root of great comfrey, an emplaifter of melifote and oile ot rofes, as much of the one as of the ocher: but before you applie the plaifter, you mult cuttlic haire away from the place where the griefe is.
To caufe dogs ro piffe, make them drinke the decortion of mallowes, hollihocks, Againa the the roots of fennell and brambles made with white wine.
If dogs haue gotten any difeafe in their eares, drop therein veriuice mingled with the water of cheruile, continuing to do fo three or foure mornings.
You hall find a larger diftourfe of the nature, conditions, differences and difeafes of dogsin the firft Booke, in the chapter of the kennell.
Yee becaufe there is one other fort of hunting dogs, which although they are for birds and not for wild beafts, yet in their kinds shey are as noble and as generous as any other dogs whatfocuer, and as much in vfe amongh grear perfons, and thêfe dogs are called field orland fpannels, of which fuh before no Aurher hath fully intreated: I will here giue you a litele touch or taft of the nature, difpofition, and manner of gouening them. To fpeake ethen of the land feannell, you fhall vnderftand, that he is be nature very gentle, courteous, and louing to the man more than any other fort of dogs whatfoener: they alfo naturally loue to hunt the wing of any bird whatfoeter, efpecially partridge, pheafant, quaile, raile, poots, and fuch like: when you make choice of any fpannell, you fhall churc him by his hape, beautic, metrall, and cunning hunting, his fhape is defcerned in the good compofition of his bodie, as when he hath a round thicke head, a hort nofe, a long,well compaft and hiairie eare, broad and fydelips, a clecere red eie, a thicke neck, broad brealt, fhort and well knit ioints, round feete, frong cleys, high dewcleyd, good round ribs, a gaunt bellie, a fhort broad backe, a thicke bufhie and long haired taile, and all his bodie gencrally long and well haired: his beautic is difcerned in his colour, of which the motleys or pide are the beft, whecher they bee blacke and white, red and white, or liuer hued and white, for to beall of one entire colour, as all white, or all bladke, or all red, or all liuer hued without any other fpot, is not fo comely in the field, although the dogs notwithflanding may be of excellent cunning: his mettall is difcerned in his free and vntired labourfome raunging, beating a field ouer and oucr, and not leauing a furrow vntrodden or vnfearcht where any haunt is likely to bee hidden, and when hee doth it moft coragioufly and fwiftly, wih a wanton playing taile, and a bufie labouxing nofe, neither defifting or fhewing leffe delight in his tabour at night than he did in the morning; and his cunning hunting is difcerned by his cafting about hredfully, and running into the wind of the pray he feckech, by hisflineffe and quietreffe in hunting without babliny or barking, but when hee is vpon an affured and certaine haunt, by the manner of his raunging, as when hee compafleth a whole field about at the firft,and afer lefnech and lelineth that circumference till he haue trodden cuery path, and brought che whole circuit to one point; and by his more temperate and leafurely hunting, when he comes to the firff fcent of the game, ficking vpon it, and pricking it out by degrecs, not opening or queftung by any meanes, but whimpring and whining to giue his mafter a warning of what he fcenteth, and to prepare himelfe and his liauke for the pleafure hee feekech, and when he is affured of his game, then to queft out loudly and freely. Now it is to be vnderflood, that it is hard to hauc one fpannell to be abfolute cunning in all the qualities of huncing, as to bean excellent raunger,an excellentfinder, and an excellent rerainer, becaufe one qualitie is almoft in nature cleere concraristo another; for he that is a good and free raunger can neuer be confined or bound into one parcicular (mall compaffe, bur will out of his owne metrall breake forth into much larger compaffe, and fo both lofe time in hunting, and alfo giue che game more leafure to gee breath, or fleit away priuatly from the place where it was markt, and fo decciue the hauke of her expectation, and inlike fort a good retainer which will fticke vpon the place whereto he is oppointed

## The feuenth Booke of

and will bear it ouer and ouer many times, euen as it were by inchmeale, neuer leauing cill he haue fprung the game he feeketh, can neuer bee efteemed for a good raunger, becaufe the leafure he taketh will not giue him leane to rid much ground, and folikewife of all other feuerall qualities : therefore cuery man muft eiteeme his fpannyel for the one good qualitie he holdech, and cannot for diuers, and fo mixing his kennell of good raungers, good nofes, and retainers, hee fhall bee fure to attaine to the vtermoft height of his pleafure he wifheth. There bee fome fpannels which delight in the plaine and open field, and thofe are the beft for the partridge, quaile, or raile: there be othe others which delight in woods, hedges, bufhes, and couerts, and thofe are beft for the pheafant and moore poot, and thele are commonly the beft recainers, and the former the beft raungers.

There is alfo another fort of land fpannyels, which are called Setters, and they diffor nothing from the former, but in inftruction or obedience; for thefe muft neither bunt, raunge, nor retaine more or leffe than as the mafter appointech, taking the whole limits of whatoeuer they doe from the cie or hand of their inftructer: they muft neuer at any time quelt what occafion foeuer fhall happen, but as being dogs without voices, fo they mint hunt clofe and mute, and when they come vpon the haunt of that they hunt: they fhall fodainly fop and fall downe vpon their bellies, and foleafurcly crecpeby degrees to the game, till they come within wo or three yards thereof, or fo neere that they cannot prefle neerer without daunger of retriuing, then fhall your Setterflicke, and by no perfuafion go further, till your felfe come in and vfe your picafure. Now the dogs which are to be made for this pleafure, fhould be che molt principall beft and luftielt fpannyell you can get, both of good feent and good courage, yec young, and as listle as may bee made acquanted with muchhunting: the way to traine him to his knowledge, is by alllouing meanes, or elfe awfull where loue taketh not effeet, as by fafting, threatnings, and tome fripes to make him both feare and loue you far aboue all other perfons, and to that end you flall fuffer him to receiue no good thing from any man but your felfe onely: when you haue made him thus enamoured of you, you fhall (as men teach hounds to couch with bitsand blowes) teach him to couch downe clofe vpon his bellie when you pleafe, by faying Lie clofe, or fuch like word: for you are to vnderfand, that in this excercife, the principall thing which is to berefpected, is conftancie of words, that is by no meanes to veremany words, or change of words, for that breeds a confufion in the dogs braines, and makes them that they cannot vnderftand you, and where vnderftanding is taken away, there neuer looke to have your will performed: therefore you thall neuer vfe but one word for incouragement or cherrifhing, as bay good dog, or fuch like, but one word for aduice or threatning, as Be wife, or fuch like, one word for performance of duetie, as Lic clofe, and one word for the bettering of his ductie, as Goe neere, and fuch like, and fo forth for the performance of any orher thing whatfoeucr. Yet I do not bind you to thefe words only \& none other, but to inuent words, fo they intend to thisfence, as you pleafe, and hauing made choice of your words, not by any neanes to alter or change them, but to vfe your dog conftantly to them that he may truely vnderftand when he is cherifht, when chid, when taughr, when forewarned or aduifed : for the whole art of making thefe fetting dogs, confifteth in thefe words onely, for if one word being vfed, that word knowne, any man may hunt with the dog as well as his mafter, and fo euery knaue greedieto fteale him: but hauing libertie to make choice of your owne words, except you teach them, a man hall be neuer the better for hauing of the dog. To proceed then to our purpofe, affoone as you haue taught your dog to lie clofe vpon his bellie, you fhall then make him creepe vnto you vpon his bellie, by leafurable and flow degrees, faying vnto him go neere go neere or fuch like, and euer obleruing in that as in all things elfe, to cherrifh and reward him when he doth well, and to threaten or correct him when he doth amifte : and in this matter of correction, you mult alfo be certaine, as in your words, and not ufe diuers corrections, but one, as either to bite him or nip him by the eare root, or other fencible part, where you may paine him, but not hurt or lame him.

When

When your dogge will couch and crcepe vpon his bellie, to make him the better delight in doing it, you fhall lay a piecc of bread three or fourc yards before him, and then make him couch downe and creepe clofe vpon lis bellic vnto it, and being come with his nofe iuft oucr it, not to talke is till you giue him leaue: vvlichobedience when he hath fhewed, you may then giue him leaue to eat it, and cherifh him. When the dogge is verie perfect in this leflon, which is but only to bring him to obedience, and to the trtee manner of carriage and concealenient of his bodie, you fhall then take him abroad into the field, and giue him leaue to raunge, yet in fuch manner, thar he goe not an yach further than you give him leaue, but with the leaft hemme or threatening of your voice to be readie to come even to your foot, although he be neuer fo earneft vpon his game : the contrarie vvhereof, vvien at any time hce fhewerh, you fhall not forget, but in the verrie felfe-fame inftant beat and corref him verie foundly. Now when you haue broughe him vneo that obedience, that he will raunge according to your pleafure eicher in large or litete compaffe, you fhall then take care, that not at any time, or vpon any occafion whatoeuer, that he dare to quef or open his mouth, but that he huat fo filent and mute as is pofible: and if at any time hec offer to queft, though neuer folitetle, prefently you muft not forbeare, but correat him, till he come to an vnderfianding of your vvill thercin: and when he vaderfandech your vvill, yer notwithftanding doth queft, you thall not onely beat him, but lead him home, and tic him vp from meat till the next day, not ceafing to hunger-ffarue hint, cill hee doe performe your pleafure: vvhich done, then reward him liberally both with good meat and with plentie: vvhich the dogge once finding, hee will both for feare, loue, and the reliefe of his owne bellie, labour his vemoft to pleafe you. Now as foone as you find your dogge is brought both vnto obedience and mute hunting, you fhall then, as foonc as you find hinr bufie vpon any haunt, which you thall note by the bufineffe of his taile, and ficking long in one place, with a kind. of fecret whining, to fhew that he is neere to chat which he defirech : forthwith you fhall draw neere vnoo him, and giue him words both of encouragement and aduice, faying, Hay good-dog, goe necre, or fuch like: and if you find him too bufie or haftie, you fhall threaten and bid him be wife, and fuch like, till you fee him lie clofe vpon his bellie, and that he dare not goe any furcher : then you fhall fetch a large compaffe round about the place where che dog liech, and caft your eie diligently into the couers to fee whether you can find out the game, which as foone as you haue done, if you find that the dog hath fet too far off, that is twentie or thirtic yards fhort, as cineroufneffe and fearefulneffe will make a young dogge many times doe : then you fhall incourage him and make him goe fomewhat neerer, but if hee fet within the compaffe of three or foure yards, then you fhall make lim lieftill, vncill fuch time as either your hauke bee at her pitch, or your nets bee fpread, and then your felfe fhall goe or ride into the courrt and fpring them, and the game being taken, you fhall not forget to reward your dogge. Now if during this maine anion of fetting, which is after the dog hath firt flucke and giucn you warning of the game, if hee fhall vpon any occafion whatfocuer, either by hafte, negligence, or the frenzic of his owne defire, or otherwife by a too open carriage of his bodie doe fpring the game before you bee readiefor it, you fhall inftantly correct him foundly, and allo tie him vp that night without any meate, keeping him fo fearefully in awe of the game, that if as any time he fhall, eicher by too haltie raunging, or anie other vilexpeated chaunce, happen vpon the game vnawares, yet thall his feare fo gouerne him, that hee flallt vpon the veric inftant fight of his error not onely floppe fuddaincly, but alfo caff himelfe toppe ouer tayle backward, rather than by preffing forward an ynch cndanger the fpringing of the game. Which vyhen at any time youl percciue him to doe, you fhall then immediately cherifh him, notwithfanding the loffe of your game at that inftant, in as much as thercin hee fhewed a vvillingneffe to haue done the contrarie vpon any occafion, if nuifchance had not beene his hinderance.

Now

Now for the food vwhich is beft for fpanyels, it is that wwhich is before preferibed for grey hounds, as chippings, bones, and broken crufts of bread, fcalded in vvater and milke, or the heads, plucks, and entrailes of fheepe, boyled with oatmeale: yet the fetting fpanyell vvould for the molt part be fedde from the trencher vvith feraps of meat, bones, bread, and fuch like: for by reafon that he muft be kepe much tafting, fince he cannot hunt but vvhen he is exceeding emptie, it is verie fir that he be kept vvith as good and as nourifhing meat as can be gotten. Now to conclude this difcourfe of hunting dogges, you fhall vnderftand, that there is one other fort of fpanyels, and they be called vvater-\{panyels, becaufe they delight onely naturally in the vvater, and are imployed for the hunting of Duckes, Mallards, and all forts of vvater-fowle : they are much larger and bigger bodied than the land-fpanyels are, and a great deale more ftrong and Lyon-like made : their haire is alfo verie long, rough, and thicke curled, vvhich fheweth their hard conftitution and abilitie to endure the vvater, albeit the vveather be neuer fo fiercely and bitterly cold. They receive all their vertues from nature, and not from inftruction : and therefore to make any large difcourfe of them, vvere friuolous: onely, for as much as they are verie neceflarie to attend the fowler, for the fetching of his fowle out of the vvater, vvhen they are either lymed or frucken vvith the piece, it is meet that they be brought to great obedience, that is to fay, to fetch, carrie, runne, couch, and creepe, vvhenfoeuer a man pleaferh, leaft ntherwife, out of the frantickneffe of their owne natures, they fcarre away the game vvhileft the fowler is the moft bufily imployed. Thefe dogges are leffe tender than any of the other, and therefore any meat vvill ferue them: neither would they be vfed to any niceneffe, becaufe their moft imploy. ment is in the Winter feafon. And thus much touching hunting dogges and their gouernments.

## Снар. XXIII.

## How young bounds are to be trained up and made fit for the game.

(2nT is not ynough to haue a number of good and faire dogges, vvell marked vvith markes, declaring both the faid qualities, for they mult ouer and aboue be taught and trained vp for the game. Wherefore the huntfman mult firt bring them to vnderftand the found of the horne, to fwim and haunt the vvater, that fo they may be the more readie and forward to purfue the beaft, if fo be that he fhould feeke to fauc himfelfe by any running riuer or ftanding lake. Heemuft lead them alfo once a weeke into the fields, but not before the age of fixteene or eighteene moneths, for before fuch age they are not throughly growne and well knit in all theirmembers. But efpecially hee muft well adurife to what kind of game he is purpofed to vle them, as vvhether to courfe the Hart, or the Hinde, the wild Bore, or the Hare : for looke vvhat beafts you firf runne them at, thofe will they beft remember alwaies, efpecially if there be care had to looke any thing well vnto them.

You mult not courfe with them in the morning, if poffibly you can auoid it: for hauing beene accuftomed to the cooleneffe of the morning, and comming afterward to the height of the day, and feeling therein the heat of the Sunne, they will not runne any more.

You muft not put on young dogges the firft time within a toile, becaufe the beaft running altogether round, and therefore alwaies in the fight of the dogges, fo when afterward they fhould be brought to runnc out of the toile, and by that meanes be-
come caft any great diffance behind the beaft, it would be the caule of their giuing oucr and forfaking of the game.
It fhall be for the better ( to the end they may be the beterer erained and fitted) to put all the young ones together with foure or fiuc old ones, at fuch time as you purpole to hunt with chem. Neither fhall you compell your young hounds to make more haft than their owne natures leads, them vito, bue encouraging them to truft to their owne nofes, let thern ake what leyfure they pleafe, and picke out the fent of themfeiues, that comming truely to viderffand what they hunt, they may be more perfect and reade in the fante: wvhereas on the contrarie part, being compeliled to hune vp clofe with the older and fwifer hounds, they hunt (as is were) by rote, catching the fent here and there, and goe away with it both vncerrainely and ignorancly, and fo feldome or ncuer proouc flaurche or good hounds. Ir is alfo veric snecte to enter all young heunds at-che Hare firt, becaule it is the fweeteft and cooleft of all fents vvihatoener, and the hound which will hunt is, muft neceflarily huns any orher horer fent vvith much more violence: for it is a rule, That vvhofocuer can doe the hardeft chings, mult forcibly doe things cafier with leffe difficultie. Therefore firft enter your hound (as before is faid) at the Hare, leafl finding a fweetnefle and eafinefle of hunting in the hoter fents, hee neuer afier lay his nofe to the cooler.

## Chap. XXIIII.

## How that the Hart and the place wbere be haunteth and ryeth to lie, nould be knowne before yee cour $\sqrt{e}$ or bunt bim.

(2)Ings, Princes, and greas Lords (to whom, and no ochers, belongeth the Huntiziz it for. coirfing of the Hart) haue nor vfed to courfe the Hart, before they haue learned of their hunte-man vvhat manner of Hart he is, young or old, and whether he be a faire and great one, and fuch a one as deferuech to e couried, and then afterward where his haunt and lodging is.
The hunt-man fhall know the age and faireneffe of the Hart in refpect of others, by iudgement of the forme of his foot, the largeneffe of his tines, his dung, gate, beatings, breakings, and rubbings,
The fole of the foot being great and large, the heele alfo being thicke and large, the little cleft which is in the middeft of the foot, being large and open, a large legge, a thick bone, being alio fhort, but nothing fharpe, and the tippes of his clawes round and thicke, are fignes of an old Hart. The elder. Harts in their gate doc neuer ouer-reach the former foor with the hinder, for they tread fhort of it at the leaft foure fingers: but it is not fo in young Harrs, for they in their gate doe ouer-reach and fer the hinder foor more forward than the fore-foot, after the manner of the ambling Mule. The Hinde hath commonly a long foot, narrow, and hollow, with fmall cut- The Hinade. ting bones.
The excrement and dung of Hares is not alike at all cimes: for fome is printed, otherfome verythen round, and otherfome flat and broad: and if it be large, grofle, and thicke, it is a figne that they are Harts of tenne tynes, that is to fay, fuch as haue thot tenne fmall horncs out of the flocke. In Iune and Inly they make their dung in thicke vureaths that are verie foft: and yet there are fome of them that make it flat and broad, vncill mid Iune : And from mid Iuly vnto the end of Auguft, their dung is printed, groffe, lnng, and knotrie, vell hammered, annoynted, or gilded: and thefe are the markes to know Harts of tenne tynes from the old ones.

The cariages of a Hart are faid to be, when a Hart paffing through a thicke and The cariages or twiggie vvood, hitterh with his head againft the boughes of trees: for fo it commeth largeneffe of bis ro patte, that if the Hart be tall and large, the cariages will alfo be fomewhat large.
tines. Now the iudgement which the huntf-man can gather of the carriages, cannor be but fromafter Iuly vntill March: for the other foure moneths, that is to fay, March, A-

The time when Hartscalt their bovzics. rill, May, and lune, the Harts caft their heads; that is to Cay, their hornes. True is is, that they begin to put forth new hornes by the moneth of Aprill, and as the Sunne mometh higher, and graffe groweth higher alfo, and harder, fo their hornes grow and wax greater: fo that by the middeft of Iune their heads will be fully fer and garnithed with all that which they are to beare all the yeare long, prouided that they be in a good thriuing countrey, and come not by any hurt or annoyance. You may like-

To iudge of the
age of the Hart age of tibe Hart by his hornes.

The bornes of anold Hart.

The gate or go. ing of the Hart.

The beatings and breaches of the Hart.

## 

 sodic is, by marking where he entreth into the thicke amongtt brakes heigh wood, which he fhall hauc let paffe betwixt his legges: for looke at what on his legges. The groffenefte with his belly, fo high muft you iudge him to be which he hath touched withe of his bodie is perceiued by the two fides of the way and branches on both fides. fo thatie: for he will haue broken off the drie boughes nefle of his bodie.The rubbing of As concerning the rubbing the Hart.
much the rather arechey the huntfinan fill pey giuen to rub, and that vpon great trees: vvherefore, vvhen thall beable to artherciue the branches of the tree to be broken downe, then hee but a darke and obfcure marke.

## The knowledge

 of the Hart bis priuse haunt and place of retraict.The Hart hath
a cueral haun eucrie moneth.

