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ANGELO SALA
OPIOLOGIA

LONDON, 1618

WALTER J. JOHNSON, INC.
THEATRUM ORBIS TERRARUM, LTD.
AMSTERDAM 1977 NORWOOD, N.J.

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S.T.C. No. 21594

Collation: A-G⁸.

Published in 1977 by

Theatrum Orbis Terrarum, Ltd.
Keizersgracht 526, Amsterdam

&

Walter J. Johnson, Inc.
355 Chestnut Street
Norwood, New Jersey
07648

Printed in the Netherlands

ISBN: 90 221 0892 9

Library of Congress Catalog Card Number
77-007431

OPIOLOGIA.

OR,

A Treatise concerning the
Nature, properties, true preparation
and safe use and Administrati-
on of Opium. 2000451

*For the comfort and ease of all such persons as
are inwardly afflicted with any extreame griefe, or lan-
guishing paine, especially such as deprive the body
of all naturall rest, and can be cured by
no other meanes or Medicine
whatsoener.*

Dedicated to the Illustrious, High and Mighty
Lords, the Estates generall of the vnitied
Prouinces in the *Netherlands.*

By ANGELVS SALA VINCENTINVS
VENETVS.

And

Done into English, and something enlarged by
THO. BRETNOR. M. M.

LONDON,
Printed by NICHOLAS OKES.
1618.



To the Learned, and my
worthily respected friends,

D. BONHAM, and Maister
NICHOLAS CARTER
Physitions.

BEE not offended, worthie
Doct^r, if I presume to pa-
rallel you with a Physition,
which neither is nor wilbe
dubbed Doct^r for any mā's
pleasure, nor cares a whit for any clothing
in Byss^e, how worthy soever. For the
which I blame him the lesse, sithence nei-
ther Aesculapius, Hippocrates, Galen,
Aucien, nor any other of the old stampe
ever assumed any such title, though better
giuen them. But tempora mutantur,
and therefore now adai^es for distinction
and decorum sake it is very conuenient

The Epistle

and necessarie to giue such attributes, especially to men indowed with so excellent a qualitie as the true knowledge of Physicke, and giift of healing is. But how vilely this worthie Science and profession is traduced and abused! Witnessse the multitude of Mounte-bankes, Quack-saluers, Horse-leaches, Cunning-women, Imposters and Vpstarts, who hauing learned (my chance) the Calcuning of Mercurie, the preparation of Antimony, or the composition of some home-spun medicine, and hauing scraped together some triuiall experiments out of some old Manuscripts, or from some brazen-face Bragadotio, will presently forsooth set the Physitian at open defiance, boasting and protesting that they haue saued the life of twentie, whom such and such a Physitian had quite forsaken and giuen ouer for dead. Nay I haue heard a good fellow, I will not say a Pharmacopæan, and that no simple one neither) boldly affirme that if hee should not now and then adde or diminish something from the Physitions Bill, the fat were in the
fire,

Medicatory.

fire, and twere as much as the Patients life were worth, aggrauating the matter in such manner that my very eares haue glowed to heare it, seeing that by this their scandalous detraction they arrogate to themselves and impose vpon the simple people, bringing them into fockes paradise! But the Physitions are well enough serued, for if they would expulse one packe of these, snaffle another, and take a little paines with Fornelius, to prepare or see prepared their principall Medicines, and not to be so idle as to giue too much credit to the Druggist, nor let each giddie-headed fellow be partaker of their secrets, it were doubtlesse better for the Common wealth, more profitable vnto themselves, and more pleasing vnto God: but of this inough. There resteth nothing now (my worthy friends) but that you would vouchsafe to stand betwixt me and such malicious detractors; for if they dare blaspheme the tall Cedars, what will they not doe vnto the lower shrubs. The subiect of this treatise is so well knowne vnto you, that how-

The Epistle Dedicatory.

Soeuer some nice and scrupulous persons may make question of the veritie of the passages, or of the safetie and excellencie of the medicine, you are so well instructed in the composition and vertue thereof, that no wise man will oppose you, some may imagine that I might haue made better choice of some famous and remarkable Collegians for my patrons, but vnto you onely and vnto that worthie Doctor Gwin am I obliged, whose multiplicity of learning, iudgement and discretion, accompanied with affabilitie, humanitie and curtesie is more then apparantly knowne to all your acquaintance; Let me therefore craue this boone at your hands, that you would accept this simple translation as a testimony of my louing remembrance towards you, and that you would defend it from the obtractions of scandalous tongues,
and you shall ever
make mee

Yours,

THO. BRETNOE,

To the Reader.

heare say as they haue rather chosen to indure intollerable paines then they would take three poore graines of well prepared *Laudanum* : but I cannot greatly blame them, for the naked truth is, many moderne Physitions know not well what to make of it. *Forestus Montanus* and many others with *Galen* absolutely conclude, that it is stupefying and cold in the fourth degree at least, and therefore not fit to be inwardly taken at all, but in Syncofes and extreame necessitie; *Mercatus* is indifferent. *Capiuaccius* is forced by common experieñce to grant with *Auicen*, that for its foure degrees of coldnesse it is furnished with three of heate in operation.

But *Platerus*, *Bauhinus*, *Zwingerus*, *Scaliger*, *Quercitanus* and others affirme with *Rhasis*, that *Opium* is rather hot then cold, seeing that in tasting thereof it doth *Palatum & linguam urere, caput tentare, Sudorem prouocare, venere[m] promouere, sitim excitare, fruriturum*

To the Reader.

*insignem parere, animositatem siue potius
furorem inducere*, and being outwardly
applied doth (contrarie to all cold
things) blister the skinne, discusse and
mollifie hard tumors and nodes. But
whether it bee hot or cold it skills not
much, seeing it is confessed of all true
Physitions, that it doth *ex forma speci-*
fica, naturally resist putrefaction and
wonderfully and speedily release the
hodie from intollerable paines: for,
let the torments or grieffe proceed
from what cause soeuer, either hot or
cold, inward or outward it worketh
the same effects, so that this onely Me-
dicine well prepared would doubtlesse
saue many thousand mens liues that
trauaile or saile, *sub aequatore vel polo*
Arctico, into the East Indies or Nor-
therne discoueries, vnder the hottest
or coldest climes in the world, seeing
it resembles much the oyle of *Vitrioll*,
Vinegar, *Chymicall salts* and such like,
which are giuen with good successe as
well in cold as hot diseases: but what
needs

To the Reader.

needs many words seeing the Author himselfe hath sufficiently discovered the benefit hereof, I onely wish you to haue great regard to its preparation: for as in most Physicall Drugges there remaineth some bad qualitic or other which needeth correction, so doth *Opium* require *Vulcans* helpe, and other specificall meanes to driue away its sulphurous malignitie: you may read in *Quercetane* his answer to *Anonimus* *Cap. 2.* and in *Sennertus* his *Institutions Lib. 5. part. 3. Sect. 2. Cap. 1.* that the ancient fathers of Physicke made their chiefest Medicines with their owne hands, and intituled them after their owne names, which many retaine to this day, but now the case is altered; The Merchant he will haue his Factor, his Casher and his Broker too, the Grocer his Garbler, the Vintner his Cooper, the Gold-smith his Forger, the Draper his Cloath-worker and Drawer too, the Physition his Apothecarie, The Apothecarie his Druggist
and

To the Reader.

and his Workeman too : for few of them make all their owne Medicines. In brieffe *Iohn* wilbe a Gentleman at least. But me thinkes, the life of man (so pretious a thing in the sight of God) should not be so little esteemed of as I feare it is in posting ouer hither and thither, I would be loath to be mistaken, or haue any man thinke I goe about to correct magnificat, or teach others hauing neede of instruction my selfe, but ingeniously (as any conscionable man ought) declare my opinion, and to let the friendly Reader know how hee may bee abused if hee looke not about him ; for mine owne part, I wilbe so bold, if able, as to prepare the chiefest Physicke I vse my selfe, and for the Medicine handled in this booke, they may haue it well don of my friend *Harbert whitfield* in *Newgate-Market*, of Maister *Bromhall*, who hath conferred with the Author and some others, no doubt about this towne. And so intreating

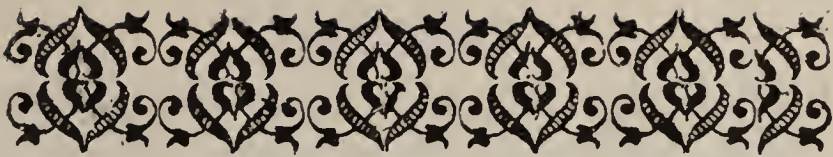
To the Reader.

treating thy gentle patience for these
rude lines, and thy kinde acceptance
of this homely translation
while better is abree-
ding, I euer
rest,

Studious of thy health,

THO. BRET NOR.

The



The Authour his Preface to the Reader.

Make no question (*Curteous Reader*) but as soone as this little Pamphlet shall come abroade, there wilbe some which will presently beginne to taxe mee; saying, what fellow is this *Sala*? will hee (like a *Master*) teach us what *Opium* is, and how wee should prepare an excellent *Medicine* thereof called *Laudanum*, which will presently appease all griefes of the bodie, extinguish all extreame heates in *Feuers*, stay all *Fluxes* of the belly, prouoke quiet rest to the diseased, &c. are not these onely two things, the one whereof hath bene disclosed to the world many ages agoe, the other revealed to us of late by sundry moderne *Physitions*, so that wee stand not in need of his instructions, hee might well inough haue spared his breath to haue cooled his potage.

To whom I answere first (concerning the naturall propertie of *Opium*) by demanding of them
what

The Preface.

what ancient Physition was there ever, who hath written of, or declared the nature and use of this Medicine so well, or so amply giuen such infallible and true reasons of its vertue and energie, but there may remaine some gap open, or some subject or other to worke upon, wherein they may bee controuled, and whereto or from whence a man may adde or diminish something more or lesse: beleeueme (I thinke) they would haue much adoe to finde me such an Author; for if it were so, to what end should they dispute so often in their publike Academies and priuate consultations of the naturall qualities of Opium? were it not a notable argument of vaine curiositie rather then of solid iudgement or discretion to dispute against a doctrine already reduced into necessary and irreproueable Maximes as they imagine? But the naked truth is, that the use of Opium is yet doubtfull among the greatest part of Physitions: which being granted, I know no reason but that if it bee lawfull for an other to argue and dispute of many things beside the common conceipt and apprehension of the Ancient: it cannot be accompted idlenesse or vauitie in me to vtter my opinion also being grounded upon rationall termes, and agreeable to the authoritic as well of ancient and moderne Sages as mine owne peculiar experience and obseruations, collected and gathered for the instruction and benefit of such onely as shall haue occasion to make

good

The Preface.

good use of them, not taking upon me in this tract or any other to teach any man; much lesse those which thinke they know already much more then my selfe.

Secondly (concerning that obiection that diuers Physitions haue written and made mention already of the Chymicall preparation of Opium as a principall ingredience into that excellent Medicine called Laudanum) I deny not their assertion, but rather rely upon their authoritie, and am partly satisfied with such things as they haue already divulged, as may appeare hereafter, yet notwithstanding the whole world can beare mee witnessse that neither Laudanum nor the use thereof haue beene things commonly knowne; for it is a thing most certaine, that among a hundred Physitions and Practitioners in Europe, a man can hardly finde fiftie that will take paines to read ouer the workes of Paracelsus, or any other Spagirique which hath written of this subiect; much lesse can the thing it selfe bee common or familiar vnto them: among those fiftie a man shall hardly finde twentie which make use of it: among those twentie it were strange to finde ten which are able to prepare it with their owne hands, and among those ten it were rare to finde three which durst freely publish or manifest its vertues to the world, or propound the use thereof in their private and particular consultations for the benefit of the diseased; or

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maintaine the same for such a soueraigne thing as it is indeed.

I am very well assured that although the most part of our Physitions here at the Hage doe sometimes make use of this Medicine, yet a man may trauaile into a hundred Cities in Christendome where the Physitions neither use it nor make any more accompt of it then of a thing altogether strange vnknowne and of no use in the world.

*Furthermore, if we come to a popular examination thereof, I am perswaded that in this very Citie (notwithstanding the aforesayd) among a thousand men and women which know the name and use of Treakle, Mithridate and other ordinary Medicinall compositions, and can apply them to their best use and behoofe when they are diseased or sicke, yet a man can hardly find twentie of them which haue once in their lines heard one speake of Laudanum, the knowledge whereof no question had beene as requisite and necessarie as of either of the aforenamed. What great matter is it then if Iames, Martin, Francis, &c. knew what Laudanum is, and the use thereof, when so many thousand men know nothing at all, many of them in the meane time languishing and complayning of extreame paines and want of sleepe euen to death, and can finde no ease at all, vnesse by meanes of this excellent and pretious secret, or such like: Well then, Let vs put the case that this my Treatise were
good*

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good for nothing else but to enlarge and make knowne the name of Laudanum among the rude multitude to give them occasion (when time and oportunitie shall serue) to inquire and demand for it of their Physitions, or of others which shall haue the same by them, whereby they may be assisted and fortified against sundry dangerous accidents which by no other meanes can be so quickly, safely or easily auoyded; so that if it were for no other reason then this, my labours (me thinks) were not unworthie regard; but the profit which may redound to many persons by this discovery is not small, as the discreet Reader may easily perceiue hereafter. To conclude with the common prouerbe, As hee cannot spit sweete whole throat is full of gall, no more can such as are stuffed with their owne passions (thinking themselues onely wise) euer speake well, or commend others labour or knowledge then their owne, yet notwithstanding, neither these nor any other obstacles whatsoeuer, either ought or can hinder the good will and entire affection of him which desireth the aduancement of Art to Gods glorie, the benefit of his neighbour and his owne private ioy and contentment.

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Whether Chymicall Medicines in generall are more violent and dangerous then other ordinarie Medicines are; and whether in respect thereof a man may lawfully administer them except in desperate diseases onely as some imagine?

A man shall finde some Physitions in the world which (having no skill in Chymicall art) being demanded of their patients and other people, what they imagine and thinke of Chymicall Medicines and their use ingenerall, will not altogether blame and reprove them (as not long since many did) but in answering perhaps will say, the Medicines are indifferent good, but are alwaies more violent and dangerous in their operations then other ordinarie Medicines are, in regard whereof they ought not to be used but in desperate diseases onely.

