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# Domestic Medicine:

#### OR, A

# TREATISE

#### ON THE

PREVENTION AND CURE

OF

DISEASES

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REGIMEN and SIMPLE MEDICINES.

#### WITH

An APPENDIX, containing a DISPENSATORY for the Use of Private Practitioners.

By WILLIAM BUCHAN, M.D. Fellow of the Royal College of Phylicians, Edinburgh.

THE NINTH EDITION:

To which is now added, An ADDITIONAL CHAPTER on COLD BATHING, and Drinking the MINERAL WATERS.

#### LONDON:

Printed for A. STRAHAN; T. CADELL in the Strand; and J. BALFOUR, and W. CREECH, at Edinburgh. MDCCLXXXVI. Omnes homines artem mèdicam nosse oportet. — Sapientiæ cognitionem medicinæ fororem ac contubernalem esse puto.

HIPPOCRATES.

Primoque medendi scienția, sapientiz pars habebatur.—Rationalem quidem puto medicinam esse debere. Celsus.

Quemadmodum fanitas omnium rerum pretium excedit, omnifque felicitas fundamentum est, ita scientia vitæ ac fanitatis tuendæ omnium nobilissima, omnibusque hominibus commendatissima este debet. HOFFMAN,

25601

Sir JOSEPH BANKS, Bart. PRESIDENT OF THE ROYAL SOCIETY.

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## SIR,

THE DOMESTIC MEDICINE having been honoured, on its first appearance, with the patronage of your learned and worthy Predecessor, the late Sir John PRINGLE, I beg leave, in a more improved state, to dedicate it to you, as a simall, but fincere, testimony of that veneration and esteem with which I have long beheld the Man who, born to ease and affluence, had resolution to encoun-

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## DEDICATION.

ter the dangers of unknown feas and diftant climes, in purfuit of ufeful Science; and whofe conftant object has been to render that Science fubfervient to the happinefs and civilization of Society.

I have the honour to be, with great respect,

SIR,

- Your most obedient servant,

London, Nov. 10, 1783.

W. BUCHAN,

## A D V E R T I S E M E N'T.

CIXTEEN years have now elapfed fince D the first Edition of this Book made its appearance. During this period, the Author having been in conftant practice, has taken occafion to improve feveral articles, which were with lefs accuracy inferted in the more early impreffions. For this he has been cenfured by fome, but the more candid and difcerning must approve his conduct. It would be unpardonable in an Author to fuffer an error in a book, on which health and life may depend, to ftand uncorrected; nor would it be much lefs fo to perceive an omiffion, and leave it unfupplied. His improvements, however, are not the refult of mercenary views. The fame principle which prompted the Author to write the Book, will ever induce him to improve it to the utmost of his power.

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#### A D V E R T I S E M E N T.

THE Author has indeed to regret, that the limits of one volume preclude many interefting obfervations, and likewife deprive him of the pleafure of inferting a number of very ufeful remarks made by his learned and ingenious friend Doctor DUPLANIL, of Paris, who has done him the honour of publifhing an elegant translation of this Work, in five volumes, octavo, accompanied with an excellent commentary.

THE improvements of the later editions are chiefly inferted in the form of notes. Thefe are intended either to illustrate the text, or to put people on their guard in dangerous fituations, and prevent fatal mistakes in the practice of medicine, which, it is to be regretted, are but too common in this metropolis.

Some attention has likewife been paid to the language. Where that was either inaccurate, or obfcure, as far as was practicable, it has been corrected. Indeed, the Author has all along endeavoured to obferve fuch fimplicity and perfpicuity in his ftyle, as might enable

## A D V E R T I S E M E N T,

enable the reader clearly to underftand it. A circumftance of the utmost importance in a peformance of this nature.

ALTHOUGH the DOMESTIC MEDICINE was never intended to fuperfede the ufe of a phyfician, but to fupply his place in fituations where medical affiftance could not eafily be obtained; yet the Author is forry to obferve, that the jealoufies and fears of the Faculty have prompted many of them to treat this Work in a manner altogether unbecoming the profeffors of a liberal fcience : notwithftanding their injurious treatment, he is determined to perfift in his plan, being fully convinced of its utility; nor fhall intereft, or prejudice, ever deter him from exerting his beft endeavours to render the Medical Art more extenfively beneficial to MANKIND.

BUT this illiberal treatment of the Faculty is not the only thing of which the Author has caufe to complain. By fome of them his Book has been ferved up mangled and mutilated, and its title, type, fize, &c. fo clofely imitated, that purchafers are mifled, and a 2 frequently

## ADVERTISEMENT.

frequently buy thefe fpurious productions inftead of the real one. That a needy Author, incapable himfelf of producing an original work, fhould prey upon another, and that a mercenary Bookfeller fhould vend fuch productions, knowing them to be ftolen, are things not at all to be wondered at: but that all this can be done with impunity, fhews that the laws of this country refpecting literary property, are ftill in a very imperfect ftate, and ftand much in need of amendment.

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LONDON, Nov. 10, 1785.

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PREFACE.

WHEN I first fignified my intention of publishing the following sheets, I was told by my friends it would draw on me the referiment of the whole Faculty. As I never could entertain such an unfavourable idea, I was resolved to make the experiment, which indeed came out pretty much as might have been expected. Many whose learning and liberality of sentiments do honour to medicine received the book in a manner which at once shewed their indulgence; and the falsity of the opinion, that every physician wisses to conceal his art; while the more felfish and narrow-minded, generally the most numerous in every profession, have not failed to perfecute both the book and its author.

THE reception, however, which this work has met with from the Public merits my moft grateful acknowledgments. As the beft way of expreffing thefe, I have endeavoured to render it more generally ufeful, by enlarging the *prophylaxis*, or that part which treats of preventing difeafes; and by adding many articles which had been entirely omitted in the former impreffions. It is needlefs to enumerate thefe additions; I fhall only fay, that I hope they will be found real improvements.

THE observations relative to Nursing and the Management of Children, were chiefly suggested by an extensive practice among infants, in a large branch

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of the Foundling Hofpital, where I had an opportunity not only of treating the difeafes incident to childhood, but likewife of trying different plans of nurfing, and obferving their effects. Whenever I had it in my power to place the children under the care of proper nurfes, to inftruct thefe nurfes in their duty, and to be fatisfied that they performed it, very few of them died; but when, from diffance of place, and other unavoidable circumftances, the children were left to the fole care of mercenary nurfes, without any perfon to inftruct or fuperintend them, fcarce any of them lived.

THIS was fo apparent, as, with me, to amount to a proof of the following melancholy fact: That almost one half of the human species perish in infancy, by improper management or neglest. This reflection has made me often wish to be the happy instrument of alleviating the miseries of those fuffering innocents, or of refcuing them from an untimely grave. No one, who has not had an opportunity of observing them, can imagine what absurd and ridiculous practices still prevail in the nursing and management of infants, and what numbers of lives are by that means lost to fociety. As these practices are chiefly owing to ignorance, it is to be hoped, that when nurses are better-informed, their conduct will be very different.

THE application of medicine to the various occupations of life has been, in general, the refult of obfervation. An extensive practice for feveral years, in one of the largest manufacturing towns in England, afforded me sufficient opportunities of obferving the injuries which those useful people suffain from

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from their particular employments, and likewife of trying various methods of obviating fuch injuries. The fuccefs which attended thefe trials was fufficient to encourage this attempt, which, I hope, will be of ufe to thofe who are under the neceffity of earning their bread by fuch employments as are unfavourable to health.

I DO not mean to intimidate men, far lefs to infinuate that even those arts, the practice of which is attended with some degree of danger, should not be carried on; but to guard the lefs cautious and unwary against those dangers which they have it in their power to avoid, and which they often, through mere ignorance, incur. As every occupation in life difposes those who follow it to some particular difeases more than to others, it is certainly of importance to know these, in order that people may be upon their guard against them. It is always better to be warned of the approach of an enemy, than to be furprised by him, especially where there is a possibility of avoiding the danger.

THE observations concerning Diet, Air, Exercife, &c. are of a more general nature, and have not escaped the attention of physicians in any age. They are subjects of too great importance, however, to be passed over in an attempt of this kind, and can never be sufficiently recommended. The man who pays a proper attention to these, will seldom need the phyfician; and he who does not will feldom enjoy health, let him employ as many physicians as he pleases.

THOUGH we have endeavoured to point out the caufes of difeafes, and to put people upon their guard against them, yet it must be acknowledged that they

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are often of fuch a nature as to admit of being removed only by the diligence and activity of the public magiftrate. We are forry, indeed, to obferve, that the power of the magiftrate is feldom exerted in this country for the prefervation of health. The importance of a proper medical police is either not underftood, or little regarded. Many things highly injurious to the public health are daily practifed with impunity, while others, abfolutely neceffary for its prefervation, are entirely neglected.

Some of the public means of preferving health are, mentioned in the general prophylaxis, as the infpection of provisions, widening the ftreets of great towns, keeping them clean, fupplying the inhabitants with wholefome water, &c.; but they are paffed over in a very curfory manner. A proper attention to these would have swelled this volume to too large a fize; I have therefore referved them for the subject of a future publication.

In the treatment of difeafes, I have been peculiarly attentive to regimen. The generality of people lay too much firefs upon Medicine, and truft too little to their own endeavours. It is always in the power of the patient, or of thofe about him, to do as much towards his recovery as can be effected by the phyfician. By not attending to this, the defigns of Medicine are often fruftrated ; and the patient, by purfuing a wrong plan of regimen, not only defeats the doctor's endeavours, but renders them dangerous. I have often known patients killed by an error in regimen, when they were using very proper medicines. It will be faid, the phylician always orders the regimen when he preferibes a medicine. I wifh it

#### PREFACE

it were fo, both for the honour of the Faculty and the fafety of their patients: but phylicians, as well as other people, are too little attentive to this matter.

THOUGH many reckon it doubtful whether medicines are more beneficial or hurtful to mankind, yet all allow the neceffity and importance of a proper regimen in difeafes. Indeed the very appetites of the fick prove its propriety. No man in his fenfes ever imagined that a perfon in a fever, for example, could eat, drink, or conduct himfelf in the fame manner as one in perfect health. This part of medicine, therefore, is evidently founded in Nature, and is every way confiftent with reafon and common fenfe. Had men been more attentive to it, and lefs folicitous in hunting after fecret remedies, Medicine had never become an object of ridicule.

INDEED this feems to have been the first idea of Medicine. The antient physicians acted chiefly in the capacity of nurses. They went very little beyond aliment in their prescriptions; and even this they generally administered themselves, attending the fick, for that purpose, through the whole course of the difease; which gave them an opportunity not only of marking the changes of difeases with great accuracy, but likewise of observing the effects of their different applications, and adapting them to the fymptoms.

THE learned Dr. Arbuthnot afferts, that by a proper attention to those things which are almost within the reach of every body, more good and less mischief will be done in acute diseases, than by medicines improperly and unseasonably administered; and that great X

great cures may be effected in chronical diftempers, by a proper regimen of the diet only. So entirely do the Doctor's fentiments and mine agree, that I would advife every perfon, ignorant of phyfic, to confine his practice folely to diet, and the other parts of regimen; by which means he may often do much good, and can feldom do any hurt.

THIS feems also to have been the opinion of the ingenious Dr. Huxham, who observes, that we often feek from Art what all-bountiful Nature most readily, and as effectually, offers us, had we diligence and fagacity enough to observe and make use of them; that the *dietetic* part of Medicine is not so much studied as it ought to be; and that, though less pompous, yet it is the most natural method of curing difeases.

To render the book more generally uleful, however, as well as more acceptable to the intelligent part of mankind, I have, in most difeases, besides regimen, recommended fome of the most simple and approved forms of medicine, and added such cautions and directions as seemed necessary for their fase administration. It would no doubt have been more acceptable to many, had it abounded with pompous preferiptions, and promised great cures in confequence of their use; but this was not my plan: I think the administration of medicines always doubtful, and often dangerous, and would much rather teach men how to avoid the necessary of using them, than how they should be used.

SEVERAL medicines, and those of confiderable efficacy, may be administered with great freedom and fafety. Physicians generally trifle a long time with medicines

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medicines before they learn their proper ufe. Many peafants at prefent know better how to ufe fome of the most important articles in the *materia medica*, than physicians did a century ago; and doubtless the fame observation will hold with tegard to others fome time hence. Wherever I was convinced that medicine might be used with fasety, or where the cure depended chiefly upon it, I have taken care to recommend it; but where it was either highly dangerous, or not very neceffary, it is omitted.

I HAVE not troubled the reader with an useles parade of quotations from different authors; but have, in general, adopted their observations where my own were either defective, or totally wanting. Those to whom I am most obliged are, Ramazini, Arbuthnot, and Tiffot; the last of which, in his Avis au Peuple, comes the nearest to my views of any author which I have feen. Had the Doctor's plan been as complete as the execution is mafterly, we should have had no occasion for any new treatife of this kind foon; but by confining himfelf to the acute difeafes, he has, in my opinion, omitted the most useful part of his subject. People in acute difeases may fometimes be their own physicians; but in the chronic, the cure must ever depend chiefly upon the patient's own endeavours. The Doctor has alfo paffed over the Prophylaxis, or preventive part of Medicine, very flightly, though it is certainly of the greatest importance in fuch a work. He had, no doubt, his reasons for fo doing, and I am fo far from finding fault with him, that I think his performance does great honour both to his head and to his heart.

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SEVERAL other foreign phyficians of eminence have written on nearly the fame plan with Tiffot, as the Baron Van Swieten, phyfician to their Imperial Majefties, M. Rofen, firft phyfician of the kingdom of Sweden, &c.; but thefe gentlemen's productions have never come to my hand. I cannot help wifhing, however, that fome of our diftinguiss field countrymen would follow their example. There still remains much to be done on this subject, and it does not appear to me how any man could better employ his time or talents, than in eradicating hurtful prejudices, and diffusing useful knowledge among the people.

I KNOW fome of the Faculty difapprove of every attempt of this nature, imagining that it must totally deftroy their influence. But this notion appears to me to be as abfurd as it is illiberal. People in diffrefs will always apply for relief to men of fuperior abilities, when they have it in their power; and they will do this with far greater confidence and readinefs when they believe that Medicine is a rational fcience, than when they take it to be only a matter of mere conjecture.

THOUGH I have endeavoured to render this Treatife plain and uleful, yet I found it impoffible to avoid fome terms of art; but those are, in general, either explained, or are fuch as most people understand. In short, I have endeavoured to conform my style to the capacities of mankind in general, and, if my Readers do not flatter either themfelves or me, with some degree of fucces. On a medical subject, this is not so easy a matter as some may imagine. To make a shew of learning is easier than to write plain sense, especially in a science which has

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has been kept at fuch a diftance from common obfervation. It would, however, be no difficult matter to prove, that every thing valuable in the practical part of Medicine is within the reach of common 14 199 abilities.

IT would be ungenerous not to express my warmeft acknowledgments to those Gentlemen who have endeavoured to extend the usefulness of this Performance, by translating it into the language of their respective countries. Most of them have not only given elegant translations of the Book, but have also enriched it with many useful observations; by which it is rendered more complete, and better adapted to the climate and the conftitutions of their countrymen. To the learned Dr. Duplanil of Paris, phyfician to the Count d'Artois, I lie under particular obligations; as this Gentleman has not only confiderably enlarged my Treatife; but, by his very ingenious and uleful notes, has rendered it so popular on the Continent, as to occasion its being translated into all the languages of modern Europe.

I HAVE only to add, that the Book has not more exceeded my expectations in its fuccefs, than in the effects it has produced. Some of the most pernicious practices, with regard to the treatment of the fick, have already given place to a more rational conduct; and many of the most hurtful prejudices, which feemed to be quite infurmountable, have, in a great measure, yielded to better information. Of this a ftronger inftance cannot be given than the inoculation of the small-pox. Few mothers, some years ago, would fubmit to have their children inoculated even

even by the hand of a Phyfician; yet nothing is more certain, than that of late many of them have performed this operation with their own hands; and as their fuccefs has been equal to that of the moft dignified Inoculators, there is little reafon to doubt that the practice will become general. Whenever this fhall be the cafe, more lives will be faved by inoculation alone, than are at prefent by all the endeavours of the Faculty.

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# INTRODUCTION,

THE improvements in Medicine, fince the revival of learning, have by no means kept pace with those of the other arts. The reason is obvious. Medicine has been studied by few, except those who intended to live by it as a trade. Such, either from a mistaken zeal for the honour of Medicine, or to raise their own importance, have endeavoured to disguise and conceal the art. Medical authors have generally written in a foreign language; and those who were unequal to this task, have even valued themselves upon couching, at least, their prescriptions, in terms and characters unintelligible to the rest of mankind.

THE contentions of the clergy, which happened foon after the reftoration of learning, engaged the attention of mankind, and paved the way for that freedom of thought and inquiry, which has fince prevailed in moft parts of Europe with regard to religious matters. Every man took a fide in those bloody disputes; and every gentleman; that he might distinguish himself on one fide or other, was instructed in divinity. This taught people to think and reason for themselves in matters of religion, and at last totally destroyed that complete and absolute dominion which the clergy had obtained over the minds of men.

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THE fludy of law has likewife, in most civilized nations, been justly deemed a necessary part of the education of a gentleman. Every gentleman ought certainly to know at least the laws of his own country: and, if he were also acquainted with those of others, it might be more than barely an ornament to him.

-THE different branches of Philosophy have also of late been very universally studied by all who pretended to a liberal education. The advantages of this are manifest. It frees the mind from prejudice and superstition; fits it for the investigation of truth; induces habits of reasoning and judging properly; opens an inexhaussible source of entertainent; paves the way to the improvement of arts and agriculture; and qualifies men for acting with propriety in the most important stations of life.

NATURAL HISTORY is likewife become an object of general attention. And it well deferves to be fo. It leads to difcoveries of the greateft importance. Indeed agriculture, the most useful of all arts, is only a branch of Natural History, and can never arrive at a high degree of improvement where the ftudy of that fcience is neglected.

MEDICINE however has not, as far as we know, in any country, been reckoned a neceffary part of the education of a gentleman. But, furely, no fufficient reafon can be affigned for this omifion. No fcience lays open a more extensive field of ufeful knowledge, or affords more ample entertainment to an inquisitive mind. Anatomy, Botany, Chymistry, and the *Materia Medica*, are all branches of Natural History, and are fraught with fuch amufement and utility,

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utility, that the man who entirely neglects them has but a forry claim either to tafte or learning. If a gentleman has a turn for obfervation, fays an elegant and fenfible writer \*, furely the natural hiftory of his own fpecies is a more interefting fubject, and prefents a more ample field for the exertion of genius, than the natural hiftory of fpiders and cockle-fhells.

WE do not mean that every man should become a physician. This would be an attempt as ridiculous as it is impossible. All we plead for is, that men of fense and learning should be so far acquainted with the general principles of Medicine, as to be in a condition to derive from it some of those advantages with which it is fraught; and at the same time to guard themselves against the destructive influences of Ignorance, Superstition, and Quackery.

As matters ftand at prefent, it is eafier to cheat a man out of his life than of a fhilling, and almoft impoffible either to detect or punifh the offender. Notwithftanding this, people ftill fhut their eyes, and take every thing upon truft that is adminiftered by any Pretender to Medicine, without daring to afk him a reafon for any part of his conduct. Implicit faith, every where elfe the object of ridicule, is ftill facred here. Many of the faculty are, no doubt, worthy of all the confidence that can be repofed in them; but as this can never be the character of every individual in any profeffion, it would certainly be for the fafety, as well as the honour of mankind, to have fome check upon the conduct of those to whom they intruft fo valuable a treafure as Health.

\* Obfervations on the Dutics and Offices of a Phyfician.

THE veil of myftery, which ftill hangs over Medicine, renders it not only a conjectural, but even a fulpicious art. This has been long ago removed from the other fciences, which induces many to believe that Medicine is a mere trick, and that it will not bear a fair and candid examination. Medicine, however, meeds only to be better known, in order to fecure the general effectm of mankind. Its precepts are fuch as every wife man would chufe to obferve, and it forbids nothing but what is incompatible with true happinefs.

Disguising Medicine not only retards its improvement as a science, but exposes the profession to ridicule, and is injurious to the true interests of fociety. An art founded on observation never can arrive at any high degree of improvement, while it is confined to a few who make a trade of it. The united obfervations of all the ingenious and fenfible part of mankind, would do more in a few years towards the improvement of Medicine, than those of the Faculty alone in a great many. Any man can tell when a medicine gives him eafe as well as a phyfician; and if he only knows the name and dole of the medicine, and the name of the difeafe, it is fufficient to perpetuate the fact. Yet the man who adds one fingle fact to the ftock of medical observations, does more real fervice to the art, than he who writes a volume in support of some favourite hypothesis.

VERY few of the valuable difcoveries in Medicine have been made by phyficians. They have, in general, either been the effect of chance or of neceffity, and have been ufually opposed by the Faculty, till every one elfe was convinced of their importance.

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as in a

ance. An implicit faith in the opinions of teachers, an attachment to fyftems and eftablished forms, and the dread of reflections, will always operate upon those who follow Medicine as a trade. Few improvements are to be expected from a man who might ruin his character and family by even the smallest deviation from an established rule.

IF men of letters, fays the author of the performance quoted above, were to claim their right of inquiry into a matter that fo nearly concerns them, the good effects on Medicine would foon appear. Such men would have no feparate intereft from that of the art. They would detect and expofe affuming Ignorance under the mafk of Gravity and Importance, and would be the judges and patrons of modeft merit. Not having their understandings perverted in their youth by falle theories, unawed by authority, and unbiaffed by intereft, they would canvafs with freedom the most univerfally received principles in Medicine, and expose the uncertainty of many of those doctrines, of which a physician dares not fo much as feem to doubt.

No argument, continues he, can be brought againft laying open Medicine, which does not apply with equal, if not greater force, to religion; yet experience has fhewn, that fince the laity have afferted their right of inquiry into these fubjects, Theology, confidered as a science, has been improved, the interests of real religion have been promoted, and the clergy have become a more learned, a more useful, and a more respectable body of men, than they ever were in the days of their greatest power and splendour.

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HAD other medical writers been as honeft as this gentleman, the art had been upon a very different footing at this day. Moft of them extol the merit of those men who brought Philosophy out of the schools, and subjected it to the rules of common fense. But they never confider that Medicine, at present, is in nearly the same fituation as Philosophy was at that time, and that it might be as much improved by being treated in the same manner. Imdeed, no science can either be rendered rational or useful, without being submitted to the common fense and reason of mankind. These alone stamp a value upon science; and what will not bear the test of these ought to be rejected.

I KNOW it will be faid, that diffusing medical knowledge among the people, might induce them to tamper with Medicine, and to trust to their own skill instead of calling a physician. The reverse of this, however, is true. Perfons who have most knowledge in these matters, are commonly most ready both to afk and to follow advice, when it is neceffary. The ignorant are always most apt to tamper with Medicine, and have the leaft confidence in phyficians. Inftances of this are daily to be met with among the ignorant peafants, who, while they abfolutely refuse to take a medicine which has been prefcribed by a phyfician, will fwallow, with greedinefs, any thing that is recommended to them by their credulous neighbours. Where men will act even without knowledge, it is certainly more rational to afford them all the light we can, than to leave them entirely in the dark.

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IT may also be all ged, that laying Medicine more open to mankind would leffen their faith in it. This would indeed be the cafe with regard to fome; but it would have a quite contrary effect upon others. I know many people who have the utmost dread and horror of every thing prefcribed by a phyfician, but who will, neverthelefs, very readily take a medicine which they know, and whole qualities they are in some measure acquainted with. Hence it is evident, that the dread arifes from the doctor, not from the drug. Nothing ever can or will infpire mankind with an absolute confidence in physicians, but an . open, frank, and undifguised behaviour. While the leaft shadow of mystery remains in the conduct. of the Faculty, doubts, jealousies, and fuspicions, will arife in the minds of men.

No doubt, cafes will fometimes occur, where a prudent phyfician may find it expedient to difguife a medicine. The whims and humours of men muft be regarded by those who mean to do them fervice; but this can never affect the general argument in favour of candour and openness. A man might as well allege, because there are knaves and fools in the world, that he ought to take every one he meets for such, and to treat him accordingly. A fensible physician will always know where difguife is necefary; but it ought never to appear on the face of his general conduct.

THE appearance of mystery in the conduct of phyficians not only renders their art fufpicious, but lays the foundations of Quackery, which is the very difgrace of Medicine. No two characters can be more different than that of the honest physician and the b 3 - quack;

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quack; yet they have generally been very much confounded. The line betwixt them is not fufficiently apparent; at leaft it is too fine for the general eye. Few perfons are able to diftinguifh fufficiently between the conduct of that man who administers a fecret medicine, and him who writes a prefcription in mystical characters and an unknown tongue. Thus the conduct of the honest physician, which needs no difguise, gives a fanction to that of the villain, whose fole confequence depends upon fecrecy.

No laws will ever be able to prevent quackery, while people believe that the quack is as honeft a man, and as well qualified, as the phyfician. A very fmall degree of medical knowledge, however, would be fufficient to break this fpell; and nothing elfe can effectually undeceive them. It is the ignorance and credulity of the multitude, with regard to medicine, which renders them fuch an eafy prey to every one who has the hardinefs to attack them on this quarter. Nor can the evil be remedied by any other means but making them wifer.

THE most effectual way to destroy quackery in any art or science, is to diffuse the knowledge of it among mankind. Did physicians write their prescriptions in the common language of the country, and explain their intentions to the patient, as far as he could understand them, it would enable him to know when the medicine had the desired effect; would inspire him with absolute confidence in the physician; and would make him dread and detest every man who pretended to cram a fecret medicine down his throat.

MEN, in the different states of society, have very different views of the same object. Some time ago

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#### INTRODUCTION.

it was the practice of this country for every perfon to fay his prayers in Latin, whether he knew any thing of that language or not. This conduct, though facred in the eyes of our anceftors, appears ridiculous enough to us; and doubtlefs fome parts of ours will feem as ftrange to pofterity. Among thefe we may reckon the prefent mode of medical prefeription, which, we venture to affirm, will fometime hence appear to have been completely ridiculous, and a very high burlefque upon the common fenfe of mankind.

But this practice is not only ridiculous, it is likewife dangerous. However capable phyficians may be of writing Latin, I am certain apothecaries are not always in a condition to read it, and that dangerous miltakes, in consequence of this, often happen. But suppose the apothecary ever so able to read the phyfician's prefcription, he is generally otherwife employed, and the buliness of making up prefcriptions is left entirely to the apprentice. By this means the greatest man in the kingdom, even when he employs a first-rate physician, in reality trufts his life in the hands of an idle boy, who has not only the chance of being very ignorant, but likewife giddy and carelefs. Miftakes will fometimes happen in spite of the greatest care; but, where human lives are concerned, all poffible methods ought certainly to be taken to prevent them. For this reason the prescriptions of physicians, instead of being couched in mystical characters and a foreign language, ought, in my humble opinion, to be conceived in the most plain and obvious terms imaginable.

DIFFUSING

XXIII

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DIFFUSING medical knowledge among the people would not only tend to improve the art, and to banish quackery, but likewise to render Medicine more univerfally useful, by extending its benefits to fociety. However long Medicine may have been known as a fcience, we will venture to fay, that many of its most important purposes to society have either been overlooked, or very little attended to. The cure of difeases is doubtless a matter of great importance; but the prefervation of health is of still greater. This is the concern of every man, and furely what relates to it ought to be rendered as plain and obvious to all as possible. It is not to be supposed, that men can be sufficiently upon their guard against diseases, who are totally ignorant of their causes. Neither can the legislature, in whose power it is to do much more for preferving the public health than can ever be done by the Faculty, exert that power with propriety, and to the greatest advantage, without some degree of medical knowledge.

INDEED, men of every occupation and condition in life might avail themfelves of a degree of medical knowledge; as it would teach them to avoid the dangers peculiar to their respective stations; which is always easier than to remove their effects. Medical knowledge, instead of being a check upon the enjoyments of life, only teaches men how to make the most of them. It has indeed been faid, that to live medically, is to live miferably : But it might with equal propriety be faid, that to live rationally is to live miferably. If phyficians obtrude their own ridiculous whims upon mankind, or lay down rules - inconfistent with reason or common sense, no doubt they

#### INTRODUCTION. XXY

they will be despised. But this is not the fault of Medicine. It proposes no rules that I know, but fuch as are perfectly confistent with the true enjoyment of life, and every way conducive to the real happinels of mankind.

WE are forry indeed to observe, that Medicine has hitherto hardly been confidered as a popular fcience, but as a branch of knowledge folely confined to a particular set of men, while all the rest have been taught, not only to neglect, but even to dread and despise it. It will, however, appear, upon a more ftrict examination, that no fcience better deferves their attention, or is more capable of being rendered generally useful.

PEOPLE are told, that if they dip the least into medical knowledge, it will render them fanciful, and make them believe they have got every difease of which they read. This, I am fatisfied, will feldom be the cafe with fenfible people; and, fuppofe it were, they must foon be undeceived. A short time will shew them their error, and a little more reading will infallibly correct it. A fingle inftance will fhew the absurdity of this notion. A fensible lady, rather than read a medical performance, which would inftruct her in the management of her children, must leave them entirely to the care and conduct of the most ignorant, credulous, and superstitious part of the human species. 

INDEED, no part of Medicine is of more general importance than that which relates to the nurfing and management of children. Yet few parents pay a proper attention to it. They leave the fole care of their tender offspring, at the very time when care and

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and attention are most necessary, to hirelings, who are either too careless to do their duty, or too ignorant to know it. We will venture to affirm, that more human lives are lost by the careless and inattention of parents and nurses, than are faved by the Faculty; and that the joint and well-conducted endeavours, both of private perfons and the public, for the prefervation of infant lives, would be of more advantage to fociety, than the whole art of Medicine, upon its prefent footing.

THE benefits of Medicine, as a trade, will ever. be-confined to those who are able to pay for them; and of courfe, the far greater part of mankind will be every where deprived of them. Phyficians, like other people, must live by their employment, and the poor must either want advice altogether, or take up with that which is worfe than none. There are not, however, any where wanting well-difposed people, of better fense, who are willing to supply the defect of medical advice to the poor, did not their fear of doing ill often fuppress their inclination to do good. Such people are often deterred from the most noble and praise-worthy actions, by the foolish alarms founded in their ears by a fet of men, who, to raife their own importance, magnify the difficulties of doing good, find fault with what is truly commendable, and fleer at every attempt to relieve the fick which is not conducted by the precife rules of Medicine. These gentlemen must, however, excuse me for faying, that I have often known fuch well-disposed persons do much good; and that their practice, which is generally the refult of good fense and observation, affisted by a little medical reading, is frequently more rational than that

that of the ignorant retainer to phyfic, who defpifes both reafon and obfervation, *that he may go wrong by rule*; and who, while he is dofing his patient with medicines, often neglects other things of far greater importance.

MANY things are neceffary for the fick befides medicine. Nor is the perfon who takes care to procure those for them, of less importance than a physician. The poor oftener perifh in difeafes for wantof proper nurfing, than of medicine. . They are frequently in want of even the neceffaries of life, and ftill more fo of what is proper for a fick-bed : no one can imagine, who has not been a witnefs of thefe fituations, how much good a well-difposed perfonmay do, by only taking care to have fuch wants fupplied. There certainly cannot be a more neceffary, a more noble, or a more godlike action, than to administer to the wants of our fellow-creatures in diftrefs. While virtue or religion are known among; mankind, this conduct will be approved; and while Heaven is just, it must be rewarded !

PERSONS who do not chufe to administer medicineto the fick, may nevertheless direct their regimen. An eminent medical author has faid, That by diet alone all the intentions of Medicine may be answered. No doubt a great many of them may; but there are other things befide diet, which ought by no meansto be neglected. Many hurtful and deftructive prejudices, with regard to the treatment of the fick, still prevail among the people, which perfons of better fense and learning alone can eradicate. To guard the poor against the influence of these prejudices, and to inftil into their minds fome just ideas of the importance

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portance of proper food, fresh air; cleanliness, and other pieces of regimen necessary in diseases, would be a work of great merit, and productive of many happy consequences. A proper regimen, in most diseases, is at least equal to medicine, and in many of them it is greatly superior.

To affift the well-meant endeavours of the humane and benevolent in relieving distress; to eradicate dangerous and hurtful prejudices; to guard the ignorant and credulous against the frauds and impofitions of quacks and impostors; and to shew men what is in their own power, both with regard to the prevention and cure of dileases, are certainly objects worthy of the phylician's attention. Thefe were the leading views in composing and publishing the following fheets. They were fuggested by an attention to the conduct of mankind, with regard to Medicine, in the course of a pretty long practice in different parts of this island, during which the Author has often had occasion to wish that his patients, or those about them, had been poffeffed of fome fuch plain directory for regulating their conduct. How far he has fucceeded in his endeavours to fupply this deficiency, must be left for others to determine ; but if they be found to contribute, in any measure, towards alleviating the calamities of mankind, he will think his labour very well beftowed.

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PART

#### xxxii

## PART I.

OF THE

GENERAL CAUSES OF DISEASES.

#### CHAP: I.

#### OF CHILDREN.

HE better to trace difeafes from their original caufes, we shall take a view of the common treatment of mankind in the state of infancy. In this period of our lives, the foundations of a good or bad constitution are generally laid; it is therefore of importance, that parents be well acquainted with the various caufes which may produce difeafes in their offspring.

IT appears from the annual registers of the dead, that almost one half of the children born in Great Britain die under twelve years of age. To many, indeed, this may appear a natural evil; but, on due examination, it will be found to be one of our own creating. Were the death of infants a natural evil, other animals would be as liable to die young as man; but this we find is by no means the cafe.

IT may feem strange that man, notwithstanding his superior reason, should fall so far short of other animals in the management of his young: But our surprise will soon cease, if we consider that brutes, B guided 2

guided by inftinct, never err in this refpect; while man, trufting folely to art, is feldom right. Were a catalogue of those infants who perish annually by art alone exhibited to public view, it would aftonish most people.

IF parents are above taking care of their children, others must be employed for that purpose: These will always endeavour to recommend themselves by the appearance of extraordinary skill and address. By this means such a number of unnecessary and destructive articles have been introduced into the diet, clothing, &c. of infants, that it is no wonder so many of them perish.

NOTHING can be more prepofterous than a mother who thinks it below her to take care of her own child, or who is fo ignorant as not to know what is proper to be done for it. If we fearch Nature throughout, we cannot find a parallel to this. Every other creature is the nurfe of its own offspring, and they thrive accordingly. Were the brutes to bring up their young by proxy, they would fhare the fame fate with those of the human species.

WE mean not, however, to impofe it as a tafk upon every mother to fuckle her own child. This, whatever fpeculative writers may allege, is in many cafes impracticable, and would inevitably prove deftructive both to the mother and child. Women of delicate conflitutions, fubject to hyfteric fits, or other nervous affections, make very bad nurfes: And thefe complaints are now fo common, that it is rare to find a woman of fashion free from them; fuch women, therefore, fupposing them willing, are really unable to fuckle their own children.

Almost

ALMOST every mother would be in a condition to give fuck, did mankind live agreeably to Nature : But whoever confiders how far mothers often deviate from her dictates, will not be furprifed to find many of them unable to perform that neceffary office. Mothers who do not eat a fufficient quantity of folid food, nor enjoy the benefit of free air and exercife, can neither have wholefome humours themfelves, nor afford proper nourifhment to an infant. Hence children who are fuckled by delicate women, either die young, or are weak and fickly all their lives,

WHEN we fay that mothers are not always in a condition to fuckle their own children, we would not be underftood as difcouraging that practice. Every mother who can, ought certainly to perform fo tender and agreeable an office\*. But, fuppofe it to be out of her power, fhe may, neverthelefs, be of great fervice to her child. The bufinefs of nurfing is by no means confined to giving fuck. To a woman who abounds with milk, this is the eafieft part of it. Numberlefs other offices are neceffary for a child, which the mother ought at leaft to fee done.

\* Many advantages would arife to fociety, as well as to individuals, from mothers fuckling their own children. It would prevent the temptation which poor women are laid under of abandoning their children to fuckle those of the rich for the fake of gain: by which means fociety loses many of its most useful members, and mothers become in fome fense the murderers of their own offspring. I am fure I speak within the truth, when I fay, that not one in a hundred of those children live who are thus abandoned by their mothers. For this reason no mother should be allowed to fuckle another's child till her own is fit to be weaned. A regulation of this kind would fave many lives among the poorer fort, and could do no hurt to the rich, as most women who make good nurfes are' able to fuckle two children in fuccession upon the fame milk.

B 2

A MOTHER.

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A MOTHER who abandons the fruit of her womb, as foon as it is born, to the fole care of an hireling, hardly deferves that name. A child, by being brought up under the mother's eye, not only fecures her affection, but may reap all the advantages of a mother's care, though it be fuckled by another. How can a mother be better employed than in fuperintending the nurfery? This is at once the moft delightful and important office; yet the moft trivial bufinefs or infipid amufements are often preferred to it ! A ftrong proof both of the bad tafte and wrong education of modern females.

It is indeed to be regretted, that more care is not beftowed in teaching the proper management of children to those whom Nature has defigned for mothers. This, inftead of being made the principal, is feldom confidered as any part of female education. Is it any wonder, when females fo educated come to be mothers, that they should be quite ignorant of the duties belonging to that character? However strange it may appear, it is certainly true, that many mothers, and those of fashion too, are as ignorant, when they have brought a child into the world, what to do for it, as the infant itfelf. Indeed, the most ignorant of the fex are generally reckoned moft knowing in the businels of nursing. Hence, sensible people become the dupes of ignorance and fuperstition; and the nurfing of children, instead of being conducted by reason, is the refult of whim and caprice \*.

WERE

\* Tacitus, the celebrated Roman historian, complains greatly of the degeneracy of the Roman ladies in his time, with regard to the care of their offspring. He fays that, in former times, the greatest women WERE the time that is generally spent by females in the acquistion of trifling accomplishments, employed in learning how to bring up their children; how to drefs them so as not to hurt, cramp, or confine their motions; how to feed them with wholesome and hourissing food; how to exercise their tender bodies, so as best to promote their growth and strength: Were these made the objects of semale instruction, mankind would derive the greatest advantages from it. But, while the education of females implies little more than what relates to drefs and public shew, we have nothing to expect from them but ignorance, even in the most important concerns.

DID mothers reflect on their own importance, and lay it to heart, they would embrace every opportunity of informing themfelves of the duties which they owe to their infant offspring. It is their province, not only to form the body, but alfo to give the mind its most early bias. They have it very much in their power to make men healthy or valetudinary, useful in life, or the pests of fociety.

But the mother is not the only perfon concerned in the management of children. The father has an equal intereft in their welfare, and ought to affift in every thing that refpects either the improvement of the body or mind.

IT is pity that the men fhould be fo inattentive to this matter. Their negligence is one reafon why

women in Rome used to account in their chief glory to keep the house and attend their children; but that now the young infant was committed to the sole care of some poor Grecian wench, or other menial servant. — We are associated, wherever luxury and effeminacy prevail, there will be too much ground for this complaint.

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females know fo little of it. Women will ever be defirous to excel in fuch accomplifhments as recommend them to the other fex. But men generally keep at fuch a diftance from even the fmalleft acquaintance with the affairs of the nurfery, that many would efteem it an affront, were they fuppofed to know any thing of them. Not fo, however, with the kennel or the ftables: A gentleman of the firft rank is not afhamed to give directions concerning the management of his dogs or horfes, yet would blufh were he furprifed in performing the fame office for that being who derived its exiftence from himfelf, who is the heir of his fortunes, and the future hope of his country.

Nor have phyficians themfelves been fufficiently attentive to the management of children: 'That has been generally confidered as the fole province of old women, while men of the first character in phyfic have refused to visit infants even when fick. Such conduct in the faculty has not only caused this branch of medicine to be neglected, but has also encouraged the other fex to assume an absolute title to preferibe for children in the most dangerous difeases. The confequence is, that a physician is feldom called till the good women have exhausted all their still; when his attendance can only ferve to divide the blame, and appease the difconfolate parents.

NURSES fhould do all in their power to prevent difeafes; but when a child is taken ill, fome perfon of fkill ought immediately to be confulted. The difeafes of children are generally acute, and the leaft delay is dangerous.

WERE phyficians more attentive to the difeafes of infants, they would not only be better qualified to treat

treat them properly when fick, but likewife to give ufeful directions for their management when well. The difeafes of children are by no means fo difficult to be underflood as many imagine. It is true, children cannot tell their complaints; but the caufes of them may be pretty certainly difcovered by obferving the fymptoms, and putting proper queftions to the nurfes. Befides, the difeafes of infants being lefs complicated, are eafier cured than those of adults \*.

It is really aftonishing, that fo little attention should in general be paid to the prefervation of infants. What labour and expence are daily beftowed to prop an old tottering carcafe for a few years, while thousands of those who might be useful in life, perish without being regarded! Mankind are too apt to value things according to their prefent, not their future, usefulness. Though this is of all others the most erroneous method of estimation; yet upon no other principle is it possible to account for the general indifference with respect to the death of infants.

### Of Diseased Parents.

ONE great fource of the difeafes of children is, the UNHEALTHINESS OF PARENTS. It would be as reafonable to expect a rich crop from a barren foil, as that ftrong and healthy children fhould be born of parents

\* The common opinion, that the difeafes of infants are hard to difcover and difficult to cure, has deterred many phyficians from paying that attention to them which they deferve. I can, however, from experience, declare, that this opinion is without foundation, and that the difeafes of infants are neither fo difficult to difcover, nor fo ill to cure, as those of adults.

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whose constitutions have been worn out with intem-

An ingenious writer observes \*, that on the conflitution of mothers depends originally that of their offspring. No one who believes this will be furprifed, on a view of the female world, to find diseafes and death fo frequent among children. A delicate female, brought up within doors, an utter stranger to exercise and open air, who lives on tea and other flops, may bring a child into the world, but it will hardly be fit to live. The first blast of disease will nip the tender plant in the bud: Or, should it struggle through a few years existence, its feeble frame, shaken with convulsions from every trivial cause, will be unable to perform the common functions of life, and prove a burden to fociety.

IF, to the delicacy of mothers, we add the irregular lives of fathers, we shall see further cause to believe that children are often hurt by the conflictution of their parents, A fickly frame may be originally induced by hardships or intemperance, but chiefly by the latter. It is impossible that a course of vice should not spoil the best constitution : And, did the evil terminate here, it would be a just punishment for the folly of the sufferer; but, when once a disease is contracted and rivetted in the habit, it is entailed on posterity. What a dreadful inheritance is the gout, the fcurvy, or the king's evil, to transmit to our offfpring! How happy had it been for the heir of many a great eftate, had he been born a beggar, rather than to inherit his father's fortunes at the expence of inheriting his difeafes!