Thus and by thefe meanes it may come to paffe, that the huntf-man may collect and gather the age and largeneffe of the Hart, and yet notwithftanding remaine as ignoranc as cuer he was of che place where he lyeth, and from where he may find him in his fecret haunt and priuie by-walkes. And therefore to be affired throughly, it behooueth him to haue fome one or other verie grod bloud-hound, hauing a verie quicke and exquifite fent, that fo he may the more eafily find out and follow the foor of the Hart : befides which meanes, it mult be prouided, that the hunte-man be not ignorant of the places in generall, which the Hart is accuftomed to refort vnto, although they be diuers, according to the moneths of the yeare; for Harts doe change their vvalkes and feeding enerie moneth, according as the Sunne mounteth and af. cendeth : for which caufe, in Nouember you muft looke to find the Harts amongft furze, briers, or heath, the crops and flowers whereof they loue to brouze and feede vpon, thereby to reftore nature after they haue beene atrut. In December they haunt the inner parts and hare of the forreft, to purchafe thereby the fhield of the vvood againft cold vvinds, fnow, and the noyfomeneffe of frofts following raine. In Ianuarie they draw neere the corners of the forrefts, and feeke reliefe amongft the greene corne-fields, vpon Rye, and fuch like. In Februarie and March; becaufe they then calt their hornes, they hide themfelues amongft the bufhes, and fo they continue like-
wife for all Aprill and May．In Iune and Iuly，they applie the cut－woods and corne，at which time they are in their prime，and fulleft fatted ：then alfo they feeke after wa－ ter，becaufe of the great heat which doth alter and change them，and drinke vp the dew and moiftneffe of the wood，which then beginneth to wax hard，In September and Octuber，they forfake the bufhes and goto rur，and ehen they keepe no certaine place，nor manner of feeding，becaule they range after the Hindes，and follow their waies and fteps，carrying their nofes clofe by the ground to take the fcent of them， nothing regarding or carefull to find out by the wind，if there bee any fecretly laied to do them harme ：as thus alfo they paffe and fpend both day and night，being fo enraged and feruently caried away with the rut，as that they thinke that there is not any thing that can hurt them ：then alfo they liue with a very fmall，as namely of that which is within themfelues（alwaies following the fteps and footings of the Hind） and next principally the great red mufhrums，which helpeth to bring them to the pifing of their tallow，for which caufes，they are very eafily killed at fuch times，if the venifon were good．

Thus the hunt－man may have a generall notion of the haunt of the Hart，and fo he fhall not feeke in any other places，then where hee ordinarily maketh his abode． And no＇s when by the meanes aforefaid，he is fure of the place，it remaineth onely that he learnc his den or the place of his particular refort：and forthe diligent finding out of the fame，he muft go earely to the place，which he knoweth to be che generall haunt of Harts for the prefenttime and houre，as is before declared：and he fhall lead with him his bloud－hound that is not giuen to open，to foot him withall，hauing firft wet his noftrels with good vineger，that fo he may haue the better fcent．He may alfo gather fome perceiverance by the other markes before fpecified，that is to fay，by the prints of his feete vpon the graffe，by the carriages of his head，his dung，gate，bea－ tings，and rubbings which hee may make vpon fuch things as hee meeteth withall in his way ：howbeit the hunt－man in this cafe mult bee ruled according to the va－ riableneffe of the place where hee makech fearch，for it is one craft and Meight to find the lodging of the Hart amongft the vnderwood，another amongtt the corne fields，and a third kind of skill to find him out amongtt the high woods，and they are better learned by practife in hunting and experience，than by inftructions deli－ uered in writing：and to the end I may not be too tedious，I will fay no more of this matter．

## Снар。 XXV．

## How the Hart mull be bunted．

算㓡He huntf－man after deligent fearch，hauing gotten as well the faireneffe and largeneffe of the Hart，as alfo the lodging，hall come and make re－

The day appointed，the horfemen mult bee readie to bee gone earely in the mor－ ning，hauing with their guid and dogs（as well their bloud－hounds and courfers，as thole which are to be put on in a fet and certaine place for the eafing of thofe which had him in chace before）as alfo whatfocuer other their neceflaric furniture．And when they are come to the place，they fhall make diligent fearch to find out where the Hart is lodged，and that both by their bloud－hound that will not open，as al－ fo by other meanes that they may deuife and inuent before they make choice of any
ftanding
ntanding for their dogges, either courfers, or of eafement. When they haue caft about the coucrt, and found the layre of the Deere, they fhall take vp the Lyam hound, and firtt place the Hewed round abour that fide of the vvood, out of which they would by no meanes haue the Deere to breake through or paffe. This Hewed is a certaine companic of men coafting that fide of the couert about, and making continuall noyfes and clamors, whereby they may affright the Decre from daring to attempt to come neere that coaft. Then on that fide through which they would haue the Deere to paffe, and where the courfe fiall be made, there they fiall in fenet ftands, made in the trees, twentie paces vvithin the vvood, place the Bowes, vwhich, as the Deere hall pafte by, may foot according ro their skils and fortunes. And this coaft thall be kept with all the fecretnefle and priuacie that may be : and great regard
thall be had of taking the vvind, leaft the Deere find offence as he is hunted. When
How toplace

## the greybounds

for Teasers, Re-
 the Bowes are placed, then on the next champion ground, and as neere the couert as you can conueniently, you fhall place your Teafers, that is, the firf brace of greyhounds for the courfe, vwhich fhould be the lighteft, nimbleft, and fwifteft dogges you haue, that putting the Stagge to the vemolt of his fpeed at firft, he may be the leffe able to endure his courfe foorth. Then a quarter of a myle before them, or more, according to the quantitic of ground, you fhall place your Refet, vvhich voould be a brace of greyhounds fomewhat ftronger than the former, vvhich comming in more frefh, may pinch forer, and make the Deere in more defpaire of fafetic. Laftly, a quarter of a myle before them, you hall place your Backfet, vvhich vvould betwo of the ftrongeft and foreft biting greyhounds you can get, vwho taking aduantage of the Stagges wearineffe, and comming to pinch, may there hold him, vvithour luffering him to runne further. When you haue thus placed your courfe, you thall then take your hunting hounds, and vncoupling them, caft them off into the couere, encouraging them both with hornes and voices, till they haue the Deere on foot, and fo hunt him, till you haue brought him to take his end at the Bowes, or in the courfe. But if you make no vfe either of Bowes or Greyhounds, but onely intend to hunt the Stagge at force with hounds onely, theri as fuone as you haue caft off your hounds, and got the Stagge on foor, you fhall by all the diligent meanes you can, get fight of him fo foone as is poffible, and vpon his view take fuch fpeciall and true knowledge of him, that vvhenfoeuer you fhall croffe him, you may know him from anie other Deere vvhatocuer : And then you thall giue good heede vnto his manner of hunting, and vnto the fleights vwhich hee vleth in the chafe; of all wwhich vvee fhall feeake feuerally hereafter. And in cafe your hounds may be ouer-haled and vvearied by the long ftanding of the Stagge, it thall not bee amiffe to haue hounds of eafement in fome conuenient place, vvhich you may caft off in the middeft of the day to relieue the former, and make the chafe or toyle much fhorter.

The Hart being once perceiued by the horfemen, or winded by the bloud-hound,
Dozges of eafement are fuch as are refled to yumne riben others are 2pearie.

The placing of the dogzes of eajemicit. they muft place their dogges of eafement ac chree or foure feucrall fands, and certaine places, to the end that they may eafe the other dogges which are wearie with running, or haue loft the footing of the Hart, and to by them giue new chafe vnto the beaft : and fuch dogges of eafement fhall bee fo fet in companies, that if the firft faile and give ouer the chafe, yet the later may be the more ftrong, able, and fierce kind of dogge, following the chafe, not coldly, a farre off, and behind, as the ochers, but leading the way before all the reft, and that wich great foutneffe and courage.

The dogges of eafement being placed in flandings moft conuenient, the courfing dogges muft be vncoupled for to runne ; regard being had according to the place where the Hart was feene.

The horfemen tending vpon the companie of dogges, fhall fecond the courfing dogges, and wind their horne, the more to encourage them, catting boughes in the way of the Hart, chereby to hinder his fwiftnes in running, iffo be che hunct-man haue not alreadie caft fome therein, in his watch, at fuch time as he made fearch to find out
the lods ing of the Hart, or elfe the horfemen themfelues, before the vncoupling and letting loolc of the courfing dogges. In the meane time, if if fall out, that the Hart in his courfe doe happen to paite neere vnto the dogges of eafement, the horfeman which keepech the fame, muft marke whecher the Hart be purfied with anie of the companie of the courfing dogges, and then prefently to vncouple the companie of his dogges of eafement, hallowing and whupping the dogges contimul'y, and cafling of boughs of trees in the way where the Hart fhould pafle: but if he pececiue chat there be not any of the companie of the courfing dogges, neither yet hearc any noife of the men that are hunting, hee muft not vincouple any of his dogeges, but onely marke the way that the Hiar runneth, to make report thereof to the companic, to the end hee my know whether the fane be the Hart inchafe, or no:becaute that fometimes Harts arc driuen through feare out of the places where they vle to lye, hearing the noife of the companie of the dogges and horfemen.
In the meane time, the horfermen appointed to wait vpon the companie, muft alwaies fecond and keepe by the fides of the dogeses, to caufe them the better to keepe and agree together, and to helpes them ata defaule, if ac any time they happen to be out of the erace, and not to follow the right way.

They muft alfo hauc a care of the vviles and fleightes of the Hart, vvho velien hee fecth himelfe ncere purfued by the dogges, indcuourech and befirrecth hinfelfe how to acquite and rid hunfelfc of them, making many windings and turnes, and that in diurs manners.
For fometimes hee bufiech himfelfe about the finding out of the dennes of other The malicimufbeafs, hiding himfelfe thercin, and leting the dogres by that means to ouerflip him, nes of tie Harto as not being able to find the fent of him, hauing couched his foure feet vnder his belly, and drawing his breath from the coolenefle and moifture of the earth. Againe, he hath this fubtectie and cralt by nature, as to know, that the dogycs doe gather more fent from his breathing and fect, than from any of the reft of the parts of his bodie. But to preaent this his craftie wilineffe, you muft haue caft many boughes in the entrances of fuch chickets as the Hart is to pafte by, to the eid they may the better find the laffecting and breaches, which will yeeld fome neere gueffeof the place wherein he fhall be hid.

Otherfome times, when the Hart feeth the dogges chafing him, and that he cannot auoid himelfe from them, hee goeth from one thicket to another, feeking the haunts of Hindes, and other leffer Harts, and thruftech himelfe into their companie: and moreouer, fometimes drawcth them away, and caufth them to runne with him the fpace of a whole houre or more vpon his way, afterward cafting them off, and making way for himfelfe out of and farre from any' way. And if it happen that his wiles be tomd out by the exquifite fent of the dogges, and wifedome of the hunters, then he caftech abour into his firft way, to breake off by that meanes his former traces, and thereby to mócke the dogges : then after that, hee entreth into fome large and wide way, which he followech fo long as his frength will endure. To aupid thefe fleights, the horfenen muf hauc an cie when the Hart fall fall into companic of other bealts, and runne away with them, to the end they may ftiire up the old dogges of the cornpanie to purfuc che Hart with greater carefulneffe, keeping neere about hem to helpe and aid them: and if the Hart haue taken the broad way, to the end he may take away all fent from the dogges (for this is a moft certaine thing, that all forts of beafts doe paffe through the broad waies, whofe earth turnech into powder) in fuch forr, as that the way of the Hart, and the places which the horne of his foot did etrad vpon, become quickiy filled vp againe and courered by the falling togecther of the duft, the horfemen muft looke very carefully, and view the ground very well, to fee if they can perceiue any traces of the Harr, and then they fhall caft the boughes out of their way. luftily, and encourage cheir dogges, calling vnto them in cheercfull and cheriihing manner.

Againe, it fometime fallcth out, that Harts doe run ourerthwart the burned grounds where the dogges can haue no fent,becaufe the fmell of the fire is greater than the fent Nnn 2
of the Hart : yea, and fometimes the dogges doe give ouer courfing, hauing drawne into their nofthrils this euill fmell : vvhereupon the horfemen muft goe afide a little out of their way with the dogges, vntill fuch time as they be got paft the fame, and then bringing their dogges into order againe, let them encourage and cheere them forward to follow the game.

Sometime che Hart runneth a contrarie courfe to that by which he is winded, to the end that his breath may be featered and difperfed, and that it may not come to the fent of the dogges, as alfo that he may heare the noife of the dogges vvhich chafe him, and then the charge lieth vpon the horfemen to marke his feps and traces.

Againe, there be fome Harts, which in going from the reft doe make breaches, cafting themfelues vpon their bellies before the horfemen, and fhew themfelues to be put forth by the dogges, as if they were wearie, and had beene long chafed : thefe wiles doe fhew shem to be verie fubtle and long winded, able to fand a long time before the dogges, trufting in their ftrength : and this the horfemen mult beware of, to the end they may be able to iudge of the deceitfulneffe of the Harts: for Cometimes they faine themtelues oner-chafed, when indeed they are not.

The figues and tolens of a Hayb oucr-shafed.

The Hart long chased.

## To become to

fland to the bay.
The Beere for the Hart, and the Barber fir the Rore:

The fiynes and tokens fhewing that the Hart hath beene long chafed, are thefe : if in running before the dogges he neither heare nor fee any man: if he hang downe his head, holding his nofe vnro the ground : if he fumble and ftagger, reeling with his legges: afterward, if hefee a man vpon the fuddaine, he lifteth vp his head, and giueth a great leape, as who would fay he were yet Atrong and luftie: furthermore, it he haue his mouth black and drie, without any froth, and his tongue drawne vp into the fame: if in his gate he fhut his hoofe, as though he went fleadie, and yet afterward on the fuddaine ftraineth himfelfe, and openeth it, making great flidings, fuffering his bones to kifle the ground verie ofeen, following commonly the trodden path and broad waies: likewife, if he meet with a hedge, he holdeth along by the fide of it, to fee if he can find any out-gate, feeing his frength faileth him to leapeouer.

Now after his long running and manifold Ghifts, when he becommeth wearie and fpent, and that he cannot longer ftandour, being paft all hope of himfelfe, he leauech the low vvoods and forrefts, and fiech to the champion fields, or vnto the corn-fields and villayes bordering next thereto, or elfe he betaketh himfelfe to fome riuer or lake, whereby it falleth out ofencimes, that he anoidech and freeth himfelfe of the courfing dogges: for in champion places and void fields the fent of the footing of the Hart is verie fmall: and as for riuers and lakes, he hath the craft rather to take downeward with the ftreame, than to fwimme vpward againft theftreame, to bereaue the dogges by that meanes of comming by the fent of him.

The horfemen fhall fee to fuch his efcapes: and therefore if he haue taken his way into any champion ground, they fhall find out histraces by the fight of the eye, and with the blaft of the horne they thall cheere vp and encourage therr dogges to a new courfe. If the Hart haue taken the water, whether it be for the cooling of himfelfe, or as the vttermoft refuge he hath for the fauing of his life, the hunter fhall looke at what place the Hart fhall haue taken the fame, and there caft in good flore of boughes, attending his paflage : and if they fee that he commeth not out of the water, they fhall caufe their dogges to take the water : or elfe (if they be afraid of caufing them ro take cold) they fhall fend to feeke a boat : or elfe if they can fwimme, they fhall put off all their clothes, and with a dagger in one hand fwimme vnto him to kill him : and yet they muft looke, that they fer not vpon him, but in fome deepe place, becaufe that if the Hart find ground for his feet, he would be able to hurt one of them with his horns, whereas in a deepe place he hath no ftrength.

Furthermore, there muft great wifedome be vfed in the hunting of the Hart, when he can no longer hold out, but being out of all hope of his life, ftandeth fill, and fuffereth the dogges to barke at him, for then he groweth dangerous, as being given to ftrike with his hornes the firf of the hunters that he can meet withall: And this is the caufe why it is growne to a prouerbe, A Beere for a Hart, and a Barber for a vvilde Bore. Wherefore it fandeth cuerie man vpon to looke vvell to himfelfe
in comming neere vino the Hart when he endurech the bay, and not to aduenture too farre, and hazard himelfe too boldly.
When the Hart is taken, he that fhall haue given the blow, fhall forthwith thereupon found the retrair, to the end hee may call together his fellow huncers and the dogges: and afer he hath prefented the right foot of the Hart vnto che King, or vnto his Lord, then to cut him vp as he fhall know it meet to be done In the meane cime he muft nor for set to take care of the dogges, and to giue them fome relicfe \& fuftenance of the prey they haue goten in hunting: vnto the bloud-hound, that is, vnto the dog which by his fent hath led the way to the Hare his lodging, he fhali caft the head and the heart, as his right and due: vnto the reft he fhallgiue the necke and braine of the Hart, or which is better, he fhall take bread and cut is into lietle lunches into a panne with chicefe, and remper the fame both together with the bloud of the Hart in his greatef heat, and afterward put all chis prouifoon forthwith vpon the shin, ftrecthed forth vpon the graffe, and in the meane (pace euery man fhall put his horne vnro his mouth, and therewithall comfort and cheere vp the dogges.
Some men vie now and then (and yee after this firft prouifion) to make a fecond with the entrailes of the Hare all whole, which the mafter huref-man doth caft vno the dogges after they hane ended their feaft, holding them vp on high:and whiles the dogges are eating thefe entrails, they muft be cheered $v p$ with the noif of the hornes, fhoutings, and hallowings.

## Снар. XXVI.

## Of the profit that may be reaped by the killing of the Hart.



Oewithflanding, that the hunting as vvell of the Hart, as of other vvilde beafts, be vndertaken and performed by great Staees rather for the exercile of the body and recreation of the fpirits, than for any ocher defire and hope; yet the killing of the Hart is not without great profit, and that intwo refpects: the firft being for the making of mear thereof: and the fecond, for the medicinable helps which may be made of his parts and members.
As concerning che meat made of the Hart : his flefh is not very pleafant, if it be The filfo of the not of that part of him which is commonly called the pizzle: for to feake general- Hart. ly according to the truuth, Hares flefh is verie hard, of an euill iuice, melancholicke, hard to digeft in the ftomacke, and verie apt and eafic to procure many great difeafes. It is true, that many great Ladies (hauing an opinion, that the flefh of Harts being eaten often, doth free and deliuer men from all danger of Agues, becaufe the beait himfelfe is not fubie\& at all chereunto ) at their rifing euerie morning haue accuflomed to tafte of Harrs flefh : notwithflanding, vvho fo is caretull of his health, fhould not touch anie fuch flefh, except it be of fome cender Fawne, or young Hiude, vvhich are made feruices for the mofl partas the Tables of Princes and great Lords.
The medicinable helpes vvhich may be prepared and made of the Hart, are infinite.
Some find a bone in the heart of the Hare howfoeuer there be fome that thinke it The bone in the to be falfe):which is fingular good again! faintres, or fwowning, trembling, and bea- Harrs beatto ting of the heart, and ocher effects of the fame, as alfo againft the venimes, poyfons, and dangers of the plague, and likewife againtt the hard crauell of vvomer.
The bloud of the Hart fried in a fry ing-panne, and put in clyfters, doch heale the The bloxd of bloudic flux, and flay yeth the flux of the belly: being drunke with vvine, it is a foue- $t$ the Hart. raigne remedie againft poyfons.

The priuie member of the Hart wafhed diligently in water, and the water wherein The prinic parts it hath beene fo wathed, drunken, appeaferh forchwich the paine of the collicke, and of the Hart.
retention of the vrine : if it be fteept in vineger the fpace of foure and twentie houres, and aferward dried and made in pouder, the weight of a French crowne of his pouder being drunke with water of plantine, flayeth the fluxe of bloud, and all manneof fluxe of the bellie. Likewife dried and poudred, it may be mingled with remedies which haue power to prouoke carnall copulation. It may alfo bee made feruiceable and of good vee in the pleurifie, and against the bitings of Serpents, if it be taken either alcne or mingled with things which are good for fuch difeafes.
The bayls borze
The horne of the hart burned, made in pouder and drunke with honie, killeth the wormes, which is a figne that the harts horne hath great vertue againft venome, and that not much leffe than the horne of the vnicorne.
Thetender hornes of a young hart cut in fmall gobbets, and put in an carchen pot wel leaded, and clofe flopped with clay, and afterward put ina hot furnace vntil fuch time as they be dried(they may alfo be beatento pouder, putring thereto pepper and myrrlee)do yeeld a pouder which is fingular good againft the cholicke taken in excellent wine.
The cholicke.
The mavorsand cold youts, and tumours that are hard, and not eafily foftned.

# The hunting of the wildBore. 

## Chap. XXVII.

## The best time to bunt the wild Boresand the markes of a good wild Bore.

The hunting of the roild bore dangerous.

Erounds made by the 2bild bore are danger ous.
 T is certaine that the hunting of the wild Bore is a great deale more difficult and daungerous than that of the Hart, in afmuch as the wild Bore doth not feare the dogs, but tarrieth and ftayeth their comming, and which is more, doth fometimes fee vpon them fo far as till he be amongft them, and all to the end hee may teare and rent them with his teeth, whofe wounds (efpecially thofe that are giuen into the cheft of the bodie) are (as it were) incurable: Wherefore the good hunt-man thatmakech any account of his dogs, for to hunt the Hart, the Roe-bucke and Hare,mult neucr giue chafe to the wild Bore with his courfing dogs, but rather with fome companie of maltiues, whofe proper pray the wild Bore is : or elfe which is better to find the meanes te take him in toiles, or to kill him with a wile and a fpeare, as we fhall further declare.

But howfocuer the matter go, yet this is to be, knowne, that all Bores are not fit to be hunned, but fuch onely as are not paft foure y eares old, howfocuer they may bee otherwife both faire,great and fat : for afterfoure yeares the wild Bore groweth leane through oldneffe of age; and forthwith loofeth all his goodneffe. A gaine all times are not fit to hunt them in, but onely when they are in feafon and in the beft plieght, as namely from mid September to December, at which timethey begin to go to rut: and yet in Aprill and May they are more eafie to be taken in toiles, than at any other time, becaufe they fleepe more in this feafon than at any other time : and the caufe is, for that they feed vpon frong herbes, which flirreth the bloud, and fendech vapours vp vnto their braine, whereby fleepe is brought vpon them : againe the Spring time doth then reflore and renew their bloud,whereby they are brought to take great eafc andreft.

The hunt-man therefore flall know the faireneffe of the Bore, and that hee is

The markes io know a wild bore worth tbe bunting. Histraces. worth the hunting, by thefe markes, that is to fay, by his traces, rooting, foile, and dung.
The prints of his traces great and large : the taking of the trace before, round and groffe:
the cutting of the fides of the traces vfed, but not fhewing themfelues cutting, the heele large, his gards groffe and open, wherewith he muft tread vpon the ground in the hard whereloeter hee gocth : all thefe things declare him to bee a faire and great bore. In like manner the craces behind being larger than thofe before, doe fhew the thickneffe of his haunches: the wreathes and wrinkles which are betwixt his gards and the heele, if they make their prints vpon the ground, do fhew that his heps are great and long. The markes of histraces decpe and wide, do fhew alfo his heauienes and corpulencie. The rootings of the bore being deepe and large, do note the thickneffe and length of his head.
The foile of the wild bore being long, large,and great, doth note and argue the bore to be great: or clfe in going from the foile, his greatneffe may be known by the entrances of the thickecs, by the leaues and herbes which the foile hath touched, becaufe that at fuch time as hee commeth out of it, he beareth dirt and mire vpon him, and therewith the leaues are bemired, as he goeth amongft them ; and hence is gathered his height and breadth : or elfe ir falleth out oftentimes, that the wild boreafter he hath bin at foile,goech to rub himfelfe againf fome one cree or othcr, and there hee leaueth the marke of his heighr.
The dung of the wild bore being thicke and long, doth Thew the greatneffe of the wild bore, howbeit the hunt-man is not to prefent it vnto the companie, but onely giue them the view of it in place as it lieth.

Chap. XXVIII.

> Of the wild Bore, tame Siwine, wild Bore assd wild Sow, and of their haunt.

(5xHe difference betwixt wild Bores and tame Swine is this: The wild Bore in his gare doth alwaies fet his hinder feet in the flepts of his forefecte, or very neere, and doth pitch his fteps rather vpon the forepart fecte, or very neere, and doth pitch his feps rather vpon the forepart widd bores ond
of the foot, than vpon the heele, relting notwithtanding his gardes the tarem faine vpon the ground, f preading the fame abroad thereupon vnto the vtter fides: the tame Swine in their gate do open the cleft of their hoofe before, pitching rather vpon the heele than vpon the forepart of their foot, and their hinder foot doth not ouer-reach their fore-foot: the fole of their foot is full of flefh, fo that the prints of their feps cannet bee but vneuen, contraric to that of the wild Bore. In like manner the wild Bore makech deeper rootings, becaufe he hath a longer head, and when he commeth infields that are fowne, he willingly followeth one furrow, nufling all along the ridge vitill he come to the end of it: which the tame hog vfeth not to doe, for hee neitlier turnech vp the earth in fo deepe manner, nor yet followeth onalong with it as the wild Bore isaccuftomed to do, but hee cafteth vp one peece of ground in on place, and another in another further off, crofing the ridges, the one ot them not reaching vnto the other. Furthermore, when the wild Bores goe vito the corne, they beare down the fame all in a round ; but fo do not tame Swine. The wild Borealfo hath this particular propertie, namely, that he is neuer meazelled as the tame Swine wil be.
The difference betwixt the wild Bore and the Sow is this : The Bore goeth wider with his hinder legs than the Sow, and commonly fettech his hinder fteps vpon the edges of his forcteps on the out-fide, becaufe of the thickneffe of his hanches and flones, which caufe them to go wider dehind, which the Sowes do not; for they are emptie betwist the hanches, tor which caufe they tread narrower. Thie Sow ma. kerth not fo good a heele as the bore, and hath her hoofe longer and fharper before, and more open, her fteps and foles of her feet behind, more narrow than the Bores. The bore with much adoe, and hardly, will be brought to crie when he is killed, but the Sow will not let to make you heare her aloud.