Therefore before we speake any more of Opium, or the Chymicall preparation thereof (for the better purging of chymicall Medicines and such as use them from suspition and blame) I thinke it fittest to resolve this question on this fashion.

First, it may bee easily perceived, that these Learned M. M. by this maner of answering fall into a double error, and are therefore worthily taxed in two principall points which makes their consequence unsauery and idle. First, that they
indge

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judge and censure of things whereof they have no skill nor exact experience at all, so that what they answer in this point, is either by some vaine conjecture, blind tradition, or idle report; secondly, by making no distinction betweene generall and particular, they condemne all Chymicall Medicines without exception to be such as aforesaid.

But leaving to reprove the former of these two points, as a thing exploded by each discreet mans concept, let vs insist a little to confute the later: in proving that they wrongfully impose violence and churlishnesse to chymicall Medicines, seeing that vnder this generalitie they doe not only condemne those excellent Vomiteries and Cathartickes of Antimonie and Mercurie, but also all other kinde of Vomitiues, both meanè and gentle, all kind of Vegetable, Deiectories or Purgatiues from the strongest to the weakest, euen from Scammonie to Aloes and so the very Rose, as also all other formes and degrees of Medicines, whether they be Diaphoreticke, Diureticke, Vulnerarie, Bèzoardicke, Cordiall, Anodyne, Somniferous, Roborating or Specifically appropriated to diuers parts of the bodie, or resisting diseases of diuers natures, and finally all other kind of wholesome and necessary Medicines, vsed generally as wèl among the Spagiriques as other ordinary Physitions, differing only in maner of their composition and preparation.

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Hereby you may at first dash perceiue that if they would speake any thing against the vehemence which may subsist in any Chymicall Medicine whatsoever, they should change this generall enuntiation into a more particular, and say, among Chymicall Medicines there be some which be vehement and not to say absolutely and generally that all Chymicall Medicines are so in performance whereof we will do them right, and presently draw them to confesse that wee onely haue not some vehement and churlish medicines, but that they themselves also haue the like, no man can deny.

Seeing therefore we accord in this (as wee cannot choose) if they will further aggrauate the former accusation, they must of necessitie prooue that chymicall medicines of a vehement nature are more churlish and dangerous then their ordinary Medicines of the same nature are, as also that their milde and gentle Physicke Chymically prepared, becommeth more dangerous then before, but (alas good men) they can proue no such matter.

For primarily touching those Chymicall Medicines, which they pretend to be vehement (as those of Antimonic and Mercurie vomitive) there is no question made among vnderstanding Physitions (besides daily experiecc) that being compared with those vehement vomits which the auncient Physitions haue prescribed, as those of white Hel-
lebores,

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lebore, Tythimalls, Spurges, &c. they would be found as gentle and familiar in their operations, as Sena and Rheubarbe are in comparison of Scammonic, Colocynthis, and other vehement and alterative purgatives.

And furthermore, if they should say that they neither use white Hellebore, nor Tithymalls in regard of their venemous proprieties, or because they are found dangerous in working, this is the thing wee looke for at their hands, for they can never make it appeare, that either Antimony or Mercurie well prepared cause any such Symptomes in the bodie as these doe: or if they esteeme it a thing fit and requisite to desist from the institutions of ancient Physitions, exploding the use of such Medicines which they finde to be dangerous; we thinke it farre more rationally on the other part, (observing the main end of the foresaid intentions, and so cutting off quite the vsage of euill things,) to appoint and ordaine in their roome such as are more gentle and familiar.

Here they may finde fault (but nothing to the purpose) and say that they custome to make sicke people to vomit is very dangerous, and therefore to that intent they ought to use no Medicine at all, &c. But hauing sufficiently answered this obiection, and proued the contrarie in my Treatise intituled Emetologia, concerning the nature and use of vomitive Medicines, I thinke it

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needlesse to repeate the same in this place.

If notwithstanding what is said these M. M. persist in their opinior, saying that Antimonie and Mercurie, are Medicines not so free from Maligne qualitie as I pretend, but that that they in-here and cleave to the guts, and leaue some secret infection in the blood or Radicall humours, the which in continuance of times comes to manifest it selfe. And these are those common nuisances which many object, thinking thereby to drawe mens, affections after their owne fantasies.

But this vaine opinion is quickly confuted by plaine and eident demonstration when they please, for most men which take either Antimonie or Mercurie well prepared, evacuate or cast the same out into the vessell, whereinto they vomit euen at the very first operation of the Medicine either upward, or downward, so that it hath beene often found in the excrements, when nature did worke that way first, as sometimes it falleth out.

*Secondly, these (being mettallicke and fixed bodies) cannot bee concocted, or brought into chyle or naturall nutriment by any meanes, whence it consequently followeth that they cannot intermixe themselves with the blood, or any other substance of the bodie, as all other vegetable and animall Medicines may easily doe, in regard of that Sym-
bolization*

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bolization they haue with the foresaid substances; so that the stomacke may reduce them into chyle at pleasure, which is the cause also that the poysons of euill plants, serpents and other venemous creatures are more actiue, sodaine and piercing then Arlink it selfe or Realgar minerall.

I could produce a number of other reasons to demonstrate that Chymicall Medicines of a vehement nature, as principally the two before named (against which all this controuersie doth particularly arise) are more gentle then any violent vomitiue Medicine which our Ancients prescribed, yea farre more safe then any vomitorie vnder Hellebore or any aboue named: but to auoide long discourse let these suffice at this time.

Now let vs come to resoluē our selues whether those ordinarie Medicines which be naturally gentle and without any offensiue qualitie, after chymicall preparation change their naturall mildenesse, into that which is euill, and so become vehement and dangerous.

Concerning which point wee haue in this discourse alreadie spoken some thing in defence of purgatiue Medicines, as those of more frequent use then others among diseased persons, and therefore wilbe contented to determine the whole matter in the generall defence of Diaphoreticks, Diureticks, Alexiteries, &c. chymically prepared.

First, therefore it must of necessity be granted of

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all opponents that every Medicine ingenerall be-
reaved of its earthinesse and feculencie, and made
pure cleane and well digested by fire must of conse-
quence be lesse hurtfull, lesse dangerous, and lesse
offensue, and is also farre more apt to worke, ci: ò
tuo & mundè (as the Physitions wish) then any
crude, earthie, impure or ill prepared Medicine may
or can doe by any meanes possible; the reason is,
that when such ill-prepared stuffe is once gotten
into the stomacke of any diseased person, nature (al-
readie struggling against the disease) becommeth
thereby more wearied, over-cloyed and oppressed in
concocting and seperating the purenesse from the
impurenesse of such drugges then it was before, and
therefore can receive very little or no comfort at all
by such Medicines, whereas on the contrary part
other medicines (made subtile, active, pure and well
prepared by art) doe begin to disperse and dilate
themselues gently into all parts of the bodie as soone
as they are receiued thereinto, and being neuer so
little exagitated or moved by naturall heate assist
nature her selfe without any alteration or distur-
bance at all, and like a good friend aide and pro-
mone her; whereas the other wearieth and tor-
menteth the body like a Tyrant. Moreover wee
may consider that Chymicall Medicines being
pure and neat, as aforesaid, leaue no feculent resi-
dues or corruption in the bodie at all, as others
commonly doe.

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But if it commeth to passe (as it is not unlikely) that some should deny these reasons, obiecting that Chymicall Medicines being subtill and pure, can more easily disturbe nature, and move the body more sodainely then other Medicines do; to whom we answer, that although among our Chymicall Medicines, there bee some of a subtill Nature, as our distilled oyles, the quintessence of wine, and other vegetables: and as there be diuers liquors (we acknowledge) very sharpe and piercing; so in like manner be there some diseases, wherein such Medicines be very requisite and necessary, whereas others of a grosse, feculent and clammy substance can yeeld no ease or comfort at all; in regard whereof wee ought not to accompt them dangerous or hurtfull, but rather very beneficiall and wholesome, especially being well applyed and vsed as all Medicines of what nature soeuer ought to bee.

But vnder colour of these no man ought to comprehend other Chymicall Medicines, or proclaime them to bee of such a piercing nature, for conning to purgatiue Medicines extracted (being of a sappie, thicke and condense forme) wee know well that they are not nor cannot bee so subtill or piercing as oyles, nor are called subtill in regarde of their penetratiue uertue, but rather because they are farre more easily conuered into Liquors, then the substances from whence they

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they are extracted, and therefore ought in no case to be called irritatives.

Experience her selfe teacheth vs that the extract of Mechoacan, Rheubarbe, or Sena (being gentle Medicines) duely administred, shew themselves farre more milde, gentle and effectuall then when they are exhibited after an entire and grosse preparation.

But what need many words? doe we not plainly see that our Chymicall Art bringeth Colocynthis and Scammonie (acrimonious and venomous purgatives) to bee so gentle and milde in operation, that a man may as safely and freely administer them as Rheubarbe, having onely regard to the qualitie of the disease, and the humour they naturally purge? as namely that of Scammonie whereof a man may boldly giue to one of a strong constitution twentie graines at a time, in sugar rosat, or any other conserue; And this will worke easily and well, without any touch of paine, perturbation or inflammation in the bowells, as otherwise it would surely do.

And this is a Maxime that not only Scammonie, but euerie other purgative Medicine of such venomous and vehemet nature as Hellebore, Tithymalls, &c. loose their acrimonie and maligne qualitie, and by meancs of this Art become gentle and effectuall in the extirpation of all such diseases as they naturally concerne or respect, without any

The Preface.

inconuenience or danger at all : and this is no vaine coniecture of mine owne braine, for I can produce a hundred sage and learned Physitions which can & will testifie and make this good as well as my selfe.

*And this is all which I purposed to speake at this time in defence of Chymicall Medicines, against the suggestions of scandalous tongues, not meaning or intending hereby to disgrace or vilipend those ordinarie Medicines, wherewith the world is and hath beene furnished and serued for so many ages together ; for both the one and the other may be found good or euill according to the diuersitie of their vsage, notwithstanding I haue at all times indeuored my selfe to the vttermost of my power, to ampie and illustrate the Art of Physicke for the comfort of the diseased (as euery one ought) without any passion or malice in condemning things newly inuented for Paradoxes and Herelics before due examination and tri-
all,*

Ad



Ad Authorem.

EXcuse me worthy *Sala* if I chance
For want of iudgement thy intent to misse,
In fitting that for *England* which for *France*:
Thou paines hast tane and labour to Iwis,
For which and others thou deseruest blisse:
I wish I were thy neighbour, or that I
With such a one might spend my daies and die.

But now the world is such, we cannot find
A man with whom we freely may converse,
Some proud, some stately, others so vnkind,
That't greeces my heart their manners to reherse:
Or talke of such selfe-louers in my verse,
When men by nature friendly creatures borne,
Doate on themselues and others foulely scorne.

But thou, *Patauan*-like, I heare dost ioy
To do poore schollers good, and to impart
Thy secrets best to him thou art not coy,
That's of an honest and a friendly heart,
What wight from such a one would euer part:
Witnesse thy bookes abroad and notes beside,
For which to thee some priuate friends are ti'd.

Ad Authorem.

For what's in Physick more to be desir'd,
Then knowledge how to vse a Medicine well
What in that worthy art to be requir'd:
More then o'th vertue and safe vse to tell?
Wherein than others many dost excell,
For how to strengthen vomit, sweat and rest
Is taught by thee as well as by the best.

Let Carping Criticks, that in corners lurke,
Blaspheme, detract and vtter what they can
Let some of them divulge me such a worke:
And I will say he quits him like a man:
If not I wish him hold his peace till then,
For sure I am that he that fault doth find,
Will come at least a bow and halfe behind.

THO. BETNOR. M. M.

Modus

Modus extrahendi papaueris succum.



Among those powerfull gifts to man infus'd,
What better is the knowledge of those plants,
Which for two thousand yeares were only vs'd:
As meate and sustinance to humaine Saints
For neither flesh, nor fish, the *Highest* grat us:
Till cataclismed world so weake was growne,
That fruit and hearbs could not suffice alone.

And yet we find in basest plants that grew
(Mongst those accompted weeds of witleffe men)
Such strange effects that farre surpasse we know:
The sence and reason of the learned'st pen,
(More is the blindnesse of our nature then:)
Witnesse the Poppie whereby *Greeke* and *Turke*
By planting profit, and do wonders worke.

F. B. M. M.



OPIOLOGIA.

CHAPTER. I.

The opinion of Ancient Physitions, concerning the naturall proprietie and vertues of Opium.



OPIUM (as ancient Physitions testifie and moderne confirme) is a certaine iuyce or viscous liquor which one time of the yeares destilleth or illueth from the tops of white or blacke *Poppie*, by meannes of a little gash or incision made in the outtermost rind of them (as witnesseth *Discordes* in his *fourth booke of Simples Chap.60.*) the which liquor after due condensation is reserued and layd vp for necessary vses, as may not only appeare by the History aforesaid, but by that of *Peter Bellon* hereafter recited.

Good

Good *Opium* (as *Diescordes* and other Ancient Physicians affirme) is weightie and ponderous, bitter in tast, and is quickly dissolved in water, it is smooth and whitish and not rugged or lumpish, and being streined it doth not like waxe melt against the sun, being kindled it causeth not a blackish flame, and being quenched or put out, it alwaies retaineth its naturall smell.

They vse many times to sophisticate or mixe *Opium* with *Glaucium*, *Gum*, or the iuyce of *wild lettice*, but that which is sophisticated with *Glaucium* is easily discerned, for being cut into small peeces, it becommeth yellow; in like manner, if it be mixed with the iuyce of wild Lettice it becommeth more rugged and tart, and hath little or no smell at all; but if it be counterfeited with Gum, it will be bright & shyning in colour, but weake in operation.