\* Rouffeau.

No perfon who labours under any incurable malady ought to marry. He thereby not only fhortens his own life, but transmits mifery to others: But, when both parties are deeply tainted with the fcrophula, the fcurvy, or the like, the effects must be flill worfe: If fuch have any iffue, they must be miferable indeed. Want of attention to these things, in forming connexions for life, has rooted out more families than plague, famine, or the fword; and, as long as these connexions are formed from mercenary views, the evil will be continued \*.

In our matrimonial contracts, it is amazing fo little regard is had to the health and form of the object: Our fportfmen know; that the generous courfer cannot be bred out of the foundered jade, nor the fagacious fpaniel out of the fnarling cur. This is fettled upon immutable laws. The man who marries a woman of a fickly conflitution, and defcended of unhealthy parents, whatever his views may be, cannot be faid to act a prudent part. A difeafed woman may prove fertile; fhould this be the cafe, the family mult become an infirmary: What profpect of happinefs the father of fuch a family has, we fhall leave any one to judge  $\frac{1}{7}$ .

\* The Lacedemonians condemned their king Archidamus for having married a weak, puny woman, becaufe, faid they, inflead of propagating a race of heroes, you will fill the throne with a progeny of changelings.

† The Jews, by their laws, were, in certain cafes, forbid to have any manner of commerce with the difeafed; and indeed to this all wife legiflators ought to have a fpecial regard. In fome countries, difeafed perfons have actually been forbid to marry. This is an evil of a complicated kind, a natural deformity, and political mifchief; and therefore requires a public confideration.

SUCH

SUCH children as have the misfortune to be born of difeafed parents, will require to be nurfed with greater care than others. This is the only way to make amends for the defects of conftitution; and it will often go a great length. A healthy nurfe, wholefome air, and fufficient exercife, will do wonders. But when thefe are neglected, little is to be expected from any other quarter. The defects of conftitution cannot be fupplied by medicine.

THOSE who inherit any family difeafe ought to be very circumfpect in their manner of living. They should confider well the nature of fuch difeafe, and guard against it by a proper regimen. It is certain, that family difeafes have often, by proper care, been kept off for one generation; and there is reason to believe, that, by persisting in the fame course, fuch difeases might at length be wholly eradicated. This is a subject very little regarded, though of the greatest importance. Family constitutions are as capable of improvement as family estates; and the libertine, who impairs the one, does greater injury to his posterity, than the prodigal, who squanders away the other.

#### Of the Clothing of Children.

THE CLOTHING of an infant is fo fimple a matter, that it is furprifing how any perfon fhould err in it; yet many children lofe their lives, and others are deformed, by inattention to this article.

NATURE knows no use of clothes to an infant, but to keep it warm. All that is necessary for this purpose, is to wrap it in a soft loose covering. Were a mother left to the dictates of Nature alone, she would certainly

certainly follow this method. But the bulinefs of drefking an infant has long been out of the hands of mothers, and has at laft become a fecret which none but adepts pretend to understand.

FROM the most early ages it has been thought neceffary, that a woman in labour should have some perfon to attend her. This in time became a businefs; and, as in all others, those who were employed in it strove to outdo one another in the different branches of their profession. The dreffing of a child came of courfe to be confidered as the midwife's province, who no doubt imagined, that the more dexterity fhe could fhew in this article, the more her skill would be admired. Her attempts were seconded by the vanity of parents, who, too often defirous of making a shew of the infant as soon as it was born, were ambitious to have as much finery heaped upon it as poffible. Thus it came to be thought as neceffary for a midwife to excel in bracing and dreffing an infant, as for a furgeon to be expert in applying bandages to a broken limb; and the poor child, as foon as it came into the world, had as many rollers and wrappers applied to its body, as if every bone had been fractured in the birth; while these were often fo tight, as not only to gall and wound its tender frame, but even to obstruct the motion of the heart, lungs, and other organs neceffary for.life.

In feveral parts of Britain, the practice of rolling children with fo many bandages is now, in fome meafure, laid afide; but it would ftill be a difficult tafk to perfuade the generality of mankind, that the fhape of an infant does not entirely depend on the care of the midwife. So far, however, are all her endeavours

deavours to mend the shape from being successful, that they conftantly operate the contrary way, and mankind become deformed just in proportion to the means used to prevent it. How little deformity of. body is to be found among uncivilized nations? So little indeed, that it is vulgarly believed they put all their deformed children to death. The truth is, they hardly know fuch a thing as a deformed child. Neither should we, if we followed their example. Savage nations never think of manacling their children. They allow them the full use of every organ, carry them abroad in the open air, wash their bodies daily in cold water, &c. By this management, their children become fo ftrong and hardy, that, by the time our puny infants get out of the nurle's arms, theirs are able to shift for themselves \*.

AMONG brute animals, no art is neceffary to procure a fine fhape. Though many of them are extremely delicate when they come into the world, yet we never find them grow crooked for want of fwaddling bands. Is Nature lefs generous to the human kind? No: But we take the bufinefs out of Nature's hands.

• Not only the analogy of other animals, but the very feelings of infants tell us, they ought to be kept eafy and free from all preffure. They cannot indeed tell their complaints; but they can fnew figns of pain; and this they never fail to do, by crying,

\* A friend of mine, who was feveral years on the coaft of Africa, tells me, that the natives neither put any clothes upon their children, nor apply to their bodies bandages of any kind, but lay them on a pallet, and fuffer them to tumble about at pleafure; yet they are all firait, and feldom have any difeafe.

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when pinched by their clothes. No fooner are they freed from their bracings, than they feem pleafed and happy; yet, ftrange infatuation! the moment they hold their peace, they are again committed to their chains.

IF we confider the body of an infant as a bundle of foft pipes, replenished with fluids in continual motion, the danger of preffure will appear in the strongest light. Nature, in order to make way for the growth of children, has formed their bodies foft and flexible; and, left they should receive any injury from preffure in the womb, has furrounded the *fatus* every where with fluids. This shews the care which Nature takes to prevent all unequal preffure on the bodies of infants, and to defend them against every thing that might in the least cramp or confine their motions.

EVEN the bones of an infant are fo foft and cartilaginous, that they readily yield to the flighteft preffure, and eafily affume a bad fhape, which can never after be remedied. Hence it is, that fo many people appear with high fhoulders, crooked fpines, and flat breafts, who were as well proportioned at their birth as others, but had the misfortune to be fqueezed out of fhape by the application of ftays and bandages.

PRESSURE, by obstructing the circulation, likewife prevents the equal distribution of nourishment to the different parts of the body, by which means the growth becomes unequal. One part grows too large, while another remains too small; and thus in time the whole frame becomes disproportioned and misschapen. To this we must add, that when a child is

is cramped in its clothes, it naturally fhrinks from the part that is hurt; and, by putting its body into unnatural poftures, it becomes deformed by habit.

DEFORMITY of body may indeed proceed from weaknefs or difeafe; but, in general, it is the effect of improper clothing. Nine-tenths, at leaft, of the deformity among mankind, muft be imputed to this caufe. A deformed body is not only difagreeable to the eye, but by a bad figure both the animal and vital functions muft be impeded, and of courfe health impaired. Hence few people, remarkably misshapen, are ftrong or healthy.

THE new motions which commence at the birth, as the circulation of the whole mafs of blood through the lungs, refpiration, the periftaltic motion, &c. afford another ftrong argument for keeping the body' of an infant free from all preffure. Thefe organs, not having been accuftomed to move, are eafily ftopped; but, when this happens, death moft enfue. Hardly any method could be devifed more effectually to ftop thefe motions, than bracing the body too tight with rollers\* and bandages. Were thefe to be applied in the fame manner to the body of an adult for an equal length of time, they could hardly fail to hurt the digeftion and make him fick. How much more hurtful they muft prove to the tender bodies of infants, we fhall leave any one to judge.

WHOEVER confiders these things will not be furprised, that so many children die of convulsions soon

\* This is by no means inveighing against a thing that does not happen. In many parts of Britain at this day, a roller, eight or ten feet in length, is applied tightly round the child's body as foon as it is born.

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after the birth. Thefe fits are generaly attributed to fome inward caufe; but, in fact, they oftener proceed from our own imprudent conduct. I have known a child feized with convultion-fits foon after the midwife had done fwaddling it, who, upon taking off the rollers and bandages, was immediately relieved, and never had the difeafe afterwards. Numerous examples of this might be given, were they neceffary.

IT would be fafer to fix on the clothes of an infant with ftrings than pins, as these often gall and irritate their tender skins, and occasion diforders. Pins have been found sticking above half an inch into the body of a child, after it had died of convulsion-fits, which, in all probability, proceeded from that cause.

CHILDREN are not only hurt by the tightness of their clothes, but also by the quantity. Every child has some degree of fever after the birth; and, if it be loaded with too many clothes, the fever must be increased. But that is not all; the child is generally laid in bed with the mother, who is often likewife feverish; to which we may add the heat of the bedchamber, the wines, and other heating things, too frequently given to children immediately after the birth. When all these are combined, which does not feldom happen, they must increase the fever to such a degree as will endanger the life of the infant.

THE danger of keeping infants too hot will further appear, if we confider, that, after they have been for fome time in the fituation mentioned above, they are often fent into the country to be nurfed in a cold houfe. Is it any wonder, if a child, from fuch a transition, catches a mortal cold, or contracts fome other fatal difeafe? When an infant is kept too hot, its its lungs, not being fufficiently expanded, are apt to remain weak and flaccid for life; hence proceed coughs, confumptions, and other difeafes of the breaft.

It would anfwer little purpose to specify the particular pieces of dress proper for an infant. These will always vary in different places, according to custom and the humour of parents. The great rule to be observed is, That a child have no more clothes than are necessary to keep it warm, and that they be quite easy for its body.

STAYS are the very bane of infants. A volume would not fuffice to point out all the bad effects of this ridiculous piece of drefs both on children and adults. The madnefs in favour of flays, feems, however, to be fomewhat abated; and it is to be hoped the world will, in time, become wife enough to know, that the human fhape does not folely depend upon whale-bone and bend-leather \*.

WE fhall only add, with refpect to the clothes of children, that they ought to be kept thoroughly clean. Children perfpire more than adults; and, if their clothes be not frequently changed, they become very hurtful. Dirty clothes not only gall and fret the tender fkins of infants, but likewife occasion ill

\* Stays made of bend-leather are worn by all the women of lower flation in many parts of England.

I am forry to understand, that there are still mothers mad enough to lace their daughters very tight in order to improve their shape. As reasoning would be totally lost upon such people, I shall beg leave just to ask them, Why there are ten deformed women for one man? and likewise to recommend to their perusal a short moral precept, which forbids us to deform the human body.

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sinells; and, what is worfe, tend to produce vermin and cutaneous difeases.

CLEANLINESS is not only agreeable to theeye, but tends greatly to preferve the health of children. It promotes the perfpiration, and, by that means, frees the body from fuperfluous humours, which, if retained, could not fail to occafion difeafes. No mother or nurfe can have any excufe for allowing a child to be dirty. Poverty may oblige her to give it coarfe clothes; but, if fhe does not keep them clean, it must be her own fault.

#### Of the Food of Children.

NATURE not only points out the food proper 'for an infant, but actually prepares it. This, however, is not fufficient to prevent fome who think themfelves wifer than Nature, from attempting to bring up their children without her provision. Nothing can shew the disposition which mankind have to depart from nature, more than their endeavouring to bring up children without the breast. The mother's milk, or that of a healthy nurse, is unquestionably the best food for an infant. Neither art nor nature can afford a proper substitute for it. Children may seem to thrive for a few months without the breast; but, when teething, the small-pox, and other diseases incident to childhood, come on, they generally perish.

A CHILD, foon after the birth, fhews an inclination to fuck; and there is no reafon why it fhould not be gratified. It is true, the mother's milk does not always come immediately after the birth; but this is the way to bring it : Befides, the first milk that the child can squeeze out of the breast answers the pur-

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pose of cleansing, better than all the drugs in the apothecary's shop, and at the same time prevents inflammations of the breass, and other diseases incident to mothers.

It is ftrange how people came to think that the first thing given to a child should be drugs. This is beginning with medicine by times, and no wonder that they generally end with it. It fometimes happens, indeed, that a child does not difcharge the meconium fo foon as could be wifhed; this has induced phyficians, in fuch cafes, to give fomething of an opening nature to cleanse the first passages. Midwives have improved upon this hint, and never fail to give fyrups, oils &c. whether they be neceffary or not. Cramming an infant with fuch indigestible stuff, as soon as it is born, can hardly fail to make it fick, and is more likely to occafion difeafes, than to prevent them. Children are feldom long after the birth without having paffage both by ftool and urine ; though these evacuations may be wanting for fome time without any danger. But if children must have fomething before they be allowed the breaft, let it be a little thin water-pap, to which may be added an equal quantity of new milk; or rather water alone, with the addition of a little fugar. If this be given without any wines or fpiceries, it will neither heat the blood, load the ftomach, nor occafion gripes.

UPON the first fight of an infant, almost every perfon is ftruck with the idea of its being weak, feeble, and wanting support. This naturally suggests the need of cordials. Accordingly wines are univerfally mixed with the first food of children. Nothing thing can be more fallacious than this way of reafoning, or more hurtful to infants than the conduct founded upon it. Children need very little food for fome time after the birth ; and what they receive fhould be thin, weak, light, and of a cooling quality. A very fmall quantity of wine is fufficient to heat and inflame the blood of an infant ; but every perfon converfant in these matters, must know, that most of the difeases of infants proceed from the heat of their humours.

IF the mother or nurfe has enough of milk, the child will need little or no other food before the third or fourth month. It will then be proper to give it, once or twice a day, a little of fome food that is eafy of digeftion; as water-pap, milk-pottage, weak broth with bread in it, and fuch like. This will eafe the mother, will accuftom the child by degrees to take food, and will render the weaning both lefs difficult and lefs dangerous. All great and fudden transitions are to be avoided in nurfing. For this purpofe, the food of children ought not only to be fimple, but to refemble, as nearly as poffible, the properties of milk. Indeed milk itfelf fhould make a principal part of their food, not only before they are weaned; but for a long time after.

Next to milk, we would recommend good light bread. Bread may be given to a child as foon as it fhews an inclination to chew; and it may at all times be allowed as much plain bread as it will eat. The very chewing of bread will promote the cutting of the teeth, and the difcharge of *faliva*, while, by mixing with the nurfe's milk in the ftomach, it will afford an excellent nourifhment. Children difcover an  $C_2$  carly early inclination to chew whatever is put into their hands. Parents obferve the inclination, but generally miftake the object. Inftead of giving the child fomething which may at once exercife its gums and afford it nourifhment, they commonly put into its hands a piece of hard metal, or impenetrable coral. A cruft of bread is the beft gum-flick. It not only anfwers the purpofe better than any thing elfe, but has the additional properties of nourifhing the child and carrying the faliva down to the ftomach, which is too valuable a liquor to be loft.

BREAD, belides being ufed dry, may be many ways prepared into food for children. One of the beft methods is to boil it in water, afterwards pouring the water off, and mixing with the bread a proper quantity of new milk unboiled. Milk is both more wholefome and nourifhing this way than boiled, and is lefs apt to occafion coftivenefs. For a child farther advanced, bread may be mixed in veal or chicken broth, made into puddings, or the like. Bread is a proper food for children at all times, provided it be plain, made of wholefome grain, and well fermented; but, when enriched with fruits, fugars, or fuch things, it becomes very unwholefome.

It is foon enough to allow children animal food when they have got teeth to eat it. They fhould never tafte it till after they are weaned, and even then they ought to ufe it fparingly. Indeed, when children live wholly on vegetable food, it is apt to four their ftomachs; but, on the other hand, too much flefh heats the blood, and occasions fevers and other inflammatory difeases. This plainly points out a due mixture of animal and vegetable food as most proper for children.

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Few things are more hurtful to infants, than the common method of fweetening their food. It entices them to take more than they ought to do, which makes them grow fat and bloated. It is pretty certain, if the food of children were quite plain, that they would never take more than enough. Their exceffes are entirely owing to nurfes. If a child be gorged with food at all hours, and enticed to take it, by making it fweet and agreeable to the palate, is it any wonder that fuch a child fhould in time be induced to crave more food than it ought to have ?

CHILDREN may be hurt by too little as well as too much food. After a child is weaned, it ought to be fed four or five times a day; but fhould never be accustomed to eat in the night; neither should it have too much at a time. Children thrive best with small quantities of food frequently given. This neither overloads the stomach nor hurts the digestion, and is certainly most agreeable to nature.

WRITERS on nurfing have inveighed with fuch vehemence against giving children too much food, that many parents, by endeavouring to fhun that error, have run into the opposite extreme, and ruined the constitutions of their children. But the error of pinching children in their food is more hurtful than the other extreme. Nature has many ways of relieving herfelf when overloadéd; but a child, who is pinched with hunger, will never become a strong or healthy man. That errors are frequently committed on both fides, we are ready to acknowledge; but where one child is hurt by the quantity of its food, ten suffer from the quality. This is the principal evil, and claims our strictest attention.

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MANY people imagine, that the food which they themfelves love cannot be bad for their children : But this notion is very abfurd. In the more advanced periods of life we often acquire an inclination for food, which, when children, we could not endure. Befides, there are many things that by habit may agree very well with the ftomach of a grown perfon, which would be hurtful to a child; as high-feafoned, falted, and fmoke-dried provisions, &c. It would alfo be improper to feed children with fat meat, ftrong broths, rich foups, or the like.

ALL firong liquors are hurtful to children. Some parents teach their children to guzzle ale, and other fermented liquors, at every meal. Such a practice cannot fail to do mifchief. Those children feldom escape the violence of the small-pox, measles, hooping-cough, or some inflammatory diforder. Milk, water, butter-milk, or whey, are the most proper for children to drink. If they have any thing fironger, it may be fine small beer, or a little wine mixed with water. The stomachs of children can digest well enough without the assistance of warm stimulants: Besides, being naturally hot, they are easily hurt by every thing of a heating quality.

Few things are more hurtful to children than unripe fruits. They weaken the powers of digeftion, and four and relax the ftomach, by which means it becomes a proper neft for infects. Children indeed fhew a great inclination for fruit, and I am apt to believe, that if good ripe fruit were allowed them in proper quantity, it would have no bad effects. We never find a natural inclination wrong, if properly regulated. Fruits are generally of a cooling nature, and

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and correct the heat and acrimony of the humours. This is what most children want; only care should be taken left they exceed. Indeed the best way to prevent children from going to excess in the use of fruit, or eating that which is bad, is to allow them a proper quantity of what is good \*.

Roots which contain a crude vifcid juice fhould be fparingly given to children. They fill the body with großhumours, and tend to produce eruptive difeafes. This caution is peculiarly neceffary for the poor; glad to obtain at a fmall price what will fill the bellies of their children, they ftuff them two or three times a day with greafy potatoes, or other crude vegetables. Children had better eat a fmaller quantity of food which yields a wholefome nourifhment, than be crammed with what their digeftive powers are unable properly to affimilate.

BUTTER ought likewife to be fparingly given to children. It both relaxes the ftomach, and produces grofs humours. Indeed, most things that are fat or oily, have this effect. Butter, when falted, becomes ftill more hurtful. Instead of butter, fo liberally given to children in most parts of Britain, we would recommend honey. Honey is not only wholefome, but cooling, cleansing, and tends to fweeten the humours. Children who eat honey are feldom troubled

\* Children are always fickly in the fruit feafon, which may be thus accounted for : Two-thirds of the fruit which comes to market in this country is really unripe; and children not being in a condition to judge for themfelves, cat whatever they can lay their hands upon, which often proves little better than a poifon to their tender bowels. Servants, and others who have the care of children, fhould be firiftly forbid to give them any fruit without the knowledge of their parents.

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with worms : They are also less fubject to cutane, ous difeafes, as itch, scabbed head, &cc.

MANY people err in thinking that the diet of children ought to be altogether moift. When children live entirely upon flops, it relaxes their folids, renders them weak, and disposes them to the rickets. the scrophula, and other glandular diforders. Relaxation is one of the most general causes of the difeafes of children. Every thing therefore which tends to unbrace their folids, ought to be carefully avoided.

WE would not be underftood, by these observations, as confining children to any particular kind of food. Their diet may be frequently varied, provided always that fufficient regard be had to fimplicity.

#### Of the Exercise of Children.

Or all the caufes which confpire to render the life of man short and miserable, none has greater influence than the want of proper EXERCISE : Healthy parents, wholefome food, and proper clothing, will avail little, where exercife is neglected. Sufficient exercife will make up for feveral defects in nurfing; but nothing can fupply the want of it. It is abfolutely neceffary to the health, the growth, and the ftrength of children.

THE defire of exercise is coeval with life itself. Were this principle attended to, many difeases might be prevented. But, while indolence and fedentary employments prevent two-thirds of mankind from either taking fufficient exercife themfelves, or giving it to their children, what have we to expect but difeafes and deformity among their offspring ? The rickets, so destructive to children, never appeared in Britain till manufactures began to flourish, and people

ple, attracted by the love of gain, left the country to follow fedentary employments in great towns. It is amongst these people that this difease chiefly prevails, and not only deforms, but kills many of their offspring.

THE conduct of other young animals flows the propriety of giving exercise to children. Every other animal makes use of its organs of motion as soon as it can, and many of them, even when under no necessfity of moving in quest of food, cannot be reftrained without force. This is evidently the case with the calf, the lamb, and most other young animals. If these creatures were not permitted to frisk about, and take exercise, they would foon die or become diseased. The same inclination appears very early in the human species; but, as they are not able to take exercise themselves, it is the business of their parents and nurses to affist them.

CHILDREN may be exercifed various ways. The best method, while they are light, is to carry them about in the nurse's arms \*. This gives the nurse an opportunity of talking to the child, and of pointing out every thing that may please and delight its fancy. Besides, it is much safer than swinging an infant in a machine, or leaving it to the care of such as are not fit to take care of themselves. Nothing can be more ridiculous than to set one child to keep another : This conduct has proved fatal to many infants, and has rendered others miserable for life.

WHEN children begin to walk, the fafeft and beft method of leading them about, is by the hands. The

<sup>•</sup> The nurle ought to be careful to keep the child in a proper polition; as great deformity is often the confequence of inattention to this circumflance.

common way, of fwinging them in leading-ftrings fixed to their backs, has feveral bad confequences. It makes them throw their bodies forward, and prefs with their whole weight upon the ftomach and breaft : By this means the breathing is obftructed, the breaft flattened, and the bowels compressed ; which must hurt the digestion, and occasion confumptions of the lungs, and other difeases.

IT is a common notion, that if children be set upon their feet too foon, their legs will become crooked. There is reason to believe, that the very reverse of this is true. Every member acquires strength in proportion as it is exercifed. The limbs of children are weak indeed, but their bodies are proportionally light ; and, had they skill to direct themselves, they would foon be able to fupport their own weight. Who ever heard of any other animal that became crooked by using its legs too foon? Indeed, if a child be not permited to make any use of its legs till a confiderable time after the birth, and be then fet upon them with its whole weight at once, there may be fome danger; but this proceeds entirely from the child's not having been accustomed to use its legs from the beginning.

MOTHERS of the poorer fort think they are great gainers by making their children lie or fit while they themfelves work. In this they are greatly miftaken. By neglecting to give their children exercife, they are obliged to keep them a long time before they can do any thing for themfelves, and to fpend more on medicine than would have paid for proper care,

To take care of their children, is the most profitable business in which even the poor can be employed : ployed: But, alas ! it is not always in their power, Poverty often obliges them to neglect their offspring, in order to procure the neceffaries of life. When this is the cafe, it becomes the intereft as well as the duty of the Public to affift them. Ten thousand times more benefit would accrue to the State, by enabling the poor to bring up their own children, than from all the \* hospitals that ever can be erected for that purpose.

WHOEVER confiders the ftructure of the human body, will foon be convinced of the neceffity of exercife for the health of children. The body is composed of an infinite number of veffels, whose fluids cannot be pushed on without the action and preffure of the muscles. But, if the fluids remain inactive, obstructions must happen, and the humours will of course be vitiated, which cannot fail to occafion difeases. Nature has furnished both the veffels which carry the blood and lymph with numerous valves, in order that the action of every muscle might push forward their contents; but without action, this admirable contrivance can have no effect. This part of the animal œconomy proves to a demon-

\* If it were made the intereft of the poor to keep their children alive, we fhould lofe very few of them. A fmall premium given annually to each poor family, for every child they have alive at the year's end, would fave more infant-lives than if the whole revenue of the crown were expended on hofpitals for this purpofe. This would make the poor effeem fertility a bleffing; whereas many of them think it the greateft curfe that can befal them; and, in place of wifning their children to live, fo far does poverty get the better of natural affection, that they are often very happy when they die.

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ftration the necessity of exercise for the prefervation of health.

ARGUMENTS to fhew the importance of exercife might be drawn from every part of the animal œconomy : Without exercife, the circulation of the blood cannot be properly carried on, nor the different fecretionsduly performed; without exercife, the humours cannot be properly prepared, nor the folids rendered ftrong or firm. The action of the heart, the motion of the lungs, and all the vital functions, are greatly affisted by exercise. But to point out the manner in which these effects are produced, would lead us farther into the æconomy of the human body, than most of those for whom this treatife is intended would be able to follow. We fhall therefore only add, that, where exercife is neglected, none of the animal functions can be duly performed; and, when that is the cafe, the whole conflitution muft go to wreck.

A GOOD conflictution ought certainly to be our first object in the management of children. It lays a foundation for their being useful and happy in life; and whoever neglects it, not only fails in his duty to his offspring, but to fociety.

ONE very common error of parents, by which they hurt the conflitutions of their children, is the fending them too young to fchool. This is often done folely to prevent trouble. When the child is at fchool, he needs no keeper. Thus the fchoolmafter is made the nurfe; and the poor child is fixt to a feat feven or eight hours a day, which time ought to be fpent in exercise and diversions. Sitting fo long cannot fail to produce the worst effects upon the body; nor is the mind lefs injured. Early application

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tion weakens the faculties, and often fixes in the mind an averfion to books, which continues for life \*.

But, fuppole this were the way to make children fcholars, it certainly ought not to be done at the expence of their conftitutions. Our anceftors, who feldom went to fchool very young, were not lefs learned than we. But we imagine the boy's education will be quite marred, unlefs he be carried to fchool in his nurfe's arms. No wonder if fuch hot-bed plants feldom become either fcholars or men !

Not only the confinement of children in public fchools, but their number often proves hurtful. Children are much injured by being kept in crowds within doors; their breathing not only renders the place unwholefome, but, if any one of them happens to be difeafed, the reft catch the infection. A fingle child has been often known to communicate the bloody flux, the hooping-cough, the itch, or other difeafes, to almost every individual in a numerous fchool.

But, if fashion must prevail, and infants are to be fent to fchool, we would recommend it to teachers, as they value the interests of fociety, not to confine them too long at a time, but to allow them to run about and play at fuch active diversions as may promote their growth, and strengthen their constitutions. Were boys, instead of being whipped for stealing an hour to run, ride, fwim, or the like, encouraged to

\* It is undoubtedly the duty of parents to educate their children, at leaft till they are of an age proper to take care of themfelves. This would tend much to confirm the ties of parental tendernefs and filial affection, of the want of which there are at prefent fo many deplorable inftances. Though few fathers have time to inftruct their children, yetmost mothers have ; and furely they cannot be better employed.



employ

employ a proper part of their time in these manly and useful exercises, it would produce many excellent effects.

Ir would be of great fervice to boys, if, at a proper age, they were taught the military exercife. This would increase their ftrength, infpire them with courage, and, when their country called for their affistance, would enable them to act in her defence, without being obliged to undergo a tedious and troublesome course of inftructions, at a time when they are less fit to learn new motions, gestures, &c. \*

AN effeminate education will infallibly fpoil the best natural constitution; and, if boys are brought up in a more delicate manner than even girls ought to be, they never will be men.

Nor is the common education of girls lefs hurtful to the conftitution than that of boys. Mifs is fet down to her frame, before fhe can put on her clothes; and is taught to believe, that to excel at the needle is the only thing that can entitle her to general effeem. It is unneceffary here to infift upon the dangerous confequences of obliging girls to fit too much. They are pretty well known, and are too often felt at a certain time of life. But fuppofe this critical period to be got over, greater dangers ftill await them when they come to be mothers. Women who have been early accuftomed to a fedentary life, generally run great hazard in childbed; while thofe who have been

\* I am happy to find that the mafters of academies now begin to put in practice this advice. Each of them ought to keep a drill ferjeant for teaching the boys the military exercife. This, befides contributing to their health and vigour of body, would have many other happy effects.

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ufed to romp about, and take fufficient exercife, are feldom in any danger.

ONE hardly meets with a girl who can, at the fame time, boaft of early performances by the needle, and a good conftitution. Clofe and early confinement generally occafions indigeftions, head-achs, pale complexions, pain of the ftomach, lofs of appetite, coughs, confumptions of the lungs, and deformity of body. The laft of thefe indeed is not to be wondered at, confidering the awkward poftures in which girls fit at many kinds of needlework, and the delicate flexible ftate of their bodies in the early periods of life.

Would mothers, inftead of having their daughters inftructed in many trifling accomplifhments, employ them in plain work and houfewifery, and allow them fufficient exercife in the open air, they would both make them more healthy mothers, and more ufeful members of fociety. I am no enemy to genteel accomplifhments, but would have them only confidered as fecondary, and always difregarded when they impair health.

MANY people imagine it a great advantage for children to be early taught to earn their bread. This opinion is certainly right, provided they were fo employed as not to hurt their health or growth; but, when thefe fuffer, fociety, inftead of being benefited, is a real lofer by their labour. There are few employments, except fedentary ones, by which children can earn a livelihood; and if they be fet to thefe too foon, it ruins their conftitutions. Thus, by gaining a few years from childhood, we generally lofe twice as many in the latter period of life, and even render the perfon lefs ufeful while he does live.

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In order to be fatisfied of the truth of this obfervation, one needs only look into the great manufacturing towns, where he will find a puny degenerate race of people, weak and fickly all their lives, feldom exceeding the middle period of life; or, if they do, being unfit for bufinefs, they become a burden to fociety. Thus arts and manufactures, though they may increafe the riches of a country, are by no means favourable to the health of its inhabitants. Good policy would therefore require, that fuch people as labour during life, fhould not be fet too early to work. Every perfon converfant in the breed of horfes, or other working animals, knows, that if they be fet to hard labour too foon, they never will turn out to advantage. This is equally true with refpect to the human fpecies.

THERE are nevertheless various ways of employing young people without hurting their health. The easier parts of gardening, husbandry, or any business carried on without doors, are most proper. These are employments which most young people are fond of, and some parts of them may always be adapted to their age, taste, and strength \*.

SUCH parents, however, as are under the neceffity of employing their children within doors, ought to allow them fufficient time for active diversions. This would both encourage them to do more work, and prevent their conftitutions from being hurt.

Some imagine, that exercise within doors is fufficient; but they are greatly mistaken. One hour

\* I have been told that in China, where the police is the beft in the world, all the children are employed in the eafier part of gardening and husbandry; as weeding, gathering stones off the land and such like.

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fpent in running, or any other exercife without doors, is worth ten within. When children cannot go abroad, they may indeed be exercifed at home. The beft method of doing this, is to make them run about in a long room, or dance: This laft kind of exercife, if not carried to excefs, is of excellent fervice to young people. It cheers the fpirits, promotes perfpiration, ftrengthens the limbs, &c. I knew an eminent phyfician who ufed to fay, that he made his children dance, inftead of giving them phyfic. It were well if more people followed his example.

The COLD BATH may be confidered as an aid to exercife. By it the body is braced and ftrengthened, the circulation and fecretions promoted, and, were it conducted with prudence, many difeafes, as the rickets, fcrophula, &c. might thereby be prevented. The ancients, who took every method to render children hardy and robuft, were no ftrangers to the ufe of the cold bath; and, if we may credit report, thepractice of immerfing children daily in cold water muft have been very common among our anceftors.

The greatest objection to the use of the cold bath arises from the superstitutions prejudices of nurses. These are often so strong, that it is impossible to bring them to make a proper use of it. I have known some of them who would not dry a child's skin after bathing it, less it should destroy the effect of the water. Others will even put clothes dipt in the water upon the child, and either put it to bed, or suffer it to go about in that condition. Some believe, that the whole virtue of the water depends upon its being dedicated to a particular faint. While others place their confidence in a certain number of dips, as D three, feven, nine, or the like; and the world could not perfuade them if thefe do not fucceed to try it a little longer. Thus, by the whims of nurfes, children lofe the benefit of the cold bath, and the hopes of the phyfician from that medicine are often fruftrated,

WE ought not, however, entirely to fet afide the cold bath, becaufe fome nurfes make a wrong ufe of it. Every child, when in health, fhould at leaft have its extremities daily wafhed in cold water. This is a partial ufe of the cold bath, and is better than none. In winter this may fuffice; but, in the warrn feafon, if a child be relaxed, or feem to have a tendency to the rickets or fcrophula, its whole body ought to be frequently immerfed in cold water, Care how ever muft be taken not to do this when the body is hot, or the ftomach full. The child fhould be dipt only once at a time, fhould be taken out immediately, and have its fkin well rubbed with a dry cloth.

### The bad effects of unwholesome Air upon Children.

Few things prove more deftructive to children than confined or unwholefome air. This is one reafon why fo few of those infants, who are put into hospitals, or parish workhouses, live. These places are generally crowded with old, fickly, and infirm people; by which means the air is rendered fo extremely pernicious, that it becomes a poison to infants.

WANT of wholefome air is likewife deftructive to many of the children born in great towns. There the poorer fort of inhabitants live in low, dirty, confined houfes, to which the fresh air has no access. Though grown

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grown people, who are hardy and robust, may live in fuch fituations, yet they generally prove fatal to their offspring, few of whom arrive at maturity, and those who do are weak and deformed. As fuch people are not able to carry their children abroad into the open air, we must lay our account with losing the greater part of them. But the rich have not this excufe. It is their business to see that their children be daily carried abroad, and that they be kept in the open air for a fufficient time. This will always fucceed better if the mother goes along with them. Servants are often negligent in these matters, and allow achild to fit or lie on the damp ground, inftead of leading or carrying it about. The mother furely needs air as well as her children; and how can she be better employed than in attending them ?

A very bad cuftom prevails, of making children fleep in small apartments, or crowding two or three beds into one chamber. Instead of this, the nurfery ought always to be the largeft and beft aired room in the house. When children are confined in small apartments, the air not only becomes unwholefome, but the heat relaxes their folids, renders them delicate, and difpofes them to colds and many other diforders. Nor is the cuftom of wrapping them up too close in cradles less pernicious. One would think that nurses were afraid lest children should suffer by breathing free air, as many of them actually cover the child's face while asleep, and others wrap a covering over the whole cradle, by which means the child is forced to breathe the fame air over and over all the time it is in it. Cradles indeed are on many accounts hurtful

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ful to children, and it would be better if their use was totally laid aside \*.

A CHILD is generally laid to fleep with all its clothes on; and if a number of others are heaped above them, it must be overheated; by which means it cannot fail to catch cold on being taken out of the cradle, and exposed to the open air with only its usfual clothing, which is too frequently the cafe.

CHILDREN who are kept within doors all day, and fleep all night in warm clofe apartments, may, with great propriety, be compared to plants nurfed in a hot-houfe, inftead of the open air. Though fuch plants may by this means be kept alive for fome time, they will never arrive at that degree of ftrength, vigour, and magnitude, which they would have acquired in the open air, nor would they be able to bear it afterwards, fhould they be expofed to it.

CHILDREN brought up in the country, who have been accuftomed to open air, fhould not be too early fent to great towns, where it is confined and unwholefome. This is frequently done with a view to forward their education, but proves very hurtful to their health. All fchools and feminaries of learning

\* It is amazing to me how children escape fuffocation, confidering the manner in which they are often rolled up in flannels, &c. I lately attended an infant, whom I found muffled up over head and ears in many folds of flannel, though it was in the middle of June, I begged for a little free air to the poor babe; but, though this indulgence was granted during my flay, I found it always on my return in the fame fituation. Death, as might be expected, foon freed the infant from all its. miferies; but it was not in my power to free the minds of its parents from those prejudices which proved fatal to their child.

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ought, if poffible, to be fo fituated as to have fresh, dry, wholesome air, and should never be too much erowded.

WITHOUT entering into a detail of the particular advantages of wholefome air to children, or of the bad confequences which proceed from the want of it, I fhallonly obferve, that, of feveral thoufands of children which have been under my care, I do not remember one inftance of a fingle child who continued healthy in a clofe confined fituation ; but have often known the most obstinate difeases cured by removing them from fuch a fituation to an open free air.

#### Of Nurses.

It is not here intended to lay down rules for the choice of nurfes. This would be wafting time. Common fenfe will direct every one to chufe a woman who is healthy, and has plenty of milk \*. If fhe be at the fame time cleanly, careful, and good-natured, fhe can hardly fail to make a proper nurfe. After all, however, the only certain proof of a good nurfe, is a healthy child upon her breaft. But, as the mifconduct of nurfes often proves fatal to children, it will be of importance to point out a few of their moft capital blunders, in order to roufe the attention of parents, and to make them look more flrictly into the conduct of those to whom they commit the care of their infant offspring.

\* I have often known people fo imposed upon, as to give an infant to a nurse to be suckled who had not one drop of milk in her breast.

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THOUGH it admits of fome exceptions, yet we may lay it down as a general rule, that every woman who nurfes for hire ought to be carefully looked after, otherwife fhe will not do her duty. For this reafon parents ought always to have their children nurfed under their own eye, if poffible ; and where this cannot be done, they fhould be extremely circumfpect in the choice of those perfons to whom they intrust them. It is folly to imagine that any woman, who abandons her own child to fuckle another for the fake of gain, fhould feel all the affections of a parent towards her nurfling; yet fo neceffary are these affections in a nurfe, that, but for them, the human race would foon be extinct.

ONE of the most common faults of those who nurse for hire, is to dose children with stupes a full them as the fup of the fup of the function o

A NURSE who has not milk enough is apt to imagine that this defect may be fupplied by giving the child wines, cordial waters, or other flrong liquors. This is an egregious miftake. The only thing that has any chance to fupply the place of the nurfe's milk, must be fomewhat nearly of the fame quality, as

\* If a mother on visiting her child at nurse finds it always affeep, I would advise her to remove it immediately; otherwise it will soon fieepits last.

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cow's milk, afs's milk, or the like, with good bread. It never can be done by the help of ftrong liquors. Thefe, inftead of nourifhing an infant, never fail.to produce the contrary effect.

CHILDREN are often hurt by nurfes fuffering them to cry long and vehemently. This ftrains their tender bodies, and frequently occasions ruptures, inflammations of the throat, lungs, &c. A child never continues to cry long without fome caufe, which might always be difcovered by proper attention; and the nurfe who can hear an infant cry till it has almost fpent itfelf, without endeavouring to pleafe it, must be cruelindeed, and is unworthy to be intrusted with the care of an human creature.

NURSES who deal much in medicine are always to be fufpected. They truft to it, and neglect their duty. I never knew a good nurfe who had her Godfrey's cordials, Daffy's elixirs, &c. at hand. Such generally imagine, that a dofe of medicine will make up for all defects in food, air, exercife, and cleanlinefs.

ALLOWING children to continue long wet, is another very pernicious cuftom of indolent nurfes. This is not only difagreeable, but it galls and frets the infant, and by relaxing the folids, occasions fcrophulas, rickets, and other difeafes, A dirty nurfe is always to be fufpected.

NATURE often attempts to free the bodies of children from bad humours, by throwing them upon the fkin : By this means fevers, and other difeafes are prevented. Nurfes are apt to miftake fuch critical eruptions for an itch, or fome other infectious diforder. Accordingly they take every method to drive them in. In this way many children lofe their lives; and no D 4 wonder,

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wonder, as Nature is opposed in the very method she takes to relieve them. It ought to be a rule, which every nurse should observe, never to shop any eruption without proper advice, or being well assured that it is not of a critical nature. At any rate, it is never to be done without previous evacuations.

LOOSE ftools is another method by which Nature often prevents or carries off the difeafes of infants. If thefe proceed too far, no doubt they ought to be checked; but this is never to be done without the greateft caution. Nurfes, upon the first appearance of loofe stools, frequently fly to the use of aftringents, or such things as bind the body. Hence inflammatory fevers, and other statl difeases, are occastoned. A dose of rhubarb, a gentle vomit, or some other evacuation, should always precede the use of aftringent medicines<sup>\*</sup>.

ONE of the greateft faults of nurfes is, concealing the difeafes of children from their parents. This they are extremely ready to do, efpecially when the difeafe is the effect of their own negligence. Many inftances might be given of perfons who have been rendered lame for life by a fall from their nurfe's arms, which fhe, through fear, concealed till' the misfortune was paft cure. Every parent who intrufts a nurfe with the care of a child, ought to give her the ftricteft charge not to conceal the most trifling diforder or misfortune that may befal it.

\* Some nurfes are fo extremely nice, that rather than take the trouble of cleaning a child frequently, they will attempt to flop up the paffage : and there are not wanting inflances of fqueamifh maids who have actually been known to make use of corks for this purpose. What have not mothers to fear, who intrust their children to the care of giddy girls ? WE can fee no reafon why a nurfe, who conceals any misfortune which happens to a child under her care, till it lofes its life or limbs, fhould not be punifhed. A few examples of this would fave the lives of many infants; but, as there is little reafon to expect that it ever will be the cafe, we would earneftly recommend it to all parents to look carefully after their children, and not to truft fo valuable a treafure entirely in the hands of an hireling.

No perfon ought to imagine thefe things unworthy of his attention. On the proper management of children depend not only their health and ufefulnefs in life, but likewife the fafety and profperity of the ftate to which they belong. Effeminacy ever will prove the ruin of any ftate, where it prevails; and, when its foundations are laid in infancy, it can never afterwards be wholly eradicated. Parents who love their offspring, and wifh well to their country, ought therefore, in the management of their children, to avoid every thing that may have a tendency to make them weak or effeminate, and to take every method in their power to render their conffitutions ftrong and hardy.

---- By arts like these

Laconia nurs'd of old her hardy fons; And Rome's unconquer'd legions urg'd their way, Unhurt, thro' every toil in every clime \*.

· Armftrong.

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# CHAP. II.

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### OF THE LABORIOUS, THE SEDENTARY, AND THE STUDIOUS.

HAT men are exposed to particular diseafes from the occupations which they follow, is a fact well known; but to remedy this evil is a matter of some difficulty. Most people are under a necessity of following the employments to which they have been bred, whether they be favourable to health or not. For this reason, instead of inveighing, in a general way, as some authors have done, against those occupation's which are hurtful to health, we shall endeavour to point out the circumstances in each of them from which the danger chiefly arises, and to propose the most rational methods of preventing it.