The wild Bore hath no certain abode, and as fome fay, he is but a trauelier, becaufe

The Bores bawnt.

The with Bore is not gimen to surnings and wiles.
he doth siothing but runne from one foreft and wood to another : and yet heetaketh greardelight to remaine in the countrie and place where hee wasbred : in fo much as that if he be hunted by dogs from any bufh or foreft, he is till readie to run without any flay, vntill he come in the countrie from whence hefirft came, and where hee was bred; for there hee fetteth vp the reft of his fafegard, and maketh it the onely refuge of all his force and frength : he is alfo oftentimes found in the countries where frmall nats and beech matt may bee come by, for he more delighteth to feed of them than of acornes.

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Chap. XXIX.

## Of the taking of the wild Bore.


concerning the hunting of the Bore, it craueth rather many men than dogs; for there is no greater cut-throat to dogsthan the wild Bore : and yet there may dogsbe vfed, but with fuch diferecion, a s that the horfe-men bealwaies mingled with them, and preffing vpon the Bore as valiant1 y and forcibly as they can : for when hee feeth himfelfe fee vpon with horf-men and dogs both at once, euen vponthe firft pufh they befetting him hard, do aftonifh him, and caufe him to loofe whatfoeuer his courage, and in fteed of wrecking his furious moode vpon the dogs, hee is conftrained to runaway and flie the countrie. Thenalfo you muft let flip lome of your frefh dogs, or dogs of eafement, but let them not be young notices, but rather old ones, and luch as haue beene well trained and taught, that they may fuccour the firf, and force the Bore to a more fpeedie flight. And you need not feare that he fhould betake himelfe to any turnings, windings, or oeber deceitfull trickes, becaufe he is heauie, and that the dogs are able to follow hin clofe and hard by. But when aftet long chafe the horfemen fee that the wild Bore doth endure the abbaie (which he will netier do vntill he bee mightily vrged) they muft forthwith, but as priuily as they can compaffe him about, and fer forward all atonce directly towards him, hauing in their hands cuery onchis fword, and not failing to kill him: and yet notwithftanding they mult not hold their hand low, for fo they thould light vpon his head, but they muft rather beare their hands on high,and ftrike at him with their fwords, to giue him deepe blowes, but taking heed that they frike not the Bore on that fide next their horfe, butrather on the fide further off; for looke on what fide he feelech himfelfe hurt, that way he curneth his head prefently, and fo he might either kill or wound the horfe. This is a moft certaine trueth, that if there be dog collers hung with bells put about the dogs necks which are called courfers, when they hunt the Bore, that he will not kil him fofoone, but run away before them, neacrcomming to the abbay.

> C н а р. X X X. The profit shat commeth of the killing of the wild Bore.

He profit comming of the killing of the wild Bore is twofold, as is that of the Hart: the one concerning food, and the other concerning medicine,for which it may be imployed and vfed.

As concerning nourifhment, the flefh of the Bore is better without all comparifon than that of the Hart, for the proofe whereof I refer me to the ftately
bankets of the auncient Romans, who fo greatly efteemed Bores flefh, as that they did ferue them all whole vpon the cable. The princes and great lords of this our age do prize it highly, but efpecially, and abouethereft, the head of the bore, as being judged a delicate and daintie fine morfell: young and tender wild Bores, are likewile very well accounted of, in Winter featts and bankets. And to fay the truth, the flefh of the wild bore doth nourifh very much, and begetteth great quantitie of good blood : which are the caufes why Phyfirians make fuch reckoning thereof, efpecially when the Bore is taken by hunting.

As for the Phyficall helpes, the vrine of the wild Bore hath many vertues: you The vrime of the muft take the bladder of the wild Bore, wherein there is yet fome quantitic of vrine, and with this vrine mingle a little quantitie of oyle, hanging vp the fame bladder in the fmoake of the chimney, and let it abide there vntill the vrine therein become fornewhat thicke, and of the confiftence of hony : which done, it mult bee carefully kept in the bladder, to vfe to annoint the nauell, temples, and noftrels of young infants withall which are tormented and pained with wormes, which thing I hane often experimented with good fucceffe. This vrine likewife chus prepared, doth break the ftone of the bladder, efpecially if there bee fome fmall quancicie of it taken inwardly in drinke : his gall likewife is good againft grauell and the ftone.
The vrine of t
noild bore.
Wrorms in yeu
childreiz.
The firne?
The

# The hunting of the Hare. 

> Cнap. XXXI.
> Of the pleafure of the bunting of the Hare, and of the dogs that are fit for the Jame.
Ertaine it is that the hunting of the Hare is more pleafant, more liuely, and leffecoftly (not onely for gentlemen, but alfo for all men of eftate) than of any other bealt, becaufeit is accompanied with a thoufand prettie pleafures and recreations cuerie houre, and of fmall charges, befides the fecuritie thereof, and the auoiding of the daungers and inconueniencies which are many, and happen of to fuch as hunt the Hart and the wild Bore : whereunto you may adde the great contentment, and no fmall pleafure which may be taken in feeing as it were the fpirit of this little beaft, as it were admirable in nature, and the fleights which the vfeth to thift and rid her felfe from the dogs that chafe her. Such game we will allow our Farmer, yea, and fo as that I could wifh him to vfe it as oft as hee can, for it cannot but affoord him both pleafure and profir.

And whereas this game confiftech principally vpon mulcitude of dogs, the gentleman that will doe the deede, and hath a young companic of dogsto teach, mult obferue two things principally, to traine and influct them weil.' Thefirft is, that the Hare. from the beginning he accuftome them to goe vncoupled, and to run in all forts of grounds and countries, that is to fay, vpon plaines, vnderwoods and thickets: for otherwife if you accuftome them from the beginning to run in one place onely, as in woods or grounds that are fallen, and haue the wood cut downe, they will not make any reckoning of the plaines and fields, but they will goe and raunge the grounds where they haue beene accuftomed to find fport and take their pleafure in finding the Hare. The fecond is, that he neuer teach his dogs to hunt in the mornings, becaufe of the dew \& coolenes of the earth, but rather in the height of the day: for if you vee. them to the coole feafons, and then afterward bring them to hunt at the height of the day, they feeling any heat or fmall wind will not afterward hunt any more.

Wherefore the fitceft time to traine young dogs vp in, and to make them fit for the hunting of the Hare, is after September vnto December, becaule that then the
time is temperate, as alfo becaufe that the young hares are foolifh, and but weake bodied, neither skillfull, nor able to worke their wiles: and befides, becaufe they themfelues doe ftart of themfelues many times before the dogs which take pleafure therein, and become better entred and cnured thereby, than they would bee, if they thould be hares that would run away and be packing apace from them.

## Chap. XXXII.

$$
\begin{aligned}
& \text { The markes of a good Hare, of the male and of the female, } \\
& \text { and of their formes. }
\end{aligned}
$$

 Ow although in hunting of the Hare, the hunter taketh what hee can haue, and not what hee can find, becaufe of the fwiftneffe and wilineffe of this little beaft, which oftentimes difappointeth bim of his purpofe : notwithitanding if at any time it bee graunted the hunter by the good hap of hunting to chufe the beft Hare amonglt many, or elfe that fome Lord, not willing to loofe his labour, hath fent his huntf-man to find the Hare before hee hunt her; the markes of a good and faire Hare, and fuch aone as deferueth to be hunted, arethefe: Thofe which keepe in woods or plaines, or which feed vpon little The markes of a halls vpon the herbe Penniroyall, or wild Time, are much better than they which bare.

Hareskecping neerevato wa. tcraze leprows. keepe neere the waters, as alfo better than the litele red Hares, which are of the kind of conies; for fuch as keepe neere vino water are commonly leprous. Further, the male is far better than the female.
The markes to know the one and the other are thefe : The male hath commonly his dung fmaller, drier, and fharper at the point: the female hath them greater, rounder, and not altogether fo drie as themales: the female hath a groffer bodie, but the male hath a more flender and fine bodie: the male in comming our of his forme, hath his hinder parts whitifh, as though hee had beene plumed: the male hath alfored fhoulders, with fome long haires mixt amongft, he hath alfo a fhorter and more bufhie head than the female, the haire and beard of his iawes long, his eares fhort, wide, and whitifh : the female hath a long and narrow head, and alfo great eares: the haire growing along the ridge of the backe of a darke gray. When the dogs courfe the female, the doth nothing but coaft round about her feat \& countrie, paffing feuen or eight times by one place before fhe euer fquat : the male doth the contrarie; for being courfed with dogges, hee runneth fometimes feuen or eight leagues diftance from his forme.

Toknow the forme of a Hare, you mult take the benefit of the night : for in the night fhe withdraweth her felfe into her forme, and not in the morning, becaufe of the dew : neither yet vpon the height of the day, becaufe of the heate. There is more regard to bee taken vnto her traces: for the print of the hares foot is fharpe, and famioned like vnto the point of a knife, hauing her fmall nailes all pricked right downe into the ground, and they doe leaue their print round about, drawing alwaies narrower and narrower, hauing the fole of her foot alway clofe, after the manner of the point of a knife.
the Counirie Farme. 695

## С нар。 XXXII.

## Thekilling of the Hare.

CoOr the hunting of the Hare, the very beft time to kill her with courfing dogs, beginneth at mid September, and endech at mid Aprill, becaule of the flowers and great heat which then begin to raigne,for boch thefe are apt to depriue the dogs of their neceffary icent : befides that, at thefe times the Hares are but young and fecble.

Notwithftanding, there be certain countries and feafons, where \& when the dogs haue not any fcent of Hares, as in Winter in the plaine countries where the ground is fat and ftrong, becaufe the Hare hath her foot vnderneath full of haire, fo that when the runneth, a fat ground will take hold vpon is, and fo the carriech it away with her foor, and fo all the fcent that the dogs might otherwife take, is withheld: and vpon plainesthere are neither brancl nor herbe for her to hit her body vpon, no mfore than there is in broad and croden waies. In like manner it is an vnfit time to draw out dogs to hunt in froftie weather: for they would both loofertheir nailes, and foile their feet: on the concrarie, the Hares run becter at that time, than at any other, becaufe they haue their feet furred.

Allo high waies are very daungerous and ill to hunt vpon: for by reafon of the much trauelling of men and other cattell, the fcent which the Hare fhould leaue, is cleane taken away, and the dogs nofes are fopt with contrarietie of odour: nor is it good to hunt where flocks of theepe, heards of goats or cattell are kept; for the hotneffe of their fent takech away all lcent of the Haire.
The firft pointmaking way for the killing of the Hare, conffifteth in finding out her forme, which the berter to find, you mult haue refpeat vnto the feafon wherein you go about it, and the time how it fhapeth: for if it be in the Spring or Summer, the Hares lodge not amongft the thicke places of woodes, becaure ot the ants, ferpents, and lizards which driue chem chence, and fo at fuch times they are conftrained to lodge amongft the cotne, fallowes, and other weake places. In Winter they do the contrary : for they take vp their lodging in fome thicke bufhes, or thicke places of the wood, efpecially, when the Northren winds, and other high and low winds doe blow,for of fuch they are much a fraid. Wherefore according to the time and place, where you fhall fee the Hares to take vp their lodging, you muft prepare your dogs zo go and fet vpon the Hare within her forme, and when fhe fhall bee flarted, the horfe-men (which fhall not be aboue three in number) muft incourage the dogs to follow the chace, without making of much crying or greatly whupping of them, for feare of fetting of them in too great a heate, which mightcaufe them to ouerflip the traces, and not to hold on right.

But touching the mof generall and beft places for the finding out of Hares both Winter and Sommer, you fhall repaire to the moores or heath which are ouergrowne with ling, or with gofle, whins, Brakes, or fuch like, for they are fpeciall harbours in which a Hare delights moft : allo in fuch places where there is great fore of fog or long dead graffe which liech vngot. You fhall befure to find Hares haunt, efpecially in the Spring time, becaufe fuch ground being giten to moifture, makes them take a greater delight therein : for Hares at that time of the yeare loue to haue all their hinder loynes couered with water : from whence it comes that the bef Hare finders, when they feeke Hates, looke all the Winter vp to the top or ridge of the lands, and in the Spring, downe to the loweft bottome of the furrowes. Now as foone as you haue found your Hare, and flarted her, the horfe-men which follow the chace, fhall by all obferuations poffible take good heed to the wiles and Ileights of the Hare, the whichare verie many and diuers, as in the time of raine the hare doth racher follow trodden pathes and broad then at any other time, and
if the lighe vpon any viderwood, the will not go in but to refrefh her felfe by the fides thereof, and letceth the dogs paffe by: after when they are gone paft, the curneth and runneth backe in the fame fteps by which fhe came thither, vnto the place from whence fhe was diflodged, rather chan the would run vp into the foreftes, by reafon of the moiftneffe which is amongtt the wood. Whenfuch practifes are in hand, the horfe-men muff flay fome hundred paces from the wood by which the hare is come, for he fhall not faile to fee her returne by her former way right vpon him, whereby he fhall be able to call in the dogs. The horfe-men likewife fhall obferue and marke whecher it be a maleor a female, and whether The beeone that keepeth continually in the countrie, or but a gueft for a night: for if fhe be a wanderer and not of conftant abode, the will haue her forme in couert, and fuffer the dogs to put her vp three or foure times neere vnto her forme: for this is infallible that the hare, bred and fed where fhe is put vp , and efpecially the female, if the horfe-man obferue and marke the firft place and compafte that fhe takech the firft time after fhe is departed and gone from her lodging being before che dogs, all the reft of the courfes that The thall makethat day will be by the fame places, waies, and mufes, if it bee not a mâle hare come from far; or elfe the dogs haue hunted her fo hard, and wearied her fo much, as that fhe be driuen to forfake her woonted haunt : and chis commonly they do voluntarily betake themfelues unto, if they be ar any time courled two whole houres, without default.

Atthe firft when the dogs begin to courfe the hare, the doth nothing but wind and turne, cracingouer one place fiue or fixe times, and that all in the fame trace. And this you mult learne, that if the courfing dogs miffe of taking the hare one day, then it will bee good for the horfe-man to beare in mind the places and coafts that then the paffed through : for if he recurne at any other time, and haue her in courfe with the dogs, fhe will paffe by the fame places, and practife the fame fhifes fhee did the day before when fhe efcaped, and thus being before acquainted with her crafts, and ways which the will run he may greatly help his dogs.
Some hares as foone as chey heareche found of the horne do ftart, and take fome rimer or lake, and then you mult vfe what good meanes you can to caufe her to auoid the water, drawing the dogs neere che place moft likely for her landing, that fothey may take her.

The females are more ofen in practifing their wiles, and in fhorter fpace, which the dogs loue not: for it is a wearifome irkefomneffe to couragious and luftie dogs, tolbedrawne a fide fo off, it being their chiefe defire to courfe fuch a beaft as will rum out before them, that fo they may runne according as their ftrength will ferue them. And for fuch hares as are given to wind and turne fo oft, it is requifite that you take great compaffe of ground, that fo you may inclofe all her wiles, leauing no paffage for her to find but only one way to go out, and by this meanes you fhall abridge her much of her helpes, and driuc her to forfake her fhites and fleights.

There are alfo fome hares giuen to run incrodden paches, and high waies, to the end the dogs might not come by any feent of them, there being neither braunch of tree, nor herbes, nor moifture, which can rouch their bodies, togather any fcent for the dogs, in fuch manner as chere would, if they were in other couert places, as woods, corne, and other coole places, and efpecially when they feed in any greene corne, becaufe they reft their bodies in one place. When the horfe-man fhall find fuch hares; and thall perceiue the defaultof the dogs, by reafon of the high way, he muft draw them onforward all along the faid high way, following them continually vntil foch time as the dogs find her out gate, or elfe till he haue found fome little valley or coole place in the middeft of the way, where the dogsmay feeme to haue found her feent. And he himfelfealfo muft light from off his horfe to fee if that he can efpie any of the traces of the hare,fuch as we haue defcribed them before. And by thefe traces or footIteps, he fhall by little and little picke out which way the is gone, and this amongft huntf-men is called the pricking forth of the hare, one obferuation no leffe needfull thanany other obferuation whatfocuer: for it is not to be vfed onely in plaine high
waies and foot pathes, but alfo in any other ground which is plaine, as vpon fallowelands, or other worne ground where the greene fwarth is taken away: and this aboueall other is the moff fafeft and fureft way for the recouring of a loffe, becaufe it goes not by coniecture or imagination, but by certaine knowledge, and by knowledge of that member by which the hound hunceth only, and by which he bearech the whole feent he feeketh.

The hare hath a thoufand other nifts, all which in generall the warie and wilie horfe-man may meet withall, if when he hath feene her ferch her firf compaffe, and withall got the knowledge of the coatt, which fhe betaketh her felfe vnto in her courfe, he get before her to behold her with his eies, and in the fame place incourage the dogs, making them to fetch great circuits, to the end they may be fure to include and compaffe all her wiles and hifting tricks.
Hares liue not aboue feuen yeares at the mof, and efpecially the males: they haue this tricke with them, that if the maie and the fernale doc liue together ina countrie, they wil neuer fuffer other ftrange hares to abide there, if they can remedie it, except is be fuch as they haue bred: and thereupon fome fay, That the more that any place is hunted, the moe hares are found there, becaufe that frangers, and thofe of other countries do come thither.
The hare being killed, it will be good to giue che dogs sheir fees, the better to incourage ehem, and to caufe them with much more ioy to hunt in that place afterward. This their repaft or fees may be made of bread, cheefe, and fome other dainties, all put into the bodie of che hare, that fo it may bee moiftned and ouefdrowned with bloud, and after fpread vpon the cleane graffe. For their fecond fort of meate, as a more royall banquet, if there be fore of hares taken, it will bee good to vncafe one and firf taking out her lights, then to caft the whole carkaffe to the dogs, giuing them leaue to teare and eat her : and after that they haue eaten her, to giue them bread 1eaft chey fhould proue ficke at their fomakes, and caft their gorge, fecing that hares flefh is enemie vnto them.In like manner when the dog which is taught to hunt the hare, fhall bee brought to courfe the hart, hee will not make any more account of the hare, becaule he hath found and tafted the flefh of the hart to be far better than that of the hare.

## Снato. XXXIIII.

## What profit commetb by the killing of the Hare.

1ke commoditie as is to be found inthe killing of the hart and wild bore, may be found alfo in the hare : and to fpeake firft of the food rifing therof, we fee not any food more common, nor more in requeft in our countrie of France than the hare. It is true in deed, that Phy fitians do iudge the fleth of the hare to be melancholike, hard to digeft in the flomake, and begetting a groffe iuice: but chis is to bee vnderftood of old hares, as fuch as are aboue a yeare old, and fuch as are kept tame in boroughes and other inclofed places: but the young leuerets haue a very pleafant and daintie flefh to eate : yea in thofe which are grownic great, there are fome parts which are in requeft, as the loines, the fhoulders and hanches. There inay be marked in chis little beaft a marueilous fruiffulneffe in nature, for that monethly fhe bringeth forth a great number of yong ones. I know that fome of the hafer fins thinke, that the male and fermale are of both fexes, and that both of then do conceive and ingender as if they were hermophrodites : but it is a falle conceiued opinion, and a thing altogecter ftrange and vinaccuftomed to be in the workes and generation that is according to nature. And it is furchermore molt true, that the female being bagd, cealeth to ingender againe for the timé, that is to fay, to admit the companie of themale, thereby to haue a fecond conception, but by and by after flie hath kindled,

The fuxe of the bellie.

The forme of the reines.

The gall.
The ditig.

T'be bloud.
The bonc of the bare.

The taketh the buck againe, and that is the caufe of their fo great fruitfulneffe : as much may be faid of conies which are a kind of hare.

As concerning the medicinall vertues of the hare : the fleih of the haire well rofied is a great helpe againft bloudie and humorall fluxes of the bellie: the liuer dried in the ouen, and made into pouder, is fingular good for them which have a weake liuer.

The braines being throughly boiled and rubd vpon the gums of young children, helpeth shem of the paines they haue of their teeth, and helpech forward their growth.

Take a whole hare both skinne and haire (faue that you mult take away her in. tailes) clofe them vp in an earthen por very well fopped and luted: afterward put the porinto a hot ouen, and there leaue irfo long, as till the whole bodie may be made cafily into pouder, in fuch fort, as that there bee left no manner of moifure, for elfe you thould bee conftrained to put the pot againe into the ouen vntill euery part and parcell were brought into pouder. The weight of a French crowne of this pouder, taken with white wine ellerie morning two houres before meate, the reines and bladder : but yet before the vfe of this pouder, the bodie muft bee purged : and during the time of the vfe thereof, there muft bee applied vpon the reines, two plates of lead of the breadth of foure fingers, fewed together betwixt two linnen clorhes.

The gall of the hare mingled with fugar, cleanfeth the cies, and taketh away the pearle or fipots of the cies.
The dung of the hare being carried about somen, hindreth their conception: but one thing of a certainetie, if it bee put vp into the fecret parts of a woman in forme of a peffaric, it fayeth the termes following exceffucly, and drieth the mother that is too moift.
The bloud of the hare dried or fried, and applied vnto a fcab or ringworme, drieth and healeth it incontinently.

The hare hatha littie bone in the ipint of her legs, which is foueraigne againt the cholicke.

# The hunting of the Brocke and Foxe. 

Сиap. XXXV.<br>The profic comming of the hunting of the Fox<br>and Brocke.