Opium taken crude and raw, as aforesayd, to the quantitie of an *Orobus* or wild Fitch, appeaseth all Aches or paines, helpeth digestion, stayeth all Coughes and Destillations or Rheumes, which fall from the braine into the stomack, it is excellent against all kinde of *Head-ach* if the temples bee anointed and chaffed with the same and oyle of roses: being dropped or instilled into the eares with
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the oyle of bitter Almonds, Mirrhe and Saffran, it healeth and recouereth *Hearing*, and the sooner being applied with the yolke of an egge hard rosted in the imbers : it auaieth much against inflammation of the eyes, and being mixed with vinegar is very good against *Saint Antonies fire*, and healeth olde vlcers : with saffran and womans milke it is singular in gouts, and being mixed with Supporatories, it prouoketh sleepe.

Diagoras, *Aetius* and *Mnesidemus* disproue and finde fault with the vsage of *Opium* in the diseases afore-named, by reason of its stupefactiue qualitie, but *Diescordes* (affirming the lawfull vse thereof) maintaineth the contrary, and proueth their opinion to bee idle and false ; seeing that the propertie of *Opium* is quite of another operation ; yet hee ingeniously else-where confesseth, that the indiscreet and superfluous vsage thereof produceth no small detriment to the patient, making him fall into a *Lethargie*, whereby death commonly insues ; the which he further confirmeth in his sixth Booke and seuenteenth Chapter of *Poysons*, and their remedies, where hee reckoneth vp the Symptomes which it causeth in those bodies which haue eaten too much thereof.

Nicander and *Aetius* haue written of the
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great annoyances that come thereby ; and *Gallen* also in his second and third bookes *De Comp. Med.* describeth *Opium* to bee a dangerous Medicine, saying, that it mortifieth the senses, and causeth deadly Symptomes, in regard whereof hee wisheth that no man should vse it, vnlesse his Patient bee in danger of death, through the extremitie of his paine, and, hereunto assenteth *Plinie* and diuers others : notwithstanding there bee no small number of moderne Physitions quite of another minde.

The cause of those dangerous effects and Symptomes, which crude *Opium* by its too much vse is said to procure, is attributed to its exceeding coldnesse ; for most Physitions hold, that it is not vnfitly ranged among things that are cold in the fourth degree.

A small Tract of Opium, taken out of the 13 Booke and 15 Chapter of Peter Bellon his Historie of the singularities of some memorable things found in Greece, Asia, and other Countries.

A Man can hardly find (saith hee) any thing more worthy of obseruation then *Opium*, which they prepare now a daies in *Turkie*, and especially at *Achara, Carachara,*
Spar-

Spartade, *Emetelinde*, and in other Cities bordering vpon *Cappadocia*, *Paphlagonie* and *Cilicia*.

They sow their fields with white *Poppie*, as we do with corne, and are so circumspect in the sowing thereof, that euery *Paysant* or Husbandman shall sow no more then he can procure people to gather the same in due time, for when the *Poppie* is growne to be headed, they cut a small hole or make incision therein, whence issueth forth certaine milkish drops which they suffer to thicken or congeale: some one of these *Peasants* will gather (may chance) ten pounds, another sixe, another more, or lesse, according to the number of people hee sets aworke, for it bootes nothing to sow a great deale of ground, vnlesse he can get people enough to gather it. Wee verily beleue that vnlesse the *Turkes* vsed it much themselves, it would be as vnusually vended among Merchants, as other vnknowne drugges are, but it is so common among thē, that there is not a *Turke* but buyeth more or lesse therof, for if he be worth but an *Asper* in all the world, hee will bestow halfe thereof in *Opium*, and carry the same at all times about as well in Peace as Warre.

A certaine *Iewish Merchant*, of the country of *Natolia*, assured vs that there passed no

yeares wherein there were not fiftie *Camels* laden out of *Paphlagonia*, *Cappadocia*, *Galatia* & *Cilicia*, to transport the same into *Persia*, *India* and *Europe*, and other parts of the Great *Turkes* Dominion in *Africa* and else where; the which we should haue hardly beleeued if hee had not related to vs by peece-meale (as it were) what quantitie might bee made and brought from each severall Village about the Confines of *Carachora*, and the Villages of *Paphlagonia*, *Cappadocia*, *Armenia* the lesse, and *Gallogreacia*, hee told vs moreouer that the *Persians* vsed it more abundantly then the *Turkes*.

Wee desired one day to make an experiment, and try how much *Opium* a man could take at a time without any offence or hurt, and wee found that a certaine *Ianisarie* of our acquaintance did vse to eate thereof euery daie, who tooke at one time in our presence the weight of halfe a *Dragme*, and meeting with him the next daie at a *Mercers* shop, wee caused him to weigh vs out a whole *dragme*, which wee gaue him, and hee swallowed it vp all at once without any daunger or hurt at all, sauing that for a while hee seemed like a drunken man.

To eate *Opium* in *Turkie* is no new thing,

thing, and the reason why it is vsed so amongst them, is because they perswade themselves that it maketh them more aduenterous and lesse fearefull of daungers in warre, so that when the *Turke* assembleth or mustereth any great Armie together, they make such hauocke of their *Opium*, that they almost disfurnish the whole Countrie. They take it in as great scuffe amongst them, and accompt it as great an iniurie when one vpbraides another with eating of *Opium*, as another Countreiman would do if one should call him a drunkard.

A *Christian-Armenian*, with whom wee lodged long time, vsed many times to eat *Opium* in our sight, and prouing the same our selues, we found no other accident, sauing that it heated our stomackes, troubled something the braine, and caused vs to sweat in our sleepe. Wee thinke that if men were disposed they might as easily plant and sow *Poppie* in *France*, *Germanie*, *Italie*, and some other places of *Europe*, as well as in *Asia*, if they would but take the paines to dresse and gather it as they should doe, for surely the Climate of *Natolia* is as colde as that of *France*. It is made in the same manner as Authors doe describe, but I am affraide if wee haue anie brought

ouer hither it is sophisticated & mingled, for the Merchants do questionles multiply it before they vent it abroad into the Countries, and therefore because we know some marks and tokens how to choose the best, it is not amisse to set downe the same.

The best *Opium* is that which is very bitter, and so hot in tast that it wil almost scorch and inflame the mouth, it is in colour something yellowish or like to a Lyons skin, and being formed into a lumpe, it seemes speckled as a masse of diuers colours, for in gathering the sayd *Opium*, the seeds are found clustered vpon the Poppie-heads, which being amassed cleaue together like a cake, its smell is fulsome and strong, and although it be accompted but of a cold temprature, yet it many times scaldeth the mouth.

Opium is formed into cakes in the Country of *Natolia*, which exceed not aboute foure ounces or halfe a pound at the most, but the Merchants to make the greater profit by their sophistication double the aforesaid quantitie, for the subtil *Venetians* make the Cakes in their shops to weigh a pound at least, and this is the report of *Bellon* concerning *Opium*.

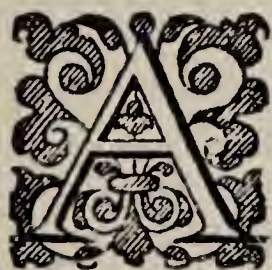
Now considering that in his time a man could hardly get any in *Christendome* that
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were good, how should we finde any now adaies either in the Apothecaries or Druggists shops which hath these tokens, or is so effectuall or pretious in its operation, letting passe the seeds or graines as the onely difference in gathering.

It is called ordinarily *Opium Thebaicum*, in respect of the Prouince of *Thebes* where the best is made.

C H A P. II.

Of the assurance we haue that Opium may be used, and taken crude or mixed in Medicines without any preiudice or indangering the Patients life at all.



M A N shall find some Physicians now a daies who adhering too much a conscience to the opinion of olde Leeches (capitall enemies to *Opium* its vse) doe not onely beleue it as an article of their Creed, that whatsoeuer any Author hath said in detraction and disgrace of *Opium* is an vndoubted truth: To whom I answere and say, that wee ought not to submit our selues to their iudgement altogether, nor to

belecue the opinion or saying of any Physitian, whether antient or moderne otherwise then daily obseruation of the vse of things & our *Grandame experience* confirme in our vnderstanding for truth : for seeing that the ancient Physitions, as well *Grecians* as *Arabians*, how great or learned soeuer they were esteemed, yet being all but imperfect men and subiect to errour, had their owne proper passions, and were full of contention and iealousie one against another, as wee are now adaiies; whence it followes that wee ought not to receiue all their workes for gospel, without condition as aforeseyd : for as for example *Galen*, *Plinie*, and others, put the world in feare and suspition of *Opium*, and contrariwise *Oribasius*, *Diescorides* and others commend it, and assure and affirme it to bee profitable and necessarie for the cure of many diseases : who then in this case can giue vs better knowledge and satisfaction of truth of these things then Experience her selfe ? Now shee tells vs that a man may safely vse *Opium* inwardly in mens bodies, *Oribasius* therefore and *Diescorides*, haue spoken truly, whereas the errour and abuse of others is manifest : which howsoeuer it falls out, it hinders vs nothing at all to search

into

into these things, seeing that neither cause nor reason can prejudice or hinder the authoritie of daily experience.

That the vse of *Opium* deserueth to be applauded of all Physicians, wee haue two principall and certaine assurances; whereof the former is not onely the certification of *Peter Bellon* aforesaid, but of a hundred honorable personages, who haue beene in *Asia*, and affirme that the *Turkes* eate thereof in great quantitie almost euery day ordinarily without any mischance or hurt to their bodies at all, which may in part be a sufficient demonstration that *Opium* is not a thing so venemous and daungerous to the life of man, as some giue out and proclaime it to be.

But heere some (to small purpose) may tell mee that the *Turkes* may easily digest *Opium*, how colde soeuer in regarde of the hot Cline they liue in, whereas the Christians dwelling vnder a colder in *Europe* can doe no such matter: to whom I aunswere, that if it were graunted that *Opium* were of such qualitie as aforesayd: yet whether a man could digest it or not, cannot bee Physicallie attributed to the temprature of the Climate, but rather to the strong constitution, or naturall vigour of the people; for
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the *Turkes* being from their very cradle more grossely brought vp and fed then the *Christians* are ingenerall, become not only more able bodied and stronger thereby, but also more apt and able to eat and digest diuers things which the tender and nice *Christians* cannot iudure: and that the truth is so, Let vs but consider a little the difference of naturall toughnes and strength betweene a *Christian Paysant* or *Carle* here amongst vs, and a *Gentleman* or *Citizen*; do not we see (I pray you) that the *Paysant* can more easily iudure a purgation made of *White Hellebore*, *Tithymalls*, *Euphorbium* or *Colocynthis* (which are accompted violent and venemous Medicines) then these tender sparkes afore sayd can brooke *Rheubarbe*, *Mechoacan*, *Sena*, *Aloes* or the *Damaske rose*.

But why the *Turkes* deuoure *Opium* on this fashon, ought rather to be imputed vnto an ordinarie custome, and common vsage among them, then to any other cause whatsoever; euen as the *Indians* are accustomed to take *Tobacco*, which is a plant not onely *Narcoticke* and *stupefactiue*, but of a violent and extreame vomitiue quality also. Notwithstanding we see that *Christians*, all *Europe* ouer, by little and little haue brought themselues into such a custome and habit there-

thereunto, that they feele no alteration or preiudice at all (*as they thinke*) by the vse thereof.

I make no question but a man might finde a number of people among Christians that if they cannot alreadie, could easily accustomethemselues to eat *Opium* as familiarly, as they take *Tobacco*: although they could not vse it in such quantitie, nor so often in regard it is a pure essence and extract, which Nature hath seperated from its plant: For essentiall things are alwaies farre more effectuall then grosse bee, for confirmation whereof we neede not doubt, that if a man should separate the rosinous and sulphurous substance of *Tobaccas*, and bring it into such a consistence as *Opium* is, and afterwards giue it vnto such as vsually take *Tobacco*, they could not possibly indure the tenth part so much of this as of the leaues, as hath bene alreadie practised and tried.

There be some *Empericks* (I know) which giue crude *Opium* to their Patiens in as great or greater quantitie at a time then *Discorides* hath limited, and that without any great daunger or hazard of life at all, onely correcting it a little with the powder of Caraway-seed; and in case of necessitie I my selfe would not sticke, or make any scruple to

use it, yea I durst, if neede were, take two or three graines thereof at a time my selfe; for although I neuer did eate thereof hitherto indeed, yet haue I often tasted the same, and also receiued great quantitie of the sulphurous vapours, both into my stomacke and head in tunc of the preparation thereof without any perceiuance, or the least touch of any offence in the world: neuertheless it is not my counsell that any Physition should vse it crude in this maner, seeing we haue Art and meanes to prepare it otherwise.

The second assurance that wee haue concerning the vse of *Opium*, is in that wee finde and see that the most expert and wisest Physitions of olde, found it good, and therefore prescribed this Medicine as a principall ingredient, and as one of the most important bases in their chiefest compositions, *Alexiteries*, *Diaphoretickes*, *Anodynes*, *Cordialls*, which naturally resist the most grieuous and violent diseases that can any waies happen to humane bodies, for which cause they vsually call them *Opiate Confections*, as that of their *Treacle of Andromachus*, their *Mithridate of Dimerates*, their *Triphera magna*, *Aurea*, *Alexandrina*, *Philomum romanum*, *Requies Nicolai*, and others, which they haue vsed as prin-

principall Medicines for these many hundred yeares and yet doe ; for they are indeed the most pretious and necessarie compositions their ordinarie Apothecaries haue.

The causes which moued Ancient Physicians to put *Opium* vnto the foresayd confections are not few, seeing that its properties are to asswage all inward paines, strengthē the passages & conduits which are open, loose, & disbanded: precipitate, disperse and consume these venemous vapours which are raised from one part to another: incrassat and thicken al subtill corrosiue & humors, by correcting their malignitie and acrimonie: stop and stay all fluxes as well Dysenterick as Menstruall: appease and extinguish all extremities in burning Feuers: prouoke naturall rest and sleepe to *Distressed and Lunaticke* persons: and finally, like a Balme defend the partes from corruption, which operations and effects are required in all compositions, which are generally ordayned to resist *the violence of diuerse* diseases, in appeasing and repelling whereof some of these properties before named are ordinarily desired, as *Quercetanus* in his *Pharmacopea* (intreating of the vetues of *Opium*) affirmeth in these wordes, saying, *Pauci enim sunt morbi qui non simul*
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complacentur vel ardoribus, vel inflammationibus, vel inquietudinibus, commotionibus, languoribus, oppressionibus, vigilijs, defluxionibus vel varij generis doloribus, capitis, pectoris, ventriculi, ventris vel cuiuscunq³ alterius Partis: ad quorum omnium Symptomatum ferociam compescendam Opium specificam & peculiarem quandam habet proprietatem, qua vel unum ex his Symptomatis seorsim, vel plura cum malo coniuncta, Simul cum admirabili astantium, & ipsorum aegrorum admiratione euincit ac subigit, unde saepeuero in eiusmodi casibus tam mirandos sanationum effectus prodero videmus Theriacam, Muhridatum, Antidotum Esdrae & similes, quae Opium excitant, &c.