CHYMISTS, founders, glafs-makers, and feveral other artifts, are hurt by the unwholefome air which they are obliged to breathe. This air is not only loaded with the noxious exhalations arifing from metals and minerals, but is fo charged with phlogifton as to be rendered unfit for expanding the lungs fufficiently, and anfwering the other important purpofes of refpiration. Hence proceed afthmas, coughs, and confumptions of the lungs, fo incident to perfons who follow thefe employments.

To prevent fuch confequences, as far as possible, the places where these occupations are carried on, ought to be constructed with the utmoss care for difcharging the sinoke and other exhalations, and admitting a free current of fresh air. Such artists ought

# Of the LABORIOUS, &c.

ought never to continue toolong at work; and when they give over, they fhould fuffer themfelves to cool gradually, and put on their clothes before they go into the open air. They ought never to drink large quantities of cold, weak, or watery liquors, while their bodies are hot, nor to indulge in raw fruits, fallads, or anything that is cold on the ftomach.

MINERS, and all who work under ground, are likewife hurt by unwholefome air The air, by its Itagnation in deep mines, not only lofes its proper fpring and other qualities neceffary for refpiration, but is often loaded with fuch noxious exhalations as to become a most deadly poifon.

THE two kinds of air which prove most deftructive to miners, are what they call the *fire damp*, and the *cboke damp*. In both cases the air becomes a poifon, by its being loaded with phlogiston. The danger from the former may be obviated by making it explode before it accumulates in too great quantities; and the latter may be generally carried off by promoting a free circulation of air in the mine.

MINERS are not only hurt by unwholefome air, but likewife by the particles of metal which adhere to their fkin, clothes, &c. Thefe are abforbed, or taken up into the body, and occafion palfies, vertigoes, and other nervous diforders, which often prove fatal. Fallopius obferves, that thofe who work in mines of mercury feldom live above three or four years. Lead, and feveral other metals, are likewife very pernicious to the health.

MINERS ought never to go to work fafting, nor to continue too long at work. Their food ought to be nourifhing, and their liquor generous : Nothing more 6 certainly

certainly hurts them than living too low. They fhould by all means avoid coftivenes. This may either be done by chewing a little rhubarb, or taking a fufficient quantity of fallad oil. Oil not only opens the body, but fheaths and defends the inteftines from the ill effects of the metals. All who work in mines or metals ought to wash carefully, and to change their clothes as soon as they give over working. Nothing would tend more to preferve the health of such people than a strict, and almost religious regard to cleanlines.

PLUMBERS, painters, gilders, fmelters, makers of white lead, and many others who work in metals, are liable to the fame difeafes as miners, and ought to obferve the fame directions for avoiding them.

TALLOW-CHANDLERS, boilers of oil, and all who work in putrid animal fubftances, are likewife liable to fuffer from the unwholefome fmells or effluvia of thefe bodies. They ought to pay the fame regard to cleanlinefs a's miners; and when they are troubled with naufea, ficknefs, or indigeftion, we would advife them to take a vomit or a gentle purge. Such fubftances ought always to be manufactured as frefh as poffible. When long kept, they not only become unwholefome to thofe who manufacture them, but likewife to people who live in the neighbourhood.

It would greatly exceed the limits of this part of our fubject, to fpecify the difeafes peculiar to perfons of every occupation; we shall therefore confider mankind under the general classes of *Laboricus*, *Sedentary* and *Studious*.

THE

#### THE LABORIOUS.

THOUGH those who follow laborious employments are in general the most healthy of mankind, yet the nature of their occupations, and the places where they are carried on, expose them more particularly to fome difeases. Husbandmen, for example, are exposed to all the vicifitudes of the weather, which, in this country, are often very great and fudden, and occasion colds, coughs, quinfies, rheumatisms, fevers, and other acute diforders. They are likewise forced to work hard, and often to carry burdens above their strength, which, by overstraining the vessels, occasion asthmas, ruptures, &c.

THOSE who labour without doors are often afflicted with intermitting fevers or agues, occasioned by the frequent vicifitudes of heat and cold, poor living, bad water, fitting or lying on the damp ground, evening dews, night air, &c. to which they are frequently exposed.

SUCH as bear heavy burdens, as porters, labourers, &c. are obliged to draw in the air with much greater force, and alfo to keep their lungs diftended with more violence, than is neceffary for common refpiration : By this means the tender veffels of the lungs are overftretched, and often burft, infomuch that a fpitting of blood or fever enfues. Hippocrates mentions an inftance, to this purpofe, of a man, who, upon a wager, carried an afs; but was foon after feized with a fever, a vomiting of blood, and a rupture.

CARRYING heavy burdens is generally the effect of mere lazinefs, which prompts people to do at once what fhould be done at twice. Sometimes it proceeds from

from vanity or emulation. Hence it is, that the ftrongeft men are most commonly hurt by heavy burdens, hard labour, or feats of activity. It is rare to find one who boasts of his ftrength without a rupture, a spitting of blood, or some other difease, which he reaps as the fruit of his folly. One would imagine, the daily instances we have of the starl effects of carrying great weights, running, wrestling, and the like, would be fufficient to prevent such practices.

THERE are indeed fome employments which neceffarily require a great exertion of ftrength, as porters, blackfmiths, carpenters, &c. None ought to follow thefe but men of a ftrong body; and they fhould never exert their ftrength to the utmost, nor work too long. When the muscles are violently ftrained, frequent reft is neceffary, in order that they may recover their tone; without this, the ftrength and conftitution will foon be worn out, and a premature old age brought on.

THE erifipelas, or St. Anthony's fire, is a difeafe very incident to the laborious. It is occafioned by whatever gives a fudden check to the perfpiration, as drinking cold water when the body is warm, wet feet, keeping on wet clothes, fitting or lying on the damp ground, &c. It is impoffible for those who labour without doors always to guard against these inconveniencies; but it is known from experience, that their ill confequences might often be prevented by proper care.

THE iliac paffion, the colic, and other complaints of the bowels, are often occafioned by the fame caufes as the erifipelas; but they may likwife proceed from flatulent and indigeftible food. Labourers generally eat unfermented unfermented bread, made of peas, beans, rye, and other windy ingredients. They also devour great quantities of unripe fruits, baked, stewed, or raw, with various kinds of roots and herbs, upon which they often drink four milk, stale small beer, or the like. Such a mixture cannot fail to fill the bowels with wind, and occasion difeases of those parts.

INFLAMMATIONS, whitloes, and other difeafes of the extremities, are likewife common amongft thofe who labour without doors. Thefe difeafes are often attributed to venom, or fome kind of poifon; but they generally proceed either from fudden heat after cold, or the contrary. When labourers, milk-maids, &c. come from the field, cold or wet, they run to the fire, and often plunge their hands in warm water, by which means the blood and other humours in thofe parts are fuddenly expanded, and, the veffels not yielding fo quickly, a ftrangulation happens, and an inflammation or mortification enfues.

WHEN fuch perfons come home cold, they ought to keep at a diftance from the fire for fome time, to wash their hands in cold water, and to rub them well with a dry cloth. It fometimes happens, that people are fo benumbed with cold, as to be quite deprived of the use of their limbs. In this case, the only remedy is to rub the parts affected with snow, or, where it cannot be had, with cold water. If they be held near the fire, or plunged into warm water, a mortification will generally enfue.

LABOURERS in the hot feafon are apt to lie down and fleep in the fun. This practice is fo dangerous, that they often wake in a burning fever. Thefe ardent fevers, which prove fo fatal about the end of fummer

fummer and beginning of autumn, are frequently occafioned by this means. When labourers leave off work, which they ought always to do during the heat of the day, they fhould go home, or, at leaft, get under fome cover, where they may repose themfelves in fafety.

MANY people follow their employments in the fields from morning till night, without eating any thing. This cannot fail to hurt their health. However homely their fare be, they ought to have it at regular times; and the harder they work, the more frequently they fhould eat. If the humours be not frequently replenished with fresh nourishment, they foon become putrid, and produce fevers of the very worst kind.

MANY peafants are extremely carelefs with refpect to what they eat or drink, and often, through mere indolence, ufe unwholefome food, when they might for the fame expence, have that which is wholefome. In fome parts of Britain, the peafants are too carelefs even to take the trouble of dreffing their own victuals. Such people would live upon one meal a-day in indolence, rather than labour, though it were to procure them the greateft affluence.

FEVERS of a very bad kind are often occafioned among labourers by *poor living*. When the body is not fufficiently nourifhed, the humours become vitiated, and the folids weak; from whence the moft fatal confequences enfue. *Poor living* is likewife productive of many of those cutaneous difeases fo frequent among the lower class of people. It is remarkable that cattle, when pinched in their food; are generally affected with difeases of the skin, which feldom feldom fail to difappear when they are put upon a good pasture. This shews how much a good state of the humours depends upon a sufficient quantity of proper nourishment.

POVERTY not only occasions, but aggravates, many of the difeases of the laborious. Few of them have much forefight; and, if they had, it is feldom in their power to fave any thing. They are glad to make a shift to live from day to day; and, when any difease overtakes them, they are miserable indeed. Here the godlike virtue of charity ought always to exert itself. To relieve the industrious poor in diftress, is furely the most exalted act of religion and humanity. They alone, who are witness of those fcenes of calamity, can form a notion of what numbers perish in difeases, for want of proper affistance, and even for want of the necessaries of life.

LABOURERS are often hurt by a foolifh emulation, which prompts them to vie with one another, till they overheat themfelves to fuch a degree as to occafien a fever, or even to drop down dead. Such as wantonly throw away their lives in this manner, deferve to be looked upon in no better light than felfmurderers.

THE office of a *foldier*, in time of war, may be ranked amongst the laborious employments. Soldiers fuffer many hardships from the inclemency of feasons, long marches, bad provisions, hunger, watching, unwholefome climates, bad water, &c. These occasion fevers, fluxes, rheumatisms, and other fatal diseases, which generally do greater execution than the fword, especially when campaigns are continued too late in E

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the year. A few weeks of cold rainy weather will often prove more fatal than an engagement.

THOSE who have the command of armies, fhould take care that their foldiers be well clothed and well fed. They ought alfo to finifh their campaigns in due feafon, and to provide their men with dry and wellaired winter-quarters. Thefe rules, taking care, at the fame time, to keep the fick at a proper diftance from those in health, would tend greatly to preferve the lives of the foldiery \*.

SAILORS may alfo be numbered amongst the laborious. They undergo great hardships from change of climate, the violence of weather, hard labour, bad provisions, &c. Sailors are of fo great importance both to the trade and fafety of this kingdom,

\* It is indeed to be regretted, that foldiers fuffer not lefs from indolence and intemperance in time of peace, than from hardships in time of war. If men are idle, they will be vicious. It would therefore be of great importance, could a scheme be formed for rendering the military, in times of peace, both more healthy and more useful. These desirable objects might, in our opinion, be obtained, by employing them for fome hours every day, and advancing their pay accordingly. By this means, idlenefs, the mother of vice, might be prevented, the price of labour lowered, public works, as harbours, canals, turnpike roads, &c. might be made without hurting manufactures; and foldiers might be enabled to marry, and bring up children. A fcheme of this kind might eafily be conducted, fo as not to depress the martial spirit, provided the men were only to work four or five hours every day, and always to work without doors: no foldier should be fuffered to work too long, or to follow any fedentary employment. Sedentary employments render men weak and effeminate, quite unfit for the hardships of war; whereas working for a few hours every day without doors would inure them to the weather, brace their nerves, and increase their strength and courage.

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that too much pains can never be beftowed in pointing out the means of preferving their lives.

ONE great fource of the difeafes of fea-faring peopie is excefs. When they get on fhore, after having been long at fea, without regard to the climate, or their own conflictutions, they plunge headlong into all manner of riot, and often perfift till a fever puts an end to their lives. Thus intemperance, and not the climate, is often the caufe why fo many of our brave failors die on foreign coafts. Such people ought not to live too low; but they will find moderation the beft defence againft fevers, and many other maladies.

SAILORS, when on duty, cannot avoid fometimes getting wet. When this happens, they fhould change their clothes as foon as they are relieved, and take every method to reftore the perfpiration. They fhould not, in this cafe, have recourfe to fpirits, or other ftrong liquors, but fhould rather drink fuch as are weak and diluting, of a proper warmth, and go immediately to bed, where a found fleep and a gentle fweat would fet all to rights.

But the health of failors fuffers moft from unwholefome food. The conftant use of falted provisions vitiates their humours, and occasions the fourvy, and other obstinate maladies. It is no easy matter to prevent this difease in long voyages; yet we cannot help thinking, that much might be done towards effecting so defirable an end, were due pains bestowed for that purpose. For example, various roots, greens, and fruits, might be kept a long time at sea, as onions, potatoes, cabbages, lemons, oranges, tamarinds, apples, &c. When fruits cannot be kept,  $E_2$  the

the juices of them, either fresh or fermented, may. With these all the drink, and even the food of the ship's dompany, ought to be acidulated in long voyages.

STALE bread and beer likewife contribute to vitiate the humours. Meal will keep for a long time on board, of which fresh bread might frequently be made. Malt too might be kept, and infused with boiling water at any time. This liquor, when drank even in form of wort, is very wholesome, and is found to be an antidote against the fourvy. Small wines and cyder might likewise be plentifully laid in; and should they turn four, they would still be useful as vinegar. Vinegar is a great antidote against difeases, and should be used by all travellers, especially at sea. It may either be mixed with the water they drink, or taken in their food.

SUCH animals as can be kept alive, ought likewife to be carried on board, as hens, ducks, pigs, &c. Fresh broths made of portable soup, and puddings made of peas, or other vegetables, ought to be used plentifully. Many other things will readily occur to people conversant in these matters, which would tend to preferve the health of that brave and useful set of men \*.

\* Our countryman, the celebrated Captain Cook, has fhewn how far, by proper care and attention, the difeafes formerly fo fatal to feamen may be prevented. In a v yage of three years and eighteen days, during which he was exposed to every climate, from the  $52^{\circ}$  north to the  $71^{\circ}$  of fouth latitude, of one hundred and eighteen men composing the fhip's company, he loft only one, who died of a *phthifis pulmonalis*. The principal means he used were, to preferve a ftrict attention to cleanlines, to procure abundance of vegetables and fresh provisions, cspecially good water, and to allow his people sufficient time for rest. WE have reason to believe, if due attention were paid to the diet, air, clothing, and above all things to the cleanliness of sea-faring people, they would be the most healthy set of men in the world; but when these are neglected, the very reverse will happen.

THE best medical antidote that we can recommend to failors or foldiers on foreign coafts, especially where dampness prevails, is the Peruvian bark. This will often prevent fevers, and other fatal difeafes. About a drachm of it may be chewed every day; or if this should prove difagreeable, an ounce of bark, with half an ounce of orange-peel, and two drachms of fnake-root coarfely powdered, may be infuied for two or three days in an English quart of brandy, and half a wine-glass of it taken twice or thrice a day, when the stomach is empty. This has been found to be an excellent antidote against fluxes, putrid, intermitting, and other fevers, in unhealthy climates. It is not material in what form this medicine be taken. It may either be infused in water, wine, or spirits, as recommended above, or made into an electuary with fyrup of lemons, oranges, or the like.

#### THE SEDENTARY.

THOUGH nothing can be more contrary to the nature of man than a sedentary life, yet this class comprehends the far greater part of the species. Almost the whole semale world, and in manufacturing countries, the major part of the males, may be reckoned sedentary \*.

#### AGRICUL-

\* The appellation of fedentary has generally been given only to the fludious; we can fee no reafon, however, for reflricting it  $E_3$  to

AGRICULTURE, the first and most healthful of all employments, is now followed by few who are able to carry on any other business. But those who imagine that the culture of the earth is not sufficient to employ all its inhabitants, are greatly mistaken. An ancient Roman, we are told, could maintain his family from the produce of one acre of ground. So might a modern Briton, if he would be contented to live like a Roman. This shews what an immense increase of inhabitants Britain might admit of, and all of them live by the culture of the ground.

AGRICULTURE is the great fource of domeftic riches. Where it is neglected, whatever wealth may be imported from abroad, poverty and mifery will abound at home. Such is, and ever will be, the fluctuating flate of trade and manufactures, that thoufands of people may be in full employment today, and in beggary to-morrow. This can never happen to those who cultivate the ground. They can eat the fruit of their labour, and can always by induftry obtain, at least, the neceffaries of life.

THOUGH fedentary employments are neceffary, yet there feems to be no reafon why any perfon should be confined for life to these alone. Were such employments intermixed with the more active and laborious, they would never do hurt. It is constant confinement that ruins the health. A man will not be hurt by fitting five or fix hours a-day; but if he

to them alone. Many artificers may, with as much propriety, be denominated fedentary as the fludious, with this particular difadvantage, that they are often obliged to fit in very awkward, poftures, which the fludious need not do, unlefs they pleafe.

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is obliged to fit ten or twelve, he will foon become delicate.

But it is not want of exercise alone which hurts fedentary people; they likewise fuffer from the confined air which they breathe. It is very common to fee ten or a dozen taylors \*, or ftay-makers, for example, crowded into one small apartment, where there is hardly room for one single perfon to breathe freely. In this situation they generally continue for many hours at a time, often with the addition of fundry candles, which tend likewise to waste the air, and render it less fit for respiration. Air that is breathed repeatedly, loses its spring, and becomes unfit for expanding the lungs. This is one cause of the phthifical coughs, and other complaints of the breaft, so incident to fedentary artificers.

EVEN the perspiration from a great number of persons pent up together, renders the air unwholesome. The danger from this quarter will be greatly increased, if any one of them happens to have bad lungs, or to be otherwise diseased. Those who fit near him, being forced to breathe the same air, can hardly fail to be infected. It would be a rare thing, however, to find a dozen of sedentary people all in good health. The danger of crowding them together must therefore be evident to every one.

\* A perfon of obfervation in that line of life told me, that most taylors die of confumptions; which he attributed chiefly to the unfavourable postures in which they fit, and the unwholefomeness of those places where their business is carried on. If more attention was not paid to profit than to the prefervation of human lives, this evil might be easily remedied; but while masters only mind their own interest, nothing will be done for the fafety of their fervants.

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MANY of those who follow fedentary employments are constantly in a bending posture, as shoemakers, taylors, cutlers, &c. Such a situation is extremely hurtful. A bending posture obstructs all the vital motions, and of course must destroy the health. Accordingly we find such artificers generally complaining of indigestions, flatulencies, head-achs, pains of the breast, &c.

THE aliment in fedentary people, inftead of being pufhed forwards by an erect pofture, and the action of the mufcles, is in a manner confined in the bowels. Hence indigeftions, coftivenefs, wind, and other hypochondriacal affections, the conftant companions of the fedentary. Indeed none of the excretions can be duly performed where exercife is wanting; andwhen the matter which ought to be difcharged in this way, is retained too long in the body, it muft have bad effects, as it is again taken up into the mafs of humours.

A BENDING pofture is likewife hurtful to the lungs. When this organ is compreffed, the air cannot have free accefs into all its parts, fo as to expand them properly. Hence tubercles, adhefions, &c. are formed, which often end in confumptions. Befides, the proper action of the lungs being abfolutely neceffary for making good blood, when that organ fails, the humours foon become univerfally depraved, and the whole conftitution goes to wreck.

SEDENTARY artificers are not only hurt by preffure on the bowels, but alfo on the inferior extremities, which obstructs the circulation in these parts, and renders them weak and feeble. Thus taylors, shoemakers, &c. frequently lose the use of their legs altogealtogether; befides, the blood and humours are, by ftagnation, vitiated, and the perfpiration is obftructed: from whence proceed the fcab, ulcerous fores, foul blotches, and other cutaneous difeafes, fo common among fedentary artificers.

A BAD figure of body is a very common confequence of clofe application to fedentary employments. The fpine, for example, by being continually bent, puts on a crooked fhape, and generally remains fo ever after. But a bad figure of body has already been obferved to be hurtful to health, as the vital functions are thereby impeded.

A SEDENTARY life feldom fails to occafion an univerfal relaxation of the folids. This is the great fource from whence most of the difeases of fedentary people flow. The fcrophula, confumption, hysterics, and nervous difeases, now fo common, were very little known in this country before fedentary artificers became fo numerous : and they are very little known ftill among fuch of our people as follow active employments without doors, though in great towns at least two-thirds of the inhabitants are afflicted with them.

It is very difficult to remedy those evils, because many who have been accustomed to a sedentary life, like ricketty children, lose all inclination for exercise; we shall, however, throw out a few hints with respect to the most likely means for preserving the health of this useful set of people, which some of them, we hope, will be wise enough to observe.

It has been already observed, that sedentary artificers are often hurt by their bending posture. They ought therefore to stand or sit as erect as the nature of

of their employments will permit. They should likewife change their posture frequently, and should never fit too long at a time; but leave off work and walk, ride, run, or do any thing that will promote the vital functions.

SEDENTARY artificers are generally allowed too little time for exercife; yet, fhort as it is, they feldom employ it properly. A journeyman taylor or weaver, for example, inftead of walking abroad for exercife and fresh air, at his hours of leisure, chuses often to spend them in a public-house, or in playing at some fedentary game, by which he generally loses both his time and his money.

THE awkward poftures in which many fedentary artificers work, feem rather to be the effect of cuftom than neceffity. For example, a table might furely be contrived for ten or a dozen taylors to fit round, with liberty for their legs either to hang down, or reft upon a foot-board, as they fhould chufe. A place might likewife be cut out for each perfon, in fuch a manner that he might fit as conveniently for working as in the prefent mode of fitting crofs-legged.

ALL fedentary artificers ought to pay the most religious regard to cleanlines. Both their situation and occupations render this highly necessary. Nothing would contribute more to preferve their health, than a strict attention to it; and such of them as neglect it, not only run the hazard of losing health, but of becoming a nuisance to fociety.

SEDENTARY people ought to avoid food that is windy, or hard of digeftion, and fhould pay the ftricteft regard to fobriety. A perfon who works hard without doors will foon throw off a debauch; but one who who fits has by no means an equal chance. Hence it often happens, that fedentary people are feized with fevers after hard drinking. When fuch perfons feel their fpirits low, inftead of running to the tavern for relief, they fhould ride, or walk in the fields. This would remove the complaint more effectually than ftrong liquor, and would never hurt the conftitution.

INSTEAD of multiplying rules for preferving the health of the fedentary, we shall recommend to them the following general plan, viz. That every perfon who follows a fedentary employment should cultivate a piece of ground with his own hands. This he might dig, plant, fow, and weed at leifure hours, fo as to make it both an exercise and amusement, while it produced many of the necessaries of life. After working an hour in a garden, a man will return with more keenness to his employment within doors, than if he had been all the while idle.

LABOURING the ground is every way conducive to health. It not only gives exercise to every part of the body, but the very smell of the earth and fresh herbs revives and cheers the spirits, whils the perpetual prospect of something coming to maturity, delights and entertains the mind. We are so formed as to be always pleased with somewhat in prospect, however distant or however trivial. Hence the happiness that most men feel in planting, sowing, building, &c. These seems to have been the chief employments of the more early ages : and, when kings and conquerors cultivated the ground, there is reason to believe, that they knew as well wherein true happiness consisted as we do.

IT may feem romantic to recommend gardening to manufacturers in great towns; but obfervation proves, that

that the plan is very practicable. In the town of Sheffield, in Yorkshire, where the great iron manufacture is carried on, there is hardly a journeyman cutler who does not posses a piece of ground, which he cultivates as a garden. This practice has many falutary effects. It not only induces these people to take exercise without doors, but also to eat many greens, roots, &c. of their own growth, which they would never think of purchasses. There can be no reason why manufacturers in any other town in Great Britain should not follow the same plan. It is indeed to be regretted, that in such a place as London a plan of this kind is not practicable; yet even there fedentary artificers may find opportunities of taking air and exercise, if they chuse to embrace them.

MECHANICS are too much inclined to crowd into great towns. This fituation may have fome advantages; but it has likewife many difadvantages. All mechanics who live in the country have it in their power to poffefs a piece of ground; which indeed moft of them do. This not only gives them exercife, but enables them to live more comfortably. So far at leaft as my obfervation extends, mechanics who live in the country are far more happy than those in great towns. They enjoy better health, live in greater affluence, and feldom fail to rear a healthy and numerous offspring.

IN a word, exercife without doors, in one fhape or another, is abfolutely neceffary to health. Those who neglect it, though they may for a while drag out life, can hardly be faid to enjoy it. Weak and effeminate, they languish for a few years, and soon drop into an untimely grave.

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#### THE STUDIOUS.

INTENSE thinking is fo defiructive to health, that few inftances can be produced of fludious perfons who are ftrong and healthy. Hard fludy always implies a fedentary life; and when intenfe thinking is joined to the want of exercise, the confequences must be bad. We have frequently known even a few months of close application to fludy ruin an excellent conflictution, by inducing a train of nervous complaints which could never be removed. Man is evidently not formed for continual thought more than for perpetual action, and would be as foon worn out by the one as by the other.

So great is the power of the mind over the body, that, by its influence, the whole vital motions may be accelerated or retarded, to almost any degree. Thus cheerfulness and mirth quicken the circulation, and promote all the fecretions; whereas fadness and profound thought never fail to retard them. Hence it would appear, that even a degree of thoughtless nets is neceffary to health. Indeed, the perpetual thinker feldom enjoys either health or spirits; while the perfon, who can hardly be faid to think at all, generally enjoys both.

PERPETUAL thinkers, as they are called, feldom think long. In a few years they generally become quite ftupid, and exhibit a melancholy proof how readily the greateft bleffings may be abufed. Thinking, like every thing elfe, when carried to extreme, becomes a vice: nor can any thing afford a greater proof of wifdom, than for a man frequently and feafonably to unbend his

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his mind. This may generally be done by mixing in cheerful company, active diversions, or the like.

INSTEAD of attempting to inveftigate the nature of that connexion which fubfifts between the mind and body, or to inquire into the manner in which they mutually affect each other, we fhall only mention those difeases to which the learned are more peculiarly liable, and endeavour to point out the means of avoiding them.

STUDIOUS perfons are very fubject to the gout. This painful difeafe in a great measure proceeds from indigeftion, and an obstructed perspiration. It is impossible that the man who sits from morning till night should either digest his food, or have any of the fecretions in due quantity. But when that matter, which should be thrown off by the skin, is retained in the body, and the humours are not duly prepared, difeases must ensure the state of the state of

THE ftudious are likewife very liable to the flone and gravel. Exercife greatly promotes both the fecretion and difcharge of urine; confequently a fedentary life must have the contrary effect. Any one may be fatisfied of this by obferving, that he passes much more urine by day than in the night, and also when he walks or rides, than when he fits.

<sup>1</sup> THE circulation in the liver being flow, obftructions in that organ can hardly fail to be the confequence of inactivity. Hence fedentary people are frequently afflicted with fchirrous livers. But the proper fecretion and difcharge of the bile is fo neceffary a part of the animal œconomy, that where thefe are not duly performed, the health must foon be impaired. Jaundice, indigestion, loss of appetite, and a wasting a wasting of the whole body, feldom fail to be the consequences of a vitiated state of the liver, or obstructions of the bile.

Few difeafes prove more fatal to the fludious than confumptions of the lungs. It has already been obferved, that this organ cannot be duly expanded in those who do not take proper exercise; and where that is the case, obstructions and adhesions will ensue. Not only want of exercise, but the posture in which studious perfons generally sit, is very hurtful to the lungs. Those who read or write much are ready to contract a habit of bending forwards, and often prefs with their breast upon a table or bench. This posture cannot fail to hurt the lungs.

THE functions of the heart may likewife by this means be injured. I remember to have feen a man opened, whofe pericardium adhered to the breaft-bone in fuch a manner, as to obftruct the motion of the heart, and occasion his death. The only probable cause that could be affigned for this singular symptom was, that the man, whose business was writing, used constantly to fit in a bending posture, with his breaft preffing upon the edge of a flat table.

No perfon can enjoy health who does not properly digeft his food. But intenfe thinking and inactivity never fail to weaken the powers of digeftion. Hence the humours become crude and vitiated, the folids weak and relaxed, and the whole conftitution goes to ruin.

Long and intenfe thinking often occasions grievous head-achs, which bring on vertigoes, apoplexies, palfies, and other fatal diforders. The best way to prevent these is, never to study too long at one time, and to keep the body regular, either by proper food, or

or taking frequently a little of fome opening medicine.

THOSE who read or write much are often afflicted with fore eyes. Studying by candle-light is peculiarly hurtful to the fight. This ought to be practifed as feldom as poffible. When it is unavoidable, the eyes fhould be fhaded, and the head fhould not be held too low. When the eyes are weak or painful, they fhould be bathed every night and morning in cold water, to which a little brandy may be added.

It has already been observed, that the excretions are very defective in the studious. The dropsy is often occasioned by the retention of those humours which ought to be carried off in this way. Any perfon may observe, that sitting makes his legs swell, and that this goes off by exercise; which clearly points out the method of prevention.

FEVERS, especially of the nervous kind, are often the effect of fludy. Nothing affects the nerves so much as intense thought. It in a manner unhinges the whole human frame, and not only hurts the vital motions, but diforders the mind itself. Hence a delirium, melancholy, and even madness, are often the effect of close application to fludy. In fine, there is no difease which can proceed either from a bad flate of the humours, a defect of the usual secretions, or a debility of the nervous system, which may not be induced by intense thinking.

But the most afflicting of all the diseafes which attack the studious is the hypochondriac. This diseafe feldom fails to be the companion of deep thought. It may rather be called a complication of maladies, than a single one. To what a wretched condition are the the beft of men often reduced by it! Their ftrength and appetite fail; a perpetual gloom hangs over their minds; they live in the conflant dread of death, and are continually in fearch of relief from medicine, where, alas! it is not to be found. Those who labour under this diforder, though they are often made the fubject of ridicule, justly claim our highest fympathy and compassion.

HARDLY any thing can be more prepofterous than for a perion to make ftudy his fole bufinefs. A mere ftudent is feldom an ufeful member of fociety. He often neglects the most important duties of life, in order to purfue ftudies of a very trifling nature. Indeed it rarely happens, that any ufeful invention is the effect of mere ftudy. The farther men dive into profound refearches, they generally deviate the more from common fense, and too often lose fight of it altogether. Profound speculations, instead of making men wifer or better, generally render them abfolute sceptics, and overwhelm them with doubt and uncertainty. All that is neceffary for man to know, in order to be happy, is easily obtained; and the reft, like the forbidden fruit, ferves only to increase his milery.

Studious perfons, in order to relieve their minds, muft not only difcontinue to read and write, but engage in fome employment or diversion, that will fo far occupy the thought as to make them forget the business of the closet. A folitary ride or walk are so far from relaxing the mind, that they rather encourage thought. Nothing can divert the mind, when it gets into a train of serious thinking, but attention to subjects of a more trivial nature. These prove a kind of play to the mind, and consequently relieve it.

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LEARNED men often contract a contempt for what they call trifling company. They are afhamed to be feen with any but philosophers. This however is no proof of their being philosophers themselves. No man deferves that name who is assumed to unbend his mind, by affociating with the cheerful and gay. Even the fociety of children will relieve the mind, and expel the gloom which application to study is too apt to occasion.

As fludious people are neceffarily much within doors, they should make choice of a large and wellaired place for ftudy. This would not only prevent the bad effects which attend confined air, but would cheer the fpirits, and have a most happy influence both on the body and mind. It is faid of Euripides the Tragedian, that he used to retire to a dark cave to compose his tragedies, and of Demosthenes the Grecian orator, that he chofe a place for ftudy where nothing could be either heard or feen. With all deference to fuch venerable names, we cannot help condemning their tafte. A man may furely think to as good purpose in an elegant apartment as in a cave; and may have as happy conceptions where the allcheering rays of the fun render the air wholefome, as in places where they never enter.

THOSE who read or write much, fhould be very attentive to their pofture. They ought to fit and ftand by turns, always keeping as nearly in an erect pofture as poffible. Thofe who dictate, may do it walking. It has an excellent effect frequently to read or fpeak aloud. This not only exercifes the lungs, but almost the whole body. Hence ftudious people are greatly benefited by delivering difcourfes in public. lic. Public speakers, indeed, sometimes hurt themfelves by overacting their part; but this is their own fault. The martyr to mere vociferation merits not our sympathy.

THE morning has, by all medical writers, been reckoned the beft time for ftudy. It is fo. But it is alfo the moft proper feafon for exercife, while the ftomach is empty, and the fpirits refreshed with seep. Studious people should therefore fometimes spend the morning in walking, riding, or fome manly diverfions without doors. This would make them return to ftudy with greater alacrity, and would be of more fervice than twice the time after their spirits are worn out with fatigue. It is not sufficient to take diversion only when we can think no longer. Every studious perfon should make it a part of his business, and should let nothing interrupt his hours of recreation more than those of study.

Music has a very happy effect in relieving the mind when fatigued with fludy. It would be well if every fludious perfon were for a cquainted with that fcience as to amufe himfelf after fevere thought, by playing fuch airs as have a tendency to raife the fpirits, and infpire cheerfulnefs and good-humour.

It is a reproach to Learning, that any of her votaries, to relieve the mind after fludy, fhould betake themfelves to the ufe of ftrong liquors. This indeed is a remedy; but it is a defperate one, and always proves deftructive. Would fuch perfons, when their fpirits are low, get on horfeback, and ride ten or a dozen miles, they would find it a more effectual remedy than any cordial medicine in the apothecary's fhop, or all the ftrong liquors in the world.

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This is the plan which I always follow myfelf, and I cannot recommend a better to others. When my mind is fatigued with ftudy, or other ferious bulinefs, I mount my horfe, and ride ten or twelve miles into the country, where I fpend a day, and fometimes two, with a cheerful friend; after which I never fail to return to town with new vigour, and to purfue my ftudies or bulinefs with fresh alacrity.

It is much to be regretted that learned men, while in health, pay fo little regard to thefe things! There is not any thing more common than to fee a miferable object over-run with nervous difeafes, bathing, walking, riding, and, in a word, doing every thing for health after it is gone; yet, if any one had recommended thefe things to him by way of prevention, the advice would, in all probability, have been treated with contempt, or, at leaft, with neglect. Such is the weaknefs and folly of mankind, and fuch the want of forefight, even in thofe who ought to be wifer than others!

WITH regard to the diet of the fludious, we fee no reafon why they fhould abftain from any kind of food that is wholefome, provided they ufe it in moderation. They ought, however, to be fparing in the ufe of every thing that is four, windy, rancid, or hard of digeftion. Their fuppers fhould always be light, or taken foon in the evening. Their drink may be water, fine malt liquor, not too ftrong, good cyder, wine and water, or, if troubled with acidities, water mixed with a little brandy, rum, or any other good fpirit.

WE shall only observe, with regard to those kinds of exercise which are most proper for the studious, that

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they fhould not be too violent, nor ever carried to the degree of exceflive fatigue. They ought likewife to be frequently varied, fo as to give action to all the different parts of the body; and fhould, as often as possible, be taken in the open air. In general, riding on horfeback, walking, working in a garden, or playing at fome active diversions, are the best.

WE would likewife recommend the ufe of the cold bath to the fludious. It will, in fome measure, fupply the place of exercise, and should not be neglected by perfons of a relaxed habit, especially in the warm feason.

No perfon ought either to take violent exercife, or to fludy immediately after a full meal.

#### CHAP. III.

# OF ALIMENT.

UNWHOLESOME food, and irregularities in diet, occafion many difeafes. There is no doubt but the whole conflitution of body may be changed by diet alone. The fluids may be thereby attenuated or condenfed, rendered mild or acrimonious, coagulated or diluted, to almost any degree. Nor are its effects upon the folids less confiderable. They may be braced or relaxed, have their fensibility, motions, &c. greatly increased or diministed, by different kinds of aliment. A very small attention to these things will be fufficient to shew, how much the prefervation of health depends upon a proper regimen of the diet.

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Nor is an attention to diet neceffary for the prefervation of health only: It is likewife of importance in the cure of difeafes. Every intention in the cure of many difeafes, may be anfwered by diet alone. Its effects, indeed, are not always fo quick as those of medicine; but they are generally more lasting: Befides, it is neither fo difagreeable to the patient, nor fo dangerous as medicine, and is always more eafily obtained.

Our intention here is not to inquire minutely into the nature and properties of the various kinds of aliment in use among mankind; nor to shew their effects upon the different constitutions of the human body; but to mark some of the most permicious errors which people are apt to fall into, with respect both to the quantity and qualities of their food, and to point out their influence upon health.

It is not indeed an eafy matter to afcertain the exact quantity of food proper for every age, fex, and conflitution: But a fcrupulous nicety here is by no means neceffary. The beft rule is to avoid all extremes. Mankind were never intended to weigh and measure their food. Nature teaches every creature when it has enough; and the calls of thirst and hunger are fufficient to inform them when more is neceffary.

**THOUGH** moderation be the chief rule with regard to the quantity, yet the quality of food merits a farther confideration. There are many ways by which provisions may be rendered unwholeforme. Bad feafons may either prevent the ripening of grain, or damage it afterwards. Thefe, indeed, are acts of Providence, and we mult fubmit to them; but furely no punishment can be too fevere for those who fuffer provisions

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to fpoil by hoarding them, on purpole to raife the price, or who promote their own interest by adulterating the necessaries of life \*.

ANIMAL, as well as vegetable food, may be rendered unwholefome, by being kept too long. All animal fubftances have a conftant tendency to putrefaction; and, when that has proceeded too far, they not only become offenfive to the fenfes, but hurtful to health. Difeafed animals, and fuch as die of themfelves, ought never to be eat. It is a common practice, however, in fome grafing countries, for fervants and poor people to eat fuch animals as die of any difeafe, or are killed by accident. Poverty, indeed, may oblige people to do this; but they had better eat a fmaller quantity of what is found and wholefome : It would both afford a better nourifhment, and be attended with lefs danger.

THE injunctions given to the Jews, not to eat any creature which died of itfelf, feem to have a ftrict regard to health; and ought to be obferved by Christians as well as Jews. Animals never die of themfelves without fome previous difeafe; but how a difeafed animal should be wholefome food, is inconceivable: Even those which die by accident must be hurtful, as their blood is mixed with the sheft, and foon turns putrid,

ANIMALS which feed großly, astameducks, hogs, &c. are neither fo eafily digested, nor afford such

\* The poor, indeed, are generally the first who fuffer by unfound provisions; but the lives of the labouring poor are of great importance to the flate: Besides, diseases occasioned by unwholesome food often prove infectious, by which means they reach people in every flation. It is therefore the interest of all to take care that no spoilt provisions of any kind be exposed to fale.

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wholefome nourifhment as others. No animal can be wholefome which does not take fufficient exercife. Moft of our ftalled cattle are crammed with grofs food, but not allowed exercife nor free air; by which means they indeed grow fat, but their humours, not being properly prepared or affimilated, remain crude, and occafion indigeftions, grofs humours, and oppreffion of the fpirits, in those who feed upon them.

ANIMALS are often rendered unwholefome by being over-heated. Exceffive heat caufes a fever, exalts the animal falts, and mixes the blood fo intimately with the flefh, that it cannot be feparated. For this reafon, butchers fhould be feverely punifhed who overdrive their cattle. No perfon would chufe to eat the flefh of an animal which had died in a high fever; yet that is the cafe with all over-drove cattle; and the fever is often raifed even to the degree of madnefs.

But this is not the only way by which butchers render meat unwholefome. The abominable cuftom of filling the cellular membrane of animals with air, in order to make them appear fat, is every day practifed. This not only fpoils the meat, and renders it unfit for keeping, but is fuch a dirty trick, that the very idea of it is fufficient to difguft a perfon of any delicacy at every thing which comes from the fhambles. Who can bear the thought of eating meat which has been blown up with air from the lungs of a dirty fellow, perhaps labouring under the very worft of difeafes ?

BUTCHERS have likewife a method of filling the cellular membranes of animals with blood. This makes the meat feem fatter, and likewife weigh more, but

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is notwithftanding a very pernicious cuftom, as it both renders the meat unwholefome and unfit for keeping. I feldo in fee a piece of meat from the fhambles, where the blood is not diffufed through the whole cellular texture. I fhall not fay that this is always the effect of defign; but I am certain it is not the cafe with animals that are killed for domeftic ufe, and properly blooded. Veal feems to be moft frequently fpoilt in this way. Perhapsthat may in fome measure be owing to the practice of carrying calves from a great diffance to market, by which means their tender flesh is bruifed, and many of their veffels burft.

No people in the world eat fuch quantities of animal food as the Englifh, which is one reafon why they are fo generally tainted with the fcurvy and its numerous train of confequences, indigeftion, low fpirits, hypochondriacifm, &c. Animal food was furely defigned for man, and, with a proper mixture of vegetables, it will be found the moft wholefome; but, to gorge beef, mutton, pork, fifh, and fowl, twice or thrice a day, is certainly too much. All who value health ought to be contented with making one meal of flefh in the twenty-four hours, and this ought to confift of one kind only.

THE most obstinate fourvy has often been cured by a vegetable diet; nay, milk alone will frequently do more in that difease than any medicine. Hence it is evident, that if vegetables and milk were more used in diet, we should have less fourvy, and likewise fewer putrid and inflammatory fevers. Fresh vegetables, indeed, come to be daily more used in diet; this laudable practice we hope will continue to gain ground. Our Our aliment ought neither to be too moift, nor too dry. Moift aliment relaxes the folids, and renders the body feeble. Thus we fee females, who live much on tea and other watery diet, generally become weak, and unable to digeft folid food : Hence proceed hyfterics, and all their dreadful confequences. On the other hand, food that is too dry, renders the folids in a manner rigid, and the humours vifeid, which difpofes the body to inflammatory fevers, fcurvies, and the like.

MUCH has been said on the ill effects of teain diet. They are, no doubt, numerous; but they proceed rather from the imprudent use of it, than from any bad qualities in the tea itself. Tea is now the univerfal breakfast in this part of the world; but the morning is furely the most improper time of the day for drinking it. Most delicate perfons, who, by the bye, are the greatest tea-drinkers, cannot eat any thing in the morning. If fuch perfons, after fasting ten or twelve hours, drink four or five cups of tea, without eating almost any bread, it must hurt them .-Good tea, taken in moderate quantity, not too ftrong, nor too hot, nor drank upon an empty ftomach, will feldom do harm; but if it be bad, which is often the cafe, or fubftituted in the room of folid food, it must have many ill effects.