.He killing of Foxes and Brockes, neither bring pleafure nor profit to the hunters, taking profit in this place for meate and nouriflument : for the Foxe his flefh, (and much leffe the Brockes) is nothing pleafant to eate, in as much as it hath an vnfauourie, frong, and wild kind of tafte. Howbeit Galen in a cerraine place lettech not to fay; that the flefh of the Foxe hath the like facultic and vertue with that of the Hare : and yet in another place, as rerracting his former affertion he faiech, that the Foxe is of the fame temperature with the dog. It is certaine thai fome countrie people hauing not the benefit of any other victuall, liue not vpon any other than Foxe flefh, but it is in the time of Autumne onely, becaufe that at fuch time the Foxe feedeth of noching but of grapes, by which meanes it may bee that his flefh may proue fomewhat good. Howfocuer it bee, if any profit grow vpon the killing of the Foxe and Brocke, itis only becaufethey deuour fowle, and annoy, the conies and warren,

Adde hereunto that the Phyfitians do make great account of the lungs of the fox, for the difeafe of the lungs and fhorneffe of the breath: and of his greafe, for the paine of the finewes: of his bloud, for the ftone : of the oyle wherein the whole bodie of the Foxe hath beene boyled, either quickeor dead, (whereof we haue folen forth in ineding in the third booke) for all manner of ioint-ach : and of the priuie members of the cine. Foxe, againtt the fone.

## Chap. XXXVI. <br> Of the tro forts of Foxes and Brocks.

yEfore we goe any further, there are two forts of Foxes, and ewo forts of Brocks fome Brockes, that is fay, great Foxes and littleones accuftomed to lie and like bogs and lurke in their dens : and Brockes fome like fwine, and fome like dogges. Jome like dogss: The two forts of Foxes are fufficiently knowne. The hog-like Brocks are whinfh, and haue the haire aboue their nofes, and vader their throats a great deale more white than the dog-like hane, their bodie of a greater bulke, their head and fnowt allo more grofte. The hog-like in going out of their dens do freely dung, but euermore they make a little hole with the end of their fnowe before, or elfe ferape one with their feet, and then dung therein : the dog. like make their dung a fatre off from their earths. The hog-like commonly make cheir dens in fandie or ocher ground that is eafie to dig, and open places, to haue the heate of the Sunne, and being giuen to fleepe continually, they are fatter than the dog!like. The dog-like make their aboad in tougher earth, or elfe in rockes, making their holes and dens deeper and narrower than the hog-like, becaufe they cannot dig the ftiffe and tough earth or rockes, ast the other do the fand and light ground. The dog-like haue their nofe, throat, and eares yellowifh, after the manner of the throat of a marten, and they are a great deale blacker and longer legd than the others. The two forts accompanie not together, but they feed of all manner of flefh : they doe much harme in warrens, efpecially vnto the young rabbets which are within their nefts, and are very fiweet and daintie, but more to pigs and hogs, whereof they feed more than of any other flefh: they feed alfo of all forts of wild flefl, as geefe, hens, and fuch like: they are very cold and chil, and if they be left in any roome where fire is, they will goe lie in it and burne their feet: they will liue hardly, as alfo they haue a hard skin: they feare their nofe notwithftanding very much, neither can one giue them euer fo little a blow thereupon with a ficke, but they diefodainly: they are deadly enemies vnto the foxes, and oftentimes fight with them.

## Chap. XXXVII.

> Of two foris of earth-dogs of wall to courr e foxes and brockes withall, and the manner of teaching and tray. ning of thems tbereunto.

(6) 5Oncerning the hunting of the Foxe and Broke, it is to bee performed with earth-dogs, which are of two forts: the one hath crooked leges, .nd commonly flort haire : the other hath fraight legs, and a flagd hare like warer-fpannyels: thofe which haue the crooked legs creepe mors eafily moo the carth than the other, and they are beff for the brocks, becaule they flay long there, and keepe better withouic comming forth. Thofe which haue ftraight legs ferue for two ves, becaule they run as courfing dogs about the ground, and alfo take
the earth more boldly then the other, but they tarrie not fo long, becaure they vexe themfelues in fighting with the foxes and brockes, whereby they are forced to come forth to take the aire.

Now if if fall out that the hunt-man hauce not earth dogs readie taught, hee may traine them in this manner. The timeto begin to take chem in hand, muft bee when they are betwixt the age of eight and ten moneths: for if he will not be brought to take the earth ata yeare old, he will farce euer be able to bee made to take it: againe, they munf nor be roughly deale withall in the time of thcir training, neither fo handled, as that they may take any hurt of the brockes in the earth, becaufe that if they fhould be beaten or hardly handled, they would neuer tak the earth more. And for that caule it muft bee carefilly looked vinto, that fuch young trained dogs bee neuer made take the earth, where there are any old foxes or brocks, but to let them firf flay out cheir yere, and be throughly nurtured, and furthermore there muft fomeold earth dogs be put in alwaies before them, to indure and beare off the furie of the brocke.
The moft conuenient and readieft way to traine them, is shus :as fuch times as foxes and brocks haue young ones, you muft take all your old earth dogs, and let them take the earth, afterward when they fhal begin to ftand at an abbaie, then muft the young ones be brought vnto the mouth of the hole one by one (for feare they fhould beate themfelues) and there caufe them to heare the abbaie. When the old brockes or foxes fhall be taken, and none remaining but their cubs, then you muft take vp and couple vp all the old earth dogs, and afeer leet loofe the young ones, incouraging them to take the earth, and crying vnto them, Creepe into them baffet, creep into them, Hor take them, rake them: and when they haue hold of any young brocke or foxe, they muft bee let alone, till they hatie frangled him in the burrow or hole, taking heed that the carth fall not in vpon them, leaft it might hurt them : afterward you muft carie all the yong brocks and foxes vnto your lodgings, and caufe their liuers and the bloud alfo so bee fried with cheefe and fat, making them meate thereof, and fhewing them the head of their wild flefl?

They mayalfo betrained and taught after another manner : as namely, you muft caufe the old brocks and foxes to be taken aliue by the old earth dogs,and with pincers fit for the purpofe, take and breake all the teeth of the neather iaw, wherein the great gripers fand, not touching the vppermof at all, to the end that by it may continually appeare and be feene the rage and furioufneffe of the beaftes, alchough they be not able to do any harme therewith at all: afterward you fhall caft earthes in fome meadow plot of fufficient largeneffe, for the dogs to turne themfelues, and go in by couples on a breft, couering the burrowes afterward with boords and greene curfes: this done, the brocke muft be put in, and all the dogs both young and old let flip and incouraged as hath alreadie beene faid. And when they haue baited him fufficiently, you mult frrike feuen or eight great blowes vpon the fide of the hole swith a fpade, to harden and acquaint them therewith, againf the time when you fhall ftand in ncede to vfe deluing: then you mint take vp the plankes ouer the place where the brocke is, eaking hold vpon him with pincers, killing him before them, or elfe caufing him to be fiffed by fome grey-hound, that fo there may meat bee made of him for them. And you muft haue cheefe which you muft caufe to be caft them prefently afier their wild flefh, when it fhall be dead : and if peraduenture you would not breake all the teeth of the neacher iaw of the brocke, yet you muft cut off all the greater and mafler reeth, that fo he may be kept from biting and doing of mifchicfe.

## Camp. XXXVIII.

## The manner of killing of the Foxe.

5yfor the killing of the Foxe it is mach more eafie than that of the Brocke: herein efpecially, feeing that after they once fcent the dogges which baite them, they gather chemfelues together, and rufh out vpon athe fodaine, except it bear fuch time as the temale hath young ones, for then they will not forfake them.
Naturally they are giuen to dig their earths in places that are hard to be digged as in rockes, or vnder che roors of trees: they haue but one hole, but it is both ftrait; and reachech far.

Somehunt-men are of opinion (and fure it is very likely and credible) that the Foxe neuer makech his owne earth orkennell : for though he bee the fubtileft of all beaftes, both touching his owne faftie;and the gaining of his pray; yet he is nothing laborious or giuento take paines for any ching, bur his bellie onely, neither hath nature giuen him any efpeciall inftrumensf for the fame vf, more than to other mungrell dogges of which he is a kind; fo that he may frrach or digge vp the earth a little for the hiding or maine couering of his pray: but to make fuch tedious, deepe, lory and winding vaults, and in fuch difficult and tough places is hard to bee coniectured : whence it comes, that thofe of better obferuation affirme, that the Brocke or Badger, or as fome call him the Grey, by reafon of his colour, who is a beaft of infinit great induftrie, cleanlineffe, and fearefulneffe, doth firft make the Foxes carth, but not with any detcrminate purpofe that the Foxe fhould inioy it, but as a place of refuge and refl, for himfelfe onely, which as foone as the Foxe findeth our, he prefently watchech the going out of the Badger, and then entring in at the hole, he defileth the mouth and entrance thereof both with his dung and piffe (which is the loathfomeft of all excraments) in fuch filthie and hatefull manner, that the Badger returning and finding his lodging fonaftily beraied, prefently heforfakes the place and commech there nomore, but leaucs is so the Foxe and digs himelfe a new cell in another place. But to our former purpofe, when the the dogges haue once ouerchrowne the Foxe, he refiftecth a litele, but it is not with any fuch boldneffe and courage as to daunt the dogs, neither hath he any daungerous bite : and yet fome fay, that he hath his fhift,as to clap his taile betwixt his legs, (when he feeth himfelfe once ouerthrowne by the dogs, and to piffe vpon it, and therewithall to befprinckle the dogs, to the end that feeling the fench thereof, they may be driuen backe and let ketho himdepart.

If youtakeabitch Fox when fhe is fale, and cutting away her priuie member, and the gut annexed chereunto, with the litele tefficles orflones, which are the caufe of ingendring, (being the fame that gelders vee to take from bitches, when they geld them (and pur all the fame cut in prettie gobbets into fome little pot all hot as they were cut away, and take Galbanum and put it in, mingling all together, and coucring if, that all may not breath out : you may keepe it a whole yeare, and make it ferue at any time shen you would make a traine to allure the dog Foxe, by taking the skin or a collop of lard, and pucting it vpon a gridyron, and when it fhall be broyled and all hot, moifting it in the pot where the priuie part of the Foxand Galbanum is, therwith making all your traines : then you fhall perceiue the male Foxes following of you euery where : but he that makech the traine, minftrub che foles of his fhoes with cowes dung, leaft they fhould take the feent of his feete : Thus you may fee the means how to draw on the dog foxes to any place where you may take chem in a fnare, or gin, and fo kill them in the euening with a crof-bow.
This is moft true, that if you rub an earth dog with brimftone, or with oile of the
lees of oyle, and thereupon caufe him to take the earth, where there are foxes or brocks, they will get themfelues thence, and come no more there for two or three monechs. There is furthermore another thing to be noted, that after that the earth dogs are come out of the earth of foxes or brocks, they muft be wafhed with warme water and fope, to rid them of the mould that thall bee gotten berwixt the haire and the skin, for elfe they would grow fcabbed of a fcab that would very hardly heale

Some fubtile foxe hunters take the foxe withourany helpe of dogs, with this wile : they rub the fole of their fhooes with a great peece of lard lately rofted, at fuch time as they are about to recurne home from the wood, or from any plaine wherethey know that there is any foxes: after the fame manner they vfe to fatter by the way (asthey goe) litele morfells of hogs liuer dipped in hony, drawing after them a dead cat : whereupon the foxe following the trace at hand, allured by the fcent of the lard and hogs liuers : they have a man accompanying them with a harquebuze, or arrow so kill him ata blow.

## Сhap. XXXIX.

## The manner of killing the Brocke.

 for the killing of the Brocke, it is more difficule than the killing of the Foxe, (as hath beene faid) becaufe their holes are deepe and narrow, and confifting of many conucyances and paffages : for which caufe it is mecte and conueniens for the vndertaking of fuch a worke, firft to haue foure or fiue men furnifhed with fpades and tooles fir for the digging of the earth : fecondly, halfe a dozen of good earth dogs at the leaft, euery one armed with his collar about his necke, of the breadth of three fingers, and hung with little bels, to hunt she feuerall earths, to the end that the Brocks may be driuen the fooner to their ftand, and the dogs defended the better by thofe collars from taking any hurt : and when it is perceiued that the Brocks are at their ftand, or that the dogs grow weary \& out of breath, or the bels to be full of earth, you muft take vp the dogs, and take away their collars from them : wheras at the firf they are of good feruice, and caufe the Brocke the fooner to take them to cheir ftand.
But before you let flıp the dogs, there muft regard be had to view the earths, what manner of ones they be,and the place wherein they lic, and where the furcheft parts of them are; for otherwife a man thould but loofe his labour: in fo much as if the earchs fhould be on the fide of a hill, it were requifite that the dogs were put in vnderneath toward the valley, to the end that the brockemay be compelled and forced to the vttermoft end of the vppermoft holes, where the faid earths are not fo deep as the other, and therefore may the more eafily be digged.
But otherwife if the earth hould be in fome raifed peece of ground, and therwithall round about the fame, the rifing ground being feated in the middeft of a flat peece of ground, then the dogsmuft be put in at the holes which are higheft, and neereft vnito the top of the rifing ground :but before they be let flip and pur into fuch earths, there mult twentie or thirtie blowes bee giuen with the head of the fpade vpon the higheft parts of the earths, thereby to caufe Brockes to remooue from out of the middeft of them, and to caufe them to defcend to the furtheft ends of their earthes which are in the bottome of the rifing ground. There muft alwaies two or three dogs be let flip at the mouths of the holes, that fo by their vehemencie and eagreneffe they may part and put a funder the Brocks which ihal be together, and force them to flie to their refts.

They have a tricke to ftand the abbaie at the places where their holes doe meete, and foutly to refift the dogs in fuch places : which, when it is perceiued, it is requifite to fmite three or foure blowes with the fpade, and if yet for all that they will not
remoue, you muff forthwith difcouer them with an augar. Then when it is perceiued that they are fled vnto the furcheft part of their holes, you muft not pierce through right vpon them, for then they would bolt forward againe into the wide fpaces and meetings of their holes, and offer violence vnto the dogges: for whicli caute it behoueth, that the hole be bored right ouer where the voice of the dogge foundech with a round augar, for che nature thereof is to caft vp che carth, and niot to le it fall downe within: and after that is done, prefently to put a flat augar into the hole of the round augar, chat fo it may croffe the hole right in the middef, leaft the Brock hould recoile vpon the dogge: and if it be poffible to fhut the dogge forth on the hinder part of the augar, it will be very good, for and if he fhould be fhut within toward the fore-part of it, the Brocks mightbeat and handle him roughly, teeing that fomecimes there are found muftered toyether in the vutermult end of one hole lix or feuen, vvhich might beat and driue backe the dogge. When the hole is thus croffe-barred with the flat aulgar, you muft prefently make a trench with fpades and fhouels, to the end that it may ferue to fet a man in, and at conuenient time to let in forte dogges by the faid trench, and to caule chem to hold a bay in that place, vvhere a man may fee warring and fighting on all fides. Thefe things thus furthered, care mult be had, that the Brockes doe not couer themfelues with earth, vvhich they are verie readie to doe, being driuen vnto their vttermoft places of flight, infomuch, as that the dogges are fometime vpon or ouer them, and yet not know where they are. Afterward, their fort being throwne downe, you muft pull them forth, not by the whole bodie, but by the nether iawes: for if you fhould take them by the vvhole bodie, they might hurt the dogges: and if by the vpper iaw, then you might hure their nofe, which is in them very tender, infomuch, as that being hurt therein, be it neuer fo litele, they die incontinently. When they are thus drawne out, they would be put in fome facke, and after carried into fome court or garden, clofed in with walls, to make them courfing-game for young earth-dogges. But in the meane time it will be good to draw your bootes vpon your legges : for when they are once throughly heated, they fpare not to runne vpon men after the manner of the vvild Bore, in fuch fort, as that offentimes chey carrie away with them pieces of their fockings, yea, the fleflo alfo, which is vnder chem.

## Chap. XL.

## The bunting of the Conie.

(2x (x)E haue entreated of Conies largely ynough vvhere vvee fpake of the That Coniss ate Warren, the hunting vvhereof is profitable, not onely in refpect of barinefill. the prouifion of foode wvhich it miniftrech, and that verie good, but likewife in refpeet of the dammage vwhich this little beanf bringeth vnto Corne, Trees, and Hearbes : and that fo dangeroufly (as Strabo vvri- Strabo. teth) as chat certaine Nations vvere conftrained, in the dayes of the raignes of Tiberius and Auguffus, to fend embaffadours vnto the Romanes, that they might haue their aid and fuccour aggainf the vrgent and fore preffing iniuries and dammages vvhich their Countries fuftained through the exceffiue number of thefe litte beafts.
Wee have made in our Treatife of the Warren two forts of Conies, the one of the Clapper, and the other, of the Warren : Thofe of the Clapper are eafie to hunt, becaufe they are tame, but thofe of the Warren are fomewhat more hard to take, becaufe their nature is more enclining vnto wildneffe : The manner of hunting them is chiefely of two forts, and both of them verie well knowne, that is to fay, either with Purfnets, or with the Ferrets: As concerning the Ferrecs, they are The buxzting of put into the holes of the Conies to fighe with chem, vvhereby they being aftonifhed the conies of the
and frighted, bolt forth by and by out of their holes, and fall into the purfnets which lie fpred vpon the tops of their holes: fometimes the Ferret doth kill them within, which falleth out to bee the occafion of no fmall attendance ofentimes vnto the hunters.

## The catching of Birds.

## Снар. XLI.

## That meri of old time made no account of catching of Birds.

He taking of Birds hath not beene much approued nor liked of, by mew of old time, by reafon of the little exercile which it affoordeth : Reeing they made no account of any manner of hunting, whereby the bodie receiued no kind of exercife, whereby it might be made more nimble and readie to mannage macters of greater importance : againe, we find not any mention made of the hunting of Birds, in the bookes of the auncient writers, as Ariftotle or Plinee, who feemeth not to haue beene ignorant in any thing that might make for the truth of his writings : neither yet of hauking, which is the nobleft kind of hunting of birds of all the refl. All which notwithftanding, the men of our time haue not ccafed to put in practife many forts of taking of birdes, as, with birdes of the praie, which excelleth all the reft, with great nets, fmall nets, tonnelling, fire, fnares, bundles of flraw, with the crof-bow, long-bow, noofes, pit falls, chirping, pipes, horfe, crow, bell, hand, and many moe waies, which are well enough knowne to birders: we wil firt fpeake of hauking.

## Of Hawking。

## Chap. XLII.

winat Haxiking is?


T is moft certaine, that the skill and knowledge of hawking hath beene brought into an art of late times, as hath beene faid: auncient writers, as Ariftotle and Plinie, the admirers of high and excellent things, and the diligent and induftrious fearchers out of all things, would nor haue caft behind them fo great and famous a worke of the skill of man, as to lure and reclaime the birds of pray, but would haue written of it, if it had beene then in vfe. For this is a wonder to fee a bird which hath been wild to become tame, to drop out of the skies and to light vpon a mans fift : to foare aloft as high as the cloudes to feeke other birds to kill them, and alfo to make warre vpon the foules, and fuch as liue below vpon the earth, and withall to take certaine foure footed beafts, as the Hare, Rabbets, and Conies. This skill is now a daiesfo highly honoured, as that the great nobles of the world, will that it fhould bee confecrated wholly to themfelues, as referuing it for a paltime onely befeeming them, and in this our countric of France it is had in fuch price, as that the gentleman which is ignorant in this skill, and that other of hunting, is lightly prized, as though he lackt the two things which of all other (chilualrie and martiall skill excepted) are the moft rare and excellent.

Now as hawking is the art and skill of luring and reclaiming of birds of the pray,
to caufe them to flye at other birds, liwing either in the ayre, vpon the earth, or about the vvaters : To hee is called a Faulconer, vvhore place and office it is to reclayme fuch birds: vvherein, if vuce pleafe to looke a little more neerely into the name, it fhould feeme, that the later Frenchmen haue followed the clder and auncient Frenchmen and Greekes in their giving of names: For euen as the auncient Frenchmen were of iudgement, that the name of $S$ acre, whoth the Greekes named iscos, and the Latines Accipiter, was the generall name, vnder vohich fhould be comprehended all birds of prey (howfoeuer that Sacre in French, and ice $\xi$ in Greeke, be the fpeciall name of a bird of prey:) euen fo the Frenchmen of our time have agreed together, that the Faulcon fhould be the chiefe in his kinde, and affoord the generall name (as by the way of furpafing excellencie) vnio all other birds of prey: becaufe that the Faulcon (compared with all che birds of prey) is the beff of vving, and exceeding all the reft in goodneffe, floumeffe, and tractableneffe: as if a man were difpofed to fay, the Faulcon gentle, the Pilgrim Faulcon, the Tartarie Faulcon, the Barbaric Faulcon, the Gerfaul con, the Faulcon Sacre, the Faulcon Lanier, the Punio cian Faulcon, and fo of the reff.