For there bee very few diseases which are not either accompaigned with heates, inflammations inquietude, preturbation, languishing, oppressions, watching, fluxes &c. for mitigating and repressing of which Symptomes *Opium* hath a specificall and a certaine peculiar proprietie &c.

And this may serue to assure vs that wee may boldly vse *Opium* inwardly without any preiudice to life, yea rather for its better conseruation being administred with iudgement and discretion as all other Medicines whatsoever ought to be.

CHAP. III.

*Concerning the good and euill affects which
Opium may produce in mens bodies.*



That *Opium* (as aforesaid) being wisely administred to the diseased, produceth in them many good effects, and contrariwise abused exciteth diuers dangerous and mortall accidents, is in no sort doubted among discreet Physitions; but touching the cause why *Opium* doth worke these effects in mens bodies is disputable: for most Physitions impute it to that extremitie of the fourth degree of coldnesse wherewith it is endowed, and for prooffe and confirmation hereof they produce an argument drawne from the effects of its operation in this manner: *Opium* (say they) prouoketh a vigilant or watchfull man to sleepe, and iucrasseth thin and subtrill humours: vigilancie, then proceeding (for the most part) from a hot and drie cause with matter or without, and the dissolution also of the humours from the like distemperature, *Opium* therefore contrarying and impugning the causes of these effects must needes bee of the
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qualitie aforesayd, and for the further confirmation hereof they alledge *Galen*, *Plinie*, and others, who in like manner witnessse, that when *Opium* is vndiscreetly vsed, it causeth Lethargicke sleepe, priuation of sense, stupefaction of members, suffocation of naturall heate, and death in the end.

But although I cannot like a cunning Logician, frame sophisticall Syllogismes, or giue such luster to my reasons, as many would doe, which take greater pleasure in the *Flos* of words, then in the veritie and realitie of things, notwithstanding if it be lawfull for meere Naturalists in plaine and simple termes to discourse of such things, whereof they haue sufficient experience, I may (vnder correction of those which know these things better then my selfe) deliuer my opinion also.

Opium then is not such a colde thing as they would haue it, as I can proue both by reason and experience; by reason in regard it is not onely bitter, but inflaming and excoriatiue, which are euident tokens of its hot qualitie and complexion; for so the wisest Physitions in the world iudge of bitter things: and the light of Nature it selfe teacheth vs that none of the foure elements doe corrode, inflame, or heate, but that of fire;

Againe

Againe, its nature is knowne by its colour, for being of a darkish yellow, when it is dryed and powdered, it must needs be hot, as *Alocs* and *Myrrhe*, and all things of like colour be, especially if they haue any bitter tast adioyned.

By experience wee may well approue that *Opium* is not cold in two respects, first that when the *Turkes* eate thereof, they become cheerefull, couragious and fierce in warre, secondly that when one giueth two or three graines thereof to any sick person, and couer him warme in his bed, it will make him sweate more then any other Diaphoreticke, which operations can by no meanes proceed from any cold qualitie it hath.

But if a man should obiect amongst both these reasons, laying, first the *Turkes* being of a hot constitution, and liuing in a hot clime, become more faint-hearted and cowardlike then those of colder temperatures, and therefore *Opium* tempering that heate maketh him more frolicke and cheerefull accidentally; secondly, that if a man giue but a cup-full of cold water onely to a sicke man to drinke, it will questionlesse make him sweate &c. Whereunto I answere, that if the *Turkes* doe acquire force and courage by tempering their heate with cold things, they might very
D well

well spare that great labour and toyle they take in sowing their Poppie, and gathering their *Opium*, seeing that spring and riuer-water might stand them in as great stead, being a cold liquor, and dispiercing it selfe into all parts of the body, as soone as it is drunke, but it is so farre short of *Opium* in quickening the spirits, and raising the courage, that it worketh quite contrary effects.

And whereas they affirme that a cup of water (which is apparantly cold) will cause any sicke person to sweate, I answer, that if it cause one that is in a Feuer, or pestered with some other hot disease to sweate, as many times it doth, it proceeds not from any Diaphoreticall or sweating qualitic, inherent in it, but commeth to passe rather, *per antiperistasis*, and accidentally, for like as water cast vpon a hot Anuile or burning stone, immediately rayseth vp vapours and fumes, euen so doth water giuen to such a bodie, which after condensation, nature either expelleth by vrine or sweate, nor hath it this operation in all diseases or tempratures, whence it is manifest that water naturally cannot procure sweate but by accident onely, as is said.

Now let vs returne to their arguments,
which

which goe about to proue that *Opium* is cold in respect it prouoketh sleepe, thickeneth the humours, and taken too liberally causeth daungerous Symptomes and doubtfull euents, which reasons (I affirme) are of no force in this behalfe, for first as *Opium* prouoketh sleepe to all those which are afflicted with hot diseases, so doth it also prouoke the same in all other causes without exception, yea although they bee of different qualities, as witnesseth *Avicen* and others, who haue diligently noted the same: and as for the humours, *Opium* doth not onely increassate and thicken those which are of a hot quality, but those also which are coldest of all, as that white and christalline humour which floweth and distilleth from the braine vnto the other parts, whence it appeareth that a man cannot produce such a necessarie consequence of the operation of *Opium*, as those men goe about to doe, for if we were tyed of necessitie to adhere and stand to the sence of the former arguments, it would consequently follow that all colde things would procure sleepe to the diseased, where no other thing could effect the same: *Item*, that they onely appeased all inward griefes, increassated euery humour, hot, cold or how subtil focuer, and in briebe had the very same

vertues that *Opium* before is described to haue, whereas on the contrarie part no hot things could effect the same; but experience proueth it farre otherwise, for if *Quick-siluer*, the *Magisterie* of *Lead* (compared to *Saturne*) *Salt-peter*, or *Allome* (salts of a cold temprature) or the water *de Sper: Ran*, which is thought to coagulate or congeale the bloud by its extreame frigiditie, if none of these (I say) perform those effects which *Opium* doth, nor Ice nor Snow themselves rationally administered in neuer so large a dose, can procure sleepe, or cease paines, but rather for the most part cause more vehement fits. Yet I will not deny that cold things may sometimes, and vpon some occasions procure rest, though not alwaies when neede is, nor so surely at any time as *Opium* well prepared.

And as for hot things, they are for the most part so farre from causing disquietnesse to mens bodies, or subtilizing grosse humours that quite contrary a man may finde many that will prouoke sleepe, and thicken subtile and virulent humours, rather and sooner then other of a colder qualitie, as we may plainely perceiue by *Mirrhe*, *Aloes*, *Storax*, *Olibanum*, *Worme wood*, *Betonie*, *Safran* and such other, yea & *Sulphur* it self (the very fire
of

of nature) doth not onely prouoke sleepe in some reasonable measure, but doth also in such wise coagulate and condense the subtile and hot humours, that it availeth much the Pthysicall in staying their defluxions, and it is a thing most manifest amongst *Spagirists* that Sulphur can coagulate water, wine or Aqua-vitæ in such sort that a man may beate them to powder in a mortar, and after reduce them to that naturall forme they were in before.

I am not ignorant, that a man may tell mee that things of a cold or hot nature, doe worke diuersely in bodies according to the diuersitie of the subiect they light vpon, as the fire which hardneth clay, and softneth waxe, and so of cold things, in like manner that *Opium* being extreame cold, by that extremitie worketh in bodies, where other things of an inferiour degree cannot in any wise; but neither of the two reasons reach to the deapth of our dispute, for first *Opiuma* (the subiect of our discourse) worketh not in mens bodies in this or that manner by election, according to the diuersitie of their temperatures and complexions, but doth indifferently prouoke sleepe, and causeth all paines to cease of what nature or qualitie soeuer as aforesaid.

Secondly, putting the case that *Opium* were the coldest thing in the world, yet that small *Dose*, which we commonly vse to giue at a time, cannot exceed the great frigiditie of those things afore-named in their larger *Doses*.

Were it not a great absurditie, to beleeue that one graine or two of *Opium* were colder then a dragme of *Allome*, prepared or crude, or one scruple of the *Magisterie* of *Lead*, or an ounce of the water of the *Sperme of frogges*, or two ounces of the water of *Nymphaea*, or as an ounce or two of *Quick-siluer*, which some haue vsed to giue against the wormes and other maladies, all which passe through the bodie as cold as any ice, and manifestly coole the mouth, and other conduits where they passe, which one small *Dose* of *Opium* cannot doe, but rather contrarily heateth both mouth and stomacke; whence you may gather that these reasons, and the like, are meere palliatie and superficiall arguments, and fine gloses to entertaine long chat, rather then to proue any coldnesse in *Opium*.

Now touching the Symptomes which *Opium* causeth being inordinately taken, Experience her selfe teacheth vs, that *Aqua-vita* (which is of a hot and subtill essence) being

too abundantly ingurged, causeth semblable effects, for many being drunke with *Aquavita* haue dyed, sealed as it were with *Stupiditie*, *privation*, of *sense*, *Trembling*, *Lethargie*; and indeed ended their liues in such manner, as if they had swallowed too much *Opium*, and became benumbed and stiffe, as if they had died in the very yce and snow.

Wine it selfe also causeth diuers Symptoms of *Opium* in them which abuse it, as wee may plainely see by the lamentable examples vsed in diuers parts of the *Papacie*, where they commonly make those people drunke which are condemned to any violent death, of whom some goe singing, and some rayling thereunto, and others as dull and senselesse as bruit beasts, none of them hauing any vnderstanding or memorie of their imminent slaughter, and which is worse, haue no true feeling of their sinnes, nor solide iudgement or discretion to commend themselues to the mercie of their Creator.

Wine (as all Authors affirme, and Experience her selfe declareth) being abused, doth cause in proceffe of time *Phrensie*, *Madnesse*, *Rage*, *Furie*, *Stupiditie*, *Lethargie*, *Palsie* and other dangerous diseases, euen as *Opium* doth, and is notwithstanding an hot liquor, as all

the world knoweth. Wee may then conclude that *Opium* maketh not the *Turkes* fierce and couragious in warre, nor maketh the diseased to sleepe, nor appeaseth all inward griefes of the bodie, because of its cold qualitie, or by reason of its heate (although it manifestly appeare to be hot) but in regard of his operations, which doubtlesse proceedeth from a specificall and hidden proprietie wherewith it is indowed, euen as wee see in deiectione Physicke, which purgeth neither by reason of any heate or coldnesse therein, but rather by a certaine specificall qualitie as is sayd.

Now as purgatiue Medicines rightly vsed, doe not onely euacuate Natures excrementes, and bring the bodie to an excellent temprature, but being abused doe mightily offend and bring dissolution to the same; euen so *Opium* well administred, endoweth the bodie with singular benefits, but abused and vn-temperatly giuen, worketh the contrary, whence it followeth that in the vsage of either of them, it behoueth the Physicion to be ruled by reason and experience, walking in a good conscience, and practising his Art in the best manner to Gods glorie and his Patients comfort.

CHAP. IIII.

Wherein is shewed the Counsell and aduise of Theophrastus Paracelsus, concerning Medicines Narcoticall or Anodynes, and in particular that of Opium.



Having generally declared the opinion of ancient Physicians concerning the nature, vertue and vse of *Opium*, and the controuersies which are among moderne Physicians touching the qualitic thereof, it is not amisse to see now what *Theophrastus Paracelsus* (that great searcher and diuer into nature) saith in this behalfe.

This Author hath generally the vsage of Anodyne Medicines in such high esteeme and reuerence, that hee recommendeth them vnto his disciples as a principali pillor of the whole bodie of Physicke, assuring them that they are the most important remedies of all othersto cure the bodies of men of the most gricuous diseases they are subiect vnto: In the seuenteenth booke of his *Archidoxes* and Chap. *De Specificis anodyno*, hee saith thus, that we should speake with great reuerence, and
regard

regard of the *Anodyne* or *Specificall appeasor*, we are moued by diuers reasons, for in particular, wee haue met with some diseases, for cure whereof (finding no helpe or reliefe among our best secrets) the *Specificall Anodyne* not without great admiration accomplished our desire, and this fell not out casually or without reason, seeing it is the nature of *Anodynes* to extinguish diseases, euen as water quenchem fire. And in his first booke of Naturall things and Chapter *De Sulphure Embrionato*, speaking generally in praise of those things which naturally pro- uoke sleepe, and are *Anodynes*, hee saith what greater secret would a Physition desire to possesse, then that which can cause all paines to cease, and extinguish all internall heate? hauing this, doth not his skill passe that of *Appollo*, *Machaon* or *Podalyrius*? Let a man consider a little this sentence, and marke with good iudgement the subiect thereof, and hee shall finde no iesting matter of it, In his *Commentarie* vpon the second *Aphorisme* of the second *Section* of *Hippocrates*, *vbi somnus delirium, &c.* *Paracelsus* speaking in the end of that exposition, concerning the benefit of wholesome sleepe, saith that sleepe is such a great secret in Physicke, that being spoken without disgrace of other things,

he

hee would gladly haue any man tell him where he can *in all the world* find such a remedie, which can manifest such sodaine and actiue ease and reliefe, to the health of mans bodie as it doth.

Hence you may perceiue why these *Anodynes* (of what kind soeuer) ought to bee so well regarded, esteemed and made accompt of among all Physitions, for seeing sleepe is a Medicine farre surpassing all gemmes, & Jewels *in the world*, hee that knowes how to apply this *Somniferous* secret, conueniently and in good season, ought to be held in great accompt and estimation among diseased people.