THE arts of cookery render many things unwholefome, which are not fo in their own nature. By jumbling together a number of different ingredients, in order to make a poignant fauce, or rich foup, the composition proves almost a poison. All high-feasoning, pickles, &c. are only incentives to luxury, and never fail to hurt the stomach. It were well

well for mankind, if cookery, as an art, were entirely prohibited. Plain roafting or boiling is all that the ftomach requires. These alone are fufficient for people in health, and the fick have ftill less need of a cook.

THE liquid part of our aliment likewife claims our attention. Water is not only the basis of most liquors, but also composes a great part of our folid food. Good water must therefore be of the greatest importance in diet. The best water is that which is most pure, and free from any mixture of foreign bodies. Water takes up parts of most bodies with which it comes into contact; by this means it is often impregnated with metals or minerals of a hurtful or poisonous nature. Hence the inhabitants of fome hilly countries have peculiar difeafes, which in all probability proceed from the water. Thus the people who live near the Alps in Switzerland, and the inhabitants of the Peak of Derby in England, have large tumours or wens on their necks. This difeafe is generally imputed to the fnow water; but there is more reason to believe it is owing to the minerals in the mountains through which the waters pafs.

WHEN water is impregnated with foreign bodies, it generally appears by its weight, colour, tafte, fmell, heat, or fome other fenfible quality. Our bufinefs therefore is to chufe fuch water, for common ufe, as is lighteft, and without any particular colour, tafte, or fmell. In most places of Britain the inhabitants have it in their power to make choice of their water; and few things would contribute more to health than a due attention to this article. But mere indolence often induces people to make use of the water water that is nearest to them, without confidering its qualities.

BEFORE water be brought into great towns, the ftrictest attention ought to be paid to its qualities as many difeases may be occasioned or aggravated by bad water; and when once it has been procured at a great expence, people are unwilling to give it up.

The common methods of rendering water clear by filtration, or foft, by exposing it to the fun and air, &c. are fo'generally known, that it is unneceffiry to fpend time in explaining them. We shall only, in general, advise all to avoid waters which stagnate long in finall lakes, ponds, or 'the like, as such waters often become putrid, by the corruption of animal and vegetable bodies with which they abound. Even cattle frequently fuffer by drinking, in dry feasons, water which has stood long in small refervoirs, without being supplied by springs, or freshened with 'showers. All wells ought to be kept clean, and to have a free communication with the air.

As fermented liquors, notwithftanding they have been exclaimed against by many writers, still continue to be the common drink of almost every perfon who can afford them; we shall rather endeavour to affist people in the choice of these liquors, than pretend to condemn what custom has fo firmly established. It is not the moderate use of sound fermented liquors which hurts mankind: it is excess, and using such as are ill-prepared or vitiated.

FERMENTED liquors, which are too ftrong, hurt digeftion; and the body is fo far from being ftrengthened by them, that it is weakened and relaxed. Many imagine, that hard labour could not be fupported ported without drinking ftrong liquors: This is a very erroneous notion. Men who never tafte ftrong liquors are not only able to endure more fatigue, but alfo live much longer, than those who use them daily. But, suppose strong liquors did enable a man to do more work, they must nevertheles waste the powers of life, and occasion premature old age. They keep up a constant fever, which exhausts the string, heats and inflames the blood, and disposes the body to numberles difeases.

But fermented liquors may be too weak as well as too ftrong: When that is the cafe, they muft either be drank new, or they become four and dead; when fuch liquors are drank new, the fermentation not being over, they generate air in the bowels, and occafion flatulencies; and, when kept till ftale, they four on the ftomach, and hurt digeftion. For this reafon all malt-liquors, cyder, &c. ought to be of fuch ftrength as to keep till they be ripe, and then they fhould be ufed. When fuch liquors are kept too long, though they fhould not become four, yet they generally contract a hardnefs, which renders them unwholefome.

ALL families, who can, ought to prepare their own liquors. Since preparing and vending of liquors became one of the most general branches of business, every method has been tried to adulterate them. The great object both to the makers and venders of liquor is, to render it intoxicating. But it is well known that this may be done by other ingredients than those which ought to be used for making it ftrong. It would be imprudent even to name those things which are daily made use of to render liquors heady. Suffice 78

it to fay, that the practice is very common, and that all the ingredients used for this purpose are of a narcotic or stupefactive nature. But, as all opiates are of a poifonous quality, it is easy to see what must be the confequence of their general use. Though they do not killfuddenly, yet they hurt the nerves, relax and weaken the ftomach, and fpoil the digeftion.

WERE fermented liquors faithfully prepared, kept to a proper age, and used in moderation, they would prove real bleffings to mankind. But, while they are ill prepared, various ways adulterated, and taken to excess, they must have many pernicious effects.

WE would recommend it to families, not only to prepare their own liquors, but likewife their bread. Bread is fo neceffary a part of diet, that too much care cannot be bestowed in order to have it found and wholefome. For this purpofe, it is not only neceffary that it be made of good grain, but likewife properly prepared, and kept free from all unwholefome ingredients. This, however, we have reafon to believe, is not always the cafe with bread prepared by those who make a trade of vending it. Their object is rather to pleafe the eye, than to confult the health. The best bread is that which is neither too coarse nor too fine; well fermented and made of wheat flour, or rather of wheat and rye mixed together.

To specify the different kinds of aliment, to explain their nature and properties, and to point out their effects in different constitutions, would far exceed the limits of our defign. Inftead of a detail of this kind, whichwould not be generally underftood, and, of courfe, little attended to, we fhall only mention the following eafy rules with respect to the choice of aliment. PER-

PERSONS, whole folids are weak and relaxed, ought to avoid all viscid food, or fuch things as are hard of digeftion. Their diet, however, ought to be folid; and they should take plenty of exercise in the open ai..

SUCH as abound with blood fhould be fparing in the use of every thing that is highly nourishing, as far meat, rich wines, ftrong ale, and such like. Their food should consist mostly of bread and other vegetable substances; and their drink ought to be water, whey, or small beer.

FAT people fhould not eat freely of oily nourifhing diet. They ought frequently to use raddifh, garlic, fpices, or fuch things as are heating and promote perfpiration and urine. Their drink fhould be water, coffee, tea, or the like; and they ought to take much exercise and little fleep.

Those who are too lean must follow an opposite course.

SUCH as are troubled with acidities, or whole food is apt to four on the ftomach, fhould live much on flefh-meats; and those who are afflicted with hot alkaline eructations, ought to use a diet confisting chiefly of acid vegetables.

PEOPLE who are affected with the gout, low fpirits, hypochondriac, or hyfteric diforders, ought to avoid . all flatulent food, every thing that is vifcid, or hard of digeftion, all falted or finoke-dried provifions, and whatever is auftere, acid, or apt to four on the ftomach. Their food fhould be light, fpare, cool, and of an opening nature.

THE diet ought not only to be fuited to the age and conftitution, but also to the manner of life : A sedentary fedentary or fludious perfon fhould live more fparingly than one who labours hard without doors. Many kinds of food will nourish a peasant very well, which would be almost indigestible to a citizen ; and the latter will live upon a diet on which the former would starve.

DIET ought not to be too uniform. The constant use of one kind of food might have some bad effects. Nature teaches us this, by the great variety of aliment which she has provided for man, and likewife by giving him an appetite for different kinds of food.

Those who labour under any particular difeaie, ought to avoid fuch aliments as have a tendency to increase it : For example, a gouty person should not indulge in rich wines; ftrong foups, or gravies, and should avoid all acids. One who is troubled with the gravel ought to fhun all auftere and aftringent aliments; and those who are fcorbutic should be sparing in the use or animal food, &c.

In the first period of life, our food ought to be light, but nourifhing, and frequently taken. Food that is folid, with a fufficient degree of tenacity, is most proper for the state of manhood. The diet suited to the last period of life, when nature is upon the decline, approaches nearly to that of the first. It should be lighter and more diluting than that of vigorous age, and likewife more frequently taken.

IT is not only neceffary for health that our diet be wholefome, but alfo that it be taken at regular periods. Some imagine long fasting will atone for excess; butthis, inftead of mending the matter, generally makes it worfe. When the ftomach and intestines are overdiftended with food, those lose their proper tone, and, by

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by long failing, shey become weak, and inflated with wind. Thus, either gluttony or failing deftroys the powers of digestion.

THE frequent repetition of aliment is not only neceffary for repairing the continual wafte of our bodies, but likewife to keep the humours found and fweet. Our humours, even in the most healthy state, have a constant tendency to putrefaction, which can only be prevented by frequent supplies of fresh nourishment: When that is wanting too long, the putrefaction often proceeds so far, as to occasion very dangerous fevers. From hence we may learn the neceffity of regular meals. No person can enjoy a good state of health, whose vessels are either frequently overcharged, or the humours long deprived of fresh supplies of chyle.

Long fafting is extremely hurtful to young people; it not only vitiates their humours, but prevents their growth. Nor is it lefs injurious to the aged. Moft perfons, in the decline of life, are afflicted with wind: This complaint is not only increafed, but even rendered dangerous, and often fatal, by long fafting. Old people, when their ftomachs are empty, are frequently feized with giddinefs, head-achs, and faintnefs. Thefe complaints may generally be removed by a bit of bread and a glafs of wine, or taking any other folid food; which plainly points out the method of preventing them.

It is more than probable, that many of the fudden deaths, which happen in the advanced periods of life, are occasioned by fasting too long, as it exhausts the spirits, and fills the bowels with wind; we would therefore advise people, in the decline of life, never

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to allow their flomachs to be too long empty. Many people take nothing but a few cups of tea and a bit of bread, from nine o'clock at night till two or three next afternoon. Such may be faid to fast almost three-fourths of their time. This can hardly fail to ruin the appetite, vitiate the humours, and fill the bowels with wind; all which might be prevented by a folid breakfast.

It is a very common practice to eat a light breakfaft and a heavy fupper. This cuftom ought to be reverfed. When people fup late, their fupper fhould be very light; but the breakfaft ought always to be folid. If any one eats a light fupper, goes foon to bed, and rifes betimes in the morning, he will be fure to find an appetite for his breakfaft, and he may freely indulge it.

THE ftrong and healthy do not indeed fuffer fo much from fafting as the weak and delicate; but they run great hazard from its oppofite, viz. repletion. Many difeafes, efpecially fevers, are the effect of a plethora, or too great fulnefs of the veffels. Strong people, in high health, have generally a great quantity of blood and other humours. When thefe are fuddenly increafed, by an overcharge of rich and nourifhing diet, the veffels become too much diftended, and obfructions and inflammations enfue. Hence fo many people are feized with inflammatory and eruptive fevers, after a feaft or debauch.

ALL great and fudden changes in diet are dangerous. What the ftomach has been long accuftomed to digeft, though lefs wholefome, will agree better with it than food of a more falutary nature which it has not been ufed to. When therefore a change becomes neceffary, neceffary, it ought always to be made gradually; a fudden transition from a poor and low, to a rich and luxurious diet, or the contrary, might fo difturb the functions of the body as to endanger health, or even to occasion death itself.

WHEN we recommend regularity in diet, we would not be underftood as condemning every fmall deviation from it. It is next to impoffible for people at all times to avoid fome degree of excefs, and living too much by rule might make even the fmalleft deviation dangerous. It may therefore be prudent to vary a little, fometimes taking more, fometimes lefs, than the ufual quantity of meat and drink, provided always that regard be had to moderation.

# C H A·P. IV.

#### OF AIR.

UNWHOLESOME air is a very common caufe of difeafes. Few are aware of the danger arifing from it. People generally pay fome attention to what they eat and drink, but feldom regard what goes into the lungs, though the latter proves often more fuddenly fatal than the former.

Air, as well as water, takes up parts of moft bodies with which it comes into contact, and is often fo replenified with those of a noxious quality, as to occasion immediate death. But such violent effects feldom happen, as people are generally on their guard against them. The less perceptible influences of bad air prove more generally hurtful to mankind; we  $G_2$  fhall fhall therefore endeavour to point out fome of thefe, and to fhew from whence the danger chiefly arifes.

AIR may become noxious many ways. Whatever greatly alters its degree of heat, cold, moifture, &c. renders it unwholefome: For example, that which is too hot diffipates the watry parts of the blood, exalts the bile, and renders the whole humours aduft and thick. Hence proceed bilious and inflaminatory fevers, cholera morbus, &c. Very cold air obftructs the perfpiration, conftringes the folids, and condenfes the fluids. It occasions rheumatifms, coughs and catarrhs, with other difeases of the throat and breast. Air that is too moift destroys the elasticity or fpring of the folids, induces phlegmatic or lax conftitutions, and disposes the body to agues, or intermitting fevers, dropsies, &c.

WHEREVER great numbers of people are crowded into one place, if the air has not a free current, it foon becomes unwholefome. Hence it is that delicate perfons are fo apt to turn fick or faint in crowded churches, affemblies, or any place where the air is injured by breathing, fires, candles, or the like.

In great cities fo many things tend to pollute the air, that it is no wonder it proves fo fatal to the inhabitants. The air in cities is not only breathed repeatedly over, but is likewife loaded with fulphur, finoke, and other exhalations, befides the vapours continually arifing from innumerable putrid fubftances, as dunghills, flaughter-houfes, &c. All poffible care fhould be taken to keep the ftreets of large towns open and wide, that the air may have a free current through them. They ought likewife

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to be kept very clean. Nothing tends more to pollute and contaminate the air of a city than dirty ftreets.

It is very common in this country to have churchyards in the middle of populous cities. Whether this be the effect of ancient fuperflition, or owing to the increase of fuch towns, is a matter of no confequence. Whatever gave rife to the custom, it is a bad one. It is habit alone which reconciles us to these things; by means of which the most ridiculous, nay, pernicious customs, often become facred. Certain it is, that thousands of putrid carcasses, fo near the furface of the earth, in a place where the air is confined, cannot fail to taint it; and that fuch air, when breathed into the lungs, must occasion difeases\*.

BURYING within churches is a practice ftill more deteftable. The air in churches is feldom good, and the effluvia from putrid carcaffes muft render it ftill worfe. Churches are commonly old buildings with arched roofs. They are feldom open above once a week, are never ventilated by fires nor open windows, and rarely kept clean. This occafions that damp, mufty, unwholefome finell which one feels upon entering a church, and renders it a very unfafe place for the weak and valetudinary. Thefe inconveniences might, in a great meafure, be obviated, by prohibiting all perfons from burying within churches, by keeping them clean, and permitting a ftream of frefh

\* In most eastern countries it was customary to bury the dead at fome distance from any town. As this practice obtained among the Jews, the Greeks, and also the Romans, it is strange that the western parts of Europe should not have followed their example in a custom fo truly laudable.

air

air to pass frequently through them, by opening opposite doors and windows.

WHEREVER air ftagnates long, it becomes unwholefome. Hence the unhappy perfons confined in jails not only contract malignant fevers themfelves, but often communicate them to others. Nor are many of the holes, for we cannot call them houfes, poffeffed by the poor in great towns, much better than jails. Thefe low dirty habitations are the very lurking-places of bad air and contagious difeafes. Such as live in them feldom enjoy good health; and their children commonly die young. In the choice of a houfe, thofe who have it in their power ought always to pay the greateft attention to open free air.

THE various methods which luxury has invented to make houfes clofe and warm, contribute not a little to render them unwholefome. No houfe can be wholefome unlefs the air has a free paffage through it. For which reafon houfes ought daily to be ventilated, by opening oppofite windows, and admitting a current of fresh air into every room. Beds', instead of being made up as foon as people rife out of them, ought to be turned down, and exposed to the fresh air from the open windows through the day. This would expel any noxious vapour, and could not fail to promote the health of the inhabitants.

IN hofpitals, jails, fhips, &c. where that cannot be conveniently done, ventilators fhould be ufed. The method of expelling foul, and introducing frefh air, by means of ventilators, is a moft falutary invention, and is indeed the moft ufeful of all our modern medical improvements. It is capable of univerfal application, plication, and is fraught with numerous advantages, both to those in health and fickness. In all places, where numbers of people are crowded together, ventilation becomes absolutely necessary.

AIR which ftagnates in mines, wells, cellars, &c. is extremely noxious. That kind of air is to be avoided as the most deadly poison. It often kills almost as quickly as lightning. For this reason, people should be very cautious in opening cellars that have been long shut, or going down into deep wells, or pits, especially if they have been kept close covered \*.

MANY people who have fplendid houfes, chufe to fleep in fmall apartments. This conduct is very imprudent. A bed-chamber ought always to be wellaired; as it is generally occupied in the night only, when all doors and windows are fhut. If a fire be kept in it, the danger from a fmall room becomes ftill greater. Numbers have been ftifled when afleep by a fire in a fmall apartment.

THOSE who are obliged, on account of bulinefs, to fpend the day in clofe towns, ought, if poffible, to fleep in the country. Breathing free air in the night will, in fome meafure, make up for the want of it through the day. This practice would have a greater effect in preferving the health of citizens than is commonly imagined.

\* We have daily accounts of perfons who lofe their lives by going down into deep wells and other places where the air flagnates; all these accidents might be prevented by only letting down a lighted candle before them, and flopping when they perceive it go out; yet this precaution, fimple as it is, is feldom used.

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DELICATE

DELICATE perfons ought, as much as possible, to avoid the air of great towns. It is peculiarly hurtful to the affhmatic and confumptive. Such perfons fhould fly cities as they would do the plague. The hypochondriac are likewife much hurt by it. I have often feen perfons fo much afflicted with this malady while in town, that it feemed impoffible for them to live, who, upon being removed to the country, were immediately relieved. The fame observation holds with regard to nervous and hysteric women. Many people, indeed, have it not in their power to change their fituation in quest of better air. All we can fay to fuch perfons is, that they fhould go as often abroad into the open air as they can, that they fhould admit fresh air frequently into their houses, and take care to keep them very clean.

IT was neceffary in former times, for fafety, to furround cities, colleges, and even fingle houfes, with high walls. Thefe, by obstructing the free current of air, never fail to render such places damp and unwholefome. As such walls are now, in most parts of this country, become useles, they ought to be pulled down, and every method taken to admit a free passage to the air. Proper attention to AIR and CLEANLINESS would tend more to preferve the health of mankind, than all the endeavours of the faculty.

SURROUNDING houfes too clofely with planting, or thick woods, likewife tends to render the air unwholefome. Wood not only obftructs the free current of the air, but fends forth great quantities of moift exhalations, which render it conftantly damp. Wood is very agreeable at a proper diftance from a houfe, but fhould never be planted too near it, efpecially cially in a flat country. Many of the gentlemen's feats in England are rendered very unwholefome from the great quantity of wood which furrounds them.

Houses fituated in low marfhy countries, or near lerge lakes of ftagnating water, are likewife unwholefome. Waters which ftagnate not only render the air damp, but load it with putrid exhalations, which produce the most dangerous and fatal difeafes. Those who are obliged to inhabit marfhy countries, ought to make choice of the dryest fituations they can find, to live generously, and to pay the strictest regard to cleanlines.

IF fresh air be necessary for those in health, it is fill more to for the fick, who often lose their lives for want of it. The notion that fick people must be kept very hot, is to common, that one can hardly enter the chamber where a patient lies, without being ready to faint, by reason of the hot fuffocating fmell. How this must affect the fick any one may judge. No medicine is to beneficial to the fick as fresh air. It is the most reviving of all cordials, if it be administered with prudence. We are not, however, to throw open doors and windows at random upon the fick, Fresh air is to be let into the chamber gradually, and, if possible, by opening the windows of fome other apartment.

THE air of a fick perfon's chamber may be greatly freshened, and the patient much revived, by sprinkling the floor, bed, &c. frequently with vinegar, juice of lemon, or any other strong vegetable acid.

In places where numbers of fick are crowded into the fame house, or, which is often the case, into the fame apartment, the frequent admission of fresh air becomes becomes abfolutely neceffary. Infirmaries, hofpitals, &c. are often rendered fo noxious, for want of proper ventilation, that the fick run more hazard from them than from the difeafe. This is particularly the cafe when putrid fevers, dyfenteries, and other infectious difeafes prevail.

PHYSICIANS, furgeons, and others who attend hofpitals, ought, for their own fafety, to take care that they be properly ventilated. Such perfons as are obliged to fpend most of their time amongst the fick, run great hazard of being themselves infected when the air is bad. All hospitals, and places of reception for the fick, ought to have an open fituation, at fome distance from any great town, and fuch patients as labour under any infectious disease ought never to be fuffered to come near the rest \*.

#### CHAP. V.

#### OF EXERCISE.

MANY people look upon the neceffity man is under of earning his bread by labour, as a curfe. Be this as it may, it is evident from the ftructure of the body, that exercise is not less neceffary than food for the prefervation of health: Those whom poverty obliges to labour for daily bread, are not only

\* A year feldom paffes that we do not hear of fome hofpital phyfician or furgeon, having loft his life by an hofpital fever, caught from his patients. For this they have themfelves alone to blame! Their patients are either in an improper fituation, or they are too carelefs with regard to their own conduct.

the

the most healthy, but generally the most happy part of mankind. Industry feldom fails to place such above want, and activity serves them instead of physic. This is peculiarly the case with those who live by the culture of the ground. The great increase of inhabitants in infant colonies, and the common longevity of such as follow agriculture every where, evidently prove it to be the most healthful as well as the most useful employment.

THE love of activity fhews itfelf very early in man. So ftrong is this principle, that a healthy youth cannot be reftrained from exercife, even by the fear of punifhment. Our love of motion is furely a ftrong proof of its utility. Nature implants no difpofition in vain. It feems to be a catholic law throughout the whole animal creation, that no creature, without exercife, fhould enjoy health, or be able to find fubfiftence. Every creature, except man, takes as much of it as is neceffary. He alone, and fuch animals as are under his direction, deviate from this original law, and they fuffer accordingly.

INACTIVITY never fails to induce an univerfal relaxation of the folids, which difpofes the body to innumerable difeafes. When the folids are relaxed, neither the digeftion, nor any of the fecretions, can be duly performed. In this cafe, the worft confequences muft enfue. How can perfons who loll all day in eafy chairs, and fleep all night on beds of down, fail to be relaxed? Nor do fuch greatly mend the matter, who never ftir abroad but in a coach, fedan, or fuch like. Thefe elegant pieces of luxury are become fo common, that the inhabitants of great towns feem to be in fome danger of lofing the ufe of their their limbs altogether. It is now below any one to walk, who can afford to be carried. How ridiculous would it feem, to a perfon unacquainted with modern luxury, to behold the young and healthy fwinging along on the fhoulders of their fellow-creatures! or to fee a fat carcafe, over-run with difeafes occafioned by inactivity, dragged along the ftreets by half a dozen horfes \*!

GLANDULAR obstructions, now so common, generally proceed from inactivity. These are the most obstinate of maladies. So long as the liver, kidnies, and other glands, duly perform their functions, health is feldom impaired; but, when they fail, nothing can preferve it. Exercise is almost the only cure we know for glandular obstructions; indeed, it does not always fucceed as a remedy; but there is reason to believe that it would feldom fail to prevent these complaints, were it used in due time. One thing is certain, that, amongst those who take sufficient exercise, glandular diseases are very little known; whereas the indolent and inactive are feldom free from them.

WEAK nerves are the conftant companions of inactivity. Nothing but exercise and open air can brace and strengthen the nerves, or prevent the endless train of diseases which proceed from a relaxed state

\* It is not neceffity, but fashion, which makes the use of carriages fo common. There are many people who have not exercife enough to keep their humours from stagnation, who yet dare not venture to make a visit to their next neighbours, but in a coach or sedan, less they should be looked down upon. Strange, that men should be such fools as to be laughed out of the use of their limbs, or to throw away their health, in order to gratify a piece of vanity, or to comply with a ridiculous fashion ! of thefe organs. We feldom hear the active or laborious complain of nervous difeafes; thefe are referved for the fons of eafe and affluence. Many have been completely cured of thefe diforders by being reduced, from a ftate of opulence, to labour for their daily bread. This plainly points out the fources from whence nervous difeafes flow, and the means by which they may be prevented.

It is abfolutely impossible to enjoy health, where the perspiration is not duly carried on; but that can never be the case where exercise is neglected. When the matter which ought to be thrown off by perspiration is retained in the body, it vitiates the humours, and occasions the gout, fevers, rheumatism, &c. Exercise alone would prevent many of those diseases which cannot be cured, and would remove others where medicine proves ineffectual.

A LATE author \*, in his excellent treatife on health, fays, that the weak and valetudinary ought to make exercife a part of their religion. We would recommend this, not only to the weak and valetudinary, but to all whofe business does not oblige them to take fufficient exercise, as fedentary artificers †, shopkeepers,

\* Cheyne.

† Sedentary occupations ought chiefly to be followed by women. They bear confinement much better than men, and are fitter for every kind of bufinefs which does not require much frength. It is ridiculous enough to fee a lufty fellow making pins, needles, or watch-wheels, while many of the laborious parts of hufbandry are carried on by the other fex. The fact is, we want men for laborious employments, while one half of the other fex are rendered ufelefs for want of occupations fuited to their firength, &c. Were girls bred to mechanical employments, we should not fee fuch numbers of them profitute themfelves for bread, keepers, fludious perfons, &c. Such ought to use exercise as regularly as they take food. This might generally be bone without any interruption to business or real loss of time.

No piece of indolence hurts the health more than the modern cultom of lying a bed too long in a morning. This is the general practice in great towns. The inhabitants of cities feldom rife before eight or nine o'clock; but the morning is undoubtedly the best time for exercife, while the ftomach is empty, and the body refreshed with sleep. Besides, the morning air braces and ftrengthens the nerves, and, in fome measure, answers the purpose of a cold bath. Let any one who has been accustomed to lie a-bed till eight or nine o'clock, rife by fix or feven, fpend a couple of hours in walking, riding, or any active diversion without doors, and he will find his spirits cheerful and ferene through the day, his appetite keen, and his body braced and ftrengthened. Cuftom foon renders early rifing agreeable, and nothing contributes more to the prefervation of health.

THE inactive are continually complaining of pains of the flomach, flatulencies, indigeftions, &c. Thefe complaints, which pave the way to many others, are not to be removed by medicines. They can only be cured by a vigorous courfe of exercise, to which indeed they feldom fail to yield.

bread, nor find fuch a want of men for the important purpoles of navigation, agriculture, &c. An eminent filk manufacturer told me, that he found women answer better for that business than men; and that he had lately taken a great many girls apprentices as filk-weavers. I hope his example will be followed by many others.

Exercise,

### OF EXERCISE.

EXERCISE, if possible, ought always to be taken in the open air. When that cannot be done, various methods may be contrived for exercising the body within doors, as the dumb bell, dancing, fencing, &c. It is not necessary to adhere strictly to any particular kind of exercise. The best way is to take them by turns, and to use that longest which is most fuitable to the strength and constitution. These kinds of exercise which give action to most of the bodily organs, are always to be preferred, as walking, running, riding, digging, fwimming, and fuch like.

It is much to be regretted, that active and manly diversions are now so little practifed. Diversions make people take more exercise than they otherwise would do, and are of the greatest fervice to such as are not under the necessity of labouring for their bread. As active diversions lose ground, those of a fedentary kind seem to prevail. Sedentary diversions are of no other use but to confume time. Instead of relieving the mind, they often require more thought than either study or business. Every thing that induces people to fit still, unless it be some necessary employment, ought to be avoided.

THE diversions which afford the best exercise are, hunting, shooting, playing at cricket, hand-ball, golff\*, &c. These exercise the limbs, promote perspiration, and the other secretions. They likewise

• Golff is a diversion very common in North Britain. It is well calculated for exercising the body, and may always be taken in fuch moderation, as neither to over-heat nor fatigue. It has greatly the preference to cricket, tennis, or any of these games which cannot be played without violence.

Arengthen

ftrengthen the lungs, and give firmnels and agility to the whole body.

SUCH as can, ought to fpend two or three hours a-day on horfeback; thofe who cannot ride, should employ the fame time in walking. Exercise should never be continued too long. Over-fatigue prevents the benefit of exercise, and weakens instead of strengthening the body.

EVERY man fhould lay himfelf under fome fort of neceffity to take exercife. Indolence, like other vices, when indulged, gains ground, and at length becomes agreeable. Hence many who were fond of exercife in the early part of life, become quite averfe from it afterwards. This is the cafe of most hypochondriac and gouty people, which renders their difeases in a great measure incurable.

In fome countries laws have been made, obliging every man, of whatever rank, to learn fome mechanical employment. Whether fuch laws were defigned for the prefervation of health, or the encouragement of manufacture, is a queftion of no importance. Certain it is, that if gentlemen were frequently to amufe and exercife themfelves in this way, it might have many good effects. They would at leaft derive as much honour from a few mafterly fpecimens of their own workmanship, as from the character of having ruined most of their companions by gaming or drinking. Besides, men of leifure, by applying themselves to the mechanical arts, might improve them, to the great benefit of fociety.

INDOLENCE not only occasions difeases, and renders men useless to society, but promotes all manner of vice. To fay a man is idle, is little better than calling

calling him vicious. The mind, if not engaged in fome useful purfuit, is constantly in quest of ideal pleasures, or impressed with the apprehension of some imaginary evil. From these sources proceed most of the miseries of mankind. Certainly man was never intended to be idle. Inactivity frustrates the very design of his creation; whereas an active life is the these soft sources, and the greatest preservative cof health.

# CHAP. VI.

# OF SLEEP AND CLOTHING.

SLEEP, as well as diet, ought to be duly regulated. Too little fleep weakens the nerves, exhaufts the fpirits, and occafions difeafes; and too much renders the mind dull, the body grofs, and difpofes to apoplexies, lethargies, and other complaints of a fimilar nature. A medium ought therefore to be obferved; but this is not eafy to fix. Children require more fleep than grown perfons, the laborious than the idle, and fuch as eat and drink freely, than those who live abstemiously. Besides, the real quantity of fleep cannot be measured by time; as one perfon will be more refreshed by five or fix hours fleep, than another by eight or ten.

CHILDREN may always be allowed to take as much fleep as they pleafe; but, for adults, fix or feven hours is certainly fufficient, and no one ought to exceed eight. Those who lie a-bed more than eight hours may flumber, but they can be hardly faid to H fleep;

fleep; fuch generally tofs and dream away the forepart of the night, fink to reft towards morning, and dofe till noon. The beft way to make fleep found and refreshing is to rise betimes. The custom of lying a-bed for nine or ten hours, not only makes the step lefs refreshing, but relaxes the nerves, and greatly weakens the conftitution.

NATURE points out night as the proper feafon for fleep. Nothing more certainly deftroys the conflitution than night-watching. It is great pity that a practice fo deftructive to health fhould be for much in fashion. How quickly the want of rest in due feason will blass the most blooming complexion, or ruin the best constitution, is evident from the ghastly countenances of those who, as the phrase is, turn day into night, and night into day.

To make fleep refreshing, the following things are requisite: First, to take sufficient exercise in the open air, through the day; next, to eat a light supper; and lastly, to lie down with a mind as cheerful and ferene as possible.

It is certain that too much exercife will prevent fleep, as well as too little. We feldom however hear the active and laborious complain of reftlefs nights. It is the indolent and flothful who generally have thefe complaints. Is it any wonder that a bed of down fhould not be refreshing to a perfon who fits all day in an eafy chair ? A great part of the pleasure of life confists in alternate reft and motion; but they who neglect the latter can never relish the former. The labourer enjoys more true luxury in plain food and found fleep, than is to be found in fumptuous tables and downy pillows, where exercise is wanting.

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THAT light fuppers caufe found fleep, is true even to a proverb. Many perfons, if they exceed the leaft at that meal, are fure to have uneafy nights; and, if they fall afleep, the load and oppreffion on their ftomach and fpirits occasion frightful dreams, broken and diffurbed repofe, night-mares, &c. Were the fame perfons to go to bed with a light fupper, or fit up till that meal was pretty well digefted, they would enjoy found fleep, and rife refreshed and cheerful. There are indeed fome people who cannot fleep unlefs they have eat fome folid food at night, but this does not imply the neceffity of a heavy fupper; befides, thefe are generally perfons who have accuftomed themfelves to this method, and who do not take a fufficient quantity of folid food through the day.

NOTHING more certainly difturbs our repofe than anxiety. When the mind is not at eafe, one feldom enjoys found fleep. That greateft of human bleffings flies the wretched, and vifits the happy, the cheerful, and the gay. This is a fufficient reafon why every man fhould endeavour to be as eafy in his mind as poffible when he goes to reft. Many, by indulging grief and anxious thought, have banifhed found fleep fo long, that they could never afterwards enjoy it.

SLEEP, when taken in the fore-part of the night, is generally reckoned more refreshing. Whether this be the effect of habit or not, is hard to fay; but as most people are accustomed to go early to bed when young, it may be prefumed that sleep, at this feason, will prove most refreshing to them ever after. Whether the fore-part of the night be best for sleep or not, furely the fore-part of the day is fittest both for  $H_2$  business

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bufinefs and amufement. I hardly ever knew an early rifer who did not enjoy a good ftate of health \*.

#### Of Clothing.

THE clothing ought to be fuited to the climate. Cuftom has no doubt a very great influence in this article; but no cuftom can ever change the nature of things fo far, as to render the fame clothing fit for an inhabitant of Nova Zembla and the ifland of Jamaica. It is not indeed neceffary to obferve an exact proportion betwixt the quantity of clothes we wear, and the degree of latitude which we inhabit; but, at the fame time, proper attention ought to be paid to it, as well as to the opennels of the country, the frequency and violence of ftorms, &c.

In youth, while the blood is hot and the perfpiration free, it is lefs neceffary to cover the body with a great quantity of clothes; but, in the decline of life, when the fkin becomes rigid and the humours more cool, the clothing fhould be increafed. Many difeafes in the latter period of life proceed from a defect of perfpiration; thefe may, in fome meafure, be prevented by a fuitable addition to the clothing, or by wearing fuch as are better calculated for promoting the difcharge from the fkin, as clothes made of cotton, flannel, &c.

\* Men of every occupation, and in every fituation in life, have lived to a good old age; nay fome have enjoyed this bleffing whofe plan of living was by no means regular: but it confifts with obfervation, that all very old men have been early rifers. This is the only circumftance attending longevity, to which I never knew an exception.

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THE clothing ought likewife to be fuited to the feafon of the year. Clothing may be warm enough for fummer, which is by no means fufficient for winter. The greateft caution, however, is neceffary in making thefe changes. We ought neither to put off our winter clothes too foon, nor to wear our fummer ones too long. In this country, the winter often fets in very early with great rigour, and we have frequently yery cold weather even after the commencement of the fummer months. It would likewife be prudent not to make the change all at once, but to do it gradually; and indeed the changes of apparel in this climate ought to be very inconfiderable, effecially among those who have paffed the meridian of life \*.

CLOTHES often become hurtful by their being made fubfervient to the purpofes of pride or vanity, Mankind in all ages feem to have confidered clothes in this view; accordingly their fashion and figure have been continually varying, with very little regard either to health, the climate, or conveniency: A farthingale, for example, may be very necessfary in hot fouthern climates, but furely nothing can be more ridiculous in the cold regions of the north.

EVEN the human shape is often attempted to be mended by dress, and those who know no better

\* That colds kill more than plagues, is an old obfervation; and, with regard to this country, it holds firifly true. Every perfon of difcernment, however, will perceive, that most of the colds which prove fo destructive to the inhabitants of Britain are owing to their imprudence in changing clothes. A few warm days in March or April induce them to throw off their winter garments, without confidering, that our most penetrating colds generally happen in May.

believe

believe that mankind would be monfters without its affiftance. All attempts of this nature are highly pernicious. The moft deftructive of them in this country is that of fqueezing the ftomach and bowels into as narrow a compass as possible, to procure, what is falfely called, a fine fhape. By this practice the action of the ftomach and bowels, the motion of the heart and lungs, and almost all the vital functions, are obstructed. Hence proceed indigestions, fyncopes, or fainting fits, coughs, confumptions of the lungs, &c.

THE feet likewife often fuffer by preffure. How a fmall foot came to be reckoned genteel, I will not pretend to fay; but certain it is, that this notion has made many perfons lame. Almost nine-tenths of mankind are troubled with corns : a difease that is feldom or never occasioned but by strait shoes. Corns are not only very troublesome, but by rendering people unable to walk, they may likewise be considered as the remote cause of other difeases.

THE fize and figure of the fhoe ought certainly to be adapted to the foot. In children the feet are as well fhaped as the hands, and the motion of the toes as free and eafy as that of the fingers; yet few perfons in the advanced periods of life are able to make any ufe of their toes. They are generally, by narrow fhoes, fqueezed all of a heap, and often laid over one another in fuch a manner as to be rendered

\* We often fee perfons, who are rendered quite lame by the nails of their toes having grown into the flefh, and frequently hear of mortifications proceeding from this caufe. All thefe, and many other inconveniences attending the feet, must be imputed folely to the use of short and strait shoes.

altogether

# OF SLEEP AND CLOTHING. 103

altogether incapable of motion. Nor is the high heel lefs hurtful than the narrow toe. A lady may, feem taller for walking on her tiptoes, but fhe will never walk well in this manner. It ftrains her joints, difforts her limbs, makes her ftoop, and utterly deftroys all her eafe and gracefulnefs of motion : It is entirely owing to fhoes with high heels and narrow toes, that not one female in ten can be faid to walk well.

In fixing on the clothes, due care fhould be taken to avoid all tight bandages. Garters, buckles, &c. when drawn too tight, not only prevent the free motion and use of the parts about which they are bound, but likewise obstruct the circulation of the blood, which prevents the equal nourifhment and growth of these parts, and occasions various difeases. Tight bandages about the neck, as stocks, cravats, necklaces, &c. are extremely dangerous. They obstruct the blood in its course from the brain, by which means headachs, vertigos, apoplexies, and other fatal difeases are often occasioned.

The perfection of drefs is to be eafy and clean. Nothing can be more ridiculous, than for any one to make himfelf a flave to fine clothes. Such a one, and many fuch there are, would rather remain as fixt as a ftatue from morning to night, than difcompofe a fingle hair, or alter the pofition of a pin. We're we to recommend any particular pattern for drefs, it would be that which is worn by the people called Quakers. They are always neat, clean, and often elegant, without any thing fuperfluous. What others lay out upon tawdry laces, ruffles, and ribbands, they beftow upon fuperior cleanlinefs. Finery is only the H 4 affectation

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affectation of drefs, and very often covers a great deal of dirt.

WE shall only add, with regard to clothing, that it ought not only to be fuited to the climate, the feafon of the year, and the period of life; but likewife to the temperature and conftitution. Robust perfons are able to endure either cold or heat better than the delicate; confequently may be lefs attentive to their clothing. But the precife quantity of clothes neceffary for any perfon cannot be determined by reafoning. It is entirely a matter of experience, and every man is the best judge for himfelf what quantity of clothes is neceffary to keep him warm \*.

#### CHAP. VII.

#### OF INTEMPERANCE.

A MODERN author † observes, that temperance and exercise are the two best physicians in the world. He might have added, that if these were duly regarded, there would be little occasion for any other. Temperance may justly be called the parent of health; yet numbers of mankind act as if they

\* The celebrated Boerhaave used to fay, that no body suffered by cold fave fools and beggars; the latter not being able to procure clothes, and the former not having sense to wear them. Prothis as it may, I can with the strictest truth declare, that in many cafes where the powers of medicine had been tried in vain, I have cured the patient by recommending thick shoes, a flannel waistcoat, a pair of under stockings, or a flannel petticoat, to be worn during the cold season at least.

+ Rouffeau.

thought

thought difeafes and death too flow in their progrefs, and by intemperance and debauch, feem, as it were, to folicit their approach.

THE danger of intemperance appears from the very conftruction of the human body. Health depends on that ftate of the folids and fluids which fits them for the due performance of the vital functions; and, while these go regularly on, we are found and well; but whatever diffurbs them neceffarily impairs health. Intemperance, however, never fails to diforder the whole animal œconomy; it hurts the digeftion, relaxes the nerves, renders the different fecretions irregular, vitiates the humours, and occasions numberlefs difeases.

THE analogy between the nourifhment of plants and animals affords a firiking proof of the danger of intemperance. Moifture and manure greatly promote vegetation; yet an over-quantity of either will entirely deftroy it. The beft thing's become hurtful, nay deftructive, when carried to excefs. Hence we learn, that the higheft degree of human wifdom confifts in regulating our appetites and paffions fo as to avoid all extremes. It is that chiefly which entitles us to the character of rational beings. The flave of appetite will ever be the difgrace of human nature.

THE Author of Nature hath endued us with various paffions, for the propagation of the fpecies, the prefervation of the individual, &c. Intemperance is the abufe of thefe paffions; and moderation confifts in the proper regulation of them. Men, not contented with farisfying the fimple calls of Nature, create artificial wants, and are perpetually in fearch of い 見たいしょう

of fomething that may gratify them; but imaginary wants never can be gratified. Nature is content with little; but luxury knows no bounds. Hence the epicure, the drunkard, and the debauchee, feldom ftop in their career, till their money, or their conftitution fails: Then indeed they generally fee their error when too late.

It is impossible to lay down fixt rules with regard to diet, on account of the different conflitutions of mankind. The most ignorant perfon, however, certainly knows what is meant by excess; and it is in the power of every man, if he chooses, to avoid it.

THE great rule of diet is to ftudy fimplicity. Nature delights in the most plain and fimple food, and every animal, except man, follows her dictates. Man alone riots at large, and ranfacks the whole creation in quest of luxuries, to his own destruction. An elegant writer \* of the last age speaks thus of intemperance in diet: "For my part, when I behold a "fashionable table fet out in all its magnificence, I fancy that I see gouts and dropsies, severs and lethargies, with other innumerable distempers, lying "in ambuscade among the distes."

Nor is intemperance in other things lefs deftructive than in diet. How quickly does the immoderate purfuit of carnal pleafures, or the abufe of intoxicating liquors, ruin the beft conflictution! Indeed thefe vices generally go hand in hand. Hence it is that we fo often behold the votaries of Bacchus and Venus, even before they have arrived at the prime of life, worn out with difeafes, and hafting with fwift pace to

\* Addison.

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an untimely grave. Did men reflect on the painful difeafes, and premature deaths, which are daily occafioned by intemperance, it would be fufficient to make them fhrink back with horror from the indulgence even of their darling pleafures.

INTEMPERANCE does not hurt its votaries alone; the innocent too often feel the direful effects of it. How many wretched orphans are to be feen embracing dunghills, whofe parents, regardlefs of the future,fpent in riot and debauch what might have ferved to bring up their offspring in a decent manner? How often do we behold the miferable mother, with her helplefs infants, pining in want, while the cruel father is indulging his infatiate appetites?

FAMILIES are not only reduced to mifery, but even extirpated by intemperance. Nothing tends fo much to prevent propagation, and to fhorten the lives of children, as the intemperance of parents. The poor man who labours all day, and at night lies down contented with his humble fare, can boaft a numerous offspring, while his pampered lord, funk in eafe and luxury, often languifhes without an heir to his ample fortunes. Even ftates and empires feel the influence of intemperance, and rife or fall as it prevails.