## Cнир. XLIII.

## What birds are good to make Hawkes of.

Ow wee mult not thinke, that all birds of prey are good and fit to make Hawkes of, but onely fuch as are flour, and of a refolure courage, and are able to flye ar anie bird vvhatfoeuer, either vvaterfowle, or land-fowle: of vwhich nature, there are tenne fpeciall and feuerall kinds, being fufficiently knowne of eueric one, and for the moft part verie common to be had in Fraunce, that is to lay, the Eayle, the Gripe, the Gollawive, the Sparrow-hawke, the Gerfaulcon, the Merlin, the Faulcon, the Lanier, the Sacre, and the Hobbie.
Foure of them flye from the fift, and kill at randome, as the Gofhawke, the Sparrow-hawke, the Gerfaulcon, and the Merlin: and foure of them lye aloft in the ayre, as the Faulcon, the Sacre, the Lanier, and the Hobbie. As for the Eagle and the Gripe, they are not anie thing knowne in France. A great part of thefe birds (the Gripe onely excepted) haue the feathers of their traynes and vvings verie much gliftering for the moft part. All of them haue their beakes and tallons crooked, and they are almoll like one vnto another, for they thew no difference, except it be in greatneffe, fecing likewife that their colour doth diuerfly change according to their mues, vwhich caufe them to be called Hagards, or Sores, all one with that which is vfually done by dried Herrings, vvhich are called Sores, or red Herrings.
There are verie manic birds of the prey vyhich are rouers continually abroad, neither can it be learned well from what place or countrey they come, nor vvhither they goe: fo that wee might alwaies remaine ignorant of what countrey our Hawkes are, vvere vvee not giuen it to vnderfand by them vwhich vfe to bring Hawkes out of Italie, Germanic, and other ftrange countries. Such as bring vs Hawkes, doe take them for the mof part with lime-twigges, which is the caule of the crulhing of their feathers, vvhich yee may at pleafure be taken away vvith vvarme vvater.
But whether they be brought from farre, or bred neere about vs,for to reclaime and bring them vnto the lure, firft, they muft not be taken out of the neaft befure they be frong, and growne pretie grear ones, and able to ftand vpon their feet : for and if
they fhould be taken away fooner, yet they muft not be handled, but kept in a neaft as like vnto their owne as may be. Aferward, as the time fhall affoord, they are to be fet vpon blocks, or vpon fome pearch, for the better preferuing of their feathers from grating vpon the ground.
They mult be fedde with liue meat as oft as may be, becaufe it will make their feathers to put forth the better. Notwithftanding, the meat and flefh that is more than ordinarie good for them, is to feede them with the leyges or necks of Hennes: cold fleh is naught for them: Beefe, Porke, and fuch other, are of too ftrong digeftion for them, and efpectally the flefh of night-beafts, that is to fay, fuch as flie about in the night, and are fcarce eure feene in the day time: fuch are the great Duke; the little Duke, the Owle, the Shrich-owle, and the Bat : for if they Thould eate thereôf, they would dic. The flefh of Pigeons, young Swallowes, and Mutton, is farre better for them. Hennes fc ch , being fweete and pleafant, doth trouble the belly of the bird, it hee eate ir cold: vvherefore, the bird that is greatly delighted with fuch flefh, might poffibly forfake the game, and feize vpon Hennes, if fhe fee any in her way as fhe is flying. Wherefore to meete with this inconuenience, you muft feede the bird with young Pigeons, or young Swallowes: the flefh of Pies and old Pigeons is bitter, and bad for thele kinds of birds: Cowes fleth is bad for them, as making thom too laxatue, vuhich commeth by the heauineffe thereof, vwhich cauferh hard digeftion. And if necefirie compell you to feede them with grofle flefh, for want of better, let it be cempered and wafhed with warme water: if it be in Winter, you mult preffe it: and in Summer it muft be wafhed in cold water. The fleth that you feede your birds withall, mult be picked, that there bee not fat finewes or veines left vpon it. You mult not fuffer them to eate whiles they will at unce, but with fome fmall diftance of time betwixt, letting them reft in eating : and now and then you muft hide away their meate, before they bee full gorged, and then afeerward giue it to them againe: but when it is taken from them, and alfo when it is giuen them, they muft not fee it, for feate of making them bate.
Likewife it is good to make them plume vpon fmall birds, as they did in the vvoods. Yearely in the beginning of Autumne they mult be brought downe by laxative medicines, if they be too high: as namely, by giuing them Aloes vvith their meare : vvhich muft be of fome good, liue, and warme meate, for otherwife they would be taken downe too much. After that they haue beene purged, you muft prepare them for the game: and againe, when you are purpofed to flye them, it will not be amilfe to giue them cafting of Towe, couered with flefh, and made in forme of a pill, and that at night, to the end they may cait it vp againe in the morning, with much more flegmaticke matter: for by this meanes they will become more

To caule ber to
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flice out. healthfull, of a better appetite, more emptie, fwif, and readie for the prey, Porkes
flefh giuen them warme with a little Aloes, maketh the bird loole and to flice out readily: but you muft obferue and fee that fhe be put in a warme place after fhe hath beene purged, and withall, to feede her on your fift with fome liue bird, for at fuch times her entrailes are much dried. They are difcerned to be ficke, vvhen Signes declaring their fundament fwelleth and becommeth red, as alfo their nofthrils and eyes. And
the birds of the thus much of the luring and reclaiming of them in generall : now let vs goe vnto the birds of the
prey to be ficho the particular.

## Снар。 XLIIII.

## of birds of the prey in particular.

48,Mongft all birds of the prey, the Vulture (called of the Grecians 24, and The Cripe, of the Latines $v_{\text {ulture }}$ ) is the greateft: a paffenger (or bird for a time) in Egypt : knowne in this countrey rather by his skinne and feathers, than otherwife, becaufe the Skinners are wont to make fomachers to lay ouer the fomacke, and the Fletchers feachers thereof, to fet vpon arrowes. They may be fed with fmall tripes, dead carkaffes, and out-caftings of beafts. Likewifc fome report of them, that ordinarily they follow Campes, becaufe of the dead bodies. They cannot rife from the earth to flie, except they firf take their aduantage by running, or elfetake their leaue vpon fome great burt.
The Eagle is called the King of birds: very vnhandforne to carrie vpon the fift, by reafon of his corpulencie: hard to reclaime, being once wild, becaufe of his boldnes, nuight, readines, and ealie inclination to hurt the Faulconer in the face, or elfewhere. Wherfore, who fo defireth to haue him good, muft take him in the neaft, and reclaime him with courfung-dugges, to the end, that when he is to flie, he may follow them, that fo they hauing put vp the Hare, Foxe, Roe-buck, or any other fuch beaft, he may feize vpon it to fay ic. He may be fed with any manner of flefh, efpescially of fuch beafts as he takech and feizeth vpon. The Faulconer muft be diligent to attend him weil, becaure he is very apt to flie away; but that mifchiefe may be preuented, by fewing the feathers of his traine in fuch fort, as that he cannot fpread them to flye with them: or elfe by plucking bare the hole of his fundament in fuch fort, as that it may appeare: for thereupon he being driuen into a feare of the cold, he will not be haftie to foare fo high. The Eagle is knowne ro be good and faire, when he is of a red colour, hauing deepe cyes, and a whiteneffe vpon his head or back.
The Sparrow-hawke \& the Gofhawke differ not in any other point than in great- The Sparrows): neffe and ffrengeth: beccure the Golhawke is of a fronger nature, and cherefore not fo hawhe and the foone Gick as the Sparrow-hawke:they are both of one kind, as are alfo the Rauen and Goffawheo the Jay, the great dogge and the little one, and both of them are of two forts, either fuch as are taken abroad in the woods, or elie fuch as are taken young out of the neaft. Of this fort there is good choife to be made, in refpect of their aptneffe to learne; as alfo ot thofe which are fliers, buc haue neucr mued their fathers, neither made any aire, or fed any young ones.
The goodneffe and fairencfice of a Sparrow-hawke is knowne by their being greas and fhort, and yet hauing a little head and fomewhar round aboue, a hhicke beake, the eyes fomewhat hollow, and the circle about the apple of the eye of a colour betwixt greene and white, long and fomewhat thick neck, open in the place where the reincs Jie, fharpe towards she traine, not very long, fet with good and large feathers, hauing flat and fhort legges, fharpe tallons, thicke and broad fhoulders, long and fmall feet, blacke feathers when they are caken young in their aire, and which follow the old one from bough to bough, hauing neuer yet mued.
And though here, for the familiartie and common vfe we haue of them, I put the Sparrow-hawke before the Gofhawke; yet it is to be vnderftood, that the Go!hawke is a great deale the more worthicr Hawke, both in refpe $\mathfrak{C}$ of her beautie and comelineffe, as alfo in refpect of the worth \& effimation of the prey fhe killech: for amongft Faulconers, that Hawke is held worthieft which killech the greateft prey: The Mal-Jard-killer be valued before the Partridge-killer, and the Hearne-killer before the Mallard: fo the Sparrow-hawke, which is mof vfuall for the Bufh and Blackbird, at the moft can afpire no further than the killing of a Pooté, or a Parrridge, cannor compare with a Gofhawke, which killech not only the Parrridge, but the Phefant, Hare,\& Conie. Moft of the French Golhawwes breed in Norway, but they are the worft kind,
and neither fo valiant, found or durable, as thofe which are bred in Ireland, efpecialin the North parts thereof, which are eafie to bee knowne from any other countrie gofhawke, by the flender and fine fhapes of their heads, their exceeding quicke and fharpe looking eies, and the palifh or fea-coloured greeneneffe of their legs. As for the fparrow-hawkes, they are bred both in France, England, Ireland, and many other countries, and very good and hard hawkes in all thofe places: yet are fome ayryes better than other fome, according to the fcituation of the place, and temperature of the ayre, for fuch as are bred in warme climats, and where they pray but vpon fmall birds, as fparrowes, robbins, wrens, linnets, and fuch like, are nothing fo valiant as thofe which are bred in cold climats and tall woods, where they pray vpon black. birds, iayes, pyes, and fuch frong and fiercer foule : neither is the ayre of the wood fo good as the ayre of the rocke, becaufe their pray being fo neere vnto them, they do not labour or take that toyle which the othet doth, and therefore are much more floathfull of wing, and leffe giuen to paines taking : alfo the ayrie which buildeth higheft and vponthe talleft cimber trees is the beft, becaufe it Sheweth courage in the mount, and thofe which build low and neere to the fprings are worft, for it fhewes a faintneffe of firit and a floathfulneffe in nature. Now though the beft taking of either of thefe bawkes(as before I faid) is when they are branchers, and are able to follow their dams from bough to bongh, and to foot the pray which the killeth for them: yet fome Faulconers loue to take them from their nefts, as foone as they be difclofed, and to bring them vp infuch maner, as they may know no other damme but their keeper, being perfuaded that fuch familiaritie and long acquaintance with the man, makes them more louing, and leffe apt to take toy and flie away Differences and than the other by many degrees, and doubtleffe it is moft true: yet thefe thus brought vp, and which are called of Faulconers Tias-hawkes, are nothing fo valiant as thole cher hawphs and much familiaritie or acquaintance with called ramadge hawkes. Bendes this, too the fieshowlss. ting, that they will neuer leaue crying, or making a noife as oft as they are either bare faced, or want any thing they defire : befides they will be fo doting of the man, that you fhall be a much longer time in entring them or making them foot the praie than the other, becaufe they will expect euery thing from the keeper, and rather flie and fit vpon his fhoulder than labour or ftriue for the pray which flies before them: therefore howfocuer the care of holding or keeping your hawke faft vnto you, may intice you to efteeme the Iiaes hawke, yet you fhall euer find the ramage or brancher much leffe troublefome, and fitter for your purpofe.
The way to take them is thus : the birder mult bee hid behind a bufh, and before the buhh a plaine or fmooth aire, but fourefquare, and fixfticks prickt downe about it of the thickeneffe of ones thombe, and of the height of a man, three on euery fide : to thefeftickes you fhall tie nets of greene threed that is very [mall, and to them a fmall line or cord, which thall be at the commaund of the man that is hid behind the buth: within the aire there thall feede diuers fmall birds, efpecially fpinks, or chaffinches, whereupon the fparrow hawke will not faile by and by very fiercely to flic into the neft, thinking to take the birds, but indeed becomming faft, and ouercaft in the nets : then the birder fhall take ber, and bind her wings below, together with her legs and traine, that fo the may not ftruggle or beat herfelfe.
They are purpofely woont to hide themfelues in Winter vpon long poles, amongft high and tall trees, vnder fome fmall and flender tree in fome hedge row : they are reclaimed by keeping them long, and oft vpon the fift, butefpecially at the breake of day : they muft be fed twice a day, or once, as when it is determined to flie them the day following; for then fhe muft be kept fharpe, that fo the may bee the more eager vpon the pray: which likewife they will performe if they haue put off their gorge of the fame day, which is perceiued by the emptineffe of their gorge. They mue yearely in March or Aprill,' and at fuch times they muft be kept in warme places, or infuch places as where the South Sunne Alineth againft fome wall. Their meat muft be of good flefh, as birds or mutton, that fothey may become very fat : the fparrow
hawke is apt to flie away: but to preuent the fame, her keeper muft be carefull to doe her no hurt, neither yet to gainefay her in any thing, being giuen to be difdainefull. When he goeth forth toflic her, he muft not let her range any farre way off, becaufe that if the miffe of the bird fhe fliech at, fhe goech for anger, and flieth to fome cree, refufing to returne againe to her keeper: he muft not flie her too oft, but content himfelfe with what fie can reafonably take, giuing her of her prey to feede vpon, that fo fhe may perceiue and find, that her prey is fomeching worth vnto her, and thereby become the more freely firred vp to flic. The birds which The takech, are the Partridge, Quaile, Stare, black-Bird, and other fuch like. For to flie her at fmaller birds, as the hedge-Sparrow, Linnet, and fuch like, is not good, becaufe being naturally coy, and apt to find fault, it will entice her to carrie and flie away with the prey in her foot, to which they are more apt than any other Hawke whatfoeuer: and hauing once found a taft or fpice thereof, they are euer after verie hardly reclaymed. It is good to enter your Sparrow-hawke firf at the Parridge, vvhen the How eo einer game is veric young, and not able to flie cither farre, or aboue one flight at moft, your sparrowthat thereby fhe may get bloud quickly, and to be encouraged to flie the game home: vvhereas encring her at flrong game, fuch as are able to flie farre, and oft, miffing the firft or fecond time, fhe will take fuch a diftruft to her wing, that not being able to truffe or foot them at the firft fpringing, fle will prefently turne tayle, and refufe to fie further. There be fome that vfe to enter their young Sparrowhawkes at the hand Partridge feeled, in this manner: They take the Partridge, being feeled, and a long creance faftened to her feer, and then comming into the field, in a place likely for haunn, digge vp a round fodd, and lay the Parrridge into the hole: then couer the Patrid ge with the fodd, fo as it cannot rife, and to the fodd allo faften another creance : and then encouraging the Spanyels to hunt, and -making fuch a cheerefull noyfe vnto them as Faulconers are wont to doe in fuch like cafes, on the fuddaine plucke the fodd from the Partridge, and let her fpring in the full view of the Hawke: then let off the Hawke after her, and hauing footed her, feed her very well vpon the fame: and thus doe twice or thrice, but no oftener in any cafe, leaft the Hawke finding your deceit, and her owne eafe, looke fo much for it,that fhe will refule to flie at any orher game. And thefe flights are called traines, becaufe they only traine or teach a young Hawke how to beftow her wing, and make her felfe viêor ouer the prey fhe feekech : yet thefe muft be vifed but onely at the beginning, and not often, for feare of the inconuenience before rehearfed. Some other old Faulconers enter their Hawkes at the Quarric, which is, when an old Hawke hath flowne the Partridge to the marke, and is vpen her wing readie to attend the retriue, then to let in the yong Hawke to the old, that they may borh come to the deach of the Partridge together. This is alfo a good manner of entring of Hawkes, but is fitter and more ottener vfed for entring of Hawkes at the riuer, than at the field, becaule thofe often ftoopings at the riuer makes a Hawke more expert and cunning, and fhe ftandech in much more need of inftruction and example in that, than in the other.
There mult great care be had to heale her when fhe is ficke. If fhe fall into an ague The dijeafes of after nuich flight, or by reafon of other accidencs, fhe muft be fet in coole places, vpon the sparromfome pearch,wrapped about with wet clothes, and feed her a little and often with the bawke. fleth of little Chickens, firft foaked in vyater, vvherein haue beerie fteeped the feedes of Cucumbers or Gourds. If the be oner-cooled, fhe muft be fer in warme places, and fed with the flefh of fome Cockrell or Pigeons foaked in vvine, or in the decoction of Sage, Maricrome, or fuch other Hearbes. If fhe haue lice, you muft annoint her pearch with the iuice of Nightfhade or Wormewood. If fhe haue the vvormes in her belly, you muft powder her meat with the powder of Peach.rree leautes. If fhe digelt her meat ill, and keepe it altogether, you mufl make her fwallow downe the heart of a frogge into her throat, pulling the fame backe againe by and by, being held by a fmall thred, for fo you fhall make her caft all her meat. If the haue the gow in her wings or legges', you muft let her bleed fome few droppes of bloud vpon the veine that is vnder her wing or thigh. If the haue the gowt in hier foot, you muft
annoint her feet with the juice of the herbe, called in French Lectorelle, as allo, her pearch, annointing the place afterward with tallow.

Phificke for Elamics.

The Jeurvall impedixenents of Hawels.

If the bee croubled with the frounce, or mouth canker, you thall wath the fore withallome and ftrong vineger, beatenrogether till they be as thicke as puddle. If you will prepare her flomake for the receiuing of a purge, and both comfort and ftrengthen it, you thall wafh her meate in water, in which cloues and licoras haue beene fteept: if you will purge her flomake, you fhall giue her Aloes: if you will purgeher liuer, you fhall giue her Rubarbe: if you will purge her kidnes, or take away the Thortnefle of breath, or kill wormes, giue her e Agaricke: if you will purge her of her gripings in the bodic, or take away the pantas, or kill fellanders, giue her Rewe or herbe of grace : if you will comfort the heart, or fortifie the lungs, giue her Saffron : to clenfe away all purrifaction, giue her Myrhe : if you will purge her head, take away windineffe, or what griefe commeth of cold caufes, giue her Muftard-feed : if you will purge from her groffe humours, giue her wormewood: for any difeafe of the liuer whatfoeuer, there is nothing better, than to wafh her meate in the water of Liuerworte: for any inward inflammation, wath her meate in the water of Sorrell: for the cafting of her gordge, and to ftrengthen the ftomak againe, wafh her meate in the iuice of Mints, orthe diftilled water thereof: for all dulnelte of fpirie, and fadneffe of heart, wath her meate in the water or iuice of burrage, or buglofic : to mollifie the hardneffe of the liuer, or any other oppellations, gue her the iuice of Hearts-tongue : to make away obftructions, or ftoppings in the head, giue her either Roftmarie, or the water thereof: for the weakeneffe of the finewes, trembling of members, or for cramps, fwellings, foares, or canker, giue her fage-bruife outwardly, or the iuice inwardly : for purfineffe, or Mort breath, giue fier the juice of Horchound : for the numbinefle or ftiffeneffe of ioints, cankers, or fores, bathe them in the decoction of of woodbine: for all manner of infection, poyfon, or inward bruifes, giue her the herbe Cardus Benedictus, which herbe, you may giue either grcene, or dryed, either che iuice, orthe powder, or if you pleafe, youmay giue the diftilled water: for the biting of any mad dogge, or any other venimous beaft, annoynt the place either with Angelica, or the iuice of an onion: for any extreame drought or heate which is in the ftomake, wah all her meate in the decoction of French Barley: for any Fiftula, or cankorous fore, take Brimftone: for the Pantas, take Butter and Rofe-water : for the Crampe, take Polipodie of the oake, or the iuice of Brianie, or of Garlicke, or where they faile, take the powder of the rootes of Pionie, and let the Hawke fmell to the fame, or pounce her nares cherewith : for the falling fickneffe, wafl her meat in the iuice of Pellitorie of Spaine: for the pinne in the foot, make her a plaifter of Galbanum, white pitch, and Venice-turpentine, and applicitto the fame: Laftly for the Rie, which is a difeafe of all ocher, moft common and incident to all manner of hawkes, but efpecially to thefe fhort winged hawkes, you fhall take a rumpeof muton, and cut away the fat which is about it, very cleane, and then foulding the fame in a handfull of parceley, let your hawke feed and tire herfelfe thereupon at her pleafure, and it will make the filth to iflue and come forth out of her nares, and purge her head
wonderfully.

The Faulcon(as we hauc faid) in the art of hawking, is fometimes a generall word taken for all kinds of hawks, fometimes it is taken for a feciall word, and according to that ferice, there are diuers forts of that name, which I omit to intreat feuerally of, becaufe of fuch as haue written of the nature of birds: but howfoever, the Faulcon is the prince of the birds of pray (I meane in refpeतt of flight) for her foutneffe and great courage, and is to be accounted of great value, when fhe hath a round head, and the top of her head is full, her beake fhort and thicke, her noffrels great and open, her eie browes high and thicke, her cies great and cloaked, a long necke, a high breft, large fhoulders, the feathers of her wings thinne, long thighes, iliort and thicke legs, greene, great, and well fpred feet, blacke, fharpe, and pearching talons : and which is for bigneffe neither too great nor toolitele.

The Faulcon, as all other birds of prey, hath her Tierceler, and they are called of the Latines Pomiliones, that is to fay, frmall birds, refembling them, and nothing differing from them, faue onely in greatnefle : and they are all of them (as it were) the males of the birds of prey, the females being, for the molt part, of greater bulke and bodies than the males. That of the Faulcon is called nothing but a Tiercelet, or the male Faulcon. The Tiercelers of the other Hawkes hauc their proper names: as, the male Sparrow-hawke is cailed a Musket: the male Lanier, a Laneret : and the male Sacre, a Sacrec. The Tiercelet of the Faulcon hath his feathers verre glitering, his head and eyes black, afh-coloured vpon his back and traine, and yer gliterering. He is a Hawke for the lure, as alfo the Euulcon, and not for the fifl. His legges and feet are yellow, hauing for she moll part a pale brealt: he carricth two very black foots vpon his feachers, on the fides of his eies. To reclaime the Faulcon, you mult haue him commonly ypon your fift, feed him with the wings and legges of Hennes foked in water, and fec him in a darke place: fometimes prefenting them with a bafon full of water, wherein they may bathe themfelues, and after their bathing, drie them at the fire:they muft be vfed firt to take fmall birds: then, indifferent great ones:andafterward,greater ones: but you muft not feed them wich any part of the birds which they fhall haue taken. They flie maruellous fwift, and mount very high, there houering and foaring, but withall,(till looking downeward:and when they fee the Duck, the greene Goofe, Crane, or Heron, they come downe like an arrow, their wings fhut and drawne together, right vpon the Fowle, to breake in vpon her with her rallons behind: at vvhich time if they happen to miffe, and the Fowle flic away, they prefently flie after: bur and it they cannot feize vpon her, as enraged and angrie, they take fo long a flight thereupon, as that they loofe their mafter.
The Fauleon is more fit than any other Hawke to flie the Heron,and all other fowle of the riucr. Her difeafes, and the curing of them, are like vnto thofe of the Sparrowhawke: howbei, the Faulcon is of a ftronger nature chan the Sparrow-hawke.
The Hobbic is the leaft of all Hawkes in refpect of bodie, except the Merlin, and is likewife for the lure, and not for the fift, being of the number of thofe that foare aloff, as the Faulcon, the Lanier, \& the Sacre. This bird is fufficiently knowne cuery where: forthere is not any country where the Hobbies doe not follow the hunters, in as much as it is the proper worke of the Hobbie to make her prey of the litetle birds as they flie, as by name, the Larke. This is his fpeciall propertie, that hauing found the hunters in the field, going to hunt the Hare or the Parridge, he keepech them companie, filllflying ouer their heads, hoping to meet widh fome one litete bird or other which the dogs Thall put vp: but for the moof part thefe litele birds doe rather chufe to become a prey vito the dogges, or elfe to find out fome means to fauc themflues among ft the horfes, or to be takenaliue, than to commit themflues to the mercie of the Hobbie, their mortall aduerfarie. But howfoeuer, the Hobbic will not follow the hunter longer than a ccrraine cime, as though he had his houres limited him: for leauing them, he goeth to looke out the place of his reff amongft the vvoods of high timber-trees, vvhere they keepe and pearch ordinarily. He hath a blew beake, yellow legs and feet, the feathers vnder his eyes very black, the top of his head betwixt black and a darke yellow, two white fpots aboue his necke, but vnderneath his throat, and on cither fide of his temples, ruffer ones : his wings very blew: his back, traine, and wings, black, on the vpper fide : his traine very much confifting of variable colours viderneath, by reafon of red fpots traced ouerthwart amonglt the blacke. If you can fee him flying in the ayre, he may be perceiued to be fomewhat red vnder his traine, and beewist his legges.