That *Theophrastus* doth also commend the vsage of *Opium* among his *Anodynes*, and Somniferous Medicines, it may easily appeare in the forenamed Chapter *De Specifico Anod.* wherein hee proposeth *Opium* onely without addition of other Somniferous things, to make that composition which he calleth his *Anodynum Specificum*, and attributeth vnto it this excellent proprietie, saying, that it causeth not the whole body of man to sleepe, but the diseases onely. In his booke *De Morbis amentium*, whete he writeth of those that be Mad, Lunaticke, Phrantick, Epilepticke, &c. hee putteth the quintessence of

Opium

Opium in the ranke before *Aurum Potabile*, *Argentum Potabile*, the *Magisterie* of *Pearles*, and all other pretious Medicines which bee ordained for these maladies.

Here some enuious *Criticke* (beside the purpose) will hit mee a blow on the blind side, saying how comes it to passe that these braue *Spagiriques* heale not all the patients that fall into their hands, seeing they brag of such singular secrets as these? of whom I demaund the cause also, why they cure not all theirs, hauing such graue institutions, solid grounds and principall Medicines vsed ordinarily amongst them? This is not to proue that although Chymicall Medicines worke more *citò, tutò & incunde*, by reason of their better preparation, and exaltation in power then other ordinary Medicines, that therefore they can surely ouercome and cure all hereditarie, inbred and incurable diseases, or such others which God for the exercise of his iustice, hath inflicted and confirmed vpon the bodies of men in such sort, that no Medicine nor skill in the world can cure. For,

Ni Deus affuerit, viresq; in fuderit herbis,

Quid, rogo dyctamus quid panacea invent?

If God helpe not, and into herbes infuse,

A working power, in vain we Medicins vse.

In his booke *De morbis resolutis*, In his first booke of Minerall diseases, and in diuers other passages of his workes, hee maketh mention of *Opium*, with such great honour and respect as any auncient Physition in commendation thereof euer did: afterwards concerning it's vsage hee meaneth not that any man should administer it simple and crude, or grossly tempered and mixed with other Medicines before the due preparation, for in his first Chapter *De Sulphure Embryonato*, and his first booke *de Reb. nat.* hee affirmeth that *Opium*, *Mandrage*, and *Herbane*, containe in them some malignant substance, in regard whereof no man ought to vse them (if he worke warily) before he haue reduced them into a quintessentiall forme, which indeed hath bin the principall occasion, that the *Spagiricke* Physitions (putting their hands to the plough) haue found the meanes to prepare *Opium* into such a precious and profitable Medicine that in all Spagirical and ordinary practise whatsoeuer, none other can bee comparable either for speedy or wonderfull operation, for which onely Medicine all Christian Physitions and people, which know it, are eternally bound to giue the
foun-

fountaine of all goodnesse, thankes, for his gracious gifts inspired into men.

C H A P. V.

Of the inuention or meanes how to prepare Opium well, and wherein it generally consisteth.



Having hitherto diuersly discoursed of *Opium*, in demonstrating its pretious and necessarie vse in Physicke, we will now goe about to shew that effectuall manner of preparation, which the *Spagirists* vse, to the end we may more freely and safely administer the same, then the ancient Physitians did, who commonly put the same into their Medicines vnprepared, which *Quercetanus* (in his *Pharm. Dog. Rest. pag. 186.*) treating of the composition of *Treacle*, mightily complayneth of in these words saying, *Deplorandus enim error est nobilis huius, alexipharmaci compositioni in tam magna, trium scilicet unciarum dosi ad miscere tantum veneni quale Opium crudum & minus preparatum esse constat.* The error of them is greatly to be lamented, &c. Which *Quercetanus* auoucheth not to blame the inuention of auncient Physiti-

Physitions, nor the vertue of *Treacle*, which hath beene, and yet is daily vsed with great successe, but rather to insinuate and shew how much more warily & safely they should haue delt in the vsage of *Opium*, then they haue done heretofore, if they had as truely knowne the Art *Spagiricke*, as wee doe now adaies; how bee it wee ought notwithstanding to take these things in good part which they haue reueiled vnto vs according to their experience, although the inuention of the true preparation of *Opium*, ought by all meanes to be ascribed to *Theophrastus Paracelsus*, as principall and chiefe of the naturall Philosophers and *Spagirists*, who haue generally written of the Chymicall preparation of all things *in a manner*, which are vsed in Physicke: where others on the contrary (intreating of the *Philosophers-stone*) haue busied themselues to besot and foole the world, and by that meanes haue rather seduced mens vnderstandings, then produced any good fruits or workes of worth.

Now the best preparation of *Opium*, consisteth in three principall practises; the first in depriving, or taking from it its *Oleaginous*, or sulphurous substance, wherein principally consisteth the euill, *Narcoticall* and stupefactiue qualitie; the second in correct-

ing

ning and mitigating its causticke and adu-
ring acrimonie, wherein it is almost parallel-
led vnto *Tithymalls*, *Spurges* and other lacti-
ferous corrosiues; and the third in accom-
panying or mixing there with some such
good additaments, and furtherers, as shalbe
described hereafter.

C H A P. VI.

*Conteyning three manners, or waies to deprive
Opium from its narroticall, stupefaciue and
nuisible Sulphur, which must be done be-
fore its essentiall extract can be drawne.*

IT is formerly said that *Opium* is deprived and freed from its malignitic three manner of waies, the first (as *Paracelsus* in his second booke *De morbis amentium* saith) is by taking *Opium*, and mixing therewith certaine Aromaticall things, and reducing them into a *Masse* with the rob or iuice of *Quinces*, and afterwards putting them into a *Quince*, whose coare is first taken out; and lastly, hauing couered or infoulded the same in past, bake it in an ouen like bread, and being taken out reduce or beate it into powder, and infuse it

in some conuenient liquor, whereby the essence or *tincture* thereof may be extracted, to which purpose he taketh the spirit of *Vitrioll* (composed against the Epilepsie) as a *specificall* furtherer in this case.

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The second meanes, is to take *Opium*, and to cut it into small slices, and to put it into a cleane Frying-pan, or vpon a Lamine or broad plate of yron, and with a gentle fire euaporate away its Sulphur; which will exhale or fume away like a grosse and stinking smoake, from which smell it is not amisse to abstaine as much as may bee: some in the *interim* sprinkle it with a little rose Vinegar, and stirre it together with a Spatula or slice as it melteth like *Aloes*, and after spread it abroad vpon the sayd Lamine of yron, and so let it euapour away as long as any fume will arise, and vntill it become so drie that it may be powdred, alwaies bewareing that it burne not.

This manner of preparation is approoued for good of *Quercetane*, and many other moderne Physitions, and I my selfe also alwaies obserue the same methode when I haue occasion to make any *Laudanum* for mine owne vse.

The third way is to dissolue the crude *Opium* in some conuenient liquor (as is sayd)

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and

and letting it digest and boyle easily, still scumming away the froath, and vnctuous Cremor swimming aloft, which indeed is its sulphurous malignitie, and reserue the rest for vse.

This manner of preparation is highly commended of *Crollius* in his *Basilica Chymica*, in the Chapter intreating of *Laudanum*.

Of these three maners of preparing *Opium* before it be brought to an extract, let euery Physition make his owne choice.

C H A P. VII.

How the tincture, quintessence or (as some call it the substance of Opium) is to be extracted, wherein his manifold vertues consist, and how to deprive or take away his malignant acrimony.



THE tincture of *Opium* (purified from its sulphurous malignitie as before) is ordinarily extracted with *Aqua-vite* rectified, or else with *Vneger*, iuice of *Citrons*, *Oranges*, *Quinces* or other egar and tart liquors, but of all these I make continuall choice of *Vneger*, for egar things

things generally haue a naturall proprietic to correct all venemous things, and to qualifie and mitigate all those which haue any great *Acrimonie*, or any *Causticke* or aduring facultie, which a man cannot find that *Aqua-vita* can by any meanes doe, and this is the reason that the most sage and auncient Physicians haue ordained that *Scammonie* should be corrected with the iuice of *Quinces*, which is an egar liquor: *Euphorbium*, the *Hellebores*, *Esula*, and other corrosiue and venemous Medicines, are commonly corrected with *Vinegar*, being therewith sprinkled or totally drenched: *Antimonie* (which is both of a vomitiue and purgatiue facultie as modern Artists know) being extracted in distilled *Vinegar*, instead of any alteratiue or nauseall qualitie, becommeth onely a *Bezoardicke* Medicine naturally prouoking sweate: *Arsenicke* (that great poyson) and *Mercurie sublimite* (that viciouss corrosiue) may bee so corrected by digestion with *Vinegar*, that a man may safely vse them in Chirurgery.

Vinegar and other sower and tart things are of such high esteeme among Physicians, that (in a maner) no man doth administer either *Bezoar-stone*, *Vnicornes-horne*, *Terralermia*, *Treacle*, or any other preseruatiue to any sicke person, vnlesse they be mixed with

Oximel-simplex, Syrupe of *Quinces*, iuice of *Citrons*, *Pomgranates*, *Berberies*, *Sorrell* or some other tart liquor; the which thing they doe not without great reason, considering that egar things ingenerall comfort the stomach, resist poysons, qualifie inward heates, and defend the parts from corruption; the which thing indeed Vinegar doth aboue all other vegetable things whatsoeuer, as may plainly appeare by its safe conseruation of all things from any corruption that are put therein, which neither the iuice of *Citrons*, *Oranges*, *Pomgranates*, nor any other thing can doe, vnlesse a man couer them with oyle and keepe them close from the ayre; and for my part I haue made sufficient experiment that the essence of *Opium* extracted with Vinegar is of greater efficacie, and more confortatiue then that which is drawne with *Aqua-vitæ*, which liquor notwithstanding I mesprise not in regard it is a subtile and very excellent essence seruing many Medicinall operations, yet in this particular I doe in no wise approue or allow thereof, for many reasons which euery discreet Physicion can manifestly yeeld.

The meanes then to extract the *Tincture* of *Opium* (after it is prepared and powdered as aforesayd) is to put the same into a conuenient

venient glasse bodie hauing a strait or narrow mouth, and that for euery ounce of *Opium* you poure thereunto eight ounces of liquor at the least, be it Aqua-vitæ, Vinegar or what other things soeuer the Physition pleaseth, and being well and close luted or stopped, let it be put in B. M. or set in the Sunne, or by a furnace, or neere the fire-side where it may remaine warme in digestion for the space of thirtie or fortie daies together, for by that meanes the *Opium* will begin to alter & change its acrimonious churlishnesse altogether; for this maner of digestion doth much resemble the Suns operation, in concocting & ripening tart and crude things, & changing thē into a sweet, pleasant & delectable tast, as nature hath manifested by the example of Figs, which at first haue such a corrasive and causticke kind of Milkinesse in them, which (as soone as it but toucheth any part of the body) rayseth pustules and blisters thereupon; which milkinesse notwithstanding is afterward conuerted by the Sunnes-heat into a delicate and sweet iuice.

Hauing thus accomplished the digestion of the *Opium*, his subtil part is easily separated from the grosse by inclination or filtering; And his essence is afterwards easily

brought into a required and due consistence by euaporation in B.M. and so may be well referued for vse, as shalbe declared hereafter.

C H A P. VIII.

Concerning the diuersitie of those opiating compositions, which the Spagirists call Laudanums.



THE Spagirists (imitating *Paracelsus*, who in diuers passages of his workes, termeth *Anodyne* and mitigating Medicines *Laudanums*) haue euer since retained that name of *Opium* so composed : which word signifyeth nothing else but a Medicine endowed with noble and singular vertues, and therefore deserueth wonderfull commendations, which moued *Crollius* to blazen it in this manner : *Laudabile medicamentum, quod plane suo nomine respondet si Laudanum dicas.*

But the preparation thereof is diuersly handled, for euery Spagirist (for the most part) differreth from another, in one thing or other : For direction wherein I haue principally made mention of foure principall-ones, according whereunto a man
for

for his vse may comprehend all other what-
focuer.

*The first Laudanum or specificall Anodyne
is that of Theophrastus Paracelsus, which
he thus describeth in the seventh booke of his
Archidoxes.*

*Rx opij Theb. ℥ j. succi pom. aurant. Suc. Citon.
ana. ℥ vj. Cinamo. garyoph. ana. ℥ ℥. Contus. per-
quam opt. simul omnia mixtaq₃ ponantur in vi-
trum cum suo coopertorio caco: digerantur in ☉,
vel fimo per mensem, postmodū exprim. & impo-
nant. iterum cum seq.*

*Rx mosch. ℥ ℥ Amb. gr. ℥ iiij. croci ℥ ℥ succi
corall. magist. perlar. ana. ℥ j. ℥. Comisce, postquam
digestionem eorum uno mense fact. Adde quintess.
auri ℥ j. ℥ qua permixt. ceteris, Anodinum speci-
ficum erit ad auferendum quoscunq₃ dolores in-
ternos & externos, vt nullum torqueatur vel arri-
piatur membrum latius.*

Here you may behold *Paracelsus* his *Spe-
cificall Anodyne*, wherein hee ordeineth onely
Opium as its principall base, which is the
more remarkable in regard hee doth reckon
and esteeme it as a powerfull Medicine to as-
swage and cease all griefes by its Specificall
forme, which ought to confirme vs no little
in our opinion concerning his qualitiues a-
foresayd.

The second Laudanum is that which Quercetanus appointeth in his Pharmacopæa. pag. 203.

Rx essent. Opij, a suo dissolvente per B. vaporosum ut supra separate, ℥ij. essent. croci, cum aq. limo. extract. ℥j. Hæ duæ essentia confundantur invicem in parvo quodam vasculo argenteo: his adde Gemmarum, Magist. Hyacinthorum, & Corallo. ana. ʒj. ℞. ter. sig: llat. vera ʒj. pul. Bezoard. veri, Vnicor. Ambr. gr. ana. ℥ij.