INSTEAD of mentioning the different kinds of intemperance, and pointing out their influence upon health, we fhall only, by way of example, make a few obfervations on one particular fpecies of that vice, viz. the abufe of intoxicating liquors.

Every act of intoxication puts Nature to the expence of a fever, in order to difcharge the poilonous draught. When this is repeated almost every day, it is easy to forefee the confequences. That constitution must

must be strong indeed, which is able long to hold out under a daily fever! But fevers occasioned by drinking do not always go off in a day; they frequently end in an inflammation of the breast, liver, or brain, and produce fatal effects.

THOUGH the drunkard fhould not fall by an acute difeafe, he feldom efcapes those of a chronic kind. Intoxicating liquors, when used to excess, weaken the bowels and spoil the digestion; they destroy the power of the nerves, and occasion paralytic and convulsive diforders; they likewise heat and inflame the blood, destroy its balfamic quality, render it unsit for circulation, and the nouriss, and confumptions of the lungs. These are the common ways in which drunkards make their exit. Diseases of this kind, when brought on by hard drinking, feldom admit of a cure.

MANY people injure their health by drinking, who feldom get drunk. The continual habit of foaking, as it is called, though its effects be not fo violent, is not lefs pernicious. When the veffels are kept conftantly full and upon the ftretch, the different digeftions can neither be duly performed, nor the humours properly prepared. Hence most people of this character are afflicted with the gout, the gravel, ulcerous fores in the legs, &c. If these diforders do not appear, they are feized with low spirits, hypochondriacal diforders, and other symptoms of indigestion.

CONSUMPTIONS are now fo common, that it is thought one-tenth of the inhabitants of great towns die of that difeafe. Hard drinking is no doubt one of thorcauses to which we must impute the increase of confump-

confumptions. The great quantities of vifcid maltliquor drank by the common people of England, cannot fail to render the blood fizy and unfit for circulation; from whence proceed obftructions, and inflammations of the lungs. There are few great aledrinkers who are not phthifical.: nor is that to be wondered at, confidering the glutinous and almost indigeftible nature of ftrong ale.

THOSE who drink ardent fpirits or ftrong wines run ftill greater hazard; thefe liquors heat and inflame the blood, and tear the tender veffels of the lungs in pieces; yet fo great is the confumption of them in this country, that one would almost be induced to think the inhabitants lived upon them \*.

THE habit of drinking proceeds frequently from misfortunes in life. The miferable fly to it for relief. It affords them indeed a temporary eafe. But, alas ! this folace is fhort-lived; and when it is over, the fpirits fink as much below their ufual tone as they had before been raifed above it. Hence a repetition of the dofe becomes neceffary, and every fresh dose makes way for another, till the unhappy wretch becomes a flave to the bottle, and at length falls a facrifice to what at first perhaps was taken only as a

\* We may form fome notion of the immenfe quantity of ardent fpirits confumed in Great Britain from this circumftance, that in the city of Edinburgh and its environs, befides the great quantity of foreign fpirits duly entered, and the ftill greater quantity which is fuppofed to be fmuggled, it is computed that above two thousand private ftills are constantly employed in preparing a poisonous liquor called *Molasses*. The common people have got fo univerfally into the habit of drinking this base fpirit, that when a porter or labourer is feen reeling along the ftreets, they fay, be has got melasted.

medicine.

medicine. No man is fo dejected as the drunkard when his debauch is gone off. Hence it is, that those who have the greatest flow of spirits while the glass circulates freely, are of all others the most melancholy when sober, and often put an end to their own miserable existence in a fit of spleen or ill humour.

DRUNKENNESS not only proves deftructive to health, but likewife to the faculties of the mind. It is ftrange that creatures who value themfelves on account of a fuperior degree of reafon to that of brutes, fhould take pleafure in finking fo far below them. Were fuch as voluntarily deprive themfelves of the ufe of reafon, to continue ever after in that condition, it would feem but a juft punifhment. Though this be not the confequence of one act of intoxication, it feldom fails to fucceed a courfe of it. By a habit of drinking, the greateft genius is often reduced to a mere idiot \*.

INTOXICATION is peculiarly hurtful to young perfons. It heats their blood, impairs their ftrength,

\* It is amazing that our improvements in arts, learning, and politenefs have not put the barbarous cuftom of drinking to excefs out of fashion. It is indeed lefs common in South Britain than it was formerly; but it still prevails very much in the North, where this relic of barbarity is mistaken for hospitality. There no man is supposed to entertain his guests well, who does not make them drunk. Forcing people to drink, is certainly the greatest piece of rudeness that any man can be guilty of. Manliness, complaifance, or mere good-nature, may induce a man to take his glass, if urged to it at a time when he might as well take poison. The custom of drinking to excess has long been out of fashion in France; and, as it begins to lose ground among the politer part of the English, we hope it will foon be banished from every part of this island.

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### OF CLEANLINESS.

and obstructs their growth; besides, the frequent use of strong liquors in the early part of life destroys anybenefit that might arise from them afterwards. Those who make a practice of drinking generous liquors when young, cannot expect to reap any benefit from them as a cordial in the decline of life.

DRUNKENNESS is not only in itfelf a most abominable vice, but is an inducement to many others. There is hardly any crime fo horrid that the drunkard will not perpetrate for the love of liquor. We have known mothers fell their children's clothes, the food that they should have eat, and afterwards even the children themsfelves, in order to purchase the accurfed draught.

### C H A P. VIII.

#### OF CLEANLINESS.

HE want of cleanlinefs is a fault which admits of no excufe. Where water can be had for nothing, it is furely in the power of every perfon to be clean. The continual difcharge from our bodies by perfpiration renders frequent change of apparel neceffary. Changing apparel greatly promotes the fecretion from the fkin, fo neceffary for health. When that matter which ought to be carried off by perfpiration, is either retained in the body, or reforbed from dirty clothes, it must occasion difeafes.

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THE itch, and feveral other difeafes of the fkin, are chiefly owing to want of cleanlinefs \*. They may indeed be caught by infection, or brought on by poor living, unwholefome food, &c. but they will feldom continue long where cleanlinefs prevails. To the fame caufe muft we impute the various kinds of vermin which infeft the human body, houfes, &c. Thefe may always be banifhed by cleanlinefs alone, and wherever they abound, we have reafon to believe it is neglected.

ONE common caufe of putrid and malignant fevers is the want of cleanlinefs. Thefe fevers commonly begin among the inhabitants of clofe dirty houfes, who breathe unwholefome air, take little exercife, and wear dirty clothes. There the infection is generally hatched, which often fpreads far and wide, to the deftruction of many. Hence cleanlinefs may be confidered as an object of public attention. It is not fufficient that I be clean myfelf, while the want of it in my neighbour affects my health as well as his own. If dirty people cannot be removed as a common nuifance, they ought at leaft to be avoided as infectious. All who regard their health fhould keep at a diftance even from their habitations.

In places where great numbers of people are collected, cleanliness becomes of the utmost importance.

\* Mr. Pot, in his furgical obfervations, mentions a difeafe which he calls the chimney-fweepers cancer, as it is almost peculiar to that unhappy fet of people. This he attributes to neglect of cleanlinefs, and with great justice. I am convinced, if that part of the body which is the feat of this cruel difeafe was kept clean by frequent washing, it would never happen.

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It is well known, that infectious difeafes are communicated by tainted air. Every thing, therefore, which tends to pollute the air, or fpread the infection, ought with the utmost care to be guarded against. For this reason, in great towns, no filth, of any kind, should be permitted to lie upon the ftreets. Nothing is more apt to convey infection than the excrements of the difeafed.

In many great towns the ftreets are little better than dunghills, being frequently covered with afhes, dung, and naftinefs of every kind. Even flaughterhoufes, or killing fhambles, are often to be feen in the very centre of great towns. The putrid blood, texcrements, &c. with which thefe places are generally covered, cannot fail to taint the air, and render it unwholefome. How eafily might this be prevented by active magiftrates, who have it atways in their power to make proper laws relative to things cof this nature, and to enforce the obfervance of them !

WE are forry to fay, that the importance of general cleanlinefs does not feem to be fufficiently underflood by the magistrates of most great towns in Britain; though health, pleasure, and delicacy, all confpire to recommend an attention to it. Nothing can be more agreeable to the fenses, more to the honour of the inhabitants, or more conducive to their health, than a clean town; nor can any thing impress a stranger with a more difrespectful idea of any people than its opposite. Whatever pretensions people may make to learning, politeness, or civilization, we will I venture to affirm, that fo long as they neglect cleanlinefs, they are in a state of barbarity\*.

THE peafants in most countries feem to hold cleanlinefs in a fort of contempt. Were it not for the open fituation of their houfes, they would often feel the bad effects of this disposition. One feldom sees a farm-house without a dunghill before the door, and frequently the cattle and their masters lodge under the fame roof. Peasants are likewise extremely careless with respect to change of apparel, keeping their houses, &c. clean. This is merely the effect of indolence and a dirty disposition. Habit may indeed render it less disagreeable to them, but no habit can ever make it falutary to wear dirty clothes, or breathe unwholesome air.

As many articles of diet come through the hands of peafants, every method fhould be taken to encourage and promote habits of cleanlinefs among them. This, for example, might be done by giving a fmall premium to the perfon who brings the cleaneft and beft article of any kind to market, as butter, cheefe, &c. and by punifhing feverely those who bring it

• In ancient Rome the greatest men did not think cleanliness an object unworthy of their attention. Pliny fays, the *Cleace*, or common fewers for the conveyance of filth and nastiness from the city, were the greatest of all the public works; and bestows higher encomiums upon Tarquinius, Agrippa, and others who made and improved them, than on those who atchieved the greatest conquests.

How truly great does the Emperor Trajan appear, when giving directions to Pliny his proconful, concerning the making of a common fewer for the health and convenience of a conquered city?

dirty.

dirty. The fame method fhould be taken with butchers, bakers, brewers, and all who are employed in preparing the neceffaries of life.

In camps the firicteft regard fhould be paid to cleanlinefs. By negligence in this matter, infectious difeafes are often fpread amongft a whole army; and frequently more die of thefe than by the fword. The Jews, during their encampments in the wildernefs, received particular inftructions with refpect to cleanlinefs\*. The rules enjoined them ought to be obferved by all in the like fituation. Indeed the whole fyftem of laws delivered to that people has a manifeft tendency to promote cleanlinefs. Whoever confiders the nature of their climate, and the difeafes to which they are liable, will fee the propriety of fuch laws.

It is remarkable, that, in most eastern countries, cleanliness makes a great part of their religion. The Mahometan, as well as the Jewish religion, enjoins various bathings, washings, and purifications. No doubt these might be designed to represent inward purity; but they were at the same time calculated for the preservation of health. However whimssical these washings may appear to some, few things would tend more to prevent diseases than a proper attention to many of them. Were every person, for example, after visiting the solve, handling a dead body, or touching any thing that might convey infection, to

\* Thou shalt have a place also without the camp, whither thou is the falt go forth abroad: and thou shalt have a paddle upon thy weapon: and it shall be when thou shalt case thyself abroad, thou shalt dig therewith, and shalt turn back, and cover that which cometh from thee, &c. Deuter. chap. xxiii. ver. 12, 13. I 2 wash wash before he went into company, or sat down to meat, he would run lefs hazard either of catching the infection himfelf, or of communicating it to others.

FREQUENT washing not only removes the filth and fordes which adhere to the fkin, but likewife promotes the perfpiration, braces the body, and enlivens the fpirits. How refreshed, how cheerful, and agreeable does one feel on being fhaved, washed, and fhifted; especially when these offices have been neglected longer than ufual!

THE eastern custom of washing the feet, though less necessary in this country, is nevertheless a very agreeable piece of cleanlinefs, and contributes greatly to the prefervation of health. The fweat and dirt with which these parts are frequently covered, cannot fail to obstruct the perspiration. This piece of cleanlinefs would often prevent colds and fevers. Were people careful to bathe their feet and legs in lukewarm water at night, after being exposed to cold or wet through the day, they would feldom experience the ill effects which often proceed from thefe caufes.

A PROPER attention to cleanlines is no where more neceffary than on shipboard. If epidemical distempers break out there, no one can be fafe. The best way to prevent them, is to take care that the whole company be cleanly in their clothes, bedding, &c. When infectious difeases do break out, cleanlines is the most likely means to prevent their spreading: it is likewife neceffary to prevent their returning afterwards, or being conveyed to other places. For this purpofe, the clothes, bedding, &c. of the fick ought to be carefully washed, and fumigated with brimstone.

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ftone. Infection will lodge a long time in dirty clothes, and afterwards break out in the most terrible manner.

In places where great numbers of fick people are collected together, cleanlinefs ought to be moft religioufly obferved. The very fmell in fuch places is often fufficient to make one fick. It is eafy to imagine what effect that is likely to have upon the difeafed. In an hofpital or infirmary, where cleanlinefs is neglected, a perfon in perfect health has a greater chance to become fick, than a fick perfon has to get well.

Few things are more unaccountable than that neglect, or rather dread of cleanlines, which appears among those who have the care of the fick; they think it almost criminal to fuffer any thing that is clean to come near a person in a fever, for example, and would rather allow him to wallow in all manner of filth than change the least bit of his linen. If cleanliness be necessary for persons in health, it is certainly more fo for the fick. Many difeases may be cured by cleanlinefs alone; most of them might be mitigated by it; and, where it is neglected, the slightest diforders are often changed into the most malignant. The fame miftaken care which prompted people to prevent the least admission of fresh air to the fick, feems likewife to have induced them to keep them dirty. Both these destructive prejudices will, we hope, be foon entirely exploded.

CLEANLINESS is certainly agreeable to our nature. We cannot help approving it in others, even though we fhould not practife it ourfelves. It fooner attracts our regard than even finery itfelf, and often gains I 3 effeem efteem where that fails. It is an ornament to the higheft as well as the loweft flation, and cannot be difpenfed with in either. Few virtues are of more importance to fociety than real cleanlinefs. It ought to be carefully cultivated every where; but, in populous cities, it fhould be almost revered \*.

#### CHAP. IX.

#### OF INFECTION.

**MOST** difeafes are infectious. Every perfon ought therefore, as far as he can, to avoid all communication with the difeafed. The common practice of vifiting the fick, though often well meant, has many ill confequences. Far be it from us to difcourage any act of charity or benevolence, especially towards those in distrefs; but we cannot help blaming fuch as endanger their own or their neighbours lives by a mistaken friendship, or an impertinent curiofity.

THE houses of the fick, especially in the country, are generally crowded from morning till night with

\* As it is impossible to be thoroughly clean without a fufficient quantity of water, we would earnestly recommend it to the magistrates of great towns to be particularly attentive to this article. Most great towns in Britain are fo fituated as to be easily supplied with water; and those perfons who will not make a proper use of it, after it is brought to their hand, certainly deferve to be feverely punished. The fireets of great towns, where water can be had, ought to be washed every day. This is the only effectual method for keeping them thoroughly clean; and, upon trial, we are perfuaded, it will be found the cheapest.

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idle vifitors. It is cuftomary, in fuch places, for fervants and young people to wait upon the fick by turns, and even to fit up with them all night. It would be a miracle indeed fhould fuch always efcape. Experience teaches us the danger of this conduct. People often catch fevers in this way, and communicate them to others, till at length they become epidemic.

IT would be thought highly improper, for one who had not had the small-pox, to wait upon a patient in that disease; yet many other fevers are almost as infectious as the finall-pox, and not lefs fatal. Some imagine, that fevers prove more fatal in villages than in great towns, for want of proper medical affistance. This may fometimes be the cafe; but we are inclined to think it oftener proceeds from the cause above mentioned.

WERE a plan to be laid down for communicating infection, it could not be done more effectually than by the common method of vifiting the fick. Such vifitors not only endanger themfelves and their connexions, but likewife hurt the fick. By crowding the house, they render the air unwholesome, and by their private whilpers and difmal countenances difturb the imagination of the patient, and depress his fpirits. Perfons who are ill, efpecially in fevers, ought to be kept as quiet as possible. The fight of ftrange faces, and every thing that difturbs the mind, hurts them.

THE common practice in country-places of inviting great numbers of people to funerals, and crowding them into the fame apartment where the corpfe lies, is another way of spreading infection. The infection 14 does

#### OF INFECTION.

does not always die with the patient. In many cafes it rather grows ftronger as the body becomes putrid. This is peculiarly the cafe of thofe who die of malignant fevers, or other putrid difeafes. Such ought not to lie long unburied; and people fhould keep, as much as poffible, at a diffance from them.

It would tend greatly to prevent the fpreading of infectious difeafes, if those in health were kept at a proper diftance from the fick. The Jewish Legislator, among many other wife inftitutions for preferving health, has been peculiarly attentive to the means of preventing infection, or *defilement* as it is called, either from a difeased person or a dead body. In many cases the difeased were to be separated from those in health; and it was deemed a crime even to approach their habitations. If a person only touched a difeased or dead body, he was appointed to wash himself in water, and to keep for some time at a diffance from fociety.

INFECTIOUS difeafes are often communicated by clothes. It is extremely dangerous to wear apparel which has been worn by the deceafed, unlefs it has been well wafhed and fumigated, as infection may lodge a long time in it, and afterwards produce very tragical effects. This fhews the danger of buying at random the clothes which have been ufed by other people.

INFECTIOUS diforders are frequently imported. Commerce, together with the riches of foreign climes, brings us alfo their difeafes. Thefe do often more than counterbalance all the advantages of that trade by means of which they are introduced. It is to be regretted, that fo little care is commonly beftowed, either to prevent the introduction or fpreading of infectious

infectious diseases. Some attention indeed is generally paid to the plague; but other diseases pass unregarded \*.

INFECTION is often fpread in cities by jails, hofpitals, &c. Thefe are frequently fituated in the very middle of populous towns; and when infectious difeafes break out in them, it is impoffible for the inhabitants to efcape. Did magistrates pay any regard to the health of the people, this evil might be eafily remedied.

MANY are the caufes which tend to diffufe infection through populous cities. The whole atmosphere of a large town is one contaminated mass, abounding with various kinds of infection, and must be pernicious to health. The best advice that we can give to fuch as are obliged to live in large cities, is, to chuse an open fituation; to avoid narrow, dirty, crowded streets; to keep their own houses and offices clean; and to be as much abroad in the open air as their time will permit.

\* Were the tenth part of the care taken to prevent the importation of difeafes, that there is to prevent fmuggling, it would be attended with many happy confequences. This might eafily be done by appointing a phyfician at every confiderable fea-port, to infpect the fhip's company, paffengers, &c. before they came afhore, and, if any fever or other infectious diforder prevailed, to order the fhip to perform a fhort quarantine, and to fend the fick to fome hofpital or proper place to be cured. He might likewife order all the clothes, bedding, &c. which had been ufed by the fick during the voyage, to be either deftroyed, or thoroughly cleanfed by fumigation, &c. before any of it were fent afhore. A fcheme of this kind, if properly conducted, would prevent many fevers, and other infectious difeafes, from being brought by failors into fea-port towns, and by this means diffufed all over the country. It would tend greatly to prevent the fpreading of infectious difeafes, were proper nurfes every where employed to take care of the fick. This might often fave a family, or even a whole town, from being infected by one perfon. We do not mean that people fhould abandon their friends or relations in diftrefs, but only to put them on their guard againft being too much in company with thofe who are afflicted with difeafes of an infectious nature.

SUCH as wait upon the fick in infectious difeafes, run very great hazard. They fhould ftuff their nofes with tobacco, or fome other ftrong fmelling herb, as rue, tanfy, or the like. They ought likewife to keep the patient very clean, to fprinkle the room where he lies with vinegar, or other ftrong acids, frequently to admit a ftream of frefh air into it, and to avoid the fmell of his breath as much as they can. They ought never to go into company without having changed their clothes and wafhed their hands; otherwife, if the difeafe be infectious, they will in all probability carry the contagion along with them \*.

However trifling it may appear to inconfiderate perfons, we will venture to affirm, that a due atten-

\* There is reafon to believe that infection is often conveyed from one place to another by the careleffnefs of the faculty themfelves. Many phyficians affect a familiar way of fitting upon the patient's bedfide, and holding his arm for a confiderable time. If the patient has the fmall-pox, or any other infectious difeafe, there is no doubt but the doctor's hands, clothes, &c. will carry away fome of the infection; and, if he goes directly to vifit another patient without wafhing his hands, changing his clothes, or being expofed to the open air, which is not feldom the cafe, is it any wonder that he fhould carry the difeafe along with him? Phyficians not only endanger others, but alfo themfelves, by this practice. And, indeed, they fometimes fuffer for their want of care.

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tion to those things which tend to diffuse infection would be of great importance in preventing diseases. As most diseases are in some degree infectious, no one should continue long with the sick, except the necessary attendants. I mean not, however, by this caution, to deter those whose duty or office leads them to wait upon the sick, from such a laudable and necessary employment.

MANY things are in the power of the magistrate which would tend to prevent the fpreading of infection; as the promoting of public cleanlinefs; removing jails, hospitals, church-yards, and other places where infection may be generated, at a proper diftance from great towns \*; widening the ftreets; pulling down useless walls, and taking all methods to promote a free circulation of air through every part of the town, &c. Public hospitals, or proper places of reception for the fick, provided they were kept clean, well ventilated, and placed in an open fituation, would likewife tend to prevent the fpreading of infection. Such places of reception would prevent the poor, when fick, from being vifited by their idle or officious neighbours. They would likewife render it unneceffary for fick fervants to be kept in their masters houses. Masters had better pay for having their fervants taken care of in an hospital, than run the hazard of having an infectious difeafe diffufed among a numerous family. Sick fervants and poor people, when placed in hospitals, are not only less apt to diffuse infection among their neighbours, but have likewife the advantage of being well attended.

\* The ancients would not fuffer even the Temples of their gods, where the fick reforted, to be built within the walls of a city.

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WE are not, however, to learn that hospitals, inftead of preventing infection, may become the means of diffusing it. When they are placed in the middle of great towns; when numbers of patients are crowded together into fmall apartments; when there is a conftant communication kept up between the citizens and the patients; and when cleanlinefs and ventilation are neglected, they become nefts for hatching difeafes, and every one who goes into them not only runs a rifk of receiving infection himfelf, but likewife of communicating it to others. This, however, is not the fault of the hospitals, but of those who have the management of them. It were to be wished, that they were both more numerous, and upon a more respectable footing, as that would induce people to go into them with lefs reluctance. This is the more to be defired, because most of the putrid fevers and other infectious diforders break out among the poor, and are by them communicated to the better fort. Were proper attention paid to the first appearances of fuch diforders, and the patients early conveyed to an hospital, we should feldom see a putrid fever, which is almost as infectious as the plague, become epidemic.

#### CHAP. X.

## OF THE PASSIONS.

THE paffions have great influence both in the caufe and cure of difeafes. How the mind affects the body, will, in all probability, ever remain a fecret. It is fufficient for us to know, that there is established a reciprocal influence betwixt the mental

## OF THE PASSIONS.

tal and corporeal parts, and that whatever injures the one diforders the other.

#### Of Anger.

THE paffion of *anger* ruffles the mind, difforts the countenance, hurries on the circulation of the blood, and diforders the whole vital and animal functions. It often occafions fevers, and other acute difeafes; and fometimes even fudden death. This paffion is peculiarly hurtful to the delicate, and those of weak nerves. I have known fuch perfons frequently lose their lives by a violent fit of anger, and would advise them to guard against the excess of this passion with the utmost care.

It is not indeed always in our power to prevent being angry; but we may furely avoid harbouring refentment in our breaft. Refentment preys upon the mind, and occasions the most obstinate chronical diforders, which gradually waste the constitution. Nothing shews true greatness of mind more than to forgive injuries: it promotes the peace of fociety, and greatly conduces to our own ease, health, and felicity.

SUCH as value health fhould avoid violent gufts of anger, as they would the moft deadly poifon. Neither ought they to indulge refertment, but to endeavour at all times to keep their minds calm and ferene. Nothing tends fo much to the health of the body as a conftant tranquillity of mind.

#### Of Fear.

THE influence of *fear*, both in occalioning and aggravating difeafes, is very great. No man ought to be blamed for a decent concern about life; but too great

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great a defire to preferve it, is often the caufe of lofing it. Fear and anxiety, by depreffing the fpirits, not only difpofe us to difeafes, but often render those difeafes fatal which an undaunted mind would overcome.

SUDDEN fear has generally violent effects. Epileptic fits, and other convultive diforders, are often occafioned by it. Hence the danger of that practice, fo common among young people, of frightening one another. Many have loft their lives, and others have been rendered miferable, by frolics of this kind. It is dangerous to tamper with the human paffions. They may eafily be thrown into fuch diforder as never again to act with regularity.

But the gradual effects of fear prove more generally hurtful. The conftant dread of fome future evil, by dwelling upon the mind, often occafions the very evil itfelf. Hence it comes to pafs, that fo many die of thofe very difeafes of which they long had a dread, or which had been imprefied on their minds by fome accident, or foolifh prediction. This, for example, is often the cafe with women in childbed. Many of thofe who die in that fituation are imprefied with the notion of their death a long time before it happens; and there is reafon to believe, that this imprefion is often the caufe of it.

THE methods taken to imprefs the minds of women with apprehensions of the great *pain* and *peril* of child-birth, are very hurtful. Few women die in labour, though many lose their lives after it; which may be thus accounted for. A woman after delivery, finding herself weak and exhausted, immediately apprehends she is in danger; but this fear feldom fails

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to obstruct the necessary evacuations upon which her recovery depends. Thus the fex often fall a facrifice to their own imaginations, when there would be no danger, did they apprehend none.

It feldom happens that two or three women, in a great town, die in child-bed, but their death is followed by many others. Every woman of their acquaintance, who is with child, dreads the fame fate, and the difeafe becomes epidemical by the mere force of imagination. This fhould induce pregnant women to defpife fear, and by all means to avoid those tattling goffips who are continually buzzing in their ears the misfortunes of others. Every thing that may in the leaft alarm a pregnant, or child-bed woman, ought with the greatest care to be guarded against.

MANY women have loft their lives in child-bed by the old fuperfitious cuftom, ftill kept up in moft parts of Britain, of tolling the parifh bell for every perfon who dies. People who think themfelves in danger are very inquifitive; and if they come to know that the bell tolls for one who died in the fame fituation with themfelves, what muft be the confequence ? At any rate, they are apt to fuppofe that this is the cafe, and it will often be found a very difficult matter to perfuade them of the contrary.

But this cuftom is not pernicious to child-bed women only. It is hurtful in many other cafes. When low fevers, in which it is difficult to fupport the patient's fpirits, prevail, what muft be the effect of a funeral peal founding five or fix times a day in his ears? No doubt his imagination will fuggeft, that others died of the fame difeafe under which he labours. This apprehenfion will have a greater tendency

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ency to depress his spirits, than all the cordials of which medicine can boast will have to raise them.

IF this ufelefs piece of ceremony cannot be abolifhed, we ought to keep the fick as much from hearing it as poffible, and from every other thing that may tend to alarm them. So far however is this from being generally attended to, that many make it their bufinefs to vifit the fick, on purpofe to whifper difmal ftories in their ears. Such may pafs for fympathifing friends, but they ought rather to be confidered as enemies. All who wifh well to the fick, ought to keep fuch perfons at the greateft diffance from them.

A custom has long prevailed among phyficians, of prognosticating, as they call it, the patient's fate, or foretelling the iffue of the difeafe. Vanity no doubt introduced this practice, and still supports it, in spite of common fense and the fafety of mankind. I have known a phyfician barbarous enough to boaft, that he pronounced more fentences than all his Majefty's judges. Would to God that fuch fentences were not often equally fatal! It may indeed be alleged, that the doctor does not declare his opinion before the patient. So much the worfe. A fenfible patient had better hear what the doctor fays, than learn it from the difconfolate looks, the watery eyes, and the broken whilpers of those about him. It feldom happens, when the doctor gives an unfavourable opinion, that it can be concealed from the patient. The very embarrassment which the friends and attendants shew in difguifing what he has faid, is generally fufficient to discover the truth.

KIND Heaven has, for the wifest ends, concealed from mortals their fate; and we do not fee what right any man

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inan has to announce the death of another, especially if fuch a declaration has a chance to kill him. Mankind are indeed very fond of prying into future events, and feldom fail to folicit the physician for his opinion. A doubtful answer, however, or one that may tend rather to encourage the hopes of the fick, is furely the most fafe. This conduct could neither hurt the patient nor the physician. Nothing tends more to destroy the credit of physic than those bold prognosticators, who, by the bye, are generally the most ignorant of the faculty. The mittakes which daily happen in this way are fo many ftanding proofs of human vanity, and the weakness of fcience.

WE readily admit, that there are cafes where the phyfician ought to give intimation of the patient's danger to fome of his near connexions; though eventhis ought always to be done with the greateft caution: hut it never can be neceffary in any cafe that the whole town and country fhould know, immediately after the doctor has made his firft vifit, *that he has no hopes* of his patient's recovery. Perfons whofe impertinent curiofity leads them to queftion the phyfician with regard to the fate of his patient, certainly deferve no' better than an evafive anfwer.

THE vanity of foretelling the fate of the fick is not peculiar to the faculty. Others follow their example, and thofewho think themfelves wifer than their neighbours often do much hurt in this way. Humanity furely calls upon every one to comfort the fick, and not to add to their affliction by alarming their fears. A friend, or even a phyfician, may often do more good by a mild and fympathizing behaviour than by medicine, and fhould never neglect to administer that greateft of all cordials, HOPE.

Of

### Of Grief.

GRIEF is the most deftructive of all the passions. Its effects are permanent, and when it finks deep into the mind, it generally proves fatal. Anger and fear being of a more violent nature, feldom last long; but grief often changes into a fixed melancholy; which preys upon the spirits, and wastes the conftitution. This passion ought not to be indulged. It may generally be conquered at the beginning; but when it has gained strength, all attempts to remove it are vain.

No perfon can prevent misfortunes in life; but it fhews true greatnefs of mind to bear them with ferenity. Many perfons make a merit of indulging grief, and, when misfortunes happen, they obftinately refufe all confolation, till the mind, overwhelmed with melancholy, finks under the load. Such conduct is not only deftructive to health, but inconfiftent with reafon, religion, and common fenfe.

CHANGE of ideas is as neceffary for health as change of pofture. When the mind dwells long upon one fubject, efpecially of a difagreeable nature, it hurts the whole functions of the body. Hence grief indulged fpoils the digeftion and deftroys the appetite; by which means the fpirits are depreffed, the nerves relaxed, the bowels inflated with wind, and the humours, for want of fresh fupplies of chyle, vitiated. Thus many an excellent conflictution has been ruined by a family-misfortune, or any thing that occasions excellive grief.

IT is utterly impossible, that any perfon of a dejected mind should enjoy health. Life may indeed be

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be dragged out for a few years: But whoever would live to a good old age, must be good-humoured and cheerful. This indeed is not altogether in our own power; yet our temper of mind, as well as our actions, depend greatly upon ourfelves. We can either affociate with cheerful or melancholy companions; mingle in the amufements and offices of life, or fit ftill and brood over our calamities, as we choofe. Thefe, and many fuch things, are certainly in our power, and from thefe the mind generally takes its caft.

THE variety of scenes which prefent themselves to the fenses, were certainly defigned to prevent our attention from being too long fixed upon any one object. Nature abounds with variety, and the mind, unless fixed down by habit, delights in contemplating new objects. This at once points out the method of relieving the mind in distress. Turn the attention frequently to new objects. Examine them for some When the mind begins to recoil, shift the time. scene. By this means a conftant fucceffion of new ideas may be kept up, till the difagreeable ones entirely difappear. Thus travelling, the fludy of any art or science, reading or writing on such subjects as deeply engage the attention, will sooner expel grief than the most sprightly amusements.

It has already been obferved, that the body cannot be healthy unlefs it be exercifed; neither can the mind. Indolence nourifhes grief. When the mind has nothing elfe to think of but calamities, no wonder that it dwells there. Few people who purfue bufinefs with attention are hurt by grief. Inftead therefore of abstracting ourfelves from the world or bufinefs, when misfortunes happen, we ought to  $K_2$  engage

### OF THE PASSIONS.

engage in it with more than ufual attention, to difcharge with double diligence the functions of our ftation, and to mix with friends of a cheerful and focial temper.

INNOCENT amufements are by no means to be neglected. Thefe, by leading the mind infenfibly to the contemplation of agreeable objects, help to difpel the gloom which mifortunes caft over it. They make time feem lefs tedious, and have many other happy effects.

Some perfons, when overwhelmed with grief, betake themfelves to drinking. This is making the cure worfe than the difeafe. It feldom fails to end in the ruin of fortune, character, and conftitution.

### Of Love.

Love is perhaps the ftrongeft of all the paffions; at leaft, when it becomes violent, it is lefs fubject to the controul either of the understanding or will, than any of the reft. Fear, anger, and feveral other paffions are neceffary for the prefervation of the individual, but love is neceffary for the continuation of the fpecies itself: It was therefore proper that this passion should be deeply rooted in the human breast.

THOUGH love be a ftrong paffion, it is feldom fo rapid in its progrefs as feveral of the others. Few perfons fall defperately in love all at once. We would therefore advife every one, before he tampers with this paffion, to confider well the probability of his being able to obtain the object of his love. When that is not likely, he fhould avoid every occasion of increasing it. He ought immediately to fly the company

pany of the beloved object; to apply his mind attentively to bufinefs or fludy; to take every kind of amufement; and, above all, to endeavour, if poffible, to find another object which may engage his affections, and which it may be in his power to obtain.

THERE is no passion with which people are fo ready to tamper as love, although none is more dangerous. Some men make love for amusement, others from mere vanity, or on purpose to shew their confequence with the fair. This is perhaps the greatest piece of cruelty which any one can be guilty of. What we eagerly wish for, we easily credit. Hence the too credulous fair are often betrayed into a situation which is truly deplorable, before they are able to discover that the pretended lover was only in jest. But there is no jesting with this passion. When love is got to a certain height, it admits of no other cure but the possible to be obtained \*.

#### Of Religious Melancholy.

MANY perfons of a religious turn of mind behave as if they thought it a crime to be cheerful. They

• The conduct of parents with regard to the difpofal of their children in marriage is often very blameable. An advantageous match is the conftant aim of parents; while their children often fuffer a real martyrdom betwixt their inclinations and duty. The first thing which parents ought to confult, in difposing their children in marriage, is certainly their inclinations. Were due regard always paid to these, there would be fewer unhappy couples, and parents would not have so often cause to repent the severity of their conduct, after a ruined constitution, a lost character, or a distracted mind, has shewn them their mistake.

imagine

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imagine the whole of religion confifts in certain mortifications, or denying themfelves the fmalleft indulgence, even of the moft innocent amufements. A perpetual gloom hangs upon their countenances, while the deepeft melancholy preys upon their minds. At length the faireft profpects vanish, every thing puts on a difinal appearance, and those very objects which ought to give delight afford nothing but difgust. Life itself becomes a burden, and the unhappy wretch, perfuaded that no evil can equal whathe feels, often puts an end to his own miserable existence.

It is great pity that ever religion should be fo far perverted, as to become the cause of those very evils which it was designed to cure. Nothing can be better calculated than *True Religion*, to raise and support the mind of its votaries under every affliction that can befal them. It teaches them, that even the sufferings of this life are preparatory to the happines of the next; and that all who persist in a course of virtue shall at length arrive at complete felicity.

PERSONS whole business it is to recommend religion to others, should beware of dwelling too much on gloomy subjects. That peace and tranquillity of mind, which true religion is calculated to inspire, is a more powerful argument in its favour, than all the terrors that can be uttered. Terror may indeed deter men from outward acts of wickedness; but can never inspire them with that love of God and real goodness, in which alone true religion consists.

To conclude; the best way to counteract the violence of any passion, is to keep the mind closely engaged in some useful pursuit.

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### CHAP. XI.

### OF THE COMMON EVACUATIONS.

THE principal evacuations from the human body are those of *stool*, urine, and infensible perspiration. None of these can be long obstructed without impairing the health. When that which ought to be thrown out of the body is too long retained, it not only occasions a *plethora*, or too great fulness of the vessels, but acquires qualities which are hurtful to the health, as acrimony, putrescence, &cc.

#### Of the Evacuation by Stool.

FEW things conduce more to health than keeping the body regular. When the *faces* lie too long in the bowels, they vitiate the humours; and when they are too foon difcharged, the body is not fufficiently nourilhed. A medium is therefore to be defired; which can only be obtained by regularity in diet, fleep, and exercife. Whenever the body is not regular, there is reafon to fufpect a fault in one or other of thefe.

PERSONS who eat and drink at irregular hours, and who eat various kinds of food, and drink of feveral different liquors at every meal, have no reafon to expect either that their digeftion will be good, or their difcharges regular. Irregularity in eating and drinking difturbs every part of the animal œconomy, and never fails to occafion difeafes. Either too much or too little food will have this effect. The former indeed generally occafions loofenefs, and the latter coftivenefs; but both have a tendency to hurt the health.

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It would be difficult to afcertain the exact number of ftools which may be confiftent with health, as thefe differ in the different periods of life, in different conflitutions, and even in the fame conflitution under a different regimen of diet, exercife, &c. It is however generally allowed, that one ftool a-day is fufficient for an adult, and that lefs is hurtful. But this, like moft general rules, admits of many exceptions. I have known perfons in perfect health who did not go to ftool above once a-week. Such a degree of coftivenefs however is not fafe; though the perfon who labours under it may for fome time enjoy tolerable health, yet at length it may occafion difeafes.

ONE method of procuring a ftool every day is to rife betimes, and go abroad in the open air. Not only the pofture in bed is unfavourable to regular ftools, but alfo the warmth. This, by promoting the perfpiration, leffens all the other difcharges.

THE method recommended for this purpofe by Mr. Locke, is likewife very proper, viz. to folicit nature by going regularly to stool every morning whether one has a call or not. Habits of this kind may be acquired, which will in time become natural.

PERSONS who have frequent recourfe to medicines for preventing coffivenefs, feldom fail to ruin their conflitution. Purging medicines frequently repeated weaken the bowels, hurt the digeftion, and every dofe makes way for another, till at length they become as neceffary as daily bread. Those who are troubled with coffiveness, ought rather, if possible, to remove it by diet than drugs. They should likewise go thinly clothed, and avoid every thing of an aftringent, or of an heating nature. The diet and other regimen neceffary in this case will be found under the article article Costiveness, where this state of the bowels is treated as a difease.

SUCH perfons as are troubled with a habitual loofennefs, ought likewife to fuit their diet to the nature of their complaint. They should use food which braces and strengthens the bowels, and which is rather of an astringent quality, as wheat-bread made of the finest flour, cheefe, eggs, rice boiled in milk, &c. Their drink should be red port, claret, brandy and water in which toasted bread has been boiled, and fuch like.

As a habitual loofenefs is often owing to an obftructed perfpiration, perfons affected with it ought to keep their feet warm, to wear flannel next their fkin, and take every other method to promote the perfpiration. Further directions with regard to the treatment of this complaint will be found under the article Loofenefs.

#### Of Urine.

So many things tend to change both the quantity and appearances of the urine, that it is very difficult to lay down any determined rules for judging of either \*. Dr. Cheyne fays, the urine ought to be equal

\* It has long been an obfervation among phyficians, that the appearances of the urine are very uncertain, and very little to be depended on. No one will be furprifed at this who confiders how many ways it may be affected, and confequently have its appearance altered. The paffions, the flate of the atmosphere, the quantity and quality of the food, the exercise, the clothing, the flate of the other evacuations, and numberless other causes, arefulficient to induce a change either in the quantity or appearance of the urine. Any one who attends to this, will be aftonished at the impudence of those carin'g quacks, who pretend to, find out difeases, and prefcribe to patients

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equal to three-fourths of the liquid part of our aliment. But fuppole any one were to take the trouble of measuring both, he would find that every thing which altered the degree of perspiration would alter this proportion, and likewise that different kinds of aliment would afford very different quantities of urine. Though for these, and other reasons, no rule can be given for judging of the precise quantity of urine which ought to be discharged, yet a person of common sense will feldom be at a loss to know when it is in either extreme.

As a free difcharge of urine not only prevents bu actually cures many difeafes, it ought by all means to be promoted; and every thing that may obftruct it fhould be carefully avoided. Both the fecretion and difcharge of urine are leffened by a fedentary life, fleeping on beds that are too foft and warm, food of a dry and heating quality, liquors which are aftringent and heating, as red port, claret, and fuch like. Thofe who have reafon to fufpect that their urine is in too finall quantity, or who have any fymptoms of the gravel, ought not only to avoid thefe things, but whatever elfe they find has a tendency to leffen the quantity of their urine.

WHEN the urine is too long retained, it is not only reforbed, or taken up again into the mass of sluids,

patients from the bare infpection of their urine. These imposfors, however, are very common all over Britain, andby the amazing credulity of the populace, many of them amass confiderable fortunes. Of all the medical prejudices which prevail in this country, that in favour of *urine dostors* is the strongest. The common people have still an unlimited faith in their skill, although it has been demonstrated that no one of them, unless he has been previously informed, is able to distinguish the urine of a horse from that of a man.

but by ftagnating in the bladder it becomes thicker, the more watery parts flying off first, and the more gross and earthy remaining behind. By the constant tendency which these have to concrete, the formation of stones and gravel in the bladder is promoted, Hence it comes to pass, that indolent and sedentary people are much more liable to these diseases, than perfons of a more active life.

MANY perfons have loft their lives, and others have brought on very tedious, and even incurable diforders, by retaining their urine too long, from a falfe delicacy. When the bladder has been overdiftended, it often lofes its power of action altogether, or becomes paralytic, by which means it is rendered unable either to retain the urine, or expelit properly. The calls of Nature ought never to be poftponed, Delicacy is doubtlefs a virtue; but that can never be reckoned true delicacy, which induces any one torifk his health, or hazzard his life.

But the urine may be in too great as well as too fmall a quantity. This may be occafioned by drinking large quantities of weak watery liquors, by the exceffive ufe of alkaline falts, or any thing that ftimulates the kidnies, diffolves the blood, &c. This diforder very foon weakens the body, and induces a confumption. It is difficult to cure, but may be mitigated by ftrengthening diet and aftringent medicines, fuch as are recommended under the article Diabetes, or exceffive difcharge of urine.

### Of the Perspiration.

INSENSIBLE perspiration is by fome reckoned the greatest of all the discharges from the human body. It

It is of fo great importance to health, that few difeafes attack us while it goes properly on; but when it is obftructed, the whole frame is generally difordered. This difcharge however being lefs perceptible than any of the reft, is confequently lefs attended to. Hence it is, that acute fevers; rheumatifms, agues, &c. often proceed from obftructed perfpiration before we are aware of its having taken place.