The Hobbie is fo quicke and fwiff, as shat he dare aduenture vpon the Rauen, and giue him many a drie bob in the ayre.
He is chiefely efteemed for the Iporr of darying of Larkes, to which he is naturally Ther fe oftibe inclined, becaufe it is the prey in which he moft naturally delightech: and the manner of daring of Larkes is in this fort. When you fee a Larke play and flie neere vnto the ground, quiuering her wings, and making a gentle noife in the ayre, you dhall then
life vp your filt whereon the Hobbie fitteeth, and yiue her the fight of the Larke, vwho prefencly thereupon will fread them abroad, and waue them in the veind, at vwhich fight the Larke will leifurely foope downe to the ground, and there lye clofe, as if fhe were vnperceiued, vvhileft you in the meane face fhall with your Horfe and Hawke ride about her, and about her, till you come fo neere her, that you may lay your daring-net ouer her : vvhich nee is a little round net like a Purfnet, not aboue a toot or two ouerthwart, and faftened bought-wife vnto the end of a long pole, like a Hawkes pole: as foone as you haue couered the Larke, you fhal light and take her vp, and giuc your Hawke the head onely. This is a port very Aelicate, and of long continuance, and therefore much relpected amongt ladies and gentlewomen.

The Merlin is the leaft of all other Hawkes which Faulconers make any vfe of: he is for the filt, and not for the lure: howbeit, for neceflitie fake he may be trained to the lure : he refembleth the Faulcon fo naturally, as that there may feeme to be no difference betwixt them, faue onely in greatneffe : for he hath the fame geftes, pluruage, and conditions: wwherefore he mult be reputed as royall as the Faulcon, or ar leaft of the fame linage and nature with the Faulcon. He is very flout of courage:for although he be not much bigger than a Black-bird or Pigeon, jet he dareth to aduenture vpon the Quaile and igartridge, and fuch other birds greater than himfelfe: and his courage is fuch, as that oftentimes he will flie them to the next houles or villages, yea, into burning fire, and vnder the garments of men or women. He mult be fed and handled after the fame manner that the Faulcon. The gencrall prey whereupon he moft ordinarily feedeth, is the Larke : vvhence it commeth, that he euer chufing to liue vvhere

## Of Merlins:

The Frijh Mer-
lin. Larke, ie is ant, hee is ofen taken with the day-nets : for fooping to ftrike at the Larke, he is taken in the net himelfe. Of Merlins there are both male and female: the male is cailed the Iack. Merlin, and is as the male of other Hawkes, a great deale leffe than the female, and indecd are fo very little, that they are of very finall or no vfe: the female is called the formale, and being nuch iarger, valiant, and full of courage, they will fley the Parrridge all Summer long. Thefe Merlins are of all Hawkes the tende reft, and can the leaft endure cold of any bird vvhatfoener, efpecially of their feet: vwhich being once nipt wvith froft, and benummed, they prefently vvill eate them of themfelues, and fo become lame and veleffe. Therefore vvhen you mue them in the Wincer time, you fhall mue chem in a very warme and clofe houfe, and vpon a pearch very well lined and couered with thicke lifts, or other vvoollen cloth. Some vee to line their pearches with Cony-skinnes, or other furred skinnes, turning the furred fides outward, but that is fomewhat too hot, and makes them more tender and apt to feele the cold than otherwife chey would be:vfe then a moderate temper of warmth, and no further. Of all forts of Merlins, the Irih Merlin is the beft, for The is neuer at any time troubled with this infirmitie:and you fhall know her by her pale greene legs, and the contrarie Merlin by her bright yellow legs When they haue flowne all Summer at the Partridge, you may make them for the buif in the Winter, and fo haue them flying all the yeare; which is the beft courfe that can be taken with them: for they are naturally of themfelues fo tender, that they can verie hardly endure muing.
The Gerfuulcon
The Gerfailcon is a bird that is feldome feene, except it be amongft Faulconers belonging to,great Lords: The is a great bodied bird, infomuch, as that fhe is thought of fome to be a kind of Eagle: fhe is fit to flie at any thing, for the is bold, and neuer giueth oner any thing; but the is more hard to reclaime and bring to the lure, than any other Hawke, becaule the is fo venturous and fantafticall : for and if the be not handled gently, and haue a mild mafter to vfe her kindly, fhe will neuer become reclaimed. This is the ftrongeft of all other birds, except the Eagle : She is kept vpon the fift, lie is long bodied, hauing her bill, legges, and feet of a blew colour, and her tallons very open and long: The is cunning at the taking of the birds of the riuer, for the wearieth them in fuch fort, that in the end they are forced to yeeld, as not being able to diue any more.

The principall flight wherein the taketh delight, is at the Herne, for her fpirit
and courage firs her vp to a \&tions of the greateft worth : and of thefe Gerfaulcons, the white is the principall beft of all other, and of greaceft price :they areexceeding tender, and very apt to take furfeiss, and therefore celdome long liued, which is the reafon that they are not of fuch generall vee as ocher hawkes are, neither are chey got but with great coft, and painefulneffe which maketh them to be held of very great price, and fo not for euerie ones purchafe. Aboue all other things, they may not endure the loffe of any bloud, info much that the fhedding of one poore droppe, though ar the pounce, or other outward part which is leaft morrall, is the vter loffe of the haukes life : they can in no fort be kept too cold, or withered too much, in fo much, that if after her flying, you fuffer her to fit abroad one whole froftie night, The will be much the founder, and better for the fame. Nay I haue feene fome Fauiconers, which after the bathing of the hawke, haue fer her abroad till the moifture hath beene frozen vpon their feathers, and hath beene perfuaded that the hath flowne

Of Gerfaulcons
life robite is the
beft. her next flight much beter for the fame : the muff be exceeding painefulty laboured withall at her firt beginning, for fhe is apt to cake deflike at che mans face, and therfore muft be carfied vpon the fift more chan any other hauke : fhe mnft alfo be kept much bare-faced afer fhe is acquainted with the man, and continually froaked and coyd about the head, bodie, and teet with a loofe feather, to make her more tame and gentil: fhe muft alfo be much whooped and gibbetted vnto, that fhe may be acquainred with the voice of the man, and with thofe founds which fhe mult obey and follow : Themay very well be flowne from Michaelmas vntill the Spring, but in no wife after; for che feafon of the yeare growing then warme, and luft fpringing within her, out of a naturall inftinet which he harth to her owne clyme, fhe will away and leaue. you,how well foeuer reclaimed, or how fharpe and fiffouer fec for the pleafure you go about : Info much that it hath been credibly known, thar diuers Gerfaulcons haue beenetaken vp in Illand, fome with French, and fome with Englifh varuells vpon them, to the great admiration and aftoninment both of thofe which haue taken them, and thole which haue lof them. The Gerfaulconlike the Faulcon gentill, is to to be chofen all of one peece, and either a blacke or fandie male, by no meanes dropt, but of a cleere and bright plume, with ful fummed feathers, vnbrufed, and vnbroken: of all hawks shey couer cheir fickneffe longeft, and out of their mettalls feeme found, when they are inwardly mofl rotten; therefort it is not good in any wife to buy or meddle with them til you haue feene them mute,recciued d full gorge, and pur it ouer, and laftly in the morning haue feene her cafting: in all which it you find no extraordinare imperfection, you may then fafely buy her, and whar loffe after fucceeds impute it to your owne negligence. The male to the Gerfaulcon is that which is called The Ierkin, being a much lelfe bird, yet of exceeding good mettall and courage, and as fit to flic at the river, as any other hawke vvhatfoeuer, hauing a naturall loue to all manner of water foule, and continually when he is vvild, making his prey vpon the fame.
The Sacre being a principall bird amongft thofeof the prey, is likevnto the Faulcon in greatneffe, a hawke that is good for the Kite, but hee may bee made fit for any vvild flefh, as allo for the open field to take wild Geefe, Fealant, Partridge, and all other forts of vvild foule.

The Sacre is of more ill fauoured coloured feathers than any other hawke, for fhe is of a colour as it were betwixt red and fmokie, fhort footed, hauing blew legs and talons. It is a vvandring bird, and feldome found in this countrie : her Teirfele is the Sacret ; fo that the Sacree is the male, and the Sacre is the female. Noble men defirous to haue fome fport betwixt him and the Kite, do firf make the Kite to floope (for the Kite is woons in the Summer ro ksepe on high in the aire, to enioy the coolencfle of the aire, vyhich is greateft in the middle region of the aire) by hauing fome one or other Faulconer to carrie a ducke vpon his fift, hauing a certaine quantitie of a . Fox taile hanging therear, thus letting her fle in fome plaine ground, they give the Kite occafion to toope: for vvhen the Kite is aduifed of the Ducke, he floopech by and by vnto the ground, and drawing neere vnto her, doth there keepe himfelfe withous

Ppp 3
doing
doing any otherthing, but beholding of her, as maruelling at her forme: Then the Sacre is to be cafl off at him, who thinking himfelfe fwift, hopech by flight toouertake him: wherupon the Kite mountech vpward, turning round therewithall as much as he can: and fo the combate becommech pleafant to behold, efpecially if it be in a plaine without trces, and that the aire be cleare, and without wind: for one fhall fee boch the Sacre and the Kite to mount fo high, as that they will be both out of fight: but all will nor ferue, for the Sacre will make him yeeld, beating him downe to the ground with fuch thumps, as he lighteeth vpon him withall.

The Lanier differeth not much from the Faulcon, and he taketh his furname of the Faulcon, for he is commonly called the Faulcon Lanier:he is commonly found in this countrey: and for that hee is of gentle conditions, and better endurech groffe meates than any other Hawke, men are wont to content themfelues with him, caufing him to ferue their purpofe euerie way. Faulconers chufe thofe Laniers that haue great heads, fhort bills, blew and yellow feet, their fore-feathers of a mixture of black and white, not hauing ouerthware frakes, as the Faulcon, but ftraight fpors going along the festhers, a fhort and fomewhat thicke necke, as alfo a bill of the fame fafhion. The Lanier is the female, and the Laneret is the male, and hath not fo bigge a bodie as the female, neither yet fo well efteemed of, but as for the reft, he is almoft like the female in plumage. There is no kind of bird that keepeth his pearch more conftantly. He abideth with vs in Winter, and is to be feene of vs at all times, contrarie to the fafhion of others, which keepe not in our countries but in the Summer time. Faulconers, when they would make the Lanier a forrefter, they put him in a lower roome, fo dark, as that he can fee nothing, except at fuch times as he is fed : and likewife they neuer carric him vpon their filt, but in the night.
And when that he is readie to flie, they make a fire in the chamber for to heat him, that fo he may afterward be bathed in pure vvine : and hauing dried him againe, they giue him to feede on, the braines of a Henne: then getting forward before day toward the place vvhere the game is, they calt him off a good way from the place vohere the Crane is, at fuch time as it beginnech to be day: and though he take him not the firft day, it is all one, for it will be as good in the daies following, and efpecially from after mid Iuly, vntill towards the end of October: And yet after the mue, hee vvill bee better than before : but it is not good in the time of Winter.
Yet to fpeake truth of the Lanier, he taketh more delight to prey vpon the Partridge, than vpon any other fowle whatfoeuer, becaufe the flight doth not moune much, to wrhich he hath no affection. He is of fo ftrong and good a conflitucion, that his greafe feldome or neuer melteth to his hurt or preiudice: neither is hefo foolifhly ouer-free of courage, that he will hurt himfelfe with too much violence, or paines-taking. Whence it comes, that his owner can feldome ourer-flye him, no, though be flye him fixe or feuen flights in a morning: and for this caufe hee is called she Schollers Hawke, as being an excellent encourager of young Faulconers, and a bird on vvhich, vvithout danger, they may trie all needefull experiments.
Thus much of the manner of luring and reclaiming of Hawses, as well in generall as in pareicular : and yee it remaineth that wee fpeake a word or two concerning the fame matter.

Youmult vnderftand, that all birds of the prey doe ferue to flie cither vpon riuers, or elfe in the fields : of which, fome flie from the fift, and that without any (pare : of this fort is the Gofhawke, the Sparrow-hawke, the Gerfaulcon, and the Merlin : The others fic on high, as namely, the Faulcon, the Lanier, the Sacre, and the Hobbie: the one of then is called from the flight, by holding out the fift vnto them, and the other by calting out vnto them the lure, that is to fay, an inftrument made after the fafhion of ewo fowles wings coupled together, hung at a leafh, and at the end thereof a ten-nife-ball,or crooke of horne: for by thefelures the Hawkes are allured, thinking them to be liue H dennes.

This is the deftinetion of our French Failconers, yet generally it is not fo receiued, for of other Faulconers, hawkes are devided into thefe two kinds, long-winged hawkes, and horr-winged hawkes: the long-winged hawkes doe properly belong vnoo the lure, and flie a loft, foaring in the aire, and from thence fooping downe and taking their pray : they are vpon their wiugs long before they cither fee or arefeene of their pray, looking when either the fpannyells fhall fpring the partridg e from the ground, or che Faulconer with his poale beate the foule from the riuer : and of this fort is the Eagle, the Gripe, the Gerfaulcon, the Faulcon, the Lanyer, the Hobie, and the Merline, fome will incrude the Caftrell, which in deed is long-winged hawke, as touching his fhape, bue looking into the cowardlineffe of his nature, he is far vnworthie to ranke in their focieric. The fhort-winged hawkes do properlie belong to the fift, for from thence euer they fle, and thither alfo backe they are euer recalled. They neuer take their wing till they fee their pray on wing before them, and then they make a maine after it, and flic it to the marke, where prefencly they take a tree, hillocke, or fome other fland, as neere the place as poffibly they can, and there fir cill the fpannyells come into the retriue: but the long-winged hawke neuer taketh ftand at all, but flying about and about grathereth vp againe to her firft pitch, and there expecteth the retriue. Now the fhort-winged hawkes are the Gofhawke, the Terffell of the Gofhawke, the Sparrow-hawke, and the Musket, fome intrude che bauld Buzzard, and the Ring-tayle, but they as the Caitrell are not worthie of the ranke, being naturally cowards, and of faint fipiris,not daring to contend where there is any fhew of refiftance.

Some of them begin not the game, butfollow it being begun by the Hawkers, as we haue faid of the Eagle. To be briefe, hawks feeme not ro differ, faue that all of them do not flie at all kind of birds and foule a like, for in deed eucry one of them bucklech himfelfe vnto the bird, to the flying whereof hee is giuen andaddicted, and not to others. And concerning all forts of flying and hawking, you may find a more ample treatife in the particular defcription of the nature and properties of euery bird of pray which we haue made.

## Снар. XLV.

## The taking of melodious finging Birds.

E haue fpoken of the fport that is made with birds of the pray called hawking, and now wee will enter into fome fpeech of taking of birds, which fing melodioufly with fweet and pleafant fongs, wherewich the mafter of the farme may take his recreation and pleafure, by hearing them fing in his clofes, parke, low-woods, and high-woods, or in his chamber window, or elfe fhut vpin fome cages or roomes made for the purpofe to containe the fubiect of fuch pleafure and delightfome melodic. And that we may not omit any thing, before we fet downe any manner or way of the particular taking of fuch birds, we will take a briefe view of the nature, feeding, and difeafes of the fame. For it were but lof labour to take the birds, if to the end that we may haue their fweet and melodious fongs along time, wee knowe not what meat is good for them, what difeafes they are fubieet vinto, and what meanes and remedies are neceffarie for cheir diftemperatures. In the meane time I mind not here to bring in the fabulous hiftories touching the originall and breeding of the moft part of them, which fantafticall Poets haue inuented. I meane to reft my felfe in this only perfuafion, namely that all. birdes were miraculoully created of God by his almightie power, that isto fay, of his own meere will and word, whereby likewife he did create all other creatures in the beginning of the creation of the world.

Chap.

## Снар. XLVI.

## Of the Nightingale.

E will make our choice of the Nightingale in the firft place, which according to the iudgement and common confent of cuery one, fingeth the molt fivectly and melodioufly of all the reft: The is a bird fufficiently knowne, efpecially in the countrie of Italy, and is called of the Latins Lufcinia or $\mathcal{P}$ hilomela: fhe maketh het neft in the Spring, at fuch time as the earth in the moneth of May, is all ouer couered, befet and hanged with flowers and pleafant greene, and that in groues and thicke bufhes, vpon which the Sunne in the morning doth calt his coole and temperate beames: from noone till Sun-fee, fhe haunterh the coole places, fountaines, brookes, chicke hedges, and well fhàdowed places. True it

TheNigbtingale
bis nefto

Meat for the Nightingale. thie wat ome them do make their nelts vpon the ground, vnder hedges, or amongft vpon vpon fome greene and thicke graffe growne, clod of earth or butte. The number of their egges is vncertaine, for fome of them lay foure, and fome fiue, and thofe which neftle in Summer, lay (according to Ariftotle his affertion) fomecimes fixe or feuen. Now the Nightingale which you would keepe, muft bee bred in the Spring; for how much the earlier bird the is, by fo much will the become the more perfect, and you may haue better hope and aflurance of her longer liuing, and of her being brought vp, and kept with more eafe, becaufe that comming (as all are woont) to mue her feathers, if fhe bee ouerrun of certaine cattle in Augguft, the cold comming and finding her bare of feathers, caufeth her to die, which thing happeneth vnto many of thofe which were bred in Summer. The young Nightingales muft not be taken from their nefts, vntill fuch time as they be feathered, and that they bee almoft conered all ouer with the fame, that fo you may haue the leffe trouble in bringing of them vp, keeping them in a folitaric and by-place : their meate mult be the heart of a Weather cleane and old. And you fhall make of the fat of the skinne, which couerech the heart, and of certaine finewss which are within the fame, cut and fhred fmall into little peeces, meate in manner of wormes, wherewith you fhall feed them once euery houre, or more ofner if need require, giuing themat each feucrall time chree gobbets: and thus you fhall feed them in their nefts as long as you can, and after they be growne vp , you fhall put them in cages, made fit with littleftickes and pearches, to the end they may begin of themfelues to ftand vpontheirlegs: and within the faid cages, you muft put moffe, hay, or chaffe, whereuponthey may reft themfelues, if to be they will not fit vpon the pearches, alwaies taking heed to keepe them cleane as much as may be:It will be requifite alfo, that their cage haue not any light buton one fide onely, and for this caufe, fuch as are moft carefull, do hang their cage for the fpace of three whole parts of it with greene cloth. When you know that the Nightingale eatech alone, you fhall mince her the heart of a Weather very fmall, after the manner of pie meate, and lay it vpon fome fmall paper, in fuch places, as where you know that fhe may feed ealily, and without any trouble, you fhall vfe this care and diligence vntill the bird hath got the cuftome to eate alone, not neglecting notwithftanding to giue her fometimes a day as much as a bird carrieth in her bill to be the furer and for the better: take order likewife leaft fhe die, that thee neuer want any of the forefaid meate, and withall thatitftinke not, as it fallethout ofrentimes in Summer. Befides the heart of the Weather, youmay give her diuers other forts of meat, as the pafte whereof we will fpeake hereafter for one: or in fteed of that pafte, take a new eggéfor elfe it might caufe fome difeafe to breed in her, and bring her eafily to her death) boile it hard, giue her the yelke to eate. It is true, that you muft not giue it her oft, or not at all, except it be for want of their meat, becaufe it is giuento bind them in their bodies, and make them continue. You may likewife
feed them with cerraine wormes which are found in a doues neft, or elfe in old flower of meale : but this muff be done as feldome as may be, becaufe that fuch meate fhould rather be vnio her as phyficke, than ordinarie food, as we fhall fay hereafrer. If fhee will not picke vp thefe meates, fhe may haue ethem mingled amonglt her meate of a Theepes heart, chat fo fhe may learne to feed of whatoenuer fhall be fer before her.

## Снар. XLVII.

## How $\mathcal{N}$ Kighringales taken in the moneth of August must be fed,

 as alfo thofe that aretakenafter they be through growne.(2) (\%)O foone as you haue taken the Nightingale in Auguft, tie her wings pre. fently, thar fo fhe may not beate her felfe in her cage and by is mamer of thee will grow tame fooner, and more eafly, and whe the ping of Thee will grow tame fooner, and more eafily, and withall fall to cate, the Nightingale whereas orherwife fhe will bee hard to tame : for fecing her felfe depriued of her libertie, fhe becommeth not tame, till of a long time after. You fhall fhue her vp in a cage couered and wrapt round with paper, not hauing any ficke for her to pearch vpon at all : in the meane cime haue regard to feed her fiue or fixe times cuery day, and that very handfomely: fometimes lay before her flies, or little wormes, which by their crauling will tiir vp the bird to picke them, wherefore for the firf time yout thall giue her them aliue, whereas afterward you may cur and mince them: the third time you fhall beginto feed her with a fheepes heart fhred fmall, mingling amongtt the farme of the wormes afore mentioned likewife minced and knodden together, for to accuftome her to the faid heart. And if you perceine that the bird doth not feed her felfe, neither yet defire or feeke after any thing but wormes, you thall leane off to giue her them mingled and tempered with the fheepes heart by a little and little, and fo offring her fuch meate as is moft ealie, you hall woont her to cate of the faid heare without any mixture all alone : you may do the like with the pafte, if you perceiue that fhe doth eate it willingly, which thing is eafily difcerned by any man of iudgement.

## Chap. XLVIII.

## Tobring up Nightingales that are taken in March.



T is true, that the Nightingales which are taken after the firft of March vnto the middeft of Aprill are very fir to keepe and bring vp. When therefore you haue a Nightingale of this feafon, you fhall put her in a cage well wrapt about with paper, for feare' that vpon the fight of any man, fhe fhould beare her felfe and crie, as alfo to the end that the may learne to eare alone. For to do this, you thall haue a veffell of glafte like a cuppe without a foote, wherein you fhall put feuen or cight fmall wormes; and fet them neerethe bird, who feeing them craule within the glaffe, will by and by for enuie ar them fall of pecking them, wherefore you fhall giue her them quicke for the firf time. Thefecond tume mince and cut them fmall : and when you fee that fhe eaterh well of fuch meare, you fhall rake of a heepes heart well beat and cut, and mingle it with the faid wormes, and making thereof as it werca pafte, giue it her to eate. But if you perceiue, that in feeding, fhe chufe to eat of nothing but the wormes, leauing the heart, you fhall indeuour your felfe to mixe it with all poffible care and cunning, that fo in eating fhe may not chufe but eate of both together, that is, both of the wormes and of the heart.