Hi pulveres sufficient ad bonam consistentiam Laudano inducendam: miscendo & agitando omnia continuò ad ignem lentum, donec ex materia frigefacta pilule formari possunt: sufficit exhibere de hoc Laudano magnitudine piperis gr. & insignes ac suspiciendos percipies huius Anodyni effectus, quod te spe tua nunquam frustrabit: nam confert citra molestiam & cerubi ullam perturbationem adversus omnis generis dolores à quacunq; causa subortos: contra omnes Hamorrhogias siue fluxus sanguinis in quacunq; corporis parte fuerint: contra omnes defuxiones & fluxores ventris, dysentericos, Hepaticos, lientericos & similes: & ad adducendam gratam tranquillitatem in febris ardentissimis, in quibus ipsis rationis sensus leditur, & in phrenesim eger plerumq; delabitur. After this he describeth an other, where-

whereunto hee adioyneth Henbane, and almost an hundred Bezoardick and cordiall things : which whosoever is curious, and desireth to know may finde them written in his sayd booke, for I am vnwilling to set them downe in this place, in regard they require a long and tedious kinde of preparation, and this may serue instead of all.

The third Laudanum is that of Oswaldus Crollius, according to his description in his Basilica Chymica.

BEfore *Crollius* describeth his *Laudanum*, he commendeth the vsage of all *Anodynes* generally in this manner. *Multi sunt morbi, qui absq³ Anodynis sanari non possunt : Ergo in omnium morborum curationibus, ubi dolorum comites vigiliae, viriumq³ resolutiones adfuerint, Anodyna intrinseca appropriata possunt administrari, ut ablatis symptomatum ipsis radicibus perniciosorum cruciatibus, amica quies naturae reddatur.* Afterwards setting downe the composition of his *Laudanum* (which hee calleth *Laudanum paracelsi*) he describeth it thus.

℞ *Opij Theb.* ꝑij. *suc. Hyoscyam. deb.* tempore collect. & in O. prius inspissat. ꝑj. ℞. *Spec. Diamb.* & *Diamosch.* fideliter dispensatorum ana ꝑij. ℞. *mumiæ transmarinae select.* ꝑ℞. *Salis Perla-*

rum,

rum, Corallorum ana ℥iij. liquor. succini albi per Alcohol vini extract. Oss. de Cord. Cervi ana ℥j. lap. Bezoard. unicorn. animalis vel miner. ana ℥j. Mosch. Ambr. ana ℥j.

*In defectu auri potab. nullis corrosivis coniqti-
nati addantur oleorum anisi, carvi, aurant. nuc.
myr. caryoph. cinamo. succ. ana gut. 12.*

*Fi. ex his S. A. chym. massa seu extractum, è
quo ad necessarios usus possint pillula efformari*
And proceeding forward he noteth certaine
● observations concerning the Anteprepara-
tion of *Opium* and *Hyosciamus* and other cir-
cumstances, as also in particular the manner
and way of their composition: the *Dose*
hereof according to the Author, is from two
graines to foure, and touching its vertues
shalbe declared hereafter.

*The fourth Laudanum is the Authors Ne-
pentes Aurea.*

*Rx Essent. Opij, per spir. aceti cardiaci ex-
tract. ℥iij. tinctura croci more Quercetani ex-
tract. ℥ij. Lap. Bexoard. Regij seu auri puriss. more
Spagirorum purpurizat. & in veram medicinam
cardiacam redact. ℥ij. resinæ lig. Aloes, Ambr.
gris. opt. ana ℥j.*

Let these things be well incorporated to-
gether in a small glasse vessell, and after-
ward

ward keepe the composition very close.

But because all these Medicines are both very costly, and curious to compound, and perhaps of no greater efficacie then some others which I make, and participate to my friends, I have made bould for the good of my country to set downe two, the one whereof was communicated to mee at a second hand, from the learned and eminent Physition Io. Hartmannus of Marpurge in Germanie, and the other by the no lesse worthy and my muchrespected friend, Maister D^r. Bonham of London, which are as followeth.

Laudanum siue philonium nostrum.

℞ Opij cum spir. vini extract. ℥vj. cai adde
 seq. tincturam vz. ℞ croci ℥j. cinamo. nuc.
 myrist. garyoph. mac. torment zedoar bistort. ana
 ℥ ij. β galang. angel. zz. ana. ℥ij. florum cord. ana.
 p. i. pulver. omnia subt. & cum aq. Cinamomi q. s.
 Fi. extract. & misce cum supradict. opio. tunc
 adde Oss. de cord cervi, corall. alb. & rub. prepar.
 succin. alb. corn. unicolor. lap. Bezoar. lig. aloes; solut
 perlarum ana. ℥ij. santal. alb. & cit. ana. ℥j. fol
 auri pul. ℥ ℥ ter. lem. verae gr. Xiiij. amb. gris.
 gr. X. mosch. gr. viij. omnia opt. pulver. & sub-
 tiliss cribrat. in fine adde ol anisi gut. Xij. ol. nuc.
 myrist. gut. viij. ol. cinamo. gut. vj. Dosis a.
 gr. iiij. ad v. cum corn. unicolor. & lap. Bezoar. ana.
 gr.

gra. ij. & conf. ros. rub. ℞j. cum itur cubi-
tum.

Laudanum præstantissime. D. Bohami.

℞ Opii Theb. laminatum conscissi & postea
exiccati ℥ i℥. gum. hyosc. ℥ iij. sem. hyosc. alb. ℥j.
mummiæ ℞j. garioph. Cinamo. ā. ℥ ij. rad. leuistic.
cal. arom. gallan. ℥℥. ana ℥j. castor. pip. nig.
carpesiorum croci sinceri ana ℥℥. labdan. belzoin.
ana ℥ ij. pul. pul. & ponantur omnia in vitro angu-
sti orificij cum spir. vini opt. q. s. ita ut quatuor di-
gitos superemineat, ac bene claudatur ter quateruc
in die agitando dum tincturam nigram obtineat,
deinde tinctura effundatur, & noui spiritus addan-
tur donec tota virtus sit educta, tum in B.M. fiat
euaporatio S. A. dum ad extracti consistentiam
peruenerit, fiat q̄₃ Laudanum approbatum & turis-
sum.

Vsus huius est.

In senis dolorum implacabilium paroxysmis
ut pote colicis, podagricis, arthriticis, pleuriticis,
stomachicis, Nephriticis. Item in vigilijs, deflux-
ionibus, hæmorrhagijs & dysenterijs in expugna-
bilibus & præsertim in vomitu pestilenti & phre-
nitide summum arcanum.

Cautio.

Cautio.

Puellis tamen & senibus, quibus etiam vires vel magnitudine morbi vel doloris seuitia prostratae sunt, non confert. Quod si pulsus strenuus satis & vehemens appareat, sine periculo uti possis.

Extractio gum. hyosc.

Rx cort. rad hyosc. in mense Mart. vel septemb. circa plenilunium collect. exsiccentur in umbra postea purgentur & contundantur opt. & in vase vitreo cum q. s. vini alb. arctiss. includantur, tum in B. M. coq. per horas 12. vel amplius & rubicundam inuenes tincturam, quam exprimes è rad. fortiter, dein omnem hunc liquorem per filtrum transfertum evaporato super carbones viuos donec tinctura remanet instar mellus, &c.

Aduertisments.

1 My meaning is that *Opium* should be first freed and quit from his sulphurous Malignity, by meanes of its exsiccation aforesayd, and afterwards digested for the space of a moneth in distilled Vinegar, wherein good stoare of white Saunders, Balme, Red-roses

roses and Cinamon haue beene infused, and lastly brought vnto the consistence of liquid Pitch, or somewhat thicker.

2 For Bezoar-Regall, I meane fine Gold, reduced into the forme of powder, by the Phylosophers dissoluing balsame, and so brought vnto such a true, reall, comfortable, and Bezoardick Medicine, that one graine thereof shall farre exceed six, or eight graines of the best orientall Bezoar; which (if need be) is very demonstrable.

3 That the (Saffron being pure and neate,) be infused after *Quercetans*-maner in Limon-water, and so the tincture drawne, let the water bee euapored with an easie and gentle fire, lest the more excellent and subtile spirit of the Saffron flie away.

4 To conclude, I put no Magistery or tincture of Pearle, Pretious-stones, Corall, nor of any other Cordiall things in my *Laudanum* then you see, not onely because I find the foresayd tincture of Gold to bee as sufficient and auailable as all the rest, but for some other rationall considerations, which here I spare to speake of.

5 And for the Amber-grise put therein, I neuer knew any woman troubled with the suffocation of the Mother, feele any manifest nuisance, alteration or offence thereby,

as some imagine, but if any man doubt thereof, let him but onely touch the Pill intended to be giuen vpon such occasion with a little oyle of Charabes or Amber.

These are the *Laudanums*, or Opiating compositions which I haue bin contented to describe in this booke, which indeed are all very good and excellent in their operations, although they differ something one from another in composition, and diuersitie of ingredients, yet the principal base common to them all, is meere *Opium*.

The reason why I haue not set downe the preparation of this Medicine in so ample and plaine a maner and forme, as euery particular Reader might desire to make himselfe Master of the Mysterie, is in regard I would not wrong any priuate person, who by his great labour, cost and industrie, hath purchased and gotten a more peculiar interest therein, as hauing sufficient vnderstanding, knowledge and experience in the whole Art of Physick. For although I am willing to make euery man, that shall read this Treatise acquainted with the vtilitie and profit which may redound and accrew by the vse of such a Medicine, yet is it not my intention for all that, to giue occasion to many presumptuous persons, which rashly, and without any true
ground

ground other then their owne priuate gaine making practise in Physicke, will take in hand with a thing of so great consideration and importance as *Laudanum* is. And this is the reason also wherefore I doe so freely admonish and counsell euery one that loues his owne life, or the preservation of his health, more then the sparing of a few scald pence, not to take this Medicine for any inward vse at any mans hand, but onely of such as haue good knowledge therein, and will faithfully communicate the same, not giuing *quid* for *quo*, as some vnworthy Mercenaries doe, who commonly gape after their owne benefit and commodite, rather then the good and safetie of their sick patient.

Furthermore, I am not ignorant though a man may finde many Spagirists vaunting, and bragging they haue this and that *Laudanum*, and other excellent Anodynes composed without any *Opium* at all, some saying they can make *Laudanum* with mixtion only of certaine Cordials, others would make the world beleue they haue a certaine embryonated Sulphur of Vitriall, which is a most rare pretious medicine, and Somniferous Anodyne; but these are nothing but vaine ostentations, seeing that without *Opium* or some other things of equiualent
and

and semblable faculties it is impossible for any man to prepare any generall, true or certaine *Anodyne*; how be it I deny not, but by permixtion of certaine things differing one from another in tast, smel and qualitie, a man may compose a handsome counterfeit *Laudanum*, seeing that I my selfe can prepare such a Medicine of *Nutmegs*, *Mace*, *Myrrhe*, *Saffron*, *Amber*, *Muske*, *Aqua-vita*, *Quintessence*, of *Sulphur*, &c. without any *Opium*, the onely smell whereof will prouoke sleepe, and being administred will appease diuers griefes, yet for all that it is nothing so generall or auailable an *Anodyne*, that it may be compared in any sort with that prepared of *Opium*, or if it were a man might doubtlesse make as great scruple to take that as the other; for if *Opium* can indanger the body by its naturall somniferous qualitie, why should not another Aromaticall Cordiall do the same, which by art hath acquired the like facultie.

Moreouer concerning the foresayd sulphurous *Anodyne*, although *Paracelsus* tells wonders of such a one, in the seuenth Chap. of his booke *De reb. natur.* wherein he discourseth of diuers minerall Sulphurs, it is so (ingeniously with *Crollius* I confesse) that I neuer saw any such medicine; for hauing tryed conclusions, and wrought long time vpon

Vitrioll, I could neuer perceiue it had any such substance in it, which had like operation to that of *Opium*, as I haue plainly manifested in my booke intituled *Anatomia Vitrioli*, divulged five yeares since; in regard wherof those are much deceiued which by meanes of its precipitation with salt of Tartar, by boyling in an yron pot, or by meanes of sublimation doe separate a greenish powder from Vitriol, calling it *Sulphur embryonatum Vitrioli*, which being put to *Vulcans Test*, a man may quickly find it to be nothing but Copper, or being administred altereth the stomack, and rather prouoketh vomit, then either comfort or disposition to sleepe: it is therefore apparant that *Paracelsus*, intēded some other thing in this proiect then he vouchsafed to discover to vs.

Hence you may behold the reasons, wherfore we ought not to mis-prise, and vilipend certaine things for vncertain, but content our selues with the aforesayd *Laudanums*, or such like, with thankesgiuing to the Author of all goodnesse, not suffering our vnderstandings to bee abused by the vaine flourishes or idle fantasies of any other.

C H A P. IX.

Concerning the vertues and vse of all opiating Laudanums, aswell in generall as particular.



Having alreadie set downe the manner how to prepare *Opium* well, and to make excellent compositions thereof called *Laudanums*, it behoueth vs now to declare their vertues and vse for the better direction and aduertisement to them which shall haue occasion to vse the same.

The properties of euery Laudanum, which is well prepared and corrected, as before sayd, are principally fixe.

1 The first is to giue ease, or to cease all inward paines proceeding of what cause soeuer, and that at all times, and to all persons without exception of what complexion, temprature, age, or constitution of bodie soeuer, onely hauing regard to the Dose, and other circumstances which are requisite for the Physition to obserue.

2 To prouoke those to sleepe which are
 destitute

destitute thereof by reason of any corporall disease, or alteration of spirit, which things it effecteth without dulling or benumbing the senses, weakning the members, confipating the bodie, or producing any euill accidents at all in them, as other Somniferous things doe which are naturally cold, and il prepared.

3 To stop all vehement, subtil and corroding *Cathurrons* distillations falling from the braine vpon the lower parts, thickening them by little and little, strengning the braine, and repressing the grosse vapors which rise from the stomacke vpwards, which are ordinarily the causes of such defluxions.

4 To stay naturally the *Hamorrhagie*, dysenterie and menstruall fluxes, as also the *Dyarrhea* and fluxe of the belly, proceeding frō the great distemperature of inward heate, or some sharpe and biting humour.

5 To consummate and cease all burning Feuers and præternaturall heate, proceeding from any wound or vlcer, or frō the fermentation or ripening of any cholerick humor, or any causticke or venemous matter.

6 To roborate and strengthen the bowels and all the relaxed and feeble conduits, and those whose vertue retentiuē is weakened, by reason of some long sicknesse, or by the too much vse of purgatiue medicines.