ON examining patients, we find moft of them impute their difeafes either to violent colds which they had caught, or to flight ones which had been neglected. For this reafon, inftead of a critical inquiry into the nature of the perfpiration, its difference in different feafons, climates, conflictutions &c, we fhall endeavour to point out the caufes which moft commonly obftruct it, and to fhew how far they may be either avoided, or have their influence counteracted by timely care. The want of a due attention to thefe cofts Britain annuallyfome thoufands of ufeful lives.

#### Changes in the Atmosphere.

ONE of the most common causes of obstructed perfpiration, or catching cold, in this country, is the changeableness of the weather, or state of the atmofphere. There is no place where such changes happen more frequently than in Great Britain. With us the degrees of heat and cold are not only very different in the different feasons of the year, but often change almost from one extreme to another in a few days, and sometimes even in the course of one day. That fuch Of the COMMON EVACUATIONS, 147 fuch changes must affect the state of the perspiration is obvious to every one \*.

THE beft method of fortifying the body against the changes of the weather, is to be abroad every day. Those who keep most within doors are most liable to catch cold. Such perfons generally render themselves fo delicate as to feel even the slightest changes in the atmosphere, and by their pains, coughs, and oppreffions of the breast, &c. they become a kind of living barometers.

#### Wet Clothes.

WET clothes not only, by their coldness, obstruct the perspiration, but their moisture, by being abforbed, or taken up into the body, greatly increases the danger. The most robust constitution is not proof against the danger arising from wet clothes; they daily occasion fevers, rheumatisms, and other fatal diforders, even in the young and healthy.

It is impoffible for people who go frequently abroad to avoid fometimes being wet. But the danger might generally be leffened, if not wholly prevented, by changing their clothes foon; when this cannot be done, they fhould keep in motion till they be dry. So far are many from taking this precaution, that they often fit or lie down in the fields with their

\* I never knew a more remarkable inftance of the uncertainty of the weather in this country, than happened while I was writing thefe notes. This morning August 14, 1783, the thermometer in the shade was down at fifty-three degrees, and a very few days ago it shood above eighty. No one who restects on such great and sudden changes in the atmosphere will be furprifed to find colds, coughs, rheums, with other affections of the breast and bowels, so common in this country.

clothes

clothes wet, and frequently fleep even whole nights in this condition. The frequent inftances which we have of the fatal effects of this conduct, ought certainly to deter others from being guilty of it.

#### Wet Feet.

EVEN wet feet often occasion fatal diseafes. The colic, inflammations of the breast and of the bowels, the iliac passion, *cholera morbus*, &c. are often occafioned by wet feet. Habit will, no doubt, render this lefs dangerous; but it ought, as far as possible, to be avoided. The delicate, and those who are not accustomed to have their clothes or feet wet, should be peculiarly careful in this respect.

#### Night Air.

THE perfpiration is often obstructed by NIGHTAIR; even in fummer, this ought to be avoided. The dews which fall plentifully after the hottest day, make the night more dangerous than when the weather is cool. Hence, in warm countries, the evening dews are more hurtful than where the climate is more temperate.

It is very agreeable after a warm day to be abroad in the cool evening; but this is a pleafure to be avoided by all who value their health. The effects of evening dews are gradual indeed, and almost imperceptible; but they are not the less to be dreaded : We would therefore advise travellers, labourers, and all who are much heated by day, carefully to avoid them. When the perspiration has been great, these become dangerous in proportion. By not attending to this, in flat marshy countries, where the exhalations and dews are copious, labourers are often feized

# Of the COMMON EVACUATIONS. 143 feized with intermitting fevers, quinfeys, and other dangerous difeafes.

#### Damp Beds.

BEDS become damp, either from their not being ufed, ftanding in damp houfes, or in rooms without fire. Nothing is more to be dreaded by travellers than damp beds, which are very common in all places where fuel is fcarce. When a traveller, cold and wet, arrives at an inn, he may by means of a good fire, warm diluting liquor, and a dry bed, have the perfpiration reftored; but if he be put into a cold room, and laid on a damp bed, it will be more obftructed, and the worft confequences will enfue. Travellers fhould avoid inns which are noted for damp beds, as they would a houfe infected with the plague, as no man, however robuft, is proof againft the danger arifing from them.

But inns are not the only places where damp beds are to be met with. Beds kept in private families for the reception of ftrangers are often equally dangerous. All kinds of linen and bedding, when not frequently ufed, become damp. How then is it poffible that beds, which are not flept in above two or three times a-year, fhould be fafe? Nothing is more common than to hear people complain of having caught cold by changing their bed. The reafon is obvious: Were they careful never to fleep in a bed but what was frequently ufed, they would feldom find any ill confequences from a change.

NOTHING is more to be dreaded by a delicate perfon when on a vifit, than being laid in a bed which is kept on purpose for strangers. That ill-judged piece of

of complaifance becomes a real injury. All the bad confequences from this quarter might eafily be prevented in private families, by caufing their fervants to fleep in the fpare beds, and refign them to ftrangers when they come. In inns where the beds are ufed almost every night, nothing elfe is necessary than to keep the rooms well feasoned by frequent fires, and the linen dry.

THAT baneful cuftom faid to be practifed in many inns, of damping fheets, and preffing them in order to fave wafhing, and afterwards laying them on the beds, ought, when difcovered, to be punifhed with the utmost feverity. It is really a fpecies of murder, and will often prove as fatal as poifon or gun-fhot. Indeed no linen, efpecially if it has been wafhed in winter, ought to be ufed till it has been expofed for fome time to the fire; nor is this operation lefs neceffary for linen wafhed in fummer, provided it has lain by for any length of time. This caution is the more needful, as gentlemen are often exceedingly attentive to what they eat or drink at an inn, yet pay no regard to a circumstance of much more importance \*.

#### Damp Houses.

DAMP houses frequently produce the like ill confequences for this reason those who build should be careful to chuse a dry situation. A house which

\* If a perfon fufpects that his bed is damp, the fimple precaution of taking off the fheets and lying in the blankets, with all, or most of his clothes on, will prevent all the danger. I have practifed this for many years, and never have been hurt by damp beds, though no confliction is proof against their baneful influence.

ftands on a damp marfhy foil or deep clay, will never be thoroughly dry. All houfes, unlefs where the ground is exceeding dry, fhould have the first floor a little raifed. Servants and others, who are obliged to live in cellars and funk ftories, feldom continue long in health: Masters ought furely to pay fome regard to the health of their fervants, as well as to their own.

NOTHING is more common than for people, merely to avoid fome trifling inconveniency, to hazard their lives, by inhabiting a houfe almost as foon as the masons, plasterers, &c. have done with it: Such houses are not only dangerous from their dampness, but likewise from the smell of lime, paints, &c. The afthmas, confumptions, and other diseases of the lungs, so incident to people who work in these articles, are sufficient proofs of their being unwholefome.

Rooms are often rendered damp by an unfeafonable piece of cleanlinefs; I mean the pernicious cuftom of wafhing them immediately before company is put into them. Most people catch cold, if they fit but a very short time in a room that has been lately washed; the delicate ought carefully to avoid such a situation, and even the robust are not proof against its influence \*.

\* People imagine if a good fire is made in a room after it has seen washed, that there is no danger from fitting in it; but they hust give me leave to fay that this increases the danger. The evaporation excited by the fire generates cold, and renders the lamp more aclive.

Sudden

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#### Sudden Transitions from Heat to Cold.

BUT nothing fo frequently obftructs the perfpiration as SUDDEN TRANSITIONS from heat to cold. Colds are feldom caught, unlefs when people have been too much heated. Heat rarifies the blood, quickens the circulation, and increafes the perfpiration; but when thefe are fuddenly checked, the confequences muft be bad. It is indeed impoffible for labourers not to be too hot upon fome occalions; but it is generally in their power to let themfelves cool gradually, to put on their clothes when they leave off work, to make choice of a dry place to reft themfelves in, and to avoid fleeping in the open fields. Thefe eafy rules, if obferved, would often prevent fevers and other fatal diforders.

NOTHING is more common than for people, when hot, to drink freely of cold water, or fmall liquors. This conduct is extremely dangerous. Thirft indeed is hard to bear, and the inclination to gratify that appetite frequently gets the better of reafon, and makes us do what our judgment difapproves. Every peafant, however, knows, if his horfe be permitted to drink his bellyful of cold water after violent exercife, and be immediately put into the ftable, or fuffered o remain at reft, that it will kill him. This they take the utmost care to prevent. It were well if they were equally attentive to their own fafety.

THIRST may be quenched many ways without fwallowing large quantities of cold liquor. The fields afford variety of acid fruits and plants, the very chewing of which would abate thirst. Water kept in the mouth for fome time, and spit out again, if

if frequently repeated, will have the fame effect. If a bit of bread be ate along with a few mouthfuls of water, it will both quench thirft more effectually, and make the danger lefs. When a perfon is extremely hot, a mouthful of brandy, or other fpirits, ought to be preferred to any thing elfe, if it can be obtained. But if any one has been fo foolifh, when hot, as to drink freely of cold liquor, he ought to continue his exercife at leaft, till what he drank be thoroughly warmed upon his ftomach.

It would be tedious to enumerate all the bad effects which flow from drinking cold liquors when the body is hot. Sometimes this has occafioned immediate death. Hoarfenefs, quinfeys, and fevers of various kinds, are its common confequences. Neither is it fafe when warm to eat freely of raw fruits, fallads, or the like. Thefe indeed have not fo fudden an effect on the body as cold liquors, but they are notwithftanding dangerous, and ought to be avoided.

SITTING in a warm room, and drinking hot liquors till the pores are quite open, and immediately going into the cold air, is extremely dangerous. Colds, coughs, and inflammations of the breaft, are the ufual effects of this conduct: Yet nothing is more common than for people, after they have drank warm liquors for feveral hours, to walk or ride a number of miles in the coldeft night, or to ramble about in the ftreets \*.

\* The tap-rooms in London and other great towns, where fuch numbers of people fpend their evenings, are highly pernicious. The breath of a number of people crowded into a low apartment, with the addition of fires, candles, the fmoke of tobacco, and the fumes of hot liquor, &c. must not only render it hurtful to continue in fuch places, but dangerous to go out of them into a cold and chilly atmosphere.

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PEOPLE are very apt, when a room is hot, to throw open a window, and to fit near it. This is a moft dangerous practice. Any perfon had better fit without doors than in fuch a fituation, as the current of air is directed against one particular part of the body. Inflammatory fevers and confumptions have often been occasioned by fitting or standing thinly clothed near an open window. Nor is steeping with open windows less to be dreaded. That ought never to be done, even in the hottest feason. I have known mechanics frequently contract fatal difeases, by working stript at an open window, and would advise all of them to beware of such a practice.

NOTHING exposes people more to catch cold than keeping their own houses too warm; fuch perfons may be faid to live in a fort of hot-houses; they can hardly ftir abroad to visit a neighbour, but at the hazard of their lives. Were there no other reason for keeping houses moderately cool, that alone is fufficient: But no house that is too hot can be wholefome; heat destroys the spring and elasticity of the air, and renders it less fit for expanding the lungs, and the other purposes of respiration. Hence it is, that confumptions and other diseases of the lungs prove fo fatal to people who work in forges, glasshouses, and the like.

Some are even fo fool-hardy, as to plunge themfelves when hot in cold water. Not only fevers, but madnefs itfelf, has frequently been the effect of this conduct. Indeed it looks too like the action of a madman to deferve a ferious confideration.

THE refult of all these observations is, that every one ought-to, avoid, with the utmost attention, all fudden transitions from heat to cold, and to keep the body

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body in as uniform a temperature as poffible; or, where that cannot be done, to take care to let it cool gradually.

PEOPLE may imagine that too first an attention to these things would tend to render them delicate. So far however is this from being our design, that the very first rule proposed for preventing colds, is to harden the body, by enuring it daily to the open air.

I SHALL put an end to what relates to this part of my fubject, by giving an abstract of the justly celebrated advice of Celfus, with refpect to the prefervation of health. " A man," fays he, " who is " bleffed with good health, fhould confine himfelf " to no particular rules; either with respect to regi-CS. men or medicine. He ought frequently to diver-" fify his manner of living; to be fometimes in " town, fometimes in the country; to hunt, fail, " indulge himfelf in reft, but more frequently to " use exercise. He ought to refuse no kind of food " that is commonly used, but fometimes to eat more " and fometimes lefs; fometimes to make one at " an entertainment, and fometimes to forbear it; " to make rather two meals a-day than one, and al-" ways to eat heartily, provided he can digeft it. "He ought neither too eagerly to pursue, nor too? " fcrupuloufly to avoid, intercourfe with the fair " fex: Pleafures of this kind; rarely indulged, ren-" der the body alert and active, but when too fre-" quently repeated, weak and languid. He should " be careful in time of health not to deftroy, by ex-" ceffes of any kind, that vigour of constitution " which should support him under sickness."

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# PART II.

# OF DISEASES.

#### CHAP. XII.

# OF THE KNOWLEDGE AND CURE OF DISEASES.

THE knowledge of difeafes does not depend fo much upon fcientific principles as many imagine. It is chiefly the refult of experience and obfervation. By attending the fick, and carefully obferving the various occurrences in difeafes, a great degree of accuracy may be acquired, both in diftinguifhing their fymptoms, and in the application of medicines. Hence fenfible nurfes, and other perfons who wait upon the fick, often difcover a difeafe fooner than those who have been bred to physic. We do not however mean to infinuate that a medical education is of no ufe: It is doubtlefs of the greatest importance; but it never can fupply the place of obfervation and experience.

EVERY difeafe may be confidered as an affemblage of fymptoms, and must be diftinguished by those which are most obvious and permanent. Instead therefore of giving a classical arrangement of difeases, according to the fystematic method, it will be more fuitable, in a performance of this nature, to give a full and accurate description of each particular difease as it occurs; and, where any of the fymptoms of one difease

#### OF THE KNOWLEDGE, &c. 151

difeafe have a near refemblance to thole of another, to take notice of that circumftance, and at the fame time to point out the peculiar or characteristic fymptoms by which it may be diffinguished. By a due attention to these, the investigation of diseafes will be found to be a less difficult matter than most people would at first be ready to imagine.

A PROPER attention to the patient's age, fex, temper of mind, conftitution, and manner of life, will likewife greatly affift, both in the investigation and treatment of difeafes.

In childhood the fibres are lax and foft, the nerves extremely irritable, and the fluids thin; whereas in old age the fibres are rigid, the nerves become almost infensible, and many of the vessels imperviable. These and other peculiarities render the diseases of the young and aged very different, and of course they must require a different method of treatment.

FEMALES are liable to many difeafes which do not afflict the other fex: Befides, the nervous fyftem being more irritable in them than in men, their difeafes require to be treated with greater caution. They are lefs able to bear large evacuations; and all ftimulating medicines ought to be administered to them with a sparing hand.

PARTICULAR conflictutions not only difpofe perfons to peculiar difeafes, but likewife render it neceffary to treat thefe difeafes in a peculiar manner. A delicate perfon, for example, with weak nerves, who lives most within doors, must not be treated, under any difeafe, precifely in the fame manner as one who is hardy and robust, and who is much exposed to the open air.

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THE temper of mind ought to be carefully attended to in difeafes. Fear, anxiety, and a fretful temper, both occafion and aggravate difeafes. In vain do we apply medicines to the body to remove maladies which proceed from the mind. When it is affected, the beft medicine is to footh the paffions, to divert the mind from anxious thought, and to keep the patient as eafy and cheerful as poffible.

ATTENTION ought likewife to be paid to the climate, or place where the patient lives, the air he breathes, his diet, &c. Such as live in low marfhy, fituations are fubject to many difeafes which are unknown to the inhabitants of high countries. Thofe who breathe the impure air of cities, have many maladies to which the more happy ruftics are entire ftrangers. Perfons who feed grofsly, and indulge in ftrong liquors, are liable to difeafes which do not affect the temperate and abftemious, &c.

It has already been obferved, that the different occupations and fituations in life difpofe men to peculiar difeafes. It is therefore neceffary to inquire into the patient's occupation, manner of life, &c. This will not only affift us in finding out the difeafe, but will likewife direct us in the treatment of it. It would be very imprudent to treat the laborious and the fedentary exactly in the fame manner, even fuppoling them to labour under the fame difeafe.

• IT will likewife be proper to enquire, whether the difeafe be conflictutional or accidental; whether it has been of long or fhort duration; whether it proceeds from any great and fudden alteration in the diet, manner of life, &c. The ftate of the patient's body, and of the other evacuations, ought alfo to be enquired into

### AND CURE OF DISEASES. 153

into; and likewife whether he can with eafe perform all the vital and animal functions, as breathing, digettion, &c.

LASTLY, it will be proper to enquire what difeafes the patient has formerly been liable to, and what medicines were most beneficial to him; if he has a strong aversion to any particular drug, &c.

As many of the indications of cure may be anfwered by diet alone, it is always the first thing to be attended to in the treatment of difeases. Those who know no better, imagine that every thing which goes by the name of a medicine possess from wonderful power or fecret charm, and think, if the patient swallows enough of drugs, that he muss do well. This mistake has many ill confequences. It makes people trust to drugs, and neglect their own endeavours; besides, it discourages all attempts to relieve the fick, where medicines cannot be obtained.

MEDICINES are no doubt useful in their place, and, when administered with prudence, they may do much good; but when they are put in place of every, thing elfe; or administered at random, which is not feldom the cafe, they must do mischief. We would therefore wish to call the attention of mankind from the pursuit of fecret medicines, to such things as they are acquainted with. The proper regulation of these may often do much good, and there is little danger of their ever doing hurt.

EVERY difeafe weakens the digeflive powers. The diet ought therefore; in all difeafes, to be light and of eafy digeftion. It would be as prudent for a perfon with a broken leg to attempt to walk, as for one in

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in a fever to eat the fame kind of food, and in the fame quantity, as when he was in perfect health. Even abstinence alone will often cure a fever, especially when it has been occasioned by excess in eating or drinking.

In all fevers attended with inflammation, as pleurifies, peripneumonies, &c. thin gruels, wheys, watery infufions of mucilaginous plants, roots, &c. are not only proper for the patient's food, but they are likewife the best medicines which can be administered.

In fevers of a flow, nervous, or putrid kind, where there are no fymptoms of inflammation, and where the patient must be fupported with cordials, that intention can always be more effectually answered by nourishing diet and generous wines, than by any medicines yet known.

Nor is a proper attention to diet of lefs importance in chronic than in acute difeafes. Perfons afflicted with low fpirits, wind, weak nerves, and other hypochondriacal affections, generally find more benefit from the ufe of folid food and generous liquors, than from all the cordial and carminative medicines which can be administered to them.

THE fcurvy, that most obstinate malady, will fooner yield to a proper vegetable diet, than to all the boasted antifcorbutic remedies of the spot.

In confumptions, when the humours are vitiated, and the ftomach fo much weakened as to be unable to digeft the folid fibres of animals, or even to affimilate the juices of vegetables, a diet confifting chiefly of *milk* will not only fupport the patient, but will often often cure the difease after every other medicine has failed.

Nor is an attention to other things of lefs importance than to diet. The ftrange infatuation which has long induced people to flut up the fick from all communication with the external air, has done great mifchief. Not only in fevers, but in many other difeafes, the patient will receive more benefit from having the fresh air prudently admitted into his chamber, than from all the medicines which can be given him.

EXERCISE may likewife, in many cafes, be confidered as a medicine. Sailing, or riding on horfeback, for example, will be of more fervice in the cure of confumptions, glandular obftructions, &c. than any medicine yet known. In difeafes which proceed from a relaxed ftate of the folids, the cold bath, and other parts of the gymnaftic regimen, will be found equally beneficial.

Few things are of greater importance, in the cure of difeafes, than cleanlinefs. When a patient is fuffered to lie in dirty clothes, whatever perfpires from his body is again reforbed, or taken up into it, which ferves to nourifh the difeafe, and increafe the danger. Many difeafes may be cured by cleanlinefs alone; most of them may be mitigated by it, and in all of them it is highly neceffary both for the patient and those who attend him.

MANY other observations, were it neceffary, might be adduced to prove the importance of a proper regimen in difeases. Regimen will often cure difeases without medicine, but medicine will seldom succeed - where

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where a proper regimen is neglected. For this reafon, in the treatment of difeates, we have always given the first place to regimen. Those who are afraid to use medicines may confine themselves to it only. For others, who have more knowledge, we have recommended some of the most simple, but approved, forms of medicine in every difease. These, however, are never to be administered but by people of better understanding; nor even by them without the greatest precaution.

## CHAP. XIII.

# OF FEVERS IN GENERAL.

S more than one half of mankind is faid to perifh by fevers, it is of importance to be acquainted with their caufes. The moft general caufes of fevers are, infection, errors in diet, unwholefome air, violent emotions of the mind, fuppression of usual evacuations, external or internal injuries, and extreme degrees of heat or cold. As most of these have already been treated of at confiderable length, and their effects shewn, we shall not now refume the confideration of them, but shall only recommend it to all, as they would wish to avoid fevers and other fatal difeases, to pay the most punctual attention to these articles.

FEVERS are not only the most frequent of all difeases, but they are likewise the most complex: In the most simple species of fever there is always a combination of several different symptoms. The distinguishing symptoms of sever are, *increased heat*, *fre-*

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quency of pulse, loss of appetite, general debility, pain in the head, and a difficulty in performing some of the vital or animal functions. The other symptoms usually attendant on fevers are, nausea, thirst, anxiety, weariness, wasting of the stell, want of step, or the steep disturbed and not refreshing.

WHEN the fever comes on gradually, the patient generally complains first of languor or listless, foreness of the fless, or the bones, as the country people express it, heaviness of the head, loss of appetite, fickness, with clamminess of the mouth; after fome time come on excessive heat, violent thirst, restless, &c.

WHEN the fever attacks fuddenly, it always begins with an uneafy fenfation of exceffive cold, accompanied with debility and lofs of appetite; frequently the cold is attended with fhivering, opprefion about the heart, and ficknefs at ftomach, or vomiting.

FEVERS are divided into continual, remitting, intermitting, and fuch as are attended with cutaneous eruption or topical inflammation, as the fmall-pox, eryfipelas, &c. By a continual fever is meant that which never leaves the patient during the whole courfe of the difeafe, or which fhews no remarkable increafe or abatement in the fymptoms. This kind of fever is likewife divided into acute, flow, and malignant. The fever is called *acute* when its progrefs is quick, and the fymptoms violent; but when thefe are more gentle, it is generally denominated *flow*. When livid or petechial fpots fhew a putrid ftate of the humours, the fever is called *malignant*, *putrid*, or *petechial*.

A REMITTING fever differs from a continual only in degree. It has frequent increases and decreases, or exacerbations

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exacerbations and remiffions, but never wholly leaves the patient during the course of the diseafe. Intermitting fevers, or agues, are those which, during the time that the patient may be faid to be ill, have evident intervals or remiffions of the symptoms.

As a fever is only an effort of Nature to free herfelf from an offending caufe, it is the bufinefs of thofe who have the care of the fick, to obferve with diligence which way Nature points, and to endeavour to affift her operations. Our bodies are fo framed, as to have a conftant tendency to expel or throw off whatever is injurious to health. This is generally done by urine, fweat, ftool, expectoration, vomit, or fome other evacuation.

THERE is reafon to believe, if the efforts of Nature, at the beginning of a fever, were duly attended to and promoted, it would feldom continue long; but when her attempts are either neglected or counteracted, it is no wonder if the difeafe proves fatal. There are daily inftances of perfons who, after catching cold, have all the fymptoms of a beginning fever; but by keeping warm, drinking diluting liquors, bathing their feet in warm water, &c. the fymptoms in a few hours difappear, and the danger is prevented. When fevers of a putrid kind threaten, the beft method of obviating their effects is by repeated vomits.

OUR defign is not to enter into a critical enquiry into the nature and immediate caufes of fevers; but to mark their most obvious fymptoms, and to point out the proper treatment of the patient with respect to his diet, drink, air, &c. in the different stages of the difease. In these articles the inclinations of the patient will, in a great measure, direct our conduct.

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ALMOST every perfon in a fever complains of great thirft, and calls out for drink, efpecially of a cooling nature. This at once points out the ufe of water, and other cooling liquors. What is fo likely to abate the heat, attenuate the humours, remove fpafms and obftructions, promote perfpiration, increafe the quantity of urine, and, in fhort, produce every falutary effect in an ardent or inflammatory fever, as drinking plentifully of water, thin gruel, or any other weak liquor, of which water is the bafis? The neceffity of diluting liquors is pointed out by the dry tongue, the parched fkin, and the burning heat, as well as by the unquenchable thirft of the patient.

MANY cooling liquors, which are extremely grateful to patients in a fever, may be prepared from fruits, as decoctions of tamarinds, apple-tea, orange-whey, and the like. Mucilaginous liquors might alfo be prepared from marshmallow roots, linseed, lime-tree buds, and other mild vegetables. These liquors, especially when acidulated, are highly agreeable to the patient, and should never be denied him.

At the beginning of a fever the patient generally complains of great laffitude or wearinefs, and has no inclination to move. This evidently fhews the propriety of keeping him eafy, and, if poffible, in bed; lying in bed relaxes the fpafms, abates the violence of the circulation, and gives Nature an opportunity of exerting all her force to overcome the difeafe. The bed alone would often remove a fever at the beginning; but when the patient flruggles with the difeafe, inftead of driving it off, he only fixes it the deeper, and renders it more dangerous. This obfervation

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fervation is too often verified in travellers, who happen, when on a journey, to be feized with a fever. Their anxiety to get home induces them to travel with the feyer upon them, which conduct feldom fails to render it fatal.

In fevers the mind as well as the body fhould be kept eafy. Company is feldom agreeable to the fick. Indeed every thing that diffurbs the imagination increafes the difeafe; for which reafon every perfon in a fever ought to be kept perfectly quiet, and neither allowed to fee nor hear any thing that may in the leaft affect or diffcompose his mind.

THOUGH the patient in a fever has the greateft inclination for drink, yet he feldom has any appetite for folid food; hence the impropriety of urging him to take victuals is evident. Much folid food in a fever is every way hurtful. It opprefies nature, and, inftead of nourifhing the patient, ferves only to feed the difeafe. What food the patient takes fhould be in finall quantity, light, and of eafy digeftion. It ought to be chiefly of the vegetable kind, as panada, roafted apples, gruels, and fuch like.

Poor people, when any of their family are taken ill, run directly to their rich neighbours for cordials, and pour wine, fpirits. &c. into the patient, who perhaps never had been accultomed to tafte fuch liquors when in health. If there be any degree of fever, this conduct mult increase it, and if there be none, this is the ready way to raife one. Stuffing the patient with tweetmeats and other delicacies, is likewife very pernicious. These are always harder to diget than common food, and cannot fail to hurt the ftomach.

#### OF FEVERS IN GENERAL.

NOTHING is more defired by a patient in a fever than frefh air. It not only removes his anxiety, but cools the blood, revives the fpirits, and proves every way beneficial. Many patients are in a manner (tiffed to death in fevers, for want of frefh air; yet fuch is the unaccountable infatuation of most people, that the moment they think a perfon in a fever, they imagine he fhould be kept in a close chamber; into which not one particle of fresh air must be admitted. Inftead of this; there ought to be a constant stream of fresh air into a fick perfon's chamber; fo as to keep it moderately cool. Indeed its degree of warmth ought never to be greater than is agreeable to one in perfect health.

NOTHING fpoils the air of a fick perfon's chamber; or hurts the patient more; than a number of people breathing in it: When the blood is inflamed; or the humours in a putrid ftate; air that has been breathed repeatedly will greatly increafe the difeafe. Such air not only lofes its fpring, and becomes unfit for the purpofe of refpiration; but acquires a noxious quality, which renders it in a manner poifonous to the fick:

IN fevers, when the patient's fpirits are low and depreffed; he is not only to be fupported with cordials, but every method fhould be taken to cheer and comfort his mind. Many, from a miltaken zeal, when they think a perfon in danger, inftead of folacing his mind with the hopes and confolations of religion, fright him with the views of hell and damnation. It would be unfuitable here to dwell upon the impropriety and dangerous confequences of this conduct; M

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it often hurts the body, and there is reafon to believe feldom benefits the foul.

AMONGST common people, the very name of a fever generally fuggefts the neceffity of bleeding. This notion feems to have taken its rife from most fevers in this country having been formerly of an inflammatory nature; but true inflammatory fevers are now feldom to be met with. Sedentary occupations, and a different manner of living, have fo changed the ftate of difeafes in Britain, that there is now hardly one fever in ten where the lancet is neceffary. In most low, nervous, and putrid fevers, which are now fo common, bleeding is really hurtful, as it weakens the patient, finks his fpirits, &c. We would recommend this general rule, never to bleed at the beginning of a fever, unless there be evident figns of inflammation. Bleeding is an excellent medicine when neceffary, but should never be wantonly performed.

It is likewife a common notion, that fweating is always neceffary in the beginning of a fever. As fevers often proceed from an obftructed perfpiration, this notion is not ill-founded. If the patient only lies in bed, bathes his feet and legs in warm water, and drinks freely of water-gruel, or any other weak, diluting liquor, he will feldom fail to perfpire freely. The warmth of the bed, and the diluting drink, will relax the univerfal fpafm, which generally affects the folids at the beginning of a fever; it will open the pores, and promote the perfpiration, by means of which the fever may often be carried off. But inftead of this, the common practice is to heap clothes upon the patient, and to give him things of a hot

hot nature, as spirits, spiceries, &c. which fire his blood, increase the spasins, and render the disease more dangerous.

In all fevers a proper attention should pe paid to the patient's longings. These are the calls of Nature, and often point out what may be of real use. Patients are not indeed to be indulged in every thing that the fickly appetite may crave; but it is generally right to let them have a little of what they eagerly defire, though it may not feem altogether proper. What the patient longs for, his stomach will generally digest; and fuch things have fometimes a very happy effect.

WHEN a patient is recovering from a fever, great care is neceffary to prevent a relapse. Many persons, by too foon imagining themfelves well, have loft their lives, or contracted other diseases of an obstinate nature. As the body after a fever is weak and delicate, it is neceffary to guard against catching cold. Moderate exercife in the open air will be of use, but great fatigue is by all means to be avoided; agreeable company will also have a good effect. The diet must be light, but nourishing. It should be taken frequently, but in small quantities. It is dangerous at such a time to eat as much as the ftomach may crave.

#### CHAP. XIV.

# OF INTERMITTING FEVERS, OR AGUES.

INTERMITTING fevers afford the best opportunity both of observing the nature of a fever, and also the effects of medicine. No person can be at M 2 a loss

a lofs to diftinguish an intermitting fever from any other, and the proper medicine for it is now almost universally known.

THE feveral kinds of intermitting fevers take their names from the period in which the fit returns, as quotidian, tertian, quartan, &c.

CAUSES. \_\_\_\_ Agues are occasioned by effluvia from putrid stagnating water. This is evident from their abounding in rainy feafons, and being most frequent in countries where the foil is marfhy, as in Holland, the Fens of Cambridgeshire, the Hundreds of Effex, &c. This difease may also be occafioned by eating too much ftone fruit, by a poor watery diet, damp houfes, evening dews, lying upon the damp ground, watching, fatigue, depreffing paffions, and the like. When the inhabitants of a high country remove to a low one, they are generally feized with intermitting fevers, and to fuch the difease is most apt to prove fatal. In a word, whatever relaxes the folids, diminishes the perspiration, or obstructs the circulation in the capillary or small veffels, difpofes the body to agues.

SYMPTOMS.—An intermitting fever generally begins with a pain of the head and loins, wearinefs of the limbs, coldnefs of the extremities, ftretching, yawning, with fometimes great ficknefs and vomiting; to which fucceed fhivering and violent fhaking. Afterwards the fkin becomes moift, and a profuse fweat breaks out, which generally terminates the fit or paroxyfm. Sometimes indeed the difease comes on fuddenly, when the person thinks himself in perfect health; but it is more commonly preceded

preceded by liftless, loss of appetite, and the fymptoms mentioned above.

REGIMEN. — While the fit continues, the patient ought to drink freely of water-gruel, orangewhey, weak camomile tea; or, if his fpirits be low; finall wine-whey, fharpened with the juice of lemon. All his drink fhould be warm, as that will affift in bringing on the fweat, and confequently fhorten the paroxyfm \*.

BETWEEN the paroxyfms the patient muft be fupported with food that is nourifhing, but light and eafy of digeftion, as veal or chicken broths, fago, gruel with a little wine, light puddings, and fuch like. His drink may be fmall negus, acidulated with the juice of lemons or oranges, and fometimes a little weak punch. He ought likewife to drink infufions of bitter herbs, as camomile, wormwood, or watertrefoil, and may now and then take a glafs of finall wine, in which gentian root, centaury, or fome other bitter, has been infufed.

As the chief intentions of cure in an ague are to brace the folids, and promote perfpiration, the patient ought to take as much exercife between the fits as he can bear. If he be able to go abroad, riding on horfeback, or in a carriage, will be of great fervice. But if he cannot bear that kind of exercife, he ought to take fuch as his ftrength will permit. Nothing tends more to prolong an intermitting fever, than indulging a lazy indolent difpofition.

\* Dr. Lind fays, that twenty or twenty-five drops of laudanum put into a cup of the patient's drink, and given about half an hour after the commencement of the hot fit, promotes the fweat, fhortens the fit, relieves the head, and tends greatly to remove the difeafe.

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INTERMITTING fevers, under a proper regimen, will often go off without medicine; and when the difeafe is mild, in an open dry country, there is feldom any danger from allowing it to take its courfe; but when the patient's ftrength feems to decline, or the paroxyfins are fo violent that his life is in danger, medicine ought immediately to be adminiftered. This however fhould never be done till the difeafe be properly formed, that is to fay; till the patient has had feveral fits of fhaking and fweating.

MEDICINE. The first thing to be done in the cure of an intermitting fever, is to cleanse the ftomach and bowels. This not only renders the application of other medicines more fafe, but likewife more efficacious. In this difeafe, the ftomach is generally loaded with cold viscid phlegm, and frequently great quantities of bile are difcharged by vomit; which plainly points out the neceffity of fuch evacuations. Vomits are therefore to be administered before the patient takes any other medicine. A dose of ipecacoanha will generally answer this purpose very well. A scruple or half a dram of the powder will be sufficient for an adult, and for a younger perfon the dose must be less in proportion. After the vomit begins to operate, the patient ought to drink plentifully of weak camomile-tea. The vomit should be taken two or three hours before the return of the fit, and may be repeated at the diftance of two or three days. Vomits not only cleanfe the ftomach, but increase the perspiration, and all the other secretions, which render them of fuch importance, that they often cure intermitting fevers without the affiftance of any other medicine.

PURGING

PURGING medicines are likewife ufeful, and often neceflary, in intermitting fevers. A finart purge has been known to cure an obftinate ague, after the Peruvian bark and other medicines had been ufed in vain. Vomits, however, are more fuitable in this difeafe, and render purging lefs neceffary; but if the patient be afraid to take a vomit, he ought in this cafe to cleanfe the bowels by a dofe or two of Glauber's falt, jalap, or rhubarb.

BLEEDING may fometimes be proper at the beginning of an intermitting fever, when exceffive heat, a delirium, &c. give reafon to fufpect an inflammation; but as the blood is feldom in an inflammatory ftate in intermitting fevers, this operation is rarely neceffary. When frequently repeated, it tends to prolong the difeafe.

AFTER proper evacuations, the patient may fafely use the Peruvian bark, which may be taken in any way that is most agreeable to him. No preparation of the bark seems to answer better than the most simple form in which it can be given, viz. in powder.

Two ounces of the beft jefuits bark, finely powdered, may be divided into twenty-four dofes. Thefe may either be made into boluffes, as they are ufed, with a little fyrup of lemon, or mixed in a glafs of red wine, a cup of camomile-tea, water-gruel, or any other drink that is more agreeable to the patient\*.

\* It has lately been observed, that the red bark is more powertul than that which has for fome time been in common use. Its superior efficacy seems to arise from its being of a more perfect growth than the quill bark, and consequently more fully impregnated with the medical properties of the plant.

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In an ague which returns every day, one of the above doles may be taken every two hours during the interval of the fits. By this method the patient will be able to take five or fix doles between each paroxyfm. In a tertian, or third-day ague, it will be infficient to take a dole every third hour during the interval, and in a quartan every fourth. If the patient cannot take fo large a dole of the bark, he may divide each of the powders into two parts, and take one every hour, &c. For a young perfon, a fmaller quantity of this medicine will be fufficient, and the dole mult be adapted to the age, conflitution, and violence of the fymptoms\*.

THE above quantity of bark will frequently cure an ague; the patient, however, ought not to leave offtaking the medicine as foon as the proxyfms are ftopped, but fhould continue to ufe it till there is reafon to believe the difeafe is entirely overcome. Moft of the failures in the cure of this difeafe are owing to patients not continuing to ufe the medicine long enough. They are generally directed to take it till the fits are ftopped, then to leave it off, and begin again at fome diftance of time; by which means the difeafe gathers ftrength, and often returns with as

\* In intermitting fevers of an obfinate nature, I have found it neceffary to throw in the bark much fafter. Indeed the benefits arising from this inedicine depend chiefly upon a large quantity of it being adminiflered in a fhort time. Several ounces of bark given in a few days, will do more than as many pounds taken in the courfe of fome weeks. When this medicine is intended either to ftop a mortification, or cure an obfinate ague, it ought to be thrown in as falt as the ftomach can possibly bear it. Inattention to this circumflance has hurt the reputation of one of the beft medicines of which we are in possible.

much

much violence as before. A relapfe may always be prevented by the patient's continuing to take finall dofes of the medicine for fome time after the fymptoms difappear. This is both the most fafe and effectual method of cure.

. An ounce of gentian root, calamus aromaticus, and orange-peel, of each half an ounce, with three or four handfuls of camomile flowers, and an handful of coriander-feed, all bruifed together in a mortar, may be used in form of infusion or tea. About half an handful of these ingredients may be put into a tea-pot, and an English pint of boiling water poured on them. A cup of this infusion drank three or four times a-day will greatly promote the cure. Such patients as cannot drink the watery infusion, may put two handfuls of the fame ingredients into a bottle of white wine, and take a glass of it twice or. thrice a-day. If patients drink freely of the above? or any other proper infusion of bitters, a smaller. quantity of bark than is generally used, will be fufficient to cure an ague \*.

Those who cannot fwallow the bark in fubftance, may take it in decoction or infusion. An ounce of bark in powder may be infused in a bottle of white

\* There is reafon to believe, that fundry of our own plants or barks, which are very bitter and aftringent, would fucceed in the cure of intermittent fevers, especially when affisted by aromatics. But as the Peruvian bark has been long approved in the cure of this difease, and is now to be obtained at a very reasonable rate, it is of less importance to fearch after new medicines. We cannot however omit taking notice, that the Peruvian bark is very often adulterated, and that it requires confiderable skill to diffinguish between the genuine and the false. This ought to make people very cautious of whom they purchase it.

wine

wine for four or five days, frequently fhaking the bottle, afterwards let the powder fubfide, and pour off the clear liquor. A wine glafs may be drank three or four times a-day, or oftener, as there is occafion. If a decoction be more agreeable, an ounce of the bark, and two drams of fnake-root bruifed, with an equal quantity of falt of wormwood, may be boiled in a quart of water, into an Englifh pint. To the ftrained liquor may be added an equal quantity of red wine, and a glafs of it taken frequently.

In obftinate agues, the bark will be found much more efficacious when affifted by brandy, or other warm cordials, than taken alone. This I have had frequently occafion to obferve in a country where intermittent fevers were endemical. The bark feldom fucceeded unlefs affifted by fnake root, ginger, canella alba, or fome other warm aromatic. When the fits are very frequent and violent, in which cafe the fever often approaches towards an inflammatory nature, it will be fafer to keep out the aromatics, and to add falt of tartar in their ftead. But in an obftinate tertian or quartan, in the end of autumn or beginning of winter, warm and cordial medicines are abfolutely neceffary \*.

As autumnal and winter agues generally prove much more obfinate than those which attack the

\* In obfinate agues, when the patient is old, the habit phlegmatic, the feafon rainy, the fituation damp, or the like, it will be neceffary to mix with two ounces of the bark, half an ounce of Virginian fnake-root, and a quarter of an ounce of ginger, or fome other warm aromatic; but when the fymptoms are of an inflammatory nature, half an ounce of falt of wormwood or falt of tartar may be added to the above quantity of bark.

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patient

patient in fpring or fummer, it will be neceffary to continue the ufe of medicines longer in the former than in the latter. A perfon who is feized with an intermitting fever in the beginning of winter, ought frequently, if the feafon proves rainy, to take a little medicine, although the difeafe may feem to be cured, to prevent a relapfe, till the return of the warm feafon. He ought likewife to take care not to be much abroad in wet weather, especially in cold eafterly winds.

WHEN agues are not properly cured, they often degenerate into obftinate chronical difeafes, as the dropfy, jaundice, &c. For this reafon all poffible care fhould be taken to have them radically cured; before the humours be vitiated, and the conftitution fpoiled.

Though nothing is more rational than the method of treating intermitting fevers, yet, by fome ftrange infatuation, more charms and whimfical remedies are daily ufed for removing this than any other difeafe. There is hardly an old woman who is not poffeffed of a noftrum for ftopping an ague; and it is amazing with what readinefs their pretenfions are believed. Thofe in diftrefs eagerly grafp at any thing that promifes fudden relief; but the fhorteft way is not always the beft in the treatment of difeafes. The only method to obtain a fafe and lafting cure, is gradually to affift Nature in removing the caufe of the diforder.

Some indeed try bold, or rather fool-hardy experiments to cure agues, as drinking great quantities of ftrong liquor, jumping into a river, &c. These may fometimes have the defired effect, but must always be

be attended with danger. When there is any degree of inflammation, or the leaft tendency to it, fuch experiments may prove fatal. The only patient whom I remember to have loft in an intermittent fever, evidently killed himfelf by drinking ftrong liquor, which fome perfon had perfuaded him would prove an infallible remedy.

MANY dirty things are extolled for the cure of intermitting fevers, as fpiders, cobwebs, fnuffings of candles, &c. Though these may sometimes succeed, yet their very nastines is sufficient to set them assoessay when cleanly medicines will answer the purpose better. The only medicine that can be depended upon, for thoroughly curing an intermittent sever, is the Peruvian bark. It may always be used with safety: and I can honestly declare, that in all my practice I never knew it fail, when combined with the medicines mentioned above, and duly persisted in.