And when the is accuftomed to eate of this mixtere, you fhall by litele and little take away the wormes, and feed her only with the heart. Let it not be found ftrange vnto you to fee your Nightingale continue fome daies without eating. For the caufe why it fo falleth out, is, becaule they are grieued for hauing loft their libertie, and thereupon continuc fome time without eating or feeding of any thing; fome, three daies; others, fiue or fixe daies; yea, cight or ten daies : whereat you muft not maruel, neither yet leaue off to feed them. For there are fome old ones, which though they bee hard to feede, become notwithftanding better finging birds than any of the young ones.

It peraduenture the bird will not take any other thing than wormes, giueher a birds bill full foure times a day, and three or foure morfells at a time, and not any more, becaufe of digeflion, and when fhe fhall haue accuftomed to takethe mixture of the heart with the wormes, giue her twice a day onely, that is to fay, morning and euening, for to preferue and maintaine her. And this is the order and courfe that yee fhall take.

## Chap. XLI:X.

> To know if the Nightingale begin to eate of her Selfe, and whecher
> Cbewall proue good, or no.


S foone as the Nightingale beginneth to fing, it is a moft certaine token that the eateth likewife alone. There are fome which make not any kind of noife or found for the fpace of eight daies;others of fifteenc: and otherfome continue a whole moneth without finging. If they exceed this time without finging, it is to bee thought, that either they are females, or elfe that they will neuer be ought worth. They giue great hope of prouing perfect birds, which begin to fing quickly, and vfe to eate quickly likewife by chemelues.

## Chap. $L$ 。

## How to order a Nightingale which eateth alone, and Jingeth.



Hen the Nightingale fhall eate well by her felfe, and fhall fing, you fhall take away by little and little the paper wherwith the cage was compaffed about, euery day a litile, infuch fort, as that the bird may not perceiue it, coucring the place againe from whence you thall take the paper, with tome greene, infomuch, as that all the paper being taken away, and the cage couered againe with greeneleaues, you fhall by litele and little accuftome her to lee the light. For if that you doe otherwife, you will bee the caufe of making her to loofe her finging, either for difdaine, or for feare, which will not come to paffe, if you order her as hath beene faid. Notwithftanding that Elian in the thirteenth booke of his naturall hiftorie faith, (following the aduice of Arifotle) That it is hard to bring that bird to finging, which is not taken in her owne neft. Which opinion is found to be moft falle by ordinarie experience : for very often it is feene, that old Nightingales become more perfect and excellent than the other.

## Chap. LI.

## How the male Nightingales are knowne from the females:

Ens opinions and judgements concerning Nightingalcs (as namely to Nightirgeles know of whether fexethey be) are very diuers: for fome diftinguin the male aridfecoke from the hen by their grofeneffe, faying, that the cocke is the groffer bird : others are of mind that the cocke hath a greater cie: fome fay, that he hath a reddifitaile : all which opinions I haue found to be far wide; for I have had perfect good Nightingales, and that a great number of them that haue beene very fmall and little: as alfo hens with all thofe markes which are affigned vnto the cockes. Wherefore for a more fure and certaine figne, you fhall reft vpon, and truft to that which followeth : That is tofay, when you hatue a Nightingale taken out of the nef,, which fhall begin to eate alone, without hauing of it cramd into her, and fhall record diuers melodious notes from day to day, contenting herfelfe therein fome cime with pleafing and befeeming noifes, you may thereby aflure your felfe that the fame is a male. But vntothis, you fhall adde certaine other notes: as namely, her quiet and peaceable abiding in her cage : her ftanding vponone legg only, and so hold on the warbling of her breft, which continuance is not to be found in the hen : more than that, fhe goeth hopping and whitling up and downe the cage with a noife and fong that is very much interupted and fhort. I will not denie notwithftanding, but that fometimes the cocke may bee knowne from the hen by the markes which fome haue fet downe before: but his is that which I affirme, namely, that fome are mightily deceiued by thofe markes, and that by their finging, the Nightingales taken in Auguft are moft certainely and clearely knowne and difcerned. And as for thofe which are taken in March, the knowledge of them reftech, not onely in finging, but alfo in the lower parts of the fexe which the cockes doe put forth, but the hens doe not, for then is the time that birds doe couple together. Thefethercfore are the moft certaine euident and infallible arguments, whereunto you may truift and betake your felfe.

## С н а р. LII. <br> Of the Ring of birds, or the little Ringotherwife called Robin-Redbreaff.

 Ou fhall viderfland that the little king,or king of birds is naturally very The kiz3?f finall, of a daintietractable complexion, he fingeeth moff fweetly, and is b:rdso not much inferior in this refpect vnto the Nighthingale. He is oftentimes fecne in Winter vpon the tops or roofes of houres, or vpon old ruines on that fide chat the Sunne fhineth, and whereas the wind may leaf annoy him. He is to be fed in this fort: You mult keepe him warme in his neft, gining himi for his meate of a fheepes heart, or of a calues heart minced, in all points as wee haic aliceadie faid, fpeaking of the Nightingale. He muft be fed with a iittle atorce, and off, by reafon of his digection, being caretull that hee take no cold, and efpecially in the night. For which caure, you fhall put him in a cage, which hath fome prettic prouifion made like a little chamber, trimmed with red cloch, and made as it were a little hothoufe, wherinto he may go, in the nighteafon, and fhun the cold all the whole yere. Now when he fhall be ved to be fed, you fhall feed him with fome heart well beaten, and fmall minced, \& fometimes you thal give him of the pafte that is vfed to be giuen to Nighcingales, which will do him no fmall good. And you fhal giue him lome-
times flies to pecke for her greater ioy and fpeedier taming, and herein you thall vfe great diligence.

> Силр. LIII.
> of the Finch.

The Finch.
 Mongtt the faireft and moft beautifull birds,y ea, or rather the molt beautifull of all, is the Finch, being no leffe delightfome tothe cie, than pleafant vnto the eare : and yet there is not that account made of herthat fhould, becaufe of the great number of them that is to be found. They neflle thrice a yeare, that istofay, in May, Iune, and Auguft. Some are of opinion, that thofe which are bred in the moneth of Auguft, are the beft, and amongtt them thore which are of the third feather, or which haue mued thrice. Others affeet thofe moft which haue their nefts amonglt the thornes, and haue certaine orange coloured feathers, which I my'felfe do not miflike: but I fay further,(that whereas the blacke ones are commonly the pefecteft and beft birds of all) that there is not any one bettee or more perfect than another. It is true that thofe which breed amongft the thornes, are ftouter and ftronger birds than the other, and better made to fing. They are vnlike the other, in as much as their feathers are fomewhat more gray and darke. The cockes haue a blacke throat, as likewife the fhoulders and head blacke, and long and flat. The hens haue their Choulders gray, their throat blacke, and their head round.

## Chap. LIIII.

## How the Fincto must be fed.

How to fred
the Finch.
 Hen you haue taken the Finch with her neft, you fhall feed them in ma. ner as followeth : you fhall firft foften in the water of fweet almonds, and afterward chaw very well a little peece of bisket, or of a pan-cake, and you hall make of thefe two things a pafte, and cram into the bird ot che lame, as fhall be needfull. Afterward you fhall worke the things aforefaid in a morter together, and hauing tempered them with wate, you fhall giucthem as much as a bird will hold in her bill, with a chickens feather, vpon paine that you make her meate new euery day, leaft it fhould grow foure, and fpoile the bird. When you haue fed the bird, you fhall make a littie ficke like a tooth-picke, at the point whereof, you Thal tie a little cotton, you fhall wet thistooth-picke in water, and with the fame, you thall wafh the birds bill, that fo there cleaue nor vnto, or hange thereabout any of the faid pafte, for caufing of apoftemes or vlcers, fuch as wherewith fhemight be kept from being able to open her bill, and fo fhe would eafly die. Now when fhe beginneth to eate alone, you fhall giue vnto her in her little box a little bruifed muftard feed, and you fhall renew it dayly, leaft it fhould become ranke, which would make her die. The fame diligence muft bee obferued in bringing vp of greene Finches, Canarie-birds, Linets, Goldfinches, or Silkens, and Spinkes. You muft bee carefull when they moute, to aire them and befprinckle them with a little wine, fetting them alfo a little in the Sunne twice a weeke.

# C нар. LV. <br> <br> How to feed the Spinke. 

 <br> <br> How to feed the Spinke.}

畕量He Spinke is a very beautifull and melodious bird, but all Spinks haue what meate the not one and the fame tunes: for fome of then fing after one fafhion, spinke must and fome after another, which needech nor to be turcher proued; for taze. there is great variecie of them, and they are called after diuers forts. Some bring them vp after the way, that is vfed in bringing vp of Finches, This bird hath this imperfection, namely, that fhe eafily loofeth her fight. Wherefore when you perceiue that the is in the way to grow blind, take of the iuice of bects, and mingle it with a litete water in her water-pot, \& that for a day only, that fo fhe may drinke thereof. And furthermore, make her a pearch of fig-tree wood, whereupon, and againft which fhee may rub herr eie, the which will doe her much good: you fhall giue her likewife to eate of the feeds of melons, the fpace of two or three daies, becaufe they are cooling and wholefome. And if by this meanes, the Spinke do not mend and become better, giue her leaue totake her libertie in the fields, for fhee will neuer be ought.

## С нар. LVI.

## Toreliene the difenfes of the Finch and Nightingale.

Hen the Finch is in her muc, you fhall comfort her, befprinckling her The Finch mous. lightly with wine, that fo fhe may mouts the fooner, which will be to her tingo further good. And if The happen to haue lice after this fprinkling with wine, fether in the Sunne, and there let her fland vnell fuch time as theibe drie.Some of them mout in Iune, fome in Iuly, and ocher fome in Auguft, according to their complexion and heate. And this is the courle which they follow which are put into the cage, hauing fpent one yearc abroad before, for thofe which are taken in the neaft, doe mue within a mnnech that they are put in: and this muft be vinderftood in generall of all birds. And therefore to come to the particular: The Nightingalc is troubled with fatneffe : and therefore fhee munt be purged twice a weeke, giuing her two or three vvormes of the Pigeon-houfe (as vvee have taught before) for the fpace of fifteene daies: If fhe grow melancholike, you fhall cut the bladder vyhich is aboue her rumpe, and pur into her drinking-por fome Sugar-caii- eate mightanchodie, and lietie lumps of pafte or fugar, of the bignes of a nut. And if you fee that fhePate mizancho- complaine her felfe of ficknefte, put iuto her vvater-pot fome fixe chyres of $S$ affron, or thereabout, continuing therewithall to giue her the pafte, and lometimes of a Sheepcs heart. And if peraduenture fhee flill grow worle, gine her the yelke of an hard egege, and the vyhite alfo. Befides, the Nightingale hauing beene two or three yeares in the cage, becommeth gowtic: now when you fhall perceiue it, annoint her feet wvith Burter, or elfe vvith Hennes greafe, vvhich is a verie good remedie for to cure her. The Nightingale is likewief fubicit to haue apoftemes breaking out about her eyes and neb, for which you fhall likewife vfe Butter and Hennes greafe. It is meet alfo to make prouifion for the Nightingale that is leane, vvhen you fee neceffitie that vvay to require it, gining her new figges to eate in their feafon, and at other times drie figges, vvell chewed : and atterward, you fhall bring her vnto her ordinarie diet, and fo you flall continue vvith her, to maintaine and keepe her. There happeneth alfo vnto the Nightingale another difeafe, called the ftraitneffe or frangling of the breaft, vwhich commeth of hauing
eaten fome ranke or fat thing, and it is perceiued by the beating and paine before not accuftemed, which fhe abideth in this place, and alfo by this, that the is giuen oft togape and open her bill. This difeafe commech allo. of fome finew or thred of the theeps heart, which was not minced fmall enough, and fo thereby doth hang in her throat : wherefore you fha!! very handfomely open her bill, and take it from her with a pinne. You fhall know it to bee chis difeafe, when you fee in herthroat certaine broken or loofe fleft. Giue her afterward a litele Sugar-candie, which Shall be a very good remedic for to cure her. In briefe, all fuch kind of birds as eate fhecps hearts, or the hearts of any other beantes, are fubiect to bee troubled with the difeafe aboue
fpoken of.

## Снар. LVII. To know ibe canarie. bird from others, and what difences fle is fubieci wnto.

 Ou fhall vnderftand that the Canarie-bird is brought from the Iffands called the Canaries, and is of much account amonght vs, becaufe fhee both commeth our of a frange countrie, as alfo becaufe fhe is a good finging bird. She is knowne trom others by this, becaufe the continuethi and heaterh the paflages of her throate, infinging, more than any other birds doe: befides, the is of a leffe bodie, and hath a longer taile; in fo much as cheleffer they bee, the perfecter they be. On the contrarie, the great ones which fomecimes turne their heads behind them, after the manner of fooles, and for that caufe are called fooles, are the worft, and come from the Ines of Palme virte. Wher. fore the nature of the Canarie-bird is not to bee fat, or to maintaine and keepe her fle $\mathrm{I}_{\mathrm{h}}$ well. She is veriefubiect vnto Impoftumes, which happen vpon her head, and thofeot a yellow colour, and they mult bee annointed with butter or hennes greafe about three tımes: then leauing off to doe any more vnto them, for the fpace of three daies, you fhall then take them in band againe, and open them gently, whereupon you thall fee comming out of themehicke matter, like vnto an egs yelk. Which done, you fhall annoint the faid Impoffumes very well with the forefaid greafe, and thus you thall doe as often as they fhall returne. This bird is likewife troubled with meiancholie fometimes, and then the end of her rumpe would be cut and wrung out very well, giuing her of thefe herbes, lettufes, beets, and fuch like. But and if for all theee things, you fee that the Canarie-bird doth not amend the better, you thall coole her witha little of the feed of melons, giuing it her to eate, and yon fhall put into her water-pot a little Sugar-candie,twice, or thereabout, and that fo much as may endure and laft one whole weeke: which may be done likewife when thee is in health ewice a moneth.

The Canarie-
birdun moute;

When the Canarie-bird moutech, giue her of the feeds of melons, and fprinkle her with a jittle good wine, in fuch fort as hath beene faid in feaking of other birds and that twife or thrice a weeke,fetting her afterward in the Sunne, and by this meanes, you fhath make her mout more properly. This courfe you fhall likewife pran etife if the haue lice, to kill the vermine that would waft and confume her, that fo fhe may be preferued.

## Сhap. LVIII.

## of the Linnet, and of her difeafes.

He Linnet is a good and melodious bird, euen that which is taken in her The Linneí. neft. Sometimes the wil be melancholicke : The hunterh the mountaines amongtt the Mirtle buhhes, Boxe-trces, Iuniper-trees, and Bay-trees : The maketh her neft of very fmall roors, and orher mater like vntofeathers. This bird bringeth forth young ones thrice a yeare. She is fubiect vnto the dif- The Linnet is eafe called the pthificke, which may be perceiued by the feeing of her melancholike, fubicia ens othe and her feathers ftanding in ftaring wife, and by her bellie, which then will fhew in difeafe called felfe, fornewhat more piffed up chan ordinarie, full of red veines, and her breaft leane, and by feeing her fpill and pecke multard-feed. This difeafe commeth to her by feeding vpon muftard-feed, which is very hot: wherefore it were better to giue her pannicke, or elfe continuing to giue her muftard-feed, to vfe withall this remedic: which is, when you fee her troubled with this difeafe, to cut the end of her rumpe, and to giue her Sugar-candie, or fome uther fine fugar to drinke: and for her meate, you hall giue her beets, lettufes, and other fuch like herbes to eave; as namely, fometimes fome mercurie. If you hauc vfed to feed her before with muftard-feed, you muft give her pannicke to eare, to coole her withall, or elfe the feed of melons well husked, and to continue the fame meat the fpace of three daics. Her ordinarie meate mult be of the faid berbes. Befides this, you fhall put into her cagea little earth, and that in fuch fort, as fhall feeme good vnto you : howbeit, it would be beft to put theirin fome beaten mortar, or fome clay, to the end that feeding vponit,fhee may bee healed.

The Linnet is likewife fubiect vnto the ftraitneffe or conuulfion of the breft, whercfore being oppreffed with this difeafe, you fhall feed her with the feeds of melons, and in her water you fhal fteep fome Sugar-candie, or elfe fmall morfels of paft. You hall putcherein furthermore a little peece of licoras, to the end the water may fomewhat tafte of it; and fo you mult continueit for the fpace of fime daies, one day alwaies betwixt, that is to fay, one day, and not the other. Seeing to it, that you giue her a beet leafe, or fome other, vpon the day that you fhall give her pure water to drinke. The fame remedic will ferue to helpeher to her voice againe, if the bird were hoarfe, for thereby Thee hall find her felfe well : notwithftanding that there are bue few that efcapeof the Phethificke. You fhallvfethelike remedies for the benefit of other birds, which are found to bee grieued with fuch difeales, as thofe are, whereof we will now fpeake.

## Chapo -LIX.

## Of diuers infirmities hapriing to little cage birds,ton gether wish their remedies.

 Mongtt other difeafes of birds, they arefubiect eafily to loofe their fights and become blind, if it bee not fpeedily looked to, and efpecially the Spinkes. Wher efore, for their better recoucrie beforechey be quite blind, you thall take beets \& draw the iuice out of them, mingling it with a litele lugar, \& with this licour, you fhall make her drinke for the fpace of three daies, to be taken every focond day, after the maner that we haue fooken of in the behalfe of the linnet. And you thall lay in her cage a ficke of the wood of the fig-tree, infuch fort as

## The feuenth Booke of

ifpofitimes aboutbirds.

Eirdt ba uing their thighor legbroken.
that the bird may vee it for a pearch, and rub her eies againft it, for the curing of them: which remedie will then be expedient, when you perceine their eies to begin to fhed teares, and their feathers begin to fare and ftand vp. When they thall bee troubled with impoftumes, you fhall vfe the fameremedies which we haue fooken of in the chapter of the Canarie bird.

But in as much as it ofren falleth out, that birds do breake their legs, I haue thought it good to teach you the way to heale them: you thall giue them their meat in the firft place, in the bottome of the cage : fecondly, you fhall take away their rods and pearches, that fo they may not thereby take occafion to be hopping to looke for their meate, and fo thereby to labour and ftirre their legge, becaufe by ftirring thereof, they perifh and are fpoiled. And this courfe will likewife ferue when any bird hath her thigh broken. And I would aduertife you not to bind or fwaddle it after the manner of the world, for fo you fhould caufe fome impontume to grow in the place where you did bind and rie ir. You fhall doe that which hath beene faid very eafily, if youlay her meare ia the botrome and loweft part of the cage; all manner of pearching being cut off by the raking away of the rods and ftickes which were in it for that purpofe, and keeping them in fome by-place for feare, that by the hearing of noife, they fhould beate and thake themfelues, letting their legge or thigh which they fhall haue broken remaine vntide and vnbound; for nature will heale it, and make it to grow together againe fpecdily.

## Сиap. LX.

## The manner bow to ferue ones turue of birdes, when be would take and catch them, and bow to make them fing.

as
and
2ndOtwithflanding that all birds, except the Spinke, do fing in Winter, as by name the Finch, the Linnet, the Misking, and other fuch like: there are fome found notwithttanding, which being come out of the mue, do give ouer their finging, becaufe of the faid mue. Wherefore from the beginning of May you thall purgethem, which you would vfe for your purpofe, to catch other birds withall, in fuch maner as followeth. You fhall giue them in the firft place of the ivice of beetes mingled with a little pure water, and the day following, you thall giue them a leafe of the faid herbe. The third day following, you Chall keepe them clofe in the houfe, fetting them vpon the ground, that fothey may eate their meate vponit, for the fpace of ten daies, withdrawing them by little and little, day after day, from the light, into fome obfcure and darke place. And when they haue thus paffed ouer ten daies, you fhall giue them fome beets againe, and fhut them vp in fome fquare cheft in a darke and by-place. At the euening, you fhal dreffe them with a lamp, fo dealing, as that the faid birds may fee the fame light for the fpace of two houres, during which time, you may nrake cleane her water-pot, changing their multard-feed every eight day, and giuing them of the leaues of beets euery fourth day, and euery twentieth day of the iuice therof, efpecially, vnto the fpink, being the molt fubiect of all others to become blind. And that you may keepethem without lice, you muft change their cage euery twentie daies, as alfo for another reafon, which is becaufe of the filth and ftench thereof, which might eafily kill them. Thus you mult fill be practifing of thefe courfes, vnto the tenth of Auguft, which terme being expired, you hall purge them a new in like manner as before, fuffering them by little and little morefreely to fee the light, vntill the twentieth of the fame moneth, taking heed that they come not in the Sunne. Thus they will ferue you very well to take and catch birds withall in September and October, and finally in all theref.

## Сhap．LXI．

of the Misken.

WhandMongt the lietle birds of the cage，the Misken is aof cheerefull nature，The mish hino and lingeth fweetly and delightromely：The is exceeding pleafing vnto the fight．She breedeth thrice a yeare，firf abour the end of Aprill，à－ mongft the fhrubs or hedges of iuic or laurell，fecond！y，about mid－May， and thirdly and laftly，in the end of lune ：and this is their ordinarie and moft corm－ mon courfe ；for fometimes they come fooner or latter，more or leffe．Their nefls are made of the moff fine roots of herbs，and offentimes of the leaues of reeds，according as the place will afford them where they nef．

To feed the Misken taken out of her neft，you fhall giue her of a fheepes heart minced very fmall，taking away the fat and finewes，or elfe of a calues or heyfers heart，taking from it likewile the finewes and the fat，all the reft being well beaten and Shred，becaufe of digeftion．You fhall feed her in her neft oftencimes，giuing her cue－ ry time a morfell or two，and no more，leaft they fhould die，by being too much file led．And when you fhall perceiue that the Misken will eate alone，you hall hang at her cage a little of the faid heart minced，not ceafing notwithftanding to feed her，by patting it in her mouth certaintimes euery day for more affurednefle．After fhe hath beene accuftomed to eate alone，you may giue her fome pafte，feeding her therewith－ all onely，not giuing her any more hcart，when fhe fhall be accuftomed thereto．Fur－ thermore，if you haue any great defire that fhe fhould learne fome proper fonge，take the paines for to teach her，for it is a bird that is very eafie to be taught．The Miskens， which are taken in birding，proue better and more perfect than the other．They are woont to continue without finging the fpace of ten daies ater they are taken．You Thal feed them，for che fpace of cight daies，wieh new or drie figs，and after you fhall begin to giue them of the pafte which is woont to bee made tor che Nightingales， wherof we will fpeake hereafter：fuch as are fed with pafte do liue longer chan thofe which are fed with nothing but figs．

## Chap．LXII。

> Of the folitaric Sparroov.