Laudanum is more particularly used with good successe in these diseases following.

1 Against all maner of head-ach, as inueterate Megrims, *Cephalalgia*, or any other kind of excessiue paine, hauing regard that the stomacke bee first clenfed from all grosse and corrupt humours, the Dose is one small Pill to bee taken at bed-time, some two houres after supper, either in the water or syr-
rup of sweet *Maiozan*, *Betony*, or some other Cephalick liquor, as the Physitions shall thinke good: or otherwise a man may take it in ale or broth, or swallow it dry as it is, continuing the same as long as need shall require, that is vntill the paine be so tamed, that *Laudanum* is needlesse, which order must be obserued in all other diseases, wherein it is vsed.

2 Against all subtile Catarrhons, Destillations which fall from the braine vnto the eyes, teeth, or eares, or vpon the inferiour parts, as the lungs, brest, stomack, &c. wherein *Laudanum* is vsed, as aforesaid, keeping the Patients head in the meane time neither too hot, nor too cold, nor suffering him to drink any wine, stale beere, or other strong drinke, as also to forbear eating of mustard, garlick, onions, all spices and other things of a hot

and drie qualitie, which further and prouoke too much the foresaid distillation. If it bee conuenient to open the body you must vse no other purgatiue then that of Aloes, washed in rose-water, and thickned with the iuice of Rheubarb, Manna, Syrrupe of Roses, or with a conuenient Clister, which indeed is much better, for all other kind of purgatiue, dry and attractiue medicines are very dangerous in such accidents.

3 Against all paines of the eares with noise and flatulent tingling, be it by reason of certaine wind inclosed in the braine, or of any other vapours arising from the stomack: this medicine is best taken in the water of Fennel, Sage or a litle white wine going to bed as aforesayd.

4 Against the ayrie Epileptic (I speake vnto Naturalists) whose fits happen with great ebullition of bloud, and afflict the Patient with an Hæmorrhagic and great head-ach, we vse to giue *Laudanum* in the water of Pæonie, wild Poppy or other appropriat liquor before or after the fit, and this must be giuen once euery quarter of the Moone in the morning before Sun-rise, causing the patient to keepe a good diet, and to bee let bloud in due season and oportunity.

5 Against tooth-ach caused through any
hot

hot and subtill destillation, we vse to dissolue a little *Laudanum* in Vinegar, a few drops whereof the sicke patient must take and hold in his mouth a while, and after spit it out, and so take more and more in that fashion, vntill the paine cease.

7 To those which cannot sleepe by any means, we commonly giue a little *Laudanum* with a spoon-ful of the water of Hypericon or Balme, some twice or thrice a weeke, as long as need shall require.

7 To those which haue any great fluxe of bloud at the nose, or mouth, after due inquisition of the precedent cause, to the end Phlebotomic, Cupping-glasses, or other means for reuulsion-sake may be vsed, which taking no effect, we should instantly giue the patient a little *Laudanum* in the water of Plaintaine, *bursa pastoris Tormentill*, or rather (as most effectuall) in *Aqua spermatis ranarum per descensum distillat*. And if the bloud issue from the nose, we put a little lint therein, that is soaked in the sayd water and *Laudanum* mixed, and also apply some dipped therein to the fore-head, by meanes whereof the flux will immediatly stay: But if the partie hath bled much alreadie, vse no more Phlebotomic, but presently haue recourse to this remedie.

8 To those which are subiect to too much

vomiting and cannot brooke any meat on their stomach, by reason of some offensive matter there heaped & congeald, it is necessary that expulsion of the aforesaid matter be first made by the fittest Emunctory, either upward or downward, as occasion shal require; or if the vomiting proceed through the abundance of wind, or vapors inclosed in the bowels by reason of some obstruction in the reins (as often it falleth out) or of some other part in such case these obstructions should be opened with some good *Diureticke*, *Diaphoretick* & other conuenient medicines, otherwise if the vomiting proceed from the particular debility of the stomach, frō some vlcer, or any other cause then those aforesaid: In such case a man may administer *Laudanum* in the Syrrup of Quinces or *Betony*, reiterating the same as often as need shall require.

9 Against burning, malignant and pestilent Feuers (after conuenient vse of vomits, Bezoardicks and other remedies fit to euacuate grosse humors, or purifie the blood, if it be needfull) a man may give the Patient *Laudanū* in the water of *Carduus-benedictus*, *Veronica*, *Celondine* or such like, for in such cases it doth precipitate and consume the venemous vapors which arise frō the center of the body to the braine, causing madnesse, rage, phrensey,

sey, and diuers other dangerous accidents, which by this means may be preuented, for it asswageth the extreame heat in Feuers, comforteth the body and recreateth the spirits.

IO In intermitting Feuers after due euacuation of the offending and grosse humors, by vomit or siege appropriate, and the subtil and thin by conuenient Diaphoretickes, as also by giuing respiration to the star of Microcosmick-fire by Phlebotomie, if need require, after which intentions (if the Feuer cease not) a man may bouldly administer *Laudanum* in the water of Centory, *Carduus-benedictus*, *Moufeare*, or others appropriat an houre or two before the fit, by which meanes twice or thrice vsed, I haue seene many Aguish people cured when no other remedie preuailed, yet I will not affirme this to bee an infallible cure in all, for intermitting Feuers fall out to bee such many times, that the best Physitions in the world know not what to say vnto them, seeing they mock and scorne (as it were both them and their medicines.)

II Against the Collicke, and all gripping in the bellie (hauing regard that the bodie be alwaies kept soluble by some Clyster or Laxatiue Medicine, we commonly giue *Laudanum* in a spoone-full of good
white-

white-wine; but the paine falling out too violent and intollerable we stay for no other remedies, but vse this at the very beginning, and the griefe being ceased, the Physition may happily proceed in his cure by removing the offending cause, otherwise if hee shall see occasion.

12 In extreame paines and pinches which proceed from the small guts called *Iliaca passio*, we administer *Laudanum* in the oyle of sweet Almonds, or Muscilage of Quince-seed.

13 Against paines of the Matrix, we giue *Laudanum* in the water of Chamomill or Mugwort, but if the paines doe particularly proceed from retention of the menstrues, then must the cause bee taken away by pro-uoking them with conuenient medicines, neuerthelesse the griefe being intollerable, *Laudanum* may be first vsed, for it ceaseth all paines, represseth and consumeth all noysome vapours, which mount to the braine, and afflict women with priuation of Sense, Strangulation, Epileptick fits, &c. without feare of any prejudice, by neglecting the cause, which the Physition may better meddle withall when the Symptomes are staid.

14 When a woman is deliuered from Child-birth, and her paines fall out afterwards to bee insupportable, causing want of
Sleepe,

Sleepe, Sounding, a burning Feuer, and great debilitie. In such a case *Laudanum* is found to be the most soueraigne remedie that can be, and hath no lesse vertue in the restraining the too much effusion of blood after birth, by giuing only one small Pill as aforesaid.

15 In all dangerous Fluxions of the Menstrues, wee vse to giue *Laudanum* twice or thrice, or as need shall require, and it will doubtlesse stay them, so that the Patient vse a conuenient diet and rest, and refraine from anger and other violent passions, altering and troubling the blood, I haue cured diuers that haue lost (in a maner) all the blood in their bodies, by giuing them onely *Laudanum*, and after taking a course to restore nature with conuenient Viands, and to comfort the heart, cause them to take the Magisterie of Pearle, Corall, the Cordiall Elixer, commonly called the Philosophers *Aurum Potabile*, &c.

16 In Dysenteries, and also in great fluxes of the belly without blood, hauing first euacuated the offending matter with Rheubarbe or other conuenient medicines, according to the quality of the matter, & the part affected, we vse *Laudanum* with the Syrrupe of Quinces, once, twice or thrice, as need shall require, omitting in no wise expedient Phlebotomie, or any other outward meanes, whether

ther they be Vngents, Plaſters, or whatſo-
euer.

17 To thoſe which (having taken ſome
naughty purgation) are fallen into a violent
fluxe of the belly with no little danger of life
(as by many examples is apparant) we giue
Laudanum in a ſpoone-full of Red-wine once,
twice, &c. vntill the fluxe ceaſe.

18 In exceeding griefe in the Reines (cal-
led *Nephritis*) as alſo when the vrine deſtil-
leth by drops, ſcalding and corroding the
vrinarie paſſages, much like to a ſtrong-lee,
Laudanum is giuen mixed with a little conſerue
of Roſes, or with ſome Syrrupe of Violets.

19 *Laudanum* is likewise giuen to thoſe
which are daungerouſly afflicted with the
ſtone, after the giuing of a mollifyng & car-
minatiue Clifter, if the body be bound, and
then it is beſt exhibited in Meath, or the Syr-
rupe of Liquiriſe.

20 To thoſe which are exceedingly paine
by reaſon of ſome inward rupture, *Laudanum*
is vſually giuen in a ſpoone-full of good
wine, annoynting them outwardly with a lit-
tle oyle of Nut-megs, and cauſing them in
the meane time to keepe themſelues very
warme.

21 Againſt all Gouts, or paines in the
ioynts, whether it be in the Feet, Hands,
Knees,

Knees, Hippes, &c. coniunct with inflammation, and when the offending matter is windie and vnconstant shifting from one place vnto another, in such cases to ease the paine, digest the matter, and thicken it so that it may bee more easily expelled by purgatiue meanes, or that Nature-selſe may consume it by insensible transpiration) *Laudanum* is certainly worthie great commendations, especially when it is giuen from the hand of a skilfull Physitian, that is with reason, vnderstanding and in fit time, for in such occurrences where the matter is so vagant and vncertaine, purgatiue Medicines doe more harme then good by stirring the humour ouer much, and causing inanition of the parts when the inflammation growes more wehement, and the sicke persons farre worse afflicted then before. To Arthriticall persons, in whom the offending matter is not so vagant, but constant and resident in one place, who suffer not onely great paine, but an extreame Feuer with debilitation, losse of naturall rest and such like cases and Symptones, *Laudanum* is verie conuenient at the instant to stay the violence, after which you may vse purgatiue medicines to take away
the

the cause with farre better successe then before, for if you should tamper and purge during these fits you would raise sundry others of greater danger, for such strong purgations as those which are able to exhale the offending matter from the ioynts, would be vsed when nature is quiet, rather then at such times as she is vexed, dejected & cast downe through violent paines and griefe.

22 To a wounded person, which is assaulted with a burning Feuer, Inquietude, *Hæmorrhagia*, or some other accident, whereby the wound is incensed and in danger to gangrene: in such a case that Chyrurgian is worthe double honour, who knowes well how to vse *Laudanum*, for the good successe which vndoubtedly followes.

23 If any person afflicted with intollerable great paine by reáson of any inueterate vlcers in the legs, armes, or other parts of the body, as many times it falleth out, by giuing a little *Laudanum* some two houres after supper, the paine will ceatè without faile. I had once in *Switzerland* a certaine patient about 90. yeares of age in cure, who had two great vlcers, which in 15. yeares did so torment him, that he could take no rest, night nor day, so that he was constrained to seeke about for some man to giue him ease; to whom hauing but
begun

begun to administer a little *Laudanum*, hee immediatly recovered his naturall rest, and shortly after was able to walke all the towne ouer, the which he could not do of long time before, so that onely by means of *Laudanum* hee preferued himselfe for the space of one yeare and a halfe together, at the end whereof hee died for very age, the vlcers in the meane time, neate, cleane and open, and that without application of any other outward thing more then a linnen ragge dipped in the water of Spotted *Persicaria*, and so layd to the soare handsomely as I had directed.

24 Lastly when any person is tormented with any malady whatsoeuer, and hauing tryed all ordinary remedies that can be deuised to take away the cause, and being not able to be holpen thereby, but remain in continual torments, Dolor, Vexation & Watching, whereby the Radical moysture is sodainly exhausted, naturall heate extinguished, &c. In this case *Laudanum* doth merit to bee called the onely soueraigne salve for languishing people, seeing it ceaseth all their grieffe strengthneth their inward parts, maintaineth naturall heate, and produceth such miracles in nature, that none can imagine, but such as haue experience of the same, for I haue obserued many examples very remarkeable, as

that hauing my selfe , with good discretion and aduice administred *Laudanum* to some persons, when they haue beene struggling with death , and assaulted with intollerable Agonies, Paine and torments, they haue had such comfort and ease, that presently after they haue in farre better sense recommended themselues vnto God , giuen order concerning their worldly estate , and yeelded their spirits into the hand of their Maker with quietnesse , great comfort and edification of all them that were present about them ; But the contrary hath often fallen out and still doth for want of such a Medicine , in whose stead there can be found no parrallel, as experience doth plainly declare, which ought to moue and stirre vp euery Physition , which neither knowes how to procure nor vse the same to acquit himselfe so much the more carefully of his charge before God and his neighbour, for there is no reason, particular opinion , nor any disputation ought to preuaile against charitie, by meanes whereof the whole vniuerse doth stand and continue, and whereupon all good Arts and Sciences are founded, so that wee halt in our dutie, when we neglect to search out and procure such things as are wholesome, good, and comfortable to sicke people, albeit they were inuen-
ted

ted and found out by *Pagans* or *Christians*, ancient or moderne, *Gallen* or *Paracelsus* or any other Author, whose opiniõ we hold for Oracles, we cānot render our selues excusable before God the very searcher of the heart and thoughts : for experience being the great fundamentall booke of Physitions, which is daily read vnto vs by the light of nature, we should continually indeuour our selues, not only to vnderstand but obserue, also her motions and directions, considering that (as *Paracelsus* saith) all the meanes and remedies which naturally cure sicknesses, are the true Canons and rules of Physick, which I would haue to be construed with all conuenient exception, attributing vnto reason that which is agreable, and vnto Authors the honour due vnto them.

Certaine Cautions and aduertisements for the better and more safe use of Laudanum.

WE may all vnderstand that there is nothing in the world (be it neuer so good) fit for medicine, wherein good iudgement and discretion for its safe exhibition is not to be required, which indeed is the chiefeft reason that mooueth mee to giue further Caution and aduertisement concerning the vse of *Laudanum*.