WHERE agues are endemical, even children are often afflicted with that difeafe. Such patients are very difficult to cure, as they can feldom be prevailed upon to take the bark, or any other difagreeable medicine. One method of rendering this medicine more palatable, is to make it into a mixture with diftilled waters and fyrup, and afterwards to give it an agreeable fharpnefs with the elixir or fpirit of vitriol. This both improves the medicine, and takes off the naufeous tafte. In cafes where the bark cannot be adminiftered, the *faline mixture* may be given with advantage to children \*.

WINE-WHEY is a very proper drink for a child in an ague; to half an English pint of which may be

\* See Appendix, Saline mixture.

put

put a tea-fpoonful of the fpirit of hartfhorn. Exercife is likewife of confiderable fervice; and when the difeafe proves obstinate, the child ought, if possible, to be removed to a warm dry air. The food ought to be nourifhing, and fometimes a little generous wine should be allowed.

To children, and fuch as cannot fwallow the bark, or when the ftomach will not bear it, it may be given by clyfter. Half an ounce of the extract of bark. diffolved in four ounces of warm water, with the addition of half an ounce of fweet oil, and fix or eight drops of laudanum, is the form recommended by Dr. Lind for an adult, and this to be repeated every fourth hour, or oftener, as the occasion shall require. For children the quantity of extract and laudanum must be proportionally lessend. Children have been cured of agues by making them wear a wailtcoat with powdered bark quilted between the folds of it; by bathing them frequently in a ftrong decoction of the bark, and by rubbing the fpine with ftrong fpirits, or with a mixture of equal parts of laudanum and. the faponaceous liniment.

WE have been the more full upon this difeafe, becaufe it is very common, and becaufe few patients in an ague apply to phyficians unlefs in extremities. There are, however, many cafes in which the difeafe is very irregular, being complicated with other difeafes, or attended with fymptoms which are both very dangerous, and very difficult to understand. All these we have purpofely passed over, as they would only bewilder the generality of readers. When the difeafe is very irregular, or the fymptoms dangerous, the 3 patient

patient ought immediately to apply to a phylician, and ftrictly to follow his advice.

To prevent agues, people must endeavour to avoid their causes. These have been already pointed out in the beginning of this section; we shall therefore only add one preventive medicine, which may be of use to such as are obliged to live in low marshy countries, or who are liable to frequent attacks of this disease.

TAKE an ounce of the beft jefuits bark; Virginian fnake-root, and orange-peel, of each half an ounce; bruife them all together, and infufe for five or fix days in a bottle of brandy, Holland gin, or any good fpirit; afterwards pour off the clear liquor, and take a wine-glafs of it twice or thrice a-day. This indeed is recommending a dram; but the bitter ingredients in a great meafure take off the ill effects of the fpirit. Thofe who do not chufe it in brandy, may infufe it in wine; and fuch as can bring themfelves to chew the bark, will find that method fucceed very well. Gentian root, or calamus aromaticus, may alfo be chewed by turns for the fame purpofe. All bitters feem to be antidotes to agues, efpecially thofe that are warm and aftringent.

### CHAP. XV.

# OF AN ACUTE CONTINUAL FEVER.

HIS fever is denominated acute, ardent, or inflammatory. It most commonly attacks the young, or perfons about the prime or vigour of life, especially

especially such as live high, abound with blood, and whofe fibres are ftrong and elaftic. It feizes people at all feasons of the year; but is most frequent in the fpring and beginning of fummer.

CAUSES. An ardent fever may be occasioned by any thing that overheats the body, or produces plethora, as violent exercife, fleeping in the fun, drinking ftrong liquors, eating fpiceries, a full diet, wich little exercife, &c. It may likewife be occafioned by whatever obstructs the perspiration, as lying on the damp ground, drinking cold liquor when the body is hot, night-watching, or the like.

SYMPTOMS .---- A rigour or chillnefs generally ushers in this fever, which is foon fucceeded by great heat, a frequent and full pulfe, a pain of the head, dry skin, redness of the eyes, a florid countenance, pains in the back, loins, &c. To these succeed difficulty of breathing, sickness, with an inclination to vomit. The patient complains of great thirst, has no appetite for folid food, is reftlefs, and his tongue generally appears black and rough.

A DELIRIUM, excessive restlessness, great oppresfion of the breaft, with laborious respiration, starting of the tendons, hiccup, cold clammy fweats, and an involuntary discharge of urine, are very dangerous fymptoms.

As this difease is always attended with danger, the best medical assistance ought to be procured as soon as possible. A physician may be of use at the beginning, but his skill is often of no avail afterwards. Nothing can be more unaccountable than the conduct of those who have it in their power, at the beginning of

of a fever; to procure the beft medical affiftance; yet put it off till things come to an extremity. When the difeafe, by delay or wrong treatment; has become incurable; and has exhausted the strength of the patient, it is in vain to hope for relief from medicine. Physician's may indeed affist Nature; but their attempts must ever prove fruitles, when she is no longer able to co-operate with their endeavours.

REGIMEN:——From the fymptoms of this difeafe it is evident, that the humours muft be too vifcid and acrimonious; that the perfpiration, urine, faliva, and all the other fecretions, are in too finall quantity; that the veffels are rigid, and the heat of the whole body too great: All thefe clearly point out the neceffity of a regimen, calculated to dilute the blood, correct the acrimony of the humours; allay the exceffive heat; remove the fpafinodic ftructure of the veffels; and promote the fecretions.

THESE important purpofes may be greatly promoted by drinking plentifully of diluting liquors; as water-gruel, or oatmeal-tea, clear whey, barleywater; balm-tea, apple-tea, &c. Thefe may be fharpened with juice of orange, jelly of currants; rafpberries, and fuch-like : Orange-whey is likewite an excellent cooling drink. It is made by boiling among milk and water a bitter-orange; fliced till the curd feparates. If no orange can be had, a lemon; a little cream of tartar, or a few fpoonfuls of vinegar, will have the fame effect: Two or three fpoonfuls of white-wine may occafionally be added to the liquor when boiling.

IF the patient be coflive; an ounce of tamarinds, with two ounces of ftoned raifins of the fun, and a couple

couple of figs, may be boiled in three English pints of water to a quart. This makes a very pleafant drink, and may be used at differentiation. The common pectoral decoction is likewise a very proper drink in this diffease. A tea-cupful of it may be taken every two hours, or oftener, if the patient's heat and thirst be very great \*.

THE above liquors mult all be drank a little warm. They may be used in finaller quantities at the beginning of a fever, but more freely afterwards, in order to affift in carrying off the morbid matter by the different excretions. We have mentioned a variety of liquors, that the patient may have it in his power to chuse those which are most agreeable; and that, when tired of one, he may have recourse to another:

THE patient's diet must be very spare and light. All forts of flesh-meats, and even chicken-broths, are to be avoided. He may be allowed groat-gruel, panada, or light bread boiled in water; to which may be added a few grains of common falt, and a liftle sugar, which will render it more palatable. He may eat roasted apples with a little sogar, toasted bread with jelly of currants, boiled prunes, &c.

IT will greatly relieve the patient, especially in an hot seafon, to have fresh air frequently let into his chamber. This, however, must always be done in such a manner as not to endanger his catching cold.

It is too common in fevers to load the patient with bed-clothes, under the pretence of making him fweat, or defending him from the cold. This cuftom has many ill effects. It increases the heat of the body,

\* See Appendix, Pettoral decottion.

N

fatigues

fatigues the patient, and retards, instead of promoting, the perspiration.

SITTING upright in bed, if the patient is able to bear it, will often have a good effect. It relieves the head, by retarding the motion of the blood to the brain. But this posture ought never to be continued too long: And if the patient is inclined to fweat, it will be more fafe to let him lie, only raifing his head a little with pillows.

SPRINKLING the chamber with vinegar, juice of lemon, or vinegar and rofe-water, with a little nitre diffolved in it, will greatly refresh the patient. This ought to be done frequently, especially if the weather is hot.

THE patient's mouth should be often washed with a mixture of water and honey, to which a little vinegar may be added; or with a decoction of figs in barley-water. His feet and hands ought likewife frequently to be bathed in lukewarm water; efpecially if the head is affected.

THE patient should be kept as quiet and easy as poffible. Company, noife, and every thing that difturbs the mind, is hurtful. Even too much light, or any thing that affects the fenses, ought to be avoided. His attendants should be as few as posfible, and they ought not to be too often changed. His inclinations ought rather to be foothed than contradicted; even the promife of what he craves will often fatisfy him as much as its reality.

MEDICINE. ----- In this and all other fevers, attended with a hard, full, quick pulse, bleeding is of the greatest importance. This operation ought always to be performed as foon as the fymptoms of an inflam-

inflammatory fever appear. The quantity of blood to be let, however, muft be in proportion to the ftrength of the patient and the violence of the difeafe. If after the first bleeding the fever should rife, and the pulse become more frequent and hard, there will be a necessity for repeating it a second, and perhaps a third, or even a fourth time, which may be done at the distance of twelve, eighteen, or twentyfour hours from each other, as the symptoms require. If the pulse continues soft, and the patient is tolerably eafy after the first bleeding, it ought not to be repeated.

IF the heat and fever be very great, forty or fifty drops of the dulcified, or fweet fpirit of nitre, may be made into a draught, with an ounce of rofewater, two ounces of common water, and half an ounce of fimple fyrup, or a bit of loaf-fugar. This draught may be given to the patient every three or four hours while the fever is violent; afterwards, once in five or fix hours will be fufficient.

IF the patient be afflicted with reaching, or an incelination to vomit, it will be right to affift Nature's attempts, by giving him weak camomile-tea, or luke-warm water to drink.

IF the body is bound, a clyfter of milk and water with a little falt, and a fpoonful of fweet oil or fresh butter in it, ought daily to be administered. Should this not have the defired effect, a tea-spoonful of magnefia alba, or cream of tartar, may be frequently put into his drink. He may likewise eat tamarinds, boiled prunes, roasted apples, and the like.

IF about the 10th, 11th, or 12th day, the pulfe becomes more foft, the tongue moifter, and the urine N 2 begins

begins to let fall a reddifh fettlement, there is reafon to expect a favourable iffue to the difeafe. But if, inftead of thefe fymptoms, the patient's fpirits grow languid, his pulfe finks, and his breathing becomes difficult; with a ftupor, trembling of the nerves, ftarting of the tendons, &c. there is reafon to fear that the confequences will be fatal. In this cafe bliftering plafters muft be applied to the head, ancles, infide of the legs or thighs, as there may be occafion; poultices of wheat-bread, muftard, and vinegar may likewife be applied to the foles of the feet, and the patient muft be fupported with cordials, as ftrong wine-whey, negus, fago-gruel with wine in it, and fuch-like.

A PROPER regimen is not only neceffary during the fever, but likewife after the patient begins to recover. By neglecting this, many relapfe, or fall into other difeafes, and continue valetudinary for life. Though the body is weak after a fever, yet the diet for fome time ought to be rather cleanfing than of too nourifhing a nature. Too much food, drink, exercife, company, &c. are carefully to be avoided. The mind ought likewife to be kept eafy, and the patient fhould not attempt to purfue ftudy, or any bufinefs that requires intenfe thinking.

IF the digeftion is bad, or the patient is feized at times with feverifh heats, an infufion of Peruvian bark in cold water will be of ufe. It will ftrengthen the ftomach, and help to fubdue the remains of the fever.

WHEN the patient's strength is pretty well recovered, he ought to take fome gentle laxative. An

ounce

ounce of tamarinds and a dram of fena may be boiled for a few minutes in an English pint of water, and an ounce of manna diffolved in the decoclion; afterwards it may be ftrained, and a tea-cupful drank every hour till it operates. This dofe may be repeated twice or thrice, five or fix days inter--vening betwixt each dofe.

THOSE who follow laborious employments ought not to return too foon to their labour after a fever, but fhould keep eafy till their ftrength and fpirits are fufficiently recruited.

#### CHAP. XVI.

#### OF THE PLEURISY.

HE true pleurify is an inflammation of that membrane called the *pleura*, which lines the infide of the breaft. It is diffinguifhed into the moift and dry. In the former, the patient fpits freely; in the latter, little or none at all. There is likewife a, fpecies of this difeafe, which is called the *fpurious* or *baftard pleurify*, in which the pain is more external, and chiefly affects the muscles between the ribs. The pleurify prevails among labouring people, especially fuch as work without doors, and are of a fanguine conflitution. It is most frequent in the fpring feafon.

CAUSES.—The pleurify may be occasioned by whatever obstructs the perfpiration; as cold northerly winds; drinking cold liquors when the N 3 body

# 182 OF THE PLEURISY.

body is hot; sleeping without doors, on the damp ground; wet clothes; plunging the body into cold water, or exposing it to the cold air, when covered with fweat, &c. It may likewife be occasioned by drinking ftrong liquors; by the ftoppage of usual evacuations; as old ulcers, iffues, fweating of the feet or hands, &c. the fudden ftriking in of any eruption, as the itch, the measles, or the small-pox. Those who have been accustomed to bleed at a certain feason of the year, are apt, if they neglect it, to be feized with a pleurify. Keeping the body too warm by means of fire, clothes, &c. renders it more liable to this difeafe. A pleurify may likewife be occasioned by violent exercise, as running, wrestling, leaping, or by fupporting great weight, blows on the breast, &c. A bad conformation of the body. fometimes renders perfons more liable to this difease, as a narrow chest, a straitness of the arteries of the pleura, &c.

SYMPTOMS. — This, like most other fevers, generally begins with chillness and shivering, which are followed by heat, thirst, and restless. To these fucceeds a violent pricking pain in one of the fides among the ribs. Sometimes the pain extends towards the back-bone, fometimes towards the forepart of the breast, and at other times towards the shoulder blades. The pain is generally most violent when the patient draws in his breath.

THE pulfe in this difeafe is commonly quick and hard, the urine high-coloured; and if blood be let, it is covered with a tough cruft, or buffy coat. The patient's fpittle is at first thin, but afterwards it becomes groffer, and is often streaked with blood.

**REGI-**

REGIMEN.—Nature generally endeavours to carry off this difeafe by a critical difcharge of blood from fome part of the body, by expectoration, fweat, loofe ftools, thick urine, or the like. We ought therefore to fecond her intentions by leffening the force of the circulation, relaxing the veffels, diluting the humours, and promoting expectoration.

For these purposes the diet, as in the former difease, ought to be cool, slender, and diluting. The patient must avoid all food that is viscid, hard of digestion, or that affords much nourishment; as sless, butter, cheese, eggs, milk, and also every thing that is of a heating nature. His drink may be whey, or an infusion of pectoral and balfamic vegetables \*.

BARLEY-WATER, with a little honey, or jelly of currants mixed with it, is likewife a very proper drink in this difeafe. It is made by boiling an ounce of pearl-barley in three English pints of water to two, which must afterwards be strained. The decoction of figs, raisins, barley, recommended in the preceding difease, is here likewise very proper. These and other diluting liquors are not to be drank in large quantities at a time, but the patient ought to keep continually sipping them, so as to render his mouth and throat always moss. All his food and drink should be taken a little warm.

THE patient should be kept quiet, cool, and every way easy, as directed under the foregoing difease. His feet and hands ought daily to be bathed in warm water; and he may sometimes sit up in bed for a short space, in order to relieve his head.

\* See Appendix, Pectoral infusion.

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MEDICINE.—Almost every perfon knows, when a fever is attended with a violent pain of the fide, and a quick, hard pulfe, that bleeding is neceffary. When these fymptoms come on, the fooner, this operation is performed the better; and the quantity at first must be pretty large, provided the patient is able to bear it. A large quantity of blood let at once, in the beginning of a pleurify, has a much better effect than repeated finall bleedings. A man may lose twelve or fourteen ounces of blood as foon as it is certainly known that he is feized with a pleurify. For a younger perfon, or one of a delicate constitution, the quantity must be lefs.

IF, after the first bleeding, the flitch, with the other violent fymptoms, should still continue, it will be necessary, at the distance of twelve or eighteen hours, to let eight or nine ounces more. If the fymptoms do not then abate, and the blood shews a strong buffy coat, a third, or even a fourth bleeding may be requisite. If the pain of the fide abates, the pulse becomes foster, or the patient begins to spit freely, bleeding ought not to be repeated. This operation is feldom necessary after the third or fourthday of the fever, and ought not then to be performed, unless in the most urgent circumstances.

THE blood may be many ways attenuated without bleeding. There are likewife many things that may be done to eafe the pain of the fide without this operation, as fomenting, bliftering, &c. Fomentations may be made by boiling a handful of the flowers of elder, camomile, and common mallows, or any other foft vegetables, in a proper quantity of water. The herbs may be either put into a flannel bag, and applied

plied warm to the fide, or flannels may be dipped in the decoftion, afterwards wrung out, and applied to the part affected, with as much warmth as the patient can eafily bear. As the clothes grow cool, they mult be changed, and great care taken that the patient do not catch cold. A bladder may be filled with warm milk and water, and applied to the fide, if the above method of fomenting be found inconvenient. Fomentations not only eafe the pain, but relax the veffels, and prevent the flagnation of the blood and other humours. The fide may likewife be frequently rubbed with a little of the volatile liniment \*.

TOPICAL bleeding has often a very good effect in. this difeafe. It may either be performed by applying a number of leeches to the part affected, or by cupping, which is both a more certain and expeditious method than the other.

LEAVES of various plants might likewife be applied to the patient's fide with advantage. I have often feen great benefit from young cabbage-leaves applied warm to the fide in a pleurify. Thefe not only relax the parts, but likewife draw off a little moifture, and may prevent the neceffity of blifteringplafters; which, however, when other things fail, muft be applied.

IF the flitch continues after repeated bleedings, fomentations, &c. a bliftering-plafter must be laid upon the part affected, and suffered to remain for two days. This not only procures a discharge from the fide, but takes off the spasm, and by that means affists in re-

\* See Appendix, Volatile liniment.

moving

#### OF THE PLEURISY.

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moving the caufe of the difeafe. To prevent a strangury when the blistering-plaster is on, the patient may drink freely of the Arabic emulsion \*.

Ir the patient is coftive, a clyfter of thin watergruel, or of barley-water, in which a handful of mallows, or any other emollient vegetable has been boiled, may be daily administered. This will not only empty the bowels, but have the effect of a warm fomentation applied to the inferior vifcera, which will help to make a derivation from the breaft.

THE expectoration, or fpitting, may be promoted by fharp, oily, and mucilaginous medicines. For this purpole, an ounce of the oxymel, or the vinegar of fquills, may be added to fix ounces of the pectoral decoction, and two table-fpoonfuls of it taken every two hours.

SHOULD the fquill difagree with the flomach, the oily emulfion may be administered  $\dagger$ ; or, in place of it, two ounces of the oil of fweet almonds, or oil of olives, and two ounces of the fyrup of violets, may be mixed with as much fugar-candy powdered, as will make an electuary of the confistence of honey. The patient may take a tea-fpoonful of this frequently, when the cough is troublefome. Should oily medicines prove naufeous, which is fometimes the cafe, two table-fpoonfuls of the folution of gum ammoniac in barley-water may be given three or four times a-day  $\ddagger$ .

IF the patient does not perspire, but has a burning heat upon his skin, and passes very little water, some

- \* See Appendix, Arabic emulfion.
- + See Appendix, Oily emulsion.
- 1 See Appendix, Solution of gum ammoniac.

fmall

fmall dofes of purified nitre and camphire will be of ufe. Two drams of the former may be rubbed with five or fix grains of the latter in a mortar, and the whole divided into fix dofes, one of which may be taken every five or fix hours, in a little of the patient's ordinary drink,

WE shall only mention one medicine more, which fome reckon almost a specific in the pleurify, viz. the decoction of the seneka rattle-snake root \*. After bleeding, and other evacuations, have been premised, the patient may take two, three, or four table-spoonfuls of this decoction, according as his stomach will bear it, three or four times a-day. If it should occalion vomiting, two or three ounces of simple cinnamon-water may be mixed with the quantity of decoction here directed, or it may be taken in smaller doses. As this medicine promotes perspiration and urine, and likewise keeps the body easy, it may be of some fervice in a pleurify, or any other inflammation of the breast.

No one will imagine, that these medicines are all to be used at the same time. We have mentioned different things, on purpose that people may have it in their power to chuse; and likewise, that when one cannot be obtained, they may make use of another. Different medicines are no doubt necessary in the different periods of a disorder; and where one fails of success, or disagrees with the patient, it will be proper to try another.

WHAT is called the crifis, or height of the fever, is fometimes attended with very alarming fymptoms, as difficulty of breathing, an irregular pulfe, convul-

\* See Appendix, Decostion of Seneca root.

five

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five motions, &c. These are apt to fright the attendants, and induce them to do improper things, as bleeding the patient, giving him ftrong ftimulating medicines, or the like. But they are only the ftruggles of Nature to overcome the disease, in which fhe ought to be affifted by plenty of diluting drink, which is then peculiarly neceffary. If the patient's ftrength however be much exhaufted by the diseafe, it will be necessary at this time to support him with frequent fmall draughts of wine-whey, negus, or the like.

WHEN the pain and fever are gone, it will be proper, after the patient has recovered fufficient ftrength, to give him fome gentle purges, as those directed towards the end of the acute continual fever. He ought likewise to use a light diet of eafy digeftion, and his drink should be butter-milk, whey, and other things of a cleanfing nature.

#### Of the BASTARD PLEURISY.

THAT species of pleurify which is called the bastard or spurious, generally goes off by keeping warm for a few days, drinking plenty of diluting liquors, and observing a proper regimen.

IT is known by a dry cough, a quick pulse, and a difficulty of lying on the affected fide, which laft does not always happen in the true pleurify. Sometimes indeed this difease proves obstinate, and requires bleeding, with cupping, and fearifications of the part affected. These, together with the use of nitrous and other cooling medicines, feldom fail to effect a cure. Second and the second second

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Of

#### OF A PERIPNEUMONY.

#### Of the PARAPHRENITIS.

THE paraphrenitis, or inflammation of the diaphragm, is fo nearly connected with the pleurify, and refembles it fo much in the manner of treatment, that it is fcarce neceffary to confider it as a feparate difeafe.

It is attended with a very acute fever, and an extreme pain of the part affected, which is generally augmented by coughing, fneezing, drawing in the breath, taking food, going to ftool, making water, &c. Hence the patient breathes quick, and draws in his bowels to prevent the motion of the diaphragm; is reftlefs, anxious, has a dry cough, a hiccup, and often a delirium. A convultive laugh, or rather a kind of involuntary grin, is no uncommon fymptom of this difeafe.

EVERY method must be taken to prevent a suppuration, as it is impossible to fave the patient's life when this happens. The regimen and medicine are in all respects the fame as in the pleurify. We shall only add, that in this difease emollient clysters are peculiarly useful, as they relax the bowels, and by that means make a derivation from the part affected.

#### CHAP. XVII.

### OF A PERIPNEUMONY, OR INFLAMMA-TION OF THE LUNGS.

A S this difease affects an organ which is absolutely neceffary to life, it must always be attended with danger. Persons who abound with thick blood, whose fibres are tense and rigid, who seed upon gross aliment,

## OF A PERIPNEUMONY.

aliment, and drink ftrong viscid liquors, are most liable to a peripheumony. It is generally fatal to those who have a flat breast, or narrow chest, and to such as are afflicted with an asthma, especially in the decline of life. Sometimes the inflammation reaches to one lobe of the lungs only, at other times the whole of the organ is affected; in which case the disease can hardly fail to prove fatal.

WHEN the difease proceeds from a viscid pituitous matter, obstructing the vessels of the lungs, it is called a *spurious* or *bastard peripneumony*. When it arises from a thin acrid defluxion on the lungs, it is denominated a *catarrhal peripneumony*, &c.

CAUSES.——An inflammation of the lungs is fometimes a primary difeafe, and fometimes it is the confequence of other difeafes, as a quinfey, a pleurify, &c. It proceeds from the fame caufes as the pleurify, viz. an obftructed perfpiration from cold, wet clothes, &c. or from an increafed circulation of the blood by violent exercife, the ufe of fpiceries, ardent fpirits, and fuch like. The pleurify and peripneumony are often complicated; in which cafe the difeafe is called a *pleuro-peripneumony*.

SYMPTOMS. — Moft of the fymptoms of a pleurify likewife attend an inflammation of the lungs; only in the latter the pulfe is more foft, and the pain lefs acute; but the difficulty of breathing, and opprefion of the breaft, are generally greater.

REGIMEN.——As the regimen and medicine are in all refpects the fame in the true peripneumony as in the pleurify, we fhall not here repeat them, but refer the reader to the treatment of that difeafe. It may not however be improper to add, that the aliment

ment ought to be more flender and thin in this than in any other inflammatory difeafe. The learned Dr. Arbuthnot afferts, that even common whey is fufficient to fupport the patient, and that decoctions of barley, and infufions of fennel roots in warm water with milk, are the most proper both for drink and nourifhment. He likewise recommends the steam of warm water taken in by the breath, which serves as a kind of internal fomentation, and helps to attenuate the impacted humours. If the patient has loose should be should be them, they are not to be stopped, but rather promoted by the use of emollient clysters.

It has already been observed, that the *fpurious* or *bastard* peripneumony is occasioned by a viscid pituitous matter obstructing the vessels of the lungs. It commonly attacks the old, infirm, and phlegmatic, in winter or wet feasons.

THE patient at the beginning is cold and hot by turns, has a fmall quick pulfe, feels a fenfe of weight upon his breaft, breathes with difficulty, and fometimes complains of a pain and giddinefs of his head. His urine is ufually pale, and his colour very little changed.

THE diet in this, as well as in the true peripneumony, must be very slender, as weak broths sharpened with the juice of orange or lemon, &c. His drink may be thin water-gruel sweetened with honey, or a decoction of the roots of fennel, liquorice, and quick grass. An ounce of each of these may be boiled in three English pints of water to a quart, and sharpened with a little currant-jelly, or the like.

BLEEDING

## OF A PERIPNEUMONY.

BLEEDING and purging are generally proper at the beginning of this difeafe; but if the patient's fpittle is pretty thick, or well concocted, neither of them are neceffary. It will be fufficient to affilt the expectoration by fome of the fharp medicines, recommended for that purpofe in the pleurify, as the folution of gum ammoniac with oxymel of fquills, &c. Bliftering-plafters have generally a good effect, and ought to be applied pretty early.

IF the patient does not fpit, he must be bled according as his strength will permit, and have a gentle purge administered. Afterwards his body may be kept open by clysters, and the expectoration promoted, by taking every four hours two tablespoonfuls of the solution mentioned above.

WHEN an inflammation of the breaft does not yield to bleeding, bliftering, and other evacuations; it commonly ends in a fuppuration, which is more or lefs dangerous, according to the part where it is fituated. When this happens in the pleura, it fometimes breaks outwardly, and the matter is difcharged by the wound.

WHEN the fuppuration happens within the fubftance or body of the lungs, the matter may be difcharged by expectoration; but if the matter floats in the cavity of the breaft, between the pleura and the lungs, it can only be difcharged by an incifion made betwixt the ribs.

IF the patient's ftrength does not return after the inflammation is to all appearance removed; if his pulfe continues quick though foft; his breathing difficult and oppreffed; if he has cold fhiverings at times, his cheeks flushed, his lips dry; and if he .complains

complains of thirft, and want of appetite, there is reafon to fear a fuppuration, and that a phthifis or confumption of the lungs will enfue. We fhall therefore next proceed to confider the proper treatment of that difeafe.

## CHAP. XVIII.

### OF CONSUMPTIONS.

A CONSUMPTION is a walting or decay of the whole body from an ulcer, tubercles, or concretions of the lung's, an empyema, a nervous atrophy, or a cachexy.

DR. ARBUTHNOT Observes, that in his time confumptions made up above one-tenth part of the bills of mortality in and about London. There is reason to believe they have rather increased fince; and we know for certain, that they are not less fatal in some other towns of England than in London.

Young perfons, betwixt the age of fifteen and thirty, of a flender make, long neck, high fhoulders, and flat breafts, are most liable to this difease.

CONSUMPTIONS prevail more in England than in any other part of the world, owing perhaps to the great use of animal food and malt-liquors, the general application to sedentary employments, and the great quantity of pit-coal which is there burnt; to which we may add the perpetual changes in the atmosphere, or variableness of the weather.

CAUSES.——It has already been obferved, that an inflammation of the breaft often ends in an im-O pofthume:

posthume: Consequently whatever disposes people to this disease, must likewise be considered as a cause of consumptions.

OTHER difeafes, by vitiating the humours, may likewife occafion confumptions; as the fcurvy, the fcrophula, or king's evil, the venereal difeafe, the afthma, finall-pox, meafles, &c.

As this difeafe is feldom cured, we fhall endeavour the more particularly to point out its caufes, in order that people may be enabled to avoid it. Thefe are:

----- CONFINED or unwholefome air. When this fluid is impregnated with the fumes of metals or minerals, it proves extremely hurtful to the lungs, and often corrodes the tender veffels of that neceffary organ.

---- GREAT evacuations; as fweating, diarrhœas, diabetes, exceffive venery, the fluor albus, an overdifcharge of the menftrual flux, giving fuck too long, &c.

THE fudden stoppage of customary evacuations; as the bleeding piles, sweating of the feet, bleeding at the nose, the menses, issues, ulcers, or eruptions of any kind.

---- MAKING

MAKING a fudden transition from a hot to a very cold climate, change of apparel, or whatever greatly less the perspiration.

----FREQUENT and exceffive debaucheries. Late watching, and drinking ftrong liquors, which generally go together, can hardly fail to deftroy the lungs. Hence the *bon companion* generally falls a facrifice to this difeafe.

INFECTION: Confumptions are often caught by fleeping with the difeafed; for which reafon this fhould be carefully avoided. It cannot be of great benefit to the fick, and muft hurt those in health.

—Occupations in life. Those artificers who fit much, and are constantly leaning forward, or preffing upon the stomach and breast, as cutlers, taylors, shoe-makers, seamstress, &c: often die of consumptions. They likewise prove fatal to singers, and all who have occasion to make frequent and violent exertions of the lungs.

——COLD. More confumptive patients date the beginning of their diforders from wet feet, damp beds, night air, wet clothes, or catching cold after the body had been heated, than from all other caufes.

SHARP, faline, and aromatic aliments, which heat and inflame the blood, are likewife frequently the caufe of confumptions.

We fhall only add, that this difeafe is often owing to an hereditary taint, or a fcrophulous habit; in which cafe it is generally incurable.

SYMPTOMS.— This difeafe generally begins with a dry cough, which often continues for fome months. If a difpolition to vomit after eating be excited by it, there is ftill greater reafon to fear an  $O_2$  approaching

approaching confumption. The patient complains of a more than ufual degree of heat, a pain and oppreffion of the breaft, especially after motion; his spittle is of a faltish taste, and sometimes mixed with blood. He is apt to be fad; his appetite is bad, and his thirst great. There is generally a quick, soft, small pulse; though sometimes the pulse is pretty full, and rather hard. These are the common symptoms of a beginning confumption.

AFTERWARDS the patient begins to fpit a greenifh, white, or bloody matter. His body is extenuated by the hectic fever, and colliquative fweats, which mutually fucceed one another, viz. the one towards night, and the other in the morning. A loofenefs and an exceffive difcharge of urine, are often troublefome fymptoms at this time, and greatly weaken the patient. There is a burning heat in the palms of the hands, and the face generally flufhes after eating; the fingers become remarkably finall, the nails are bent inwards, and the hairs fall off.

AT last the fwelling of the feet and legs, the total lofs of strength, the finking of the eyes, the difficulty of swallowing, and the coldness of the extremities, shew the immediate approach of death, which however the patient feldom believes to be fo near. Such is the usual progress of this fatal disease, which, if not early checked, commonly sets all medicine at defiance.

REGIMEN.——On the first appearance of a confumption, if the patient lives in a large town, or any place where the air is confined, he ought immediately to quit it, and to make choice of a fituation in the country, where the air is pure and free. Here he must not

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not remain inactive, but take every day as much exercife as he can bear.

THE beft method of taking exercife is to ride on horfeback, as this gives the body a great deal of motion without much fatigue. Such as cannot bear this kind of exercife, muft make ufe of a carriage. A long journey, as it amufes the mind by a continual change of objects, is greatly preferable to riding the fame ground over and over. Care however muft be taken to avoid catching cold from wet clothes, damp beds, or the like. The patient ought always to finifh his ride in the morning, or at leaft before dinner; otherwife it will oftener do harm than good.

It is pity those who attend the fick feldom recommend riding in this difease, till the patient is either unable to bear it, or the malady has become incurable. Patients are likewise apt to trifle with every thing that is in their own power. They cannot see how one of the common actions of life should prove a remedy in an obstinate difease, and therefore they reject it, while they greedily hunt after relief from medicine, merely because they do not understand it.

THOSE who have firength and courage to undertake a pretty long voyage, may expect great advantage from it. This, to my knowledge, has frequently cured a confumption after the patient was, to all appearance, in the laft ftage of that difeafe, and where medicine had proved ineffectual. Hence it is reafonable to conclude, that if a voyage were undertaken in due time, it would feldom fail to perform a cure \*.

#### SUCH

\* Two things chiefly operate to prevent the benefits which would arife from failing. The one is, that phyficians feldom O 3 order

SUCH as try this method of cure ought to carry as much fresh provisions along with them as will ferve for the whole time they are at fea. As milk is not easily obtained in this fituation, they ought to live upon fruits, and the broth of chickens, or other young animals which can be kept alive on board. It is fearce neceffary to add, that fuch voyages should be undertaken, if possible, in the mildest feason, and that they ought to be towards a warmer climate \*.

THOSE who have not courage for a long voyage may travel into a more fouthern climate, as the fouth of France, Spain, or Portugal; and if they find the air of these countries agree with them, they should continue there, at least till their health be confirmed.

NEXT to proper air and exercife, we would recommend a due attention to diet. The patient fhould eat nothing that is either heating or hard of digeftion, and his drink muft be of a foft and cooling nature. All the diet ought to be calculated to leffen the acrimony of the humours, and to nourifh and fupport the patient. For this purpofe he muft keep chiefly to the use of vegetables and milk. Milk alone is of more value in this difease than the whole *materia medica*.

order it till the difeafe is too far advanced; and the other is, that they feldom order a voyage of a fufficient length. A patient may receive no benefit by croffing the Channel, who, fhould he crofs the Atlantic, might be completely cured. Indeed we have reafon to believe, that a voyage of this kind, if taken in due time, would feldom fail to cure a confumption.

\* Though I do not remember to have feen one inftance of a confirmed confumption of the lungs cured by medicine, yet I have known a Weft-India voyage to reftore to perfect health a perfon who feemed to be in the laft ftage of that dreadful diforder.

Asses

Asses milk is commonly reckoned preferable to any other; but it cannot always be obtained; befides, it is generally taken in a very fmall quantity; whereas, to produce any effects, it ought to make a confiderable part of the patient's diet. It is hardly to be expected, that a gill or two of affes milk, drank in the fpace of twenty-four hours, fhould be able to produce any confiderable change in the humours of an adult; and when people do not perceive its effects foon, they lofe hope, and fo leave it off. Hence it happens that this medicine, however valuable, very feldom performs a cure. The reafon is obvious; it is commonly ufed too late, is taken in too finall quantities, and is not duly perfifted in.

I HAVE known very extraordinary effects from affes milk in obftinate coughs, which threatened a confumption of the lungs; and do verily believe, if ufed at this period, that it would feldom fail; but if it be delayed till an ulcer is formed, which is generally the cafe, how can it be expected to fucceed ?

Asses milk ought to be drank, if poffible, in its natural warmth, and, by a grown perfon, in the quantity of half an English pint at a time. Instead of taking this quantity night and morning only, the patient ought to take it four times, or at least thrice a-day, and to eat a little light bread along with ir, fo as to make it a kind of meal.

IF the milk fhould happen to purge, it may be mixed with old conferve of rofes. When that cannot be obtained, the powder of crabs claws may be used in its stead. Affes milk is usually ordered to be drank warm in bed; but as it generally throws the patient into a sweat when taken in this way, it would perhaps be better to give it after he rifes.

04

Some

Some extraordinary cures in confumptive cafes have been performed by women's milk. 'Could this be obtained in fufficient quantity, we would recommend it in preference to any other. It is better if the patient can fuck it from the breaft, than to drink it afterwards. I knew a man who was reduced to fuch a degree of weaknefs in a confumption, as not to be able to turn himfelf in bed. His wife was at that time giving fuck, and the child happening to die, he fucked her breafts, not with a view to reap any advantage from the milk, but to make her eafy. Finding himfelf however greatly benefited by it, he continued to fuck her till he became perfectly well, and is at prefent a ftrong and healthy man.

Some prefer butter-milk to any other, and it is indeed a very valuable medicine, if the flomach be able to bear it. It does not agree with every perfon at firft; and is therefore often laid afide without a fufficient trial. It fhould at firft be taken fparingly, and the quantity gradually increafed, until it comes to be almost the fole food. I never knew it fucceed unless where the patient almost lived upon it.

Cows milk is most readily obtained of any, and though it be not fo easily digested as that of assor mares, it may be rendered lighter by adding to it an equal quantity of barley-water, or allowing it to stand for fome hours, and asterwards taking off the cream. If it should, notwithstanding, prove heavy on the stomach, a small quantity of brandy or rum, with a little sugar, may be added, which will render it both more light and nourishing.

It is not to be wondered, that milk fhould, for fome time, difagree with a ftomach that has not been accustomed accuftomed to digeft any thing but flefh and ftrong liquors, which is the cafe with many of thofe who fall into confumptions. We do not however advife thofe who have been accuftomed to animal food and ftrong liquors, to leave them off all at once. This might be dangerous. It will be neceffary for fuch to eat a little once a-day of the flefh of fome young animal, or rather to ufe the broth made of chickens, veal, lamb, or fuch like. They ought likewife to drink a little wine made into negus, or diluted with twice or thrice its quantity of water, and to make it gradually weaker till they can leave it off altogether.

THESE must be used only as preparatives to a diet confisting chiefly of milk and vegetables, which the fooner the patient can be brought to bear, the better. Rice and milk, or barley and milk boiled, with a little fugar, is very proper food. Ripe fruits roasted, baked, or boiled, are likewise proper, as goole or currant berry tarts, apples roasted, or boiled in milk, &c. The jellies, conferves, and preferves, &c. of ripe fubacid fruits, ought to be eat plentifully, as the jelly of currants, conferve of roses, preferved plums, cherries, &c.

WHOLESOME air, proper exercife, and a diet confifting chiefly of thefe and other vegetables, with milk, is the only courfe that can be depended on in a beginning confumption. If the patient has ftrength and fufficient refolution to perfift in this courfe, he will feldom be difappointed of a cure.

IN a populous town in England \*, where confumptions are very common, I have frequently feen con-

\* Sheffield.

fumptive

fumptive patients, who had been fent to the country with orders to ride, and live upon milk and vegetables, return in a few months quite plump, and free from any complaint. This indeed was not always the cafe, efpecially when the difeafe was hereditary, or far advanced; but it was the only method in which fuccefs was to be expected: where it failed, I never knew medicine fucceed.

IF the patient's ftrength and fpirits flag, he must be fupported by ftrong broths, jellies, and fuch like. Some recommend shell-fish in this diforder, and with fome reason, as they are nourishing and restorative\*. All the food and drink ought however to be taken in small quantities, left an overcharge of fresh chyle should oppress the lungs, and too much accelerate the circulation of the blood.

THE patient's mind ought to be kept as eafy and cheerful as possible. Confumptions are often occafioned, and always aggravated, by a melancholy cast of mind; for which reason, music, cheerful company, and every thing that inspires mirth, are highly beneficial. The patient ought feldom to be left alone, as brooding over his calamities is fure to render them worse.

MEDICINE. Though the cure of this difcafe depends chiefly upon regimen and the patient's own endeavours, yet we shall mention a few things which may be of fervice in relieving fome of the more violent fymptoms.

\* I have often known perfons of a confumptive habit, where the fymptoms were not violent, reap great benefit from the ufe of ovfters. They generally eat them raw, and drank the juice along with them.

IN

In the first stage of a confumption, the cough may fometimes be appealed by bleeding; and the expectoration may be promoted by the following medicines. Take fresh squills, gum-ammoniac, and powdered cardamum feeds, of each a quarter of an ounce; beat them together in a mortar, and if the mass proves too hard for pills, a little of any kind of fyrup may be added to it. This may be formed into pills of a moderate fize, and four or five of them taken twice or thrice a-day, according as the patient's stomach will bear them.

THE lac ammoniacum, or milk of gum ammoniac, as it is called, is likewife a proper medicine in this ftage of the difeafe. It may be used as directed in the pleurify.

A MIXTURE made of equal parts of lemon-juice, fine honey, and fyrup of poppies, may likewife be ufed. Four ounces of each of thele may be fimmered together in a fauce-pan, over a gentle fire, and a table-fpoonful of it taken at any time when the cough is troublefome.

It is common in this ftage of the difeafe to load the patient's ftomach with oily and balfamic medicines. Thefe, inftead of removing the caufe of the difeafe, tend rather to increafe it, by heating the blood, while they pall the appetite, relax the folids, and prove every way hurtful to the patient. Whatever is ufed for removing the cough, befides riding and other proper regimen, ought to be medicines of a fharp and cleanfing nature; as oxymel, fyrup of lemon, &c.

Acids feem to have peculiarly good effects in this difeafe; they both tend to quench the patient's thirft and

and to cool the blood. The vegetable acids, as apples, oranges, lemons, &c. appear to be the moft proper. I have known patients fuck the juice of feveral lemons every day with manifest advantage, and would, for this reason, recommend acid vegetables to be taken in as great quantity as the stomach will bear them

For the patient's drink, we would recommend infufions of the bitter plants, as ground-ivy, the leffer centaury, camomile flowers, or water-trefoil. Thefe infufions may be drank at pleafure. They ftrengthen the ftomach, promote digeftion, rectify the blood, and at the fame time answer all the purposes of dilution, and quench thirst much better than things that are lussions or fweet. But if the patient spits blood, he ought to use, for his ordinary drink, infusions or decoctions of the vulnerary roots, plants, &c \*.

THERE are many other mucilaginous plants and feeds, of a healing and agglutinating nature, from which decoctions or infufions may be prepared with the fame intention; as the orches, the quince-feed, coltsfoot, linfeed, farfaparilla, &c. It is not neceffary to mention the different ways in which thefe may be prepared. Simple infufion or boiling is all that is neceffary, and the dofe may be at difcretion.

THE conferve of roles is here peculiarly proper. It may either be put into the decoction above prefcribed, or eat by itfelf. No benefit is to be expected from trifling doles of this medicine. I never knew it of any fervice, unlefs where three or four

\* See Appendix, Vulnerary decoction.