（⿸厂⿱艹⿹勹亾欠心Y nature the folitarie Spartow is giuen to be melancholicke，the loueth by－places，and thereupon commeth her name，becaufe they are very fo－ litarie，as narnely，the old decayed walls of churches，and other vninhao bited places，as being far remoued from the companie of other birds： The is very iealous ouer her young ones ：fhe maketh her neft in the holes and clefis of old buildings，and breedeth thrice a yeare：firft，in A prill：：fecondly，in May ：and thirdly，in Iune．

If you will bring vp，and take any pleafure by the folitarie Sparrow，which haue taken young in their nefts，you muft chufe the greateft and biggeft，namely fuch as are well couered with feathers，for elfe you fhal neuer bring thento any proofe．
If peraduenture，when chey are growne thus great，they will not open their bils，sucat fis ths 0 on you fhall open them，gining them as much as a bird will hold in her bill threc or lafief parrom？ foure times．But and if you perceiue that they will eate of chemfelues，you may put in their trough or meate－boxe，fome of the forefaid heart，not giuiny ouer notwith－ flanding，to put it into their mouthes，vntill fuch time as they can eate alone．But forfuch as open their bils，you fhall feed them with the faid heart，after chat you haue
taken off the skinne round about, and the fat alfo, and that once euerie houre or more, if you heare them crie and fee them gape. Put in their cage a little ftraw or hay, keeping them as neate and cleane as poffibly you can; for if you do not, they will become lame, or elfe die in a fmall time. Wherefore you fhall do as hath beene faid, vntill they haue mouted, and afterward if you will keepethem in fand, it will be very good: howbeit, I thinke it better to keepe them in hay all the Winter following. And whenas they thall cate of themfelues, their meate thall bee theepes heare fmall minced, and fometimes of the pafte which is woont to be given to Nightingales. And fometimes for an extraordinarie difh; you may giue them hard egges, as alfo rayfins.

## Chap. LXIII. <br> Of the Throsile.

what maner of bird the Tbrofle is
 He Throftle is a bird knowne to euery one, and the is as good to be eaten, as to fing: fhe makech her neil in hils full of fnow and ice, vpon high trees: it is made of the moffe of the wood mingled with earth, and farhioned of a round forme with fingular cunning, in the middeft thereof they leate a hole, to the end that it may not fill with water through long and continuall raine, which might proue to the drowning of her young ones. They breed thrice a yeare, as other birds do, that is, in A prill, May, and Iune.

The Throfte taken in the neft muft be kept and fed in like manner as the folitarie Sparrow, as well whiles they are young and fmall, as when they become old and great ones. Furthermore, youmult know that the Throftle is a great deale more delicate and fine than che folitarie (parrow, and hath tenderer bones. So that to preferue and keepe her aliue, fhe muft bee kept very neate and cleane. See that the Throftle which you would bring vp and keepe, be a great one, and well feathered : for if you chufe her great, and that fhe begin to eate alone, and to mout, you fhall bee the more able to bring her vp, and fhe will proue the better.

You muft note alfo, that there are three fors of Throfles : thofe which are beft to bring vp for fingers, are rather the little ones, than the others, and thofe which are of a browne and darke coloured feather, called in Italian Tordi faffoti. On the contrarie, thofe which are nothing worth to fing, are much greater, and their feathers of a whiter colour, called by the Italians, Tordelli, which in my iudgement are better for the belliethan the eare.

## Сияр. LXIIII.

## Of the Calander, Coridale, and Larke.

The calander.
The Cordale. The Larke. Oncerning the nature of the Calander, it is knowne by the effects, for the is hard to tame, if the be not taken in the neft : The wil be fo vexed fometimes as is maruellous, and a thing almoft incredible, for being carried from one place to another; and in this vexation, fhe will continue a whole moneth without finging : yea there haue fome bin feene which did neuer fing againe after, except they were brought backe to their accuftomed place.

The Larke, notwithftanding that fhe is difdainefull, doth not forfake her finging in fuch cafes, aboue two or three daies, as doth in like maner the Coirdale. Thefe birds make their nefts vpon the ground, and in meadowes, and fometimes amongft the corne. Their nefts are made of the dric roots of herbs,and they breed thrice a yeare:
firft in the beginning of May, then in the beginnig of lune, and laftly aboutmid Iuly. Notwithflanding they differ herein fometimes, according to the feafon and time, as do all others.

Thefe three forts of birds, as they are of one and the fame nature, fo they are fed and eate after one manner. For their ordinarie meate and feeding thall be no other than that we haue faid to be goôd for the other birds: namely, the heart of a Gheepe beaten and minced very fmall. If they eate not alone, you fhall feed them very diligently in their nefts, according as you fhall fee it needfull.Looke to it, that they continue not too long in their nefts, for feare they fhould become lame. But after certaine daies putthem in their cage ftrawed with fand,and there leaue them day and night. Being accuftomed to eate alone, you fhall giue them heart mingled with the graine, called of the Latines Far, or elfe with patte which is made for Nightingales, and therewith you thall feed them, till they become great ones, and ftand vpon their feet. Afterward you fhall fcatter fome of the aforefaid corne called Far, amongft the fand of the cage, to the end that the birdes may learne to know of themfelues, the faid corne amongft the fand, and to pecke it now and then, continuing notwithftanding to feed them, and to put into their mouthes of fheepes heart, according to your former cultome. But when thefe birds begin to mout, you may giue them hemp-feed, fpelt, and the fiftings of corne. You fhall allo, put into their cages a peece of drie morter, or elfe of the pumice fone, or of clay, whereupon the birds may fharpen and rub their bills, which is very apt to grow blunt with pecking : and to the end that they mae eare fome of it alfo fometimes; for it is a thing that doth them much good, and feruech for to purge chem.

## Chap. LXV.

> To make the paffe which the $\mathrm{Nightingales} \mathrm{eate}$, the Solitarie Sparrow, Miskins, Blacke-birds, Throftles, andmany other birds.

(25)Afte for the faid birds' (whereof we haue made mention before) muft be made after this manner: take the meale of white Cich-peafe, and boult ir diligently wish a boulter, as is ved to be done with wheat meale, and infuch quantitie, as you fhall fee to be needfull. For example : Let the quantitie of meale bee two poundes, with one pound of fweet almonds chofen and husked, which afterward you fhall take and ftampe very well, in fuch fort as is vfed when pafte for march-paines is tobe made. Herewishall, you muft haue threc ounces of frefh butter, which butter you fhal put into a copper veflel tinned, and mixe therwithall the faid flower and almonds sogether. Afrer that you haue done this, you flal fet the faid veffell vpon charcole fire, that foit may not fmell of fmoake, ftirring it diligently whiles it is vpon the fire, with a wooden fpoone, that fo it may boile by litele and litele, putcing thereto the yelkes of two egs, and a little faffron: when you perceiue the butter to begin to melt, you fhall furthermore drop into it of liquid honie,fo much as fhall ferue for the incorporating of the pafte, and bringing of it into cornes, ftill continuing to fir it with a fpoone,for feare the fire fhould make it burne too. When you haue thus done, you fhall take a Colander made with fuch holes, as will let paffe fo much at once, asthe birds (for which you make it) will eate. And when the pafte is thus ffrained through the Colander, and the cornes made in fuch quantitie, and qualitie, as is requifite for the neceffitie of the birdes, you fhall take the paft which could not paffe through the faid Colander, Io far forth as that the whole may come to be of a iuft confiftence. And for the keeping of it, you mult poure honic aboue, hand ling and ftirring of it cunningly, and fo you hall beftored of prowifion for fixe moneths.

# Chap. LXVI. 

The way to know many and fundric maladies which doe bappen vento birds. thereof cauleth diuers effects, and diuers fignes, wvhich lying hidden; the difeafe continueth vnknowne, and fo there is no adminiftring of any thing, in.as much as it is not knowne, whence it commeth,that they are ent for the curing thereof. Wherefore it is neceflarily remedie is good or conuenibe good regard giuen vnto the outward fignes, by them to know the mifchiefe that lurketh vvichin, and that no leffe in the behalte of birds, than generally of all other creatures. Wherefore I haue endeuoured my felfe, briefely to colleet and gather into this Chapter, vvhatfoeuer hath beene deliuered fcatereringly and diffufedly elfewhere, in the touching of the infirmities and difeafes that are incident vnto birds, and of the knowledge thereof; for the benefit and inftruction of fuch as would know the dileafes whereunto fuch birds as they delight in, and loue to keepe, are fubica.

Birds therefore are fubie $\mathbb{R}$, amongी other difeafes, vnto impoftumes, wvhich doe bappen vnto them, and appeare in the head of a yellow colour,as great as a Hempfeed, yea, fometimes as bigge as a Peafe: a difeafe commonly haunting all birds, efpecially thofe which are ot a hot complexion.
Another kind of difeafe with which birds are troubled, is called the fubte difeafe, Pthisw: for the bird that is troubled with this difeafe, fwelleth in her bodic, as hauing it cuerie where befee with veines full of bloud, the breaft notwithftanding being thin and leane: and furthermore, the bird fo difeafed, doth nothing but take, caft away, or olicr-turne her meat and Hempe-feed.
The gowit: The gowe is anocher fort of difeafe common vnto birds, and vexing them fore: for when as they are difeafed thereof, they can neither ftirre nor' ftand, becaufe of the paine they doe endure. This difeafe is knowne by the roughneffe of theirlegges
and feer. and feet.
fo: and it is is te of breathing, or hard drawing of their breath, troublech them al10: and it is knowne by their hoarfenefle, fo as that they cannor vter thein tunes : or
if they doe, yet very harfhly and imperfectly : or elfe by their not if tiney doe, yet very harfhly and imperfectly : or clice by their not faying any thing
at all. You fhalllay your hand vpon her breat, and by that alfo you flall percciue it: for you fhall feele an extr: ordinarie beating, as hewwing it felfe to come from fome oppreffionand great difficultie: by all which you may gather for certaine, that fhe is infected with this difeafe.

## eries and lam

netratable noijes
Oftentimes it likewife commerh to paffe, that they crie and caff forth lamentable noifes, complaining themfelues, wvhich declarech euidently, that they haue the difeafe called Afthma, or hortneffe of b breath.
Blindzeffeq Birds alfo oftentimes fall blind: wvhich, if it be not quickly helped, they vvill newer be cured: and this difeafe is perceiued by the trickling of teares from their eyes, and by certaine feathers about their eyes, vwhich doe curle and crooke by tur-
ning in againe. ning in againe.
The falling fickneffe is likewife incident vnto birds: vvhereof they are fcarce euer cured: for there is no other remedie for it, but to keepe the bird vvhich you bring vp, from the Sunne in Summer: if the efcape che firft time, you mutt cut the nailes of her feet, and befprinkle her well with good wine : purge her oft.
Some fay, That birds are fubiect to the difeafe called the $P_{i p}$ : wvhich is falfe : for the diffafe which they call the $P_{\text {ip }} \mathrm{P}$, is not the $\mathrm{P}_{\text {ip }}$ in effect, butanocher difeafe, which
groweth in the bills of birds, for which it is good to vfe this remedic: Take the feed of Melons, and fteeping them in pure water, make them to drinke thereof three or foure daies, and perceiuing the bird to grow better, you fhall giue her a litele fine Su= gas, tempered likewife with fugred water.
It is hard to know when the bird hath the difeafe of the rumpe: and for my part I The difeafe of cannot tell how to giue you a better figne thereof, than her growing melancholike, as the rumpe. by furceafing and abfaining to fing. The remedie is, to cut away halfe of the fharpe poine which fhe hath there, for you fhall not deuife to do her fo great good any other waies. This is a griefe which all birds are troubled withall, euen thofe that are kept in the cage.
Befides the difeafes before named, birds haue fometimes the flux of the belly: which The fux of the is known, by their making of their dung more thinne and liquid than ordinarily they bellie. were wont, by the beating of their taile, and in that they keepe it clofe and neere together. The remedie is, to cut the feathers of their taile, and thofe alfo which are about the fundament, annointing it with a litelc oyle: And in ftead of Hempe-feed, you fhall giue her the feedes of Melons for the ipace of two daies. But and if chefe be birds which vfe not to eate any Hempe-feed, but heart, or pafte, deferre not to take it from her, and in place thereof to giue her hard rofted egges, in fuch fort as we haue faid before.

## Chap. LXVII.

## Of the difeafes that happen particularly to cucrie particular $\int$ ort of birds.

 Sconcerning old Nightingales of the cage, they are fubieCt vnto gowes The dijeafis and conuulfions in the breaft : vnto which difeafes the folitaric Sparrow is allo fubič, befides the falling fickneffe, or giddineffe of the Nightingale, and to thefe birds following? head.

Linnets
The Linnet is troubled with the fubtile, or clofe and fecret difeafe, more than any other bird, as alfo with hot apoftemes, conuulfions, and gowts.

The Finch is wont to haue impoftumes, and the fubrile difeafe.
Firch.
The Siskin, on the eontrarie, is not fofubiect vnto difeafes, both becaufe fhe is of a siblim, betrer complexion, as alfo of more flrength. And this is the caufe likewife why fhe feldome times falleth blind.
The Spinke is more fubieft to blindneffe than all the reft : and when fle is once spinke. oner-runne of this difeafe, the is no more worth any thing, for the will cuer and anon fall into it againe of fec purpofe.
Two only difeafes doe voluntarily moleft the Goldfinch,that is, the fubtile difeafe, Goldifnth. caured through old age, and impoftumes, proceeding of the eating of Hemp-feed,
The fame two difeafes we find to befall the Canarie bird of Spaine : howbeit, the canaric bird. fubrile difeafe is feldome times found to trouble her : he is alfo fubieat to the conuulfion and oppreffion of the breaft, becaule of her exceffue naturall heat. The Miskin is more fubeet vnto the yowt than any bird that is. The folitarie Sparrow is haunted with impoiftumes and melancholie, which cauferh her ofen to die. The Corydale fal- corydale. leth blind fometimes, and fometimes fhe is troubled with the fubrile difeafe. As ie alfo Larkeo happenech vnto the orher kind of Lark, which hath no crefl vpon her head. The Ca- calander. lander likewife is fubiect vnto the fubtile difeafe, apofemes, gowts: and that which is worfe, namely, to become quickly blind. The bird, called in Latine T Thraupis, is likcwife very fubiect vnto impoftumes, and ofentimes diech of fat. The ftrongeft and flouteft bird that can be, is the Blacke-bird, wherein I cannot find any difeale to kill Blact-bird. her, exceptold age, which is the common maladie deuouring all mortall things. Fat
and impoltumes doe fometimes hurt the Throftle, as alfo the difeafe of the rumpe, which is likewife common to all birds that are kept in the cage.

## Chap. LXVIII.

## Birds are to be purged, at what time, and bow of in the yere.

Ightingales and all other kind of birds which eate heart and pafte, mult be purged at the leaft once euery moneth with two or three wormes oue of the pigeon houle euery time : two daies after, put into her water-pot the quantitie of a nut, of fine fugar, and when her voicefailech ber, you mult put into the laid water, fome licoras, as namely, fo much as may giue fome tafte to the water, and this will cleere her voice very exceedingly. The forelaid purgation is very needfull when they are about to moure. The cage mu? neuer be withour earth or fand. She muft be fprinkled ouer with wine at the leaft twice a week, to further her in her mouting, and for the beteer preferuing of her life, fetting her afterward in the Sunne, til fhe be almofl drie : the like courfe mult be taken when fhe is troubled with lice: and if you give her any drie figs, they will much reioice her.

## Chap. LXIX.

## To purge birds that feed upon Hempe-feed.

Irds that eate Hempe-feede, fhal take for to purge them the feedes of melons husked, and herbes (as you thall thinke good) namely Succoric, Beets, Leetufes,Scariole, and Mercury, which is principally good for the Linner, but giue them what herbs you pleafe; forthey are very good to giue to birds to purge them: yea, and thoughthey haue no need to be purged, yee you muft not ceafe concinually to be giuing of them fome, giving then furchermore, among $t$, either earth or drie mortar in their cage, to the end they may eate of it, or dult themfelues in it at their pleafure and conuenient time, which is very wholefome for them: and likewife you mult giue them fome Sugar, as you haue beene taughe before. You hall perceiue when the bird would moute by the feathers in her cage, and then you thall befprinkle her lighely with wine, as wee haue already fooken before. Sume birds mout in the end of Iulic, and others in the end of Auguft. Thofe which aretaken in the neft begin to mout as foone as they be bred, and rheir mouting continueth a moneth. You fhall befprinkle them with wine at the leaft twice a weeke, to caufe them to mout the fooner.

## С нар. LXX.

## Toknow how long the birdsliue.

(3)F any man defire to know how long thefe birds line, lee him know that amonyt Nightingales, fome liue three yeares, fome fiue, and others vnto eight, and fing vntill that time, but from that time forward they are not any longer in perfection, but decline by little and litele. It hath bin feene that Nightingales haue liued till they haue been fifteene yeres old, and continued finging every day leffe or more, fo that it may feeme that they line according to the good ordering which they haue, or elfeaccording to their good complexion.

## the Comirie Farmio.

The Miskins being fubied to che gowe, doe live buta fhore time, as chrce or foure yeares at che mof? The folitaric Sparrowes line in good flate and account for the fpace of fiue ycarss : many of them die of the fubrile difeafe, forme of impoflumes, ex, politrarie spart yea, fifecter, and freche, and twencie yeares, more or leffe, according vito ther complexion: and they are alwaies in geod plight, finging vnto the laft day of their hife. The Linnet is fhot--lited, becaufe fhe is fubiedt vnto the fubtile difeafe : fome live ewo The life of yeares, fome chrec, and fome fiue, according to their manner of ordering and gover- the Linuth, ning. The Siskins liuc, fome fuue, ochers eight yeares, by reafon of their good com- the suth the plexion, and becaufe they are not fo fubiect vnoo difeafes as other birds. The Spinke spinheo liuech but a horteime, becaufe tincy are fubieft to blinduefle : fome live one ycare, fome two, others sill foure: many of them die of the falling fickreffe, becauferhey hauc becne fet forth into the Sunne in the Summer time, vviercby the heast hath fearched and penecrated into their brainc. The Calanders, Corydales, and Larkes, liue alike long, the one fort and the other, as chree or fiue yearcs. Some Calanders doe liue longei than the Corydales: but fhe groweth metancholie, being remoured out of one place info another. The Canarie bird liueth long, as fue, teinie, and fifteene yeares: yea, there laue fome beene feene to line twentie yeares, continuing al-. The lificof the waies good. The Thraupis is of the continuance of fix yeares, or thereabour, accorn and of the the ding as fhe is kept betcri or worf. It is a bird that is not muth regarded: for her fin- Tinauphpso ging is but irkclome and rectious : fome take pleafure in is, and fome doe not.

Chap. LXXI:

> The manner of taking fumall birds, as well thof wobich sing, as thofe which are for to ocat: as alfo all osther fort of fmall birds.

iiO take birds with the voice of fome leafe, knite, or fuch other like ching, To tate birds a man muft fand in a bufl?, fhadowing himfclfe with the leaues cherc- with a chivs of, and with a whiftle make a noife or cric, councerfeiting fome bird ${ }^{\circ}$ or call. that hath beene taken before, or is then taken. Some take a Sparrow, being kepe fomewhat neere, and held in a fnare, and make her crie, pinching together her wings or legges, and then the birds will flocke about her to aid hier, thinking, that the Owle hath caught her: and hauing fer lime-wwigges or lime-buhhes vpon the branches of the erces, the birds chat hauli come to fuccour her, and lighting, will be limed.
To cake Spinkes as they are going, that is to fay, in the place where many Spinkes To take birds are wont to paffe, you muff enuiron their trees (atter they haue beene cut and planted as they are in a plaine ground, one diflane from another fome finall diffance, as three foot, or thereabout) with lcaucs below, as if it were a lodge, and amongft chem lay a coard, made faft vnto a bough, and carried vp on the other fide with fome prop: this fhall be held by a man placed a good way off, and on the faid bough fhall be lianged and made fant two or three Spinkes: then you muft fer the faid trees verie choiccly and thinne with lime-twigges, and fome diflance off from thence, two or three cages, wherein there fhall be fome Spinkes,for to call to fuch flocks as fhall come fly ying that way, which perceiuing thofe in the cages, as alfo thofe which arc hanged vpon the flicke, will lime chemfelues on the trees.
To take Partridges wish the Tonnell, or Tombrell, there muRa man be placed To tate birds behind a Cow or a Horfe, of wood, or of officr, painted in fuch fert, as that it niay re- with the femble the falhion of a Cow or a Horfe, and in the meane cime hee flall ouer-calt the nets vpon the Pareridges. This kind of taking of Pareridges is now adaies forbidden.

The feucnth Booke of ©c.
To take Partridges and Woodcocks in the night with fire, you muft light a match

To tate birds with fire.

To take bivds wist the hant. of old drie vvoollen clouts, dipt in melted tallow, wrapping them vp afterward together in forme of a corch, as chicke as ones arme, and of the length of a foot: then you muft aftonifh and amaze the Partridges in fuch fort, as chat they may caft themfelues into the nets, wverewith they fhall be befer and compaffed.

To cake birds with your hand, you muft fatter, in fome plaine and fmooth piece of ground, Corne or Millet, Ateept in the lees of good vvine, and the inice of Hemlock, and afterward drie them, whereof when the birds fhall haue eaten, they will not be able to flie afterward, fo that one may take them with his hand.

To kill birds with the Long-bow, or Stone-bow, vpon houfes, trees, or butts, it is requifite, that he that fhooteth, fhould haue double Thafts, forked before, vven hee vvould kill Geefe, or other great birds, and thofe verie. fharpe euerie vvhere, to the end they may cut off the vving, or the necke, vvhere they fhall touch them: for to ftrike them vvith the common fhaft, vvould not fo hure the bird, as that fhe might be conftrained to abide in the place, for fhee vvould flie away, notwithftanding that fhe vvere hure
or fhot through, although fhee vvould
die thereof in another
place.

The end of the feuent th and last Booke of the Countrey Houfe.

FINIS.


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[^0]:    Some doe grow better of new feedes; as

    Vnderftand, and know, that the choice and age of feedes is double : for afcer you haue chofen them ripe, full, heauie, corpulent, groffe, of a good colour, and that they fall not into powder eyther through rottenneffe, or bruifedneffe,

    Leekes and Cucumbers.
    grow bet doe Beets. old feedes, as Creffes. Spinach. Poppie.
    

[^1]:    chem,

[^2]:    R 2

[^3]:    

[^4]:    CI CAP。

[^5]:    ?.

    Furthess