1 First although in the former passages it hath bin decreed, that this Medicine should be vsed with diuers Vehicles in euery disease, yet there may happen some particular occurrence, that in one or other, the distilled waters and Syrrups aforesaid may not bee conueniently taken as well in respect of their qualities, smells and tast, as other particular properties antipathizing the sicke Patient, whereof wee haue seene diuers examples, as some that cannot indure the smell or tast of roses, others of Quinces, some leuing sweet things, others not able to indure them, to some distilled waters are pleasant, to others they cause vomit, and other accidents, so that the Physition ought to looke vnto all these things, and because such occasions may often fall out, it is best to administer *Laudanum* in Wine, Beere, Chicken-broath or some other Vehicle, agreeable as well to the Patients nature as his disease, whercunto great regard must be had.

2 You must not giue *Laudanum* twice in one day, vnlesse in great extremitie of paines for once will suffice, nor you ought not to exceed ordinarily the weight of three or foure grains at a time, yet vnto a person of strong constitution a man may giue from foure to six. It is best administr'd at night two houres after supper,

supper, as aforesaid, vnlesse great occasion fall out otherwise, for then any time of the day must serue, according (to the old saying) necessitie hath no law.

3 You must also haue great regard that the body bee free from superfluous excrements, which must be procured with some conuenient Laxatiue Medicine, mollifying Clister, or Suppositorie, but in leane and megre bodies, and such as feed very little, and such as are slender, full of heate and destitute of necessary humiditie and radicall moysture, hauing withall their veines full of blood, with such you must deale very warily, for they haue more need then a man would thinke to haue their heate cooled, and humected, rather then by purging the body, where no excrements are to dry the same more and more, for by diminishing the humours, heat must needs increase, and so will the bodie pine and consume away to nothing.

4 To *Asthmaticall* people, whose Breasts, Lungs and other Organes are stuffed with Viscous and clammy flegme, you must take heed of giuing any *Laudanum*, for in such cases you must vse Medicines to dissolue and cleanse away the said matter, which *Laudanum* cannot do being a medicine of a corroborating and indifferent thickning nature.

5 *Laudanum* is not good or conuenient for Hydropical persons, which for the abundance of water contained in them haue much adoe to breath and dare not sleepe in their beds for feare of suffocation, yet after the watrie matter is euacuated, the Liuer and other parts vnstopped with conuenient medicines, and deliuered from the foresaid Symptomes, then a man may be bold to giue them *Laudanum* to Roborate the bowels, defend the body from subtill Defluxions and finish the whole cure.

6 Finally, *Laudanum* is not conuenient for them, whose Stomack is full of grosse humours which should bee euacuated with vomitory or *Catharticke* medicines, nor for those which haue the Small-pocks, which Symptomes should bee taken away with appropriat remedies: In briefe, no man ought to vndertake the cure of any disease with *Laudanum*, which hath need of mitigation or helpe, either by *Vomitories*, *Cathartickes*, *Diaphoretickes*, *Diuretickes*, *Alexitaries*, *Vulneraries*, *Phlebotomie*, *Diet*, or any other appropriat remedie: And contrariwise it is idle to goe about to cure any disease with an other medicine, which of necessity must be cured with *Laudanum*: for euerie medicinall rule, and euerie Section of medicines haue vnder them

them their proper maladies for whose cure they are especially appropriated, yet notwithstanding wee are constrained many times vpon occasion to mixe one thing with another, not only in regard that two or three diseases do often iump together in one body, but also for the varietie of Symptomes, and effects that one only diseases may sometimes produce, so that one while one Medicine, another while another may be found to be most conuenient, and agreeable. And this is the reason why I propose not *Laudanum* for a vniuersall Medicine.

C H A P. X.

Confuting three erronious obiections which may be proposed against the vse of Laudanum.



Some 8. yeares since, being in consultatiō with certain Physicians, about a man which was troubled with a fluxe of the belly a month together, & at that time together with the same had a continuall Feuer, was deprived of naturall rest and mightily tormented with belly-ach,

so that notwithstanding the vse of a great number of medicines, yet he was become exceeding weake and feeble: vpon which occasion when it came to my turne to speake, I proposed *Laudanum*, for an excellent medicine in that case: but they vtterly disliking the same, came vpon me with these three obiections following, which notwithstanding were not able to renverse or ouerthrow my opinion. To preuent therefore a mischief which may happen to some sicke persons for want of *Laudanum*, being denied the vse thereof vpon so slight reasons, I thought good for conclusion of this Treatise, to set downe their obiections and my refutation of them in manner as followeth.

The Obiections.

1 First that *Laudanum*, being principally composed of *Opium*, and still reteyning its Somniferous propertie, might consequently suffocate naturall heate, and benum and stupefie all the senses.

2 Seeing *Laudanum* doth incrassate & thicken the subtil humors, it followed that although it did cease paine for the time, yet afterwards it made the cause of the sicknesse malignant, fixed and incurable.

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3 That it hath beene obserued, that some sicke people haue died some few houres after the taking of *Laudanũ*, inconsideration whereof we should abstaine from its vse altogether.

The Answer.

Concerning the first obiection, I am of opinion, that if such men as goe about to propose any such thing, would either giue place to the authority of great Physitions, or experience-seif (both which assuring vs that crude *Opium*, taken in small quantity, neither suffocateth naturall heate, nor dulleth the senses, as hath beene already sufficiently proued in the beginning of this discourse) they would neither blame, nor so basely esteeme of it; but suppose that a very smal *Dose* of crude *Opium* did produce such effects, must it therefore doe the same when it is depriued of the superfluity of its narcotical Sulphur, his Acrimonie corrected, and after mixed with such *Bezoardick* and Cordiall things as aforesaid? No man of iudgement, or of any experience in the Mysteries of nature, can deny that *Opium* (the principall ingredience or Basis of *Laudanum*) being thus altered both in forme and substance, becómeth likewise changed in its vertues and operations, and therefore can

with no reason censure so hardly thereof as when it is crude : And notwithstanding that *Laudanũ* doth prouoke the diseased to sleepe, yet daily experience teacheth vs that it doth not suffocate naturall heate, but rather preserve it when it is about to consume, and in danger to be suddainely extinct by reason of its violent motion, extreame paines, and extraordinary watching, whereby it is as rudely handled as a lampe or burning-torch is in a mightie tempest, which causeth a greater wasting of oyle, and losse of light then it would doe if it were defended from such an accident.

2 For the second obiection : *Laudanum* is so farre from aggrauating, impairing or making worse the causes of the disease by reason of its incrassating faculty, that quite contrary it prepareth some offending humours, and maketh them far more apt and easie to be expelled, as in the 21. passage before concerning Gouts we haue something declared ; For is it not the consent and verdict of the best Physicians in the world, that the preparation of humors before purgation doth chiefly consist in two operations, that is in subtilizing and attenuating of those which are Viscouse thick and clammy, and incrassating and thickning indifferently those which are too
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subtill, virulent, windy & vagant in the body? Now the greatest part of extreame paines and inward heates proceeding from some dissolved matter, that is either salt, sharpe or corroding, or from such as doth excoriate, inflame and alter the member affected, whereby malignant vapors arise, which passing vnto the adioyning parts, doe by consent produce sundry tormētts, & many euil accidents as by experience is manifest: what better course can a man obserue, then by meanes of *Laudanum* to thicken and digest the sayd humors & sequestering & consuming the aforesayd vapours in such sort, that they can by no means exercise their cruelty as before? And in case of superfluity (if it be any waies requisite to be purged, a man may doe it afterwards farre more warily and safely then in the former estate: is not this represented to any mans vnderstanding, by sundry outward vlcers, which being inflamed and distilling from some subtill and corrosiue humour, cause great Pricking, Dolour and paines and oftentimes by consent a Feuer to the Patient, so that the true remedie in such a case to take away such accidents is some excellent *Anodyne*, which may mitigate and asswage that vnnaturall heate, and suddenly ripen and indifferently thicken the offending
humour

humor which was so subtile and corrosive, which being done, all other Symptomes cease whatsoever; *Laudanum* then (not onely producing these effects by its naturall propertie, but also mundifying, resisting putrifaction, and healing, and comforting the weakened parts as it were Balsame) may by good consequence take away or extinguish the cause of many euill Symptomes, rather then impaire and make them incurable: for although it doth moderately incrassate, yet notwithstanding it doth not coagulate the bloud, nor fixe the substances, which in their owne proper nature are liquid in stone, nor solder or glue the parts together as *Gypsum* doth, for which cause onely men should blame it in such maner as before.

3 Thirdly, we will not deny, but that some sick person may chance to die soone after the receipt of *Laudanum*, but that *Laudanum* was the cause of their death, & that in regard thereof its vse is vtterly to be abandoned and forsaken is the matter now in question.

First therefore it is very apparant by our former discourse, that *Laudanum* is not a thing of such a venemous quality, as will cause death to the receiuer, for albeit the obseruation be true that some haue died soone after the taking thereof, yet that ought not

to supersede all other reasons, attestations & experience concerning the good effects, and safe use of *Laudanum*, for as it is an absurd and foolish thing for a man to say, I did see certaine graines of *Bezoar-stone*, *Vnicornes-horne*, *Pearles*, or such like pretious Cordials giuen to a sicke person who died not long after, *ergo*, that was the cause of his death, and therefore take heed of vsing any such thing hereafter: or I saw one giue a Clister to such a sicke person who died soone after, *Ergo*, Clisters are dangerous remedies, and ought not to be vied, as many simple people are accustomed to argue; Euen so it is as absurd a thing to hold *Laudanum* in suspition, because such a one tooke it & after dyed, for although it doe principally and speedily cause all torments to cease, and prouoke the diseased to sleepe, yet that is no consequence that it can preferue a man from death, when by God his secret decree his houre is come, for neither that nor no other Medicine in the world can doe: sleepe and exemption from paines are necessary things, as well for sound as sicke men, the one with distinction, the other without all exception; but that these two doe sometimes serue for the maintenance and strengthening of mans life, and other sometimes are vnnecessary, and of no use, this proceeds

ceeds not through any fault in themselves, but in nature which doth not receiue them for her owne good and benefit, as other times she vseth to doe, which thing is liuely represented vnto vs by the vse of meate, drinke and all other things called Medicines not naturall, which sometimes are good and profitable to the bodie, and sometimes quite contrary, euen as nature disposeth of them for our good, or euill, howsoeuer in themselves they are alwaies good, seeing without thē no man can liue, we may easly perceiue the veritie hereof by the example of any man, who hauing watched, and trauailed moderately vntill at last hee become drowsie and faint, who after a little sleepe, and repose being awakened, becommeth as liuely and frolicke as at first. But if this man returne to his labour, and redouble his paines & watching in such sort, that hee surpasse the limits of his strength, and so long vntill his vitall animall and naturall functions be vtterly disbanded and weakned, making such an exceeding alteration in his body and turning it quite vpside-downe, so that a dangerous and mortall disease insue: Now in this case, if he betake himselfe to this Medicine for rest and sleepe, thinking to finde like benefit and comfort, as before, he shalbe so farre from enjoying
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the same, that quite contrary he must needs pay the price of his life for his vaine excessive and intemperance. After the very same manner may wee iudge of such a sicke person as hath wanted sleepe beyond measure, indured intollerable paines, taken no food or nourishment, and become extreame weake and at point of death, who afterwards falling into a little sleepe of himselfe, or by meanes of a little *Laudanum*, or a spoone-full or two of some restauratiue liquor to comfort him; instead of recouering his life by any of these, hee doubtlesse dies; the cause of his death notwithstanding ought not to bee imputed to the little sleepe hee had, nor to the taking of the Cordiall (seeing that sleepe and nourishment are two necessary things for the preservation of life) but rather in regard that death hauing seized vpon them, these things could not produce those good effects, which by natures intention they were ordained and appointed for. Let this suffice then to confute the third obiection aforesaid, in defence of well prepared and discreetly administred *Laudanum*. For if any man vsing *Opium* as the *Turkes* doe, or *Henbane*, *Mandrage*, or any other Narcotiall thing so crude, raw,

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ill-prepared or uncorrected hath or doth commit any notable error in that behalfe, it is farre from my scope or intention to defend any such abuse; my desire is rather that Physicians should beware how they deale with simple people, and lest the Art should bee slandered, there ought to bee a fit time collected for the giuing of *Laudanum*, that is at the first incounter of the disease, when there is good hope of cure, considering that wee must not onely haue regard to purge Phlebotomize, prescribe a Dyet, &c. to our Patients, but also to comfort and restore, to aduance and bring them to their naturall rest, and to cease and qualifie their torments. Moreover wee should omit no occasion at any time, to ease and succour our neighbour, even vntill the point of death, in all things wee may or can possibly, euen as wee would bee serued our selues in the like case, and that with all conuenient exceptions and protestation for the reason aforesayd; And this shall suffice for conclusion of this present Treatise.

Now I protest to euery one that shall read this same, that I haue no pretension in this discourse, to iniure, or detract from those which worthily make profession of Physick, but onely desire to amplifie the knowledge
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of this medicine, for the benefit of such persons as are ignorant thereof, as I haue before sayd in my Preface. And also to manifest the paines which I take, and the diligence I bestow to find out the properties, preparation and true vse of such things as are especially conuenient and necessary in Physicke, and consequently to make it appeare, that those which (mooued with their owne proper passions) shall speake any thing against me, deceiue themselues, and derogate from that Noble name whence they are called *Christians*, thinking it no wrong to detract from anothers honour, so they may by that meanes or any other augment their owne, which I would haue construed with all modest exception, intending not to touch any one mans name more than another, if their owne tongues bee not their owne accusors, wherby if they chance to manifest themselues they shall haue no occasion to blame me, and therefore I commit my right to him which only knowes the hearts of men, and who administreth Iustice, Equity, Mercie and Grace, vnto all his Creatures, to whom bee glorie for euer and euer.

Amen.

F I N I S.

Faults escaped in the Printing.

IN the Epistle Dedicatory Pag. 12. line 10. reade *Cal-*
cining. In the Authors Preface p. 12. l. 6. r. *incundè*.
In the treatise p. 2. l. 1. r. *Dioscorides*, p. 11. l. 12. r. *nuifance*
p. 16. l. 1. r. *Complicentur*, p. 19. l. 17. for amongst r. a-
gainst, p. 49. l. 16. r. *Mellis*.