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ounces

ounces at least were used daily for a confiderable time. In this way I have seen it produce very happy effects, and would recommend it wherever there is a discharge of blood from the lungs.

WHEN the fpitting up of groß matter, opprefion of the breaft, and the hectic fymptoms fhew that an impofthume is formed in the lungs, we would recommend the Peruvian bark, that being the only drug which has any chance to counteract the general tendency which the humours then have to putrefaction.

An ounce of the bark in powder may be divided into eighteen or twenty dofes, of which one may be taken every three hours through the day, in a little fyrup, or a cup of horehound tea.

IF the bark fhould happen to purge, it may be made into an electuary, with the conferve of rofes, thus: Take old conferve of rofes a quarter of a pound, Peruvian bark in powder an ounce, fyrup of orange or lemon, as much as will make it of the confiftence of honey. This quantity will ferve the patient four or five days, and may be repeated as there is occafion.

SUCH as cannot take the bark in fubftance, may infuse it in cold water. This seems to be the best menstruum for extracting the virtues of that drug. Half an ounce of bark in powder may be infused for twenty-four hours in half an English pint of water. Afterwards let it be passed through a fine strainer, and an ordinary tea-cupful of it taken three or four times a-day.

We would not recommend the bark while there are any fymptoms of an inflammation of the breaft; but when

when it is certainly known that matter is collected there, it is one of the beft medicines which can be ufed. Few patients indeed have refolution enough to give the bark a fair trial at this period of the difeafe, otherwife we have reafon to believe, that great benefit might be reaped from it.

WHEN it is evident that there is an impofthume in the breaft, and the matter can neither be fpit up nor carried off by abforption, the patient muft endeavour to make it break inwardly, by drawing in the fteams of warm water or vinegar with his breath, coughing, laughing, or bawling aloud, &c. When it happens to burft within the lungs, the matter may be difcharged by the mouth. Sometimes indeed the burfting of the vomica occafions immediate death, by fuffocating the patient. When the quantity of matter is great, and the patient's ftrength exhaufted, this is apt to happen. At any rate, the patient is ready to fall into a fwoon, and fhould have volatile falts or fpirits held to his nofe.

IF the matter difcharged be thick, and the cough and breathing become eafier, there may be fome hopes of a cure. The diet at this time ought to be light, but reftorative, as chicken-broths, fago-gruel, rice-milk, &c. the drink, butter-milk, or whey fweetened with honey. This is likewife a proper time for using the Peruvian bark, which may be taken as directed above.

IF the vomica or imposthume should discharge itfelf into the cavity of the breast, betwixt the pleura and the lungs, there is no way of getting the matter out but by an incision, as has already been observed. As this operation must always be performed by a furgeon,

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furgeon, it is not neceffary here to defcribe it. We fhall only add, that it is not fo dreadful as people are apt to imagine, and that it is the only chance the patient, in this cafe, has for his life.

A NERVOUS CONSUMPTION, is a wafting or decay of the whole body, without any confiderable degree of fever, cough, or difficulty of breathing. It is attended with indigeftion, weaknefs, and want of appetite, &cc.

THOSE who are of a fretful temper, who indulge in fpirituous liquors, or who breathe an unwholefome air, are most liable to this difease.

WE would chiefly recommend, for the cure of a nervous confumption, a light and nourifhing dier, plenty of exercise in a free open air, and the use of such bitters as brace and strengthen the stomach; as the Peruvian bark, gentian root, camomile, horehound, &c. These may be infused in water or wine, and a glass of it drank frequently.

It will greatly affift the digeftion, and promote the cure of this difeafe, to take twice a-day twenty or thirty drops of the elixir of vitriol in a glafs of wine or water. The chalybeate wine is likewife an excellent medicine in this cafe. It ftrengthens the folids, and powerfully affifts Nature in the preparation of good blood \*.

AGREEABLE amufements, cheerful company, and riding about, are, however, preferable to all medicines in this difeafe. For which reafon, when the patient can afford it, we would recommend a long

\* See Appendix, Chalybeate wine.

journey

journey of pleasure, as the most likely means to restore his health.

WHAT is called a *fymptomatic confumption* cannot be cured without first removing the difease by which it is occasioned. Thus, when a confumption proceeds from the fcrophula or king's-evil, from the fcurvy, the asthma, the venereal difease, &c. a due attention must be paid to the malady from whence it arises, and the regimen and medicine directed accordingly.

WHEN exceffive evacuations of any kind occafion a confumption, they must not only be reftrained, but the patient's strength must be reftored by gentle exercife, nourishing diet, and generous cordials. Young and delicate mothers often fall into confumptions, by giving fuck too long. As soon as they perceive their strength and appetite begin to fail, they ought immediately to wean the child, or provide another nurfe, otherwise they cannot expect a cure.

BEFORE we quit this fubject, we would earnefly recommend it to all, as they wifh to avoid confumptions, to take as much exercife without doors as they can, to avoid unwholefome air, and to ftudy fobriety. Confumptions owe their prefent increafe not a little to the fafhion of fitting up late, eating hot fuppers, and fpending every evening over a bowl of hot punch or other ftrong liquors. Thefe liquors, when too freely ufed, not only hurt the digeftion, and fpoil the appetite, but heat and inflame the blood, and fet the whole conftitution on fire.

# OF THE NERVOUS FEVER.

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# ĆHAP. XIX.

# OF THE SLOW OR NERVOUS FEVER.

NERVOUS fevers have increased greatly of late years in this island, owing, doubtlefs, to our different manner of living, and the increase of fedentary employments; as they commonly attack perfons of a weak relaxed habit, who neglect exercife, eat little folid food, study hard, or indulge in spirituous liquors.

CAUSES.—Nervous fevers may be occafioned by whatever depreffes the fpirits, or impoverifhes the blood; as grief, fear, anxiety, want of fleep, intenfe thought, living on poor watery diet, unripe fruits, cucumbers, melons, mufhrooms, &c. They may likewife be occafioned by damp, confined, or unwholefome air. Hence they are very common in rainy feafons, and prove moft fatal to thofe who live in dirty, low houfes, crowded ftreets, hofpitals, jails, or fuch-like places.

PERSONS whofe conflictutions have been broken by exceffive venery, frequent falivations, too free an ufe of purgative medicines, or any other exceffive evacuations, are very liable to this difeafe.

KEEPING on wet clothes, lying on the damp ground, exceffive fatigue, and whatever obstructs the perspiration, or causes a spassmodic stricture of the folids, may likewise occasion nervous severs. We shall only add, frequent and great irregularities in diet. Too great abstinence, as well as excess, is hurtful. Nothing tends fo much to preferve the body in a P found

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found flate as a regular diet; nor can any thing contribute more to occasion fevers of the worst kind than its opposite.

SYMPTOMS.—Low fpirits, want of appetite, weaknefs, wearinefs after motion, watchfulnefs, deep fighing, and dejection of mind, are generally the forerunners of this difeafe. Thefe are fucceeded by a quick low pulfe, a dry tongue without any confiderable thirft, chillnefs and flufhing in turns, &c.

AFTER fome time the patient complains of a giddinefs and pain of his head, has a naufea, with reachings and vomiting; his pulfe is quick, and fometimes intermitting; his urine pale, refembling dead finall-beer, and his breathing is difficult, with oppreffion of the breaft, and flight alienations of mind.

IF towards the ninth, tenth, or twelfth day, the tongue becomes more moift, with a plentiful fpitting, a gentle purging, or a moifture upon the fkin; or if a fuppuration happens in one or both ears, or large puffules break out about the lips and nofe, there is reafon to hope for a favourable crifis.

But if there is an exceffive loofenefs, or wafting fweats, with frequent fainting fits; if the tongue, when put out, trembles exceffively, and the extremities feel cold, with a fluttering or flow creeping pulfe; if there is a flarting of the tendons, an almost total lofs of fight and hearing, and an involuntary difcharge by flool and urine, there is great reafon to fear that death is approaching.

REGIMEN.——It is very neceffary in this difeafe to keep the patient cool and quiet. The leaft motion

motion will fatigue him, and will be apt to occasion wearinefs, and even faintings. His mind ought not only to be kept easy, but soothed and comforted with the hopes of a speedy recovery. Nothing is more hurtful in low fevers of this kind, than prefenting to the patient's imagination gloomy or frightful ideas. These of themselves often occasion nervous fevers, and it is not to be doubted but they will likewife aggravate them.

THE patient must not be kept too low. His ftrength and fpirits ought to be fupported by nourishing diet and generous cordials. For this purpose his gruel, panada, or whatever food he takes, must be mixed with wine according as the fymptoms may require. Pretty ftrong wine-whey, or finall negus, scharpened with the juice of orange or lemon, will be proper for his ordinary drink. Mustard-whey is likewife a very proper drink in this fever, and may be rendered an excellent cordial medicine by the addition of a proper quantity of white-wine \*.

WINE in this difeafe, if it could be obtained genuine, is almost the only medicine that would be neceffary. Good wine posseffers all the virtues of the cordial medicines, while it is free from many of their bad qualities. I fay good wine; for however common this article of luxury is now become, it is rarely to be obtained genuine, especially by the poor, who are obliged to purchase it in small quantities.

I HAVE often feen patients in low nervous fevers where the pulfe could hardly be felt, with a conftant delirium, coldnefs of the extremities, and almost every

\* See Appendix, Muslard-Whey,

other

other mortal fymptom, recover by using in whey, gruel, and negus, a bottle or two of strong wine every day. Good old sound claret is the best, and may be made into negus, or given by itself, as circumstances may require.

IN a word, the great aim in this difeafe is to fupport the patient's ftrength, by giving him frequently finall quantities of the above, or other drinks of a warm and cordial nature. He is not however to be over-heated either with liquor or clothes; and his food ought to be light, and given in fmall quantities.

MEDICINE. Where a naufea, load, and ficknefs at flomach prevail at the beginning of the fever, it will be neceffary to give the patient a gentle vomit. Fifteen or twenty grains of ipecacoanha in fine powder, or a few fpoonfuls of the vomiting julep\*, will generally anfwer this purpofe very well. This may be repeated any time before the third or fourth day, if the above fymptoms continue. Vomits not only clean the flomach, but, by the general fhock which they give, promote the perfpiration, and have many other excellent effects in flow fevers, where there are no figns of inflammation, and nature wants roufing.

SUCH as dare not venture upon a vomit, may clean the bowels by a finall dofe of Turkey rhubarb, or an infusion of fenna and manna.

IN all fevers, the great point is to regulate the fymptoms, fo as to prevent them from going to either extreme. Thus, in fevers of the inflammatory kind, where the force of the circulation is too great, or the

\* See Appendix, Vomiting Juley.

blood

blood denfe, and the fibres too rigid, bleeding and other evacuations are neceffary. But in nervous fevers, where nature flags, where the blood is vapid and poor, and the folids relaxed, the lancet mult be fpared, and wine, with other cordials, plentifully administered.

It is the more neceffary to caution people againft bleeding in this difeafe, as there is generally at the beginning an univerfal ftricture upon the veffels, and fometimes an opprefion and difficulty of breathing, which fuggeft the idea of a plethora, or too great a quantity of blood. I have known even fome of the faculty deceived by their own feelings in this refpect, fo far as to infift upon being bled, when it was evident that the operation was improper.

THOUGH bleeding is generally improper in this difeafe, yet bliftering is highly neceffary. Blifteringplafters may be applied at all times of the fever with great advantage. If the patient is delirious, he ought to be bliftered on the neck or head, and it will be the fafeft courfe, while the fenfibility continues, as foon as the difcharge occafioned by one blifteringplafter abates, to apply another to fome other part of the body, and by that means keep up a continual fucceffion of them till he be out of danger.

I HAVE been more fenfible of the advantage of bliftering in this than in any other difeafe. Blifters not only ftimulate the folids to action, but likewife occafion a continual difeharge, which may in fome meafure fupply the want of critical evacuations, which feldom happen in this kind of fever. They are most proper, however, either towards the beginning, or af-

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ter some degree of stupor has come on, in which last cafe it will always be proper to blifter the head.

IF the patient is coffive through the course of the difease; it will be necessary to procure a stool, by giving him every other day'a clyfter of milk and water, with a little fugar, to which may be added a fpoonful of common falt, if the above does not operate.

SHOULD a violent loofeness come on, it may be checked by fmall quantities of Venice treacle, or giving the patient for his ordinary drink the white decoction \*.

A MILIARY eruption fometimes breaks out about the ninth or tenth day. As eruptions are often critical, great care should be taken not to retard Nature's operation in this particular. The eruption ought neither to be checked by bleeding nor other evacuations, nor pushed out by a hot regimen; but the patient fhould be fupported by gentle cordials, as wine-whey, finall negus, fago-gruel with a little wine in it, and fuch like. He ought not to be kept too warm; yet a kindly breathing fweat should by no means be checked.

THOUGH bliftering and the use of cordial liquors are the chief things to be depended on in this kind of fever; yet, for those who may chuse to use them, we shall mention one or two of the forms of medicine which are commonly prefcribed in it †.

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\* See Appendix; White Decoction.

+ When the patient is low, ten grains of Virginian Inake-root, and the fame quantity of contrayerva-root, with five grains of Ruffian caftor, all in fine powder, may be made into a bolus with a little 8

In desperate cases, where the hiccup and starting of the tendons have already come on, we have fometimes feen extraordinary effects from large dofes of musk frequently repeated. Musk is doubtless an antispasmodic, and may be given to the quantity of a scruple three or four times a-day, or oftener if neceffary. Sometimes it may be proper to add to the musk a few grains of camphire, and falt of hartshorn, as these tend to promote perspiration and the discharge of urine. Thus fifteen grains of musk, with three grains of camphire, and fix grains of falt of hartfhorn, may be made into a bolus with a little fyrup, and given as above.

IF the fever should happen to intermit, which it frequently does towards the decline, or if the pa-. tient's ftrength should be wasted with colliquative fweats, &c. it will be neceffary to give him the Peruvian bark. Half a drachm, or a whole drachm, if the ftomach will bear it, of the bark in fine powder, may be given four or five times a-day, in a glafs of red port or claret. Should the bark in fubstance not fit eafy on the ftomach, an ounce of it in powder may be infused in a bottle of Lisbon or Rhenish wine, for two or three days, afterwards it may be strained, and a glass of it taken frequently \*.

Some

a little of the cordial confection, or syrup of faffron, One of these may be taken every four or five hours.

The following powder may be used with the fame intention. Take wild Valerian-root in powder one fcruple, faffron and caftor each four grains. Mix these by rubbing them together in a mortar, and give one in a cup of wine-whey three or four times a-day.

\* The bark may likewife be very properly administered, along with other cordials, in the following manner : Take an ounce of P 4 Peruvian

Some give the bark in this and other fevers, where there are no fymptoms of inflammation, without any regard to the remiffion or intermiffion of the fever. How far future obfervations may tend to eftablish this practice, we will not pretend to fay; but we have reafon to believe that the bark is a very universal febrifuge, and that it may be administered with advantage in most fevers where bleeding is not neceffary, or where there are no fymptoms of topical inflammation.

#### CHAP. XX.

# OF THE MALIGNANT, PUTRID, OR SPOTTED FEVER.

**THIS** may be called the *peftilential fever* of Europe, as in many of its fymptoms it bears a great refemblance to that dreadful difeafe the plague. Perfons of a lax habit, a melancholy difposition, and those whose vigour has been wasted by long fasting, watching, hard labour, excefsive venery, frequent falivations, &c. are most liable to it.

CAUSES.——This fever is occasioned by foul air, from a number of people being confined in a narrow place not properly ventilated; from putrid animal and vegetable effluvia, &c. Hence it prevails

Beruvian bark, orange-peel half an ounce, Virginian fnake-root, two drachms, faffron one drachm. Let all of them be powdered, and infufed in an English pint of the best brandy for three or four days. Afterwards the liquor may be strained, and two teaspoonfuls of it given three or four times a-day in a glass of small wine or negus,

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in camps jails, hospitals, and infirmaries, especially where such places are too much crowded, and clean+. lines is neglected.

A CLOSE conflictution of the air, with long rainy or foggy weather, likewife occasions putrid fevers. They often fucceed great inundations in low and marshy countries, especially when these are preceded or followed by a hot and fultry season.

LIVING too much upon animal food, without a proper mixture of vegetables, or eating filh or flefh that has been kept too long, are likewife apt to occafion this kind of fever. Hence failors on long voyages, and the inhabitants of befieged cities, are very often vifited with putrid fevers.

CORN that has been greatly damaged by rainy feafons, or long keeping, and water which has become putrid by ftagnation, &c. may likewife occasion this fever.

DEAD carcafes tainting the air, efpecially in hot feafons, are very apt to occafion putrid difeafes. Hence this kind of fever often prevails in countries which are the fcenes of war and bloodfhed. This fhews the propriety of removing church-yards, flaughter-houfes, &c. at a proper diffance from great towns.

WANT of cleanlinefs is a very general caufe of putrid fevers. Hence they prevail amongst the poor inhabitants of large towns, who breathe a confined unwholefome air, and neglect cleanlinefs. Such mechanics as carry on dirty employments, and are constantly confined within doors, are likewife very liable to this difeafe.

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WE shall only add, that putrid, malignant, or spotted fevers are highly infectious; and are therefore often communicated by contagion. For which reason all perfons ought to keep at a distance from those affected with such diseases, unless their attendance is absolutely necessary.

SYMPTOMS.—. The malignant fever is generally preceded by a remarkable weaknefs, or lofs of ftrength, without any apparent caufe. This is fometimes fo great, that the patient can fcarce walk, or even fit upright, without being in danger of fainting away. His mind too is greatly dejected; he fighs, and is full of dreadful apprehenfions.

THERE is a naufea, and fometimes a vomiting of bile; a violent pain of the head, with a ftrong pulfation or throbbing of the temporal arteries; the eyes often appear red and inflamed, with a pain at the bottom of the orbit; there is a noife in the ears, the breathing is laborious, and often interrupted with a figh; the patient complains of a pain about the region of the ftomach, and in his back and loins; his tongue is at first white, but afterwards it appears black and chaped; and his teeth are covered with a black cruft. He fometimes paffes worms both upwards and downwards, is affected with tremors, or fhaking, and often becomes delirious.

IF blood is let, it appears diffolved, or with a very fmall degree of cohefion, and foon becomes putrid; the ftools fmell extremely fœtid, and are fometimes of a greenifh, black, or reddifh caft. Spots of a pale purple, dun, or black colour often appear upon the fkin, and fometimes there are violent hæmorrhages, or difcharges of blood from the mouth, eyes, nofe, &c. PUTRID

PUTRID fevers may be diffinguished from the inflammatory, by the smallness of the pulse, the great dejection of mind, the diffolved state of the blood, the petechiæ, or purple spots, and the putrid smell of the excrements. They may likewise be diffinguished from the low or nervous fever by the heat and thirst being greater, the urine of a higher colour, and the loss of strength, dejection of mind, and all the other symptoms more violent.

It fometimes happens, however, that the inflammatory, nervous, and putrid fymptoms are fo blended together, as to render it very difficult to determine to which clafs the fever belongs. In this cafe the greateft caution and fkill are requifite. Attention must be paid to those fymptoms which are most prevalent, and both the regimen and medicines adapted to them.

INFLAMMATORY and nervous fevers may be converted into malignant and putrid, by too hot a regimen, or improper medicines.

THE duration of putrid fevers is extremely uncertain; fometimes they terminate betwixt the feventh and fourteenth day, and at other times they are prolonged for five or fix weeks. Their duration depends greatly upon the conftitution of the patient, and the manner of treating the difeafe.

The most favourable fymptoms are a gentle loofeness after the fourth or fifth day, with a warm mild fweat. These, when continued for a confiderable time, often carry off the fever, and should never be imprudently stopped. Small miliary pusses appearing between the petechiæ, or purple spots, are likewise favourable, as also hot scabby eruptions about the mouth and nose. It is a good sign when the pusse rifes

rifes upon the ufe of wine, or other cordials, and the nervous fymptoms abate; deafnefs coming on towards the decline of the fever, is likewife often a favourable fymptom\*, as are abfceffes in the groin, or parotid glands.

AMONGST the unfavourable fymptoms may be reckoned an exceffive loofenefs, with a hard fwelled belly; large black or livid blotches breaking out upon the fkin; aphthæ in the mouth; cold clammy fweats; blindnefs; change of the voice; a wild ftaring of the eyes; difficulty of fwallowing; and inability to put out the tongue; and a conftant inclination to uncover the breaft. When the fweat and faliva are tinged with blood, and the urine is black, or depofits a black footy fediment, the patient is in great danger. Starting of the tendons, and fætid, ichorous, involuntary ftools, attended with coldnefs of the extremities, are generally the forerunners of death.

REGIMEN.— In the treatment of this difeafe we ought to endeavour, as far as poffible, to counteract the putrid tendency of the humours; to fupport the patient's ftrength and fpirits; and to affift Nature in expelling the caufe of the difeafe, by gently promoting perfpiration and the other evacuations.

It has been observed, that putrid fevers are often occasioned by unwholesome air, and of course they must be aggravated by it. Care should therefore be taken to prevent the air from stagnating in the patient's chamber, to keep it cool, and renew it fre-

• Deafness is not always a favourable symptom in this difease. Perhaps it is only so when occasioned by abscesses formed within the ears.

quently,

quently, by opening the doors or windows of fome adjacent apartment. The breath and perfpiration of perfons in perfect health foon render the air of a fmall apartment noxious; but this will fooner happen from the perfpiration and breath of a perfon whofe whole mafs of humours are in a putrid ftate.

BESIDES the frequent admission of fresh air, we would recommend the use of vinegar, verjuice, juice of lemon, Seville orange, or any kind of vegetable acid that can be most readily obtained. These ought frequently to be fprinkled upon the floor, the bed, and every part of the room. They may also be evaporated with an hot iron, or by boiling, &c. The, fresh skins of lemons or oranges ought likewife to be laid in different parts of the room, and they should be frequently held to the patient's nofe. The ufe of acids in this manner would not only prove very refreshing to the patient, but would likewise tend to prevent the infection from fpreading among those who attend him. Strong scented herbs, as ruc, tanfy, rofemary, wormwood, &c. may likewife be laid in different parts of the house, and smelled to by those who go near the patient.

THE patient must not only be kept cool, but likewife quiet and eafy. The least noise will affect his, head, and the smallest fatigue will be apt to make him faint.

Few things are of greater importance in this difeafe than acids, which ought to be mixed with all the patient's food as well as drink. Orange, lemon, or vinegar whey, are all very proper, and may be drank by turns, according to the patient's inclination. They may be rendered cordial by the addition of wine in fuch

fuch quantity as the patient's ftrength feems to require. When he is very low, he may drink negus, with only one half water, and fharpened with the juice of orange or lemon. In fome cafes a glafs of clear wine may now and then be allowed. The most proper wine is Rhenish; but if the body be open, red port or claret is to be preferred.

WHEN the body is bound, a tea-fpoonful of the cream of tartar may be put into a cup of the patient's drink, as there is occasion; or he may drink a decoction of tamarinds, which will both quench his thirst, and promote a discharge by stool.

IF camomile-tea will fit upon the ftomach, it is a very proper drink in this difeafe. It may be fharpened by adding to every cup of the tea ten or fifteen drops of the elixir of vitriol.

THE food must be light, as panada, or groat gruel, to which a little wine may be added, if the patient be weak and low; and they ought all to be sharpened with the juice of orange, the jelly of currants, or the like. The patient ought likewise to eat freely of ripe fruits, as roasted apples, currant or gooseberry tarts, preferved cherries, or plums, &c.

TAKING a little food or drink frequently, not only fupports the fpirits, but counteracts the putrid tendency of the humours; for which reafon the patient ought frequently to be fipping fmall quantities of fome of the acid liquors mentioned above, or any that may be more agreeable to his palate, or more readily obtained.

IF he be delirious, his feet and hands ought to be frequently fomented with a ftrong infusion of camomile flowers. This, or an infusion of the bark, to fuch

fuch as can afford it, cannot fail to have a good effect. Fomentations of this kind not only relieve the head, by relaxing the veffels in the extremities, but as their contents are abforbed, and taken into the fyftem, they may, by their antifeptic qualities, affift in preventing the putrefcency of the humours.

MEDICINE. ——If a vomit be given at the beginning of this fever, it will hardly fail to have a good effect; but if the fever has gone on for fome days, and the fymptoms are violent, vomits are not quite fo fafe. The body however is always to be kept gently open by clyfters, or mild laxative medicines.

BLEEDING is feldom neceffary in putrid fevers. If there be figns of an inflammation, it may fometimes be permitted at the first onset; but the repetition of it generally proves hurtful.

BLISTERING plafters are never to be used unless in the greatest extremities. If the petechiæ or spots should suddenly disappear, the patient's pulse sink remarkably, and a delirium, with other bad symptoms, come on, bliftering may be permitted. In this case the bliftering plassers are to be applied to the head, and inside of the legs or thighs. But as they are sometimes apt to occasion a gangrene, we would rather recommend warm cataplasms or poultices of mustard and vinegar to be applied to the feet, having recourse to blifters only in the utmost extremities.

It is common in the beginning of this fever to give the emetic tartar in fmall doles, repeated every fecond or third hour, till it fhall either vomit, purge, or throw the patient into a fweat. This practice is very

very proper, provided it be not pushed so far as to weaken the patient.

A VERY ridiculous notion has long prevailed, of expelling the poifonous matter of malignant difeafes by triffing dofes of cordial or alexipharmic medicines. In confequence of this notion, the contrayerva-root, the cordial confection, the mithridate, &c. have been extolled as infallible remedies. There is reafon however to believe, that thefe feldom do much good. Where cordials are neceffary, we know none that is fuperior to good wine; and therefore again recommend it both as the fafeft and beft. Wine, with acids and antifeptics, are the only things to be relied on in the cure of malignant fevers.

In the most dangerous species of this difease, when it is attended with purple, livid, or black spots, the Peruvian bark must be administered. I have seen it, when joined with acids, prove successful, even in cases where the petechiæ had the most threatening aspect. But, to answer this purpose, it must not only be given in large doses, but duly persisted in.

THE beft method of administering the bark is certainly in fubstance. An ounce of it in powder may be mixt with half an English pint of water, and the fame quantity of red wine, and sharpened with the elixir, or the spirit of vitriol, which will both make it fit easier on the stomach, and render it more beneficial. Two or three ounces of the syrup of lemon may be added, and two table-spoonfuls of the mixture taken every two hours, or oftener, if the stomach is able to bear it.

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THOSE who cannot take the bark in fubstance may infuse it in wine, as recommended in the preceding difease.

IF there be a violent loofenefs, the bark must be boiled in red wine with a little cinnamon, and sharpened with the elixir of vitriol, as above. Nothing can be more beneficial in this kind of loofeness than plenty of acids, and such things as promote a gentle perspiration.

IF the patient be troubled with vomiting, a dram of the falt of wormwood diffolved, in an ounce and half of fresh lemon-juice, and made into a draught with an ounce of simple cinnamon-water, and a bit of sugar, may be given, and repeated as often as it is necessary.

IF fwellings of the glands appear, their fuppuration is to be promoted by the application of poultices, ripening cataplasms, &c. And as soon as there is any appearance of matter in them, they ought to be laid open, and the poultices continued.

I HAVE known large ulcerous fores break out in various parts of the body, in the decline of this fever, of a livid gangrenous appearance, and a most putrid cadaverous smell. These gradually healed, and the patient recovered, by the plentiful use of Peruvian bark and wine, sharpened with the spirits of vitriol.

For preventing putrid fevers we would recommend a ftrift regard to cleanlinefs; a dry fituation; fufficient exercife in the open air; wholefome food, and a moderate use of generous liquors. Infection ought above all things to be avoided. No conflictution is proof against it. I have known perfors seized with a putrid fever, by only making a fingle visit to a patient

patient in it; others have caught it by lodging for one night in a town where it prevailed; and fome by attending the funerals of fuch as died of it \*.

WHEN a putrid fever feizes any perfon in a family, the greateft attention is neceffary to prevent the difeafe from fpreading. The fick ought to be placed in a large apartment, as remote from the reft of the family as poffible; he ought likewife to be kept extremely clean, and fhould have frefh air frequently let into his chamber; whatever comes from him fhould be immediately removed, his linen fhould be frequently changed, and those in health ought to avoid all unneceffary communication with him.

ANY one who is apprehenfive of having caught the infection, ought immediately to take a vomit, and to work it off by drinking plentifully of camomile-tea. This may be repeated in a day or two, if the apprehenfions still continue, or any unfavourable fymptoms appear.

THE perfon ought likewife to take an infusion of the bark and camomile flowers for his ordinary drink; and before he goes to bed, he may drink an English punt of pretty strong negus, or a few glasses of generous wine. I have been frequently obliged to follow

• The late Sir John Pringle expressed a concern left these cautions of mine should prevent people from attending their friends or relations when afflicted with putrid fevers. I told him I meant only to discourage unnecessary attendance, and mentioned a number of instances where putrid fevers had proved fatal to perfons, who were rather hurtful than beneficial to the fick. This fagacious physician agreed with me, in thinking that a good doctor and a careful nurse were the only necessary attendants; and that all others not only endangered themselves, but, generally, by their folicitude and ill-directed care, hurt the fick.

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this courfe, when malignant fevers prevailed, and have likewife recommended it to others with conftant fuccefs.

PEOPLE generally fly to bleeding and purging as antidotes against infection; but these are so far from fecuring them, that they often, by debilitating the body, increase the danger.

THOSE who wait upon the fick in putrid fevers, ought always to have a piece of fpunge or a handkerchief dipt in vinegar, or juice of lemon, to finell to while near the patient. They ought likewife to wafh their hands, and, if poffible, to change their clothes, before they go into company.

#### CHAP. XXI.

## OF THE MILIARY FEVER.

THIS fever takes its name from the fmall puftules or bladders which appear on the fkin, refembling, in fhape and fize, the feeds of millet. The puftules are either red or white, and fometimes both are mixed together.

THE whole body is fometimes covered with puftules; but they are generally more numerous where the fweat is most abundant, as on the breast, the back, &c. A gentle fweat, or moisture on the skin, greatly promotes the eruption; but, when the skin is dry, the eruption is both more painful and dangerous.

Sometimes this is a primary difease; but it is much oftener only a symptom of some other malady,  $Q_2$ 

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as the fmall-pox, meafles, ardent, putrid, or nervous fever, &c. In all these cases it is generally the effect of too hot a regimen or medicines.

THE miliary fever chiefly attacks the idle and the phlegmatic, or perfons of a relaxed habit. The young and the aged are more liable to it than those in the vigour and prime of life. It is likewise more incident to women than men, especially the delicate and the indolent, who, neglecting exercise, keep continually within doors, and live upon weak watery diet. Such semales are extremely liable to be feized with this disease in childbed, and often lose their lives by it.

CAUSES.— The miliary fever is fometimes occafioned by violent paffions or affections of the mind; as exceffive grief, anxiety, thoughtfulnefs, &c. It may likewife be occafioned by exceffive watching, great evacuations, a weak wate.y diet, rainy feafons, eating too freely of cold, crude, unripe fruits, as plums, cherries, cucumbers, melons, &c. Impure waters, or provifions which have been fpoiled by rainy feafons, long keeping, &c. may likewife caufe miliary fevers. They may alfo be occafioned by the ftoppage of any cuftomary evacuation, as iffues, fetons, ulcers, the bleeding piles in men, or the menftrual flux in women, &c.

THIS difeafe in childbed-women is fometimes the effect of great coffivenels during pregnancy; it may likewife be occafioned by their exceffive ufe of green trafh, and other unwholefome things, in which pregnant women are too apt to indulge. But its moft general caufe is indolence. Such women as lead a fedentary fedentary life, efpecially during pregnancy, and at the fame time live grofsly, can hardly efcape this difeafe in childbed. Hence it proves extremely fatal to women of fashion, and likewise to those women in manufacturing towns, who, in order to affist their husbands, fit close within doors for almost the whole of their time. But among women who are active and laborious, who live in the country, and take fufficient exercise without doors, this difease is very little known.

SYMPTOMS.—When this is a primary difeafe, it makes its attack, like most other eruptive fevers, with a flight fhivering, which is fucceeded by heat, loss of ftrength, faintifhness, fighing, a low quick pulse, difficulty of breathing, with great anxiety and oppression of the breast. The patient is restless, and sometimes delirious; the tongue appears white, and the hands shake, with often a burning heat in the palms; and in childbed-women the milk generally goes away, and the other discharges stop.

THE patient feels an itching or pricking pain under the fkin, after which innumerable fmall puftules of a red or white colour begin to appear. Upon this the fymptoms generally abate, the pulfe becomes more full and foft, the fkin grows moifter, and the fweat, as the difeafe advances, begins to have a peculiar fœtid fmell; the great load on the breaft, and oppreffion of the fpirits, generally go off, and the cuftomary evacuations gradually return. About the fixth or feventh day from the eruption, the puftules begin to dry and fall off, which occafions a very difagreeable itching in the fkin.

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It is impossible to afcertain the exact time when the pussible will either appear or go off. They generally come out on the third or fourth day, when the eruption is critical; but, when symptomatical, they may appear at any time of the difease.

SOMETIMES the puftules appear and vanish by turns. When that is the case, there is always danger; but when they go in all of a fudden, and do not appear again, the danger is very great.

In childbed-women the puftules are commonly at first filled with clear water, afterwards they grow yellowish. Sometimes they are interspersed with puscules of a red colour. When these only appear, the discase goes by the name of a *rafb*.

REGIMEN.— In all eruptive fevers, of whatever kind, the chief point is to prevent the fudden difappearing of the puftules, and to promote their maturation. For this purpofe the patient muft be kept in fuch a temperature, as neither to pufh out the eruption too faft, nor to caufe it to retreat prematurely. The diet and drink ought therefore to be in a moderate degree nourifhing and cordial; but neither ftrong nor heating. The patient's chamber ought neither to be kept too hot nor cold; and he fhould not be too much covered with clothes. Above all, the mind is to be kept eafy and cheerful. Nothing fo certainly makes an eruption go in as fear, or the apprehenfion of danger.

THE food must be weak chicken-broth with bread, panada, fago, or groat-gruel, &c. to a gill of which may be added a spoonful or two of wine, as the patient's strength requires, with a few grains of falt and. and a little fugar. Good apples roafted or boiled, with other ripe fruits of an opening cooling nature, may be eat.

THE drink may be fuited to the flate of the patient's strength and spirits. If these be pretty high, the drink ought to be weak; as water-gruel, balmtes, or the decoction mentioned below \*.

WHEN the patient's fpirits are low, and the eruption does not rife fufficiently, his drink must be a little more generous: as wine-whey, or finall negus, fharpened with the juice of orange or lemon, and made ftronger or weaker as circumstances may require.

Sometimes the miliary fever approaches towards a putrid nature, in which cafe the patient's ftrength must be supported with generous cordials, joined with acids; and, if the degree of putrescence be great, the Peruvian bark must be administered. If the head be much affected, the body must be kept open by cmollient clyfters +.

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\* Take two ounces of the shavings of hartshorn, and the same quantity of sarsaparilla, boil them in two English quarts of water. To the strained decoction add a little white sugar, and let the patient take it for his ordinary drink.

+ In the commercium literarium for the year 1735, we have the history of an epidemical miliary fever, which raged at Strafburgh in the months of November, December, and January; from which we learn the necessity of a temperate regimen in this malady, and likewife that physicians are not always the first who discover the proper treatment of difeases. " This fever made terrible havoc even among men of robust constitutions, and all medicine proved in vain. They were feized in an inflant with fhivering, yawning, firetching, and pains in the back, fucceeded by a most intenfe heat; at the fame time there was a great lofs of firength and Q4 appetite.

MEDICINE. —— If the food and drink be properly regulated, there will be little occasion for medicine in this difease. Should the eruption however not rife, or the spirits stag, it will not only be necessary to support the patient with cordials, but likewise to apply blifters. The most proper cordial in this case is good wine, which may either be taken in the patient's food or drink; and if there be signs of putrescence, the bark and acids may be mixed with wine, as directed in the putrid fever.

Some recommend blifters through the whole courfe of this difeafe; and where nature flags, and the eruption comes and goes, it may be neceffary to keep up a flimulus, by a continual fucceffion of fmall blifters; but we would not recommend above one at a time. If however the pulfe flould fink remarkably, the puftules fall in, and the head be affected, it will be neceffary to apply feveral bliftering plafters to the most fensible parts, as the infide of the legs and thighs, &zc,

BLEEDING is feldom necessary in this disease, and fometimes it does much hurt, as it weakens the patient, and depresses his spirits. It is therefore never

appetite. On the feventh or ninth day the miliary eruptions appeared, or fpots like flea-bites, with great anxiety, a delirium, reftleffnefs, and toffing in bed. Bleeding was fatal. While matters were in this unhappy fituation, a midwife, of her own accord, gave to a patient, in the height of the difeafe, a clyfter of rain-water and butter without falt, and for his ordinary drink a quart of fpring water, half a pint of generous wine, the juice of a lemon, and fix ounces of the whiteft fugar, gently boiled till a fcum arofe, and this with great fuccefs; for the belly was foon loofened, the grievous fymptoms vanifhed, and the patient was reftored to his fenfes, and fnatched from the jaws of death." This practice was imitated by others with the like happy effects.

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to be attempted unlefs by the advice of a phyfician. We mention this, becaufe it has been cuftomary to treat this difeafe in childbed-women by plentiful bleeding, and other evacuations, as if it were highly inflammatory. But this practice is generally very unfafe. Patients in this fituation bear evacuations very ill. And indeed the difeafe feems often to be more of a putrid than of an inflammatory nature.

THOUGH this fever is often occafioned in childbed-women by too hot a regimen, yet it would be dangerous to leave that off all of a fudden, and have recourfe to a very cool regimen, and large evacuations. We have reafon to believe, that fupporting the patient's fpirits, and promoting the natural evacuations, is here much fafer than to have recourfe to artificial ones, as thefe, by finking the fpirits, feldom fail to increafe the danger.

IF the difeafe proves tedious, or the recovery flow, we would recommend the Peruvian bark, which may either be taken in fubftance, or infufed in wine or water, as the patient inclines.

THE miliary fever, like other eruptive difeafes, requires gentle purging, which should not be neglected as soon as the fever is gone off, and the patient's strength will permit.

To avoid this difeafe, a pure dry air, fufficient exercife, and wholefome food, are neceffary. Pregnant women fhould guard against costiveness, and take daily as much exercise as they can bear, avoiding all green trashy fruits, and other unwholefome things; and when in childbed, they ought strictly to observe a cool regimen.

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## CHAP. XXII.

## OF THE REMITTING FEVER.

HIS fever takes its name from a remiffion of the fymptoms, which happens fometimes fooner, and fometimes later, but generally before the eighth day. The remiffion is commonly preceded by a gentle fweat, after which the patient feems greatly relieved, but in a few hours the fever returns. Thefe remiffions return at very irregular periods, and are fometimes of longer, fometimes of fhorter duration; the nearer however that the fever approaches to a regular intermittent, the danger is the lefs.

CAUSES.— Remitting fevers prevail in low marfhy countries abounding with wood and flagnating water; but they prove moft fatal in places where great heat and moifture are combined, as in fome parts of Africa, the province of Bengal in the Eaft Indies, &c. where remitting fevers are generally of a putrid kind, and prove very fatal. They are moft frequent in clofe calm weather, efpecially after rainy feafons, great inundations, or the like. No age, fex, or conflitution, is exempted from the attack of this fever; but it chiefly feizes perfons of a relaxed habit, who live in low dirty habitations, breathe an impure flagnating air, take little exercife, and ufe unwholefome diet.

SYMPTOMS.—The first fymptoms of this fever are generally yawning, stretching, pain, and giddiness in the head, with alternate fits of heat and cold. Sometimes the patient is affected with a delirium at the very first attack. There is a pain, and fomefometimes a fwelling, about the region of the flomach, the tongue is white, the eyes and fkin frequently appear yellow, and the patient is often afflicted with bilious vomitings. The pulfe is fometimes a little hard, but feldom full, and the blood, when let, rarely flews any figns of inflammation. Some patients are exceedingly coffive, and others are afflicted with a very troublefome loofenefs.

It is impossible to deferibe all the fymptoms of this difeafe, as they vary according to the fituation, the feafon of the year, and the constitution of the patient. They may likewife be greatly changed by the method of treatment, and by many other circumstances too tedious to mention. Sometimes the bilious fymptoms predominate, fometimes the nervous, and at other times the putrid. Nor is it at all uncommon to find a fucceffion of each of thefe, or even a complication of them at the fame time, in the fame perfon,

REGIMEN., The regimen must be adapted to the prevailing fymptoms. When there are any figns of inflammation, the diet must be flender, and the drink weak and diluting. But when nervous or putrid fymptoms occur, it will be neceffary to fupport the patient with food and liquors of a more generous nature, fuch as are recommended in the immediately preceding fevers. We must however be very cautious in the use of things of a heating quality, as this fever is frequently changed into a *continual* by an hot regimen, and improper medicines.

WHATEVER the fymptoms are, the patient ought to be kept cool, quiet, and clean. His apartment, if poffible, fhould be large, and frequently ventilated by

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by letting in fresh air at the doors or windows. It ought likewife to be sprinkled with vinegar, juice of lemon, or the like. His linen, bed-clothes, &c.. should be frequently changed, and all his excrements immediately removed. Though these things have been recommended before, we think it necessary to repeat them here, as they are of more importance to the fick than practitioners are apt to imagine \*.

MEDICINE.— In order to cure this fever, we must endeavour to bring it to a regular intermission. This intention may be promoted by bleeding, if there be any figns of inflammation; but when that is not the case, bleeding ought by no means to be attempted, as it will weaken the patient, and prolong the difease. A vomit however will seldom be improper, and is generally of great fervice. Twenty or thirty grains of ipecacuanha will answer this purpose very well; but, where it can be obtained, we would rather recommend a grain or two of tartar emetic,

\* The ingenious Dr. Lind, of Edinburgh, in his inaugural differtation concerning the putrid remitting fever of Bengal, has the following obfervation: "Indufia, lodices, ac ftragula, fæpius funt mutanda, ac aëri exponenda; fæces fordefque quam primum removendæ; oportet ctiam ut loca quibus ægri decumbunt fint falubria, et aceto confperfa; denique ut ægris cura quanta maxima profpiciatur. Compertum ego habeo, medicum hæc fedulo obfervantem, quique ea exequi poteft, multo magis ægris profuturum, quam medicum peritiorem hifce commodis deftitutum."

"The patient's fhirt, bed-clothes, and bedding, ought frequently to be changed, and exposed to the air, and all his excrements immediately removed; the bed-chamber should be well ventilated, and frequently sprinkled with vinegar; in short, every attention should be paid to the patient. I can affirm, that a phyfician who puts these in practice will much oftener succeed than one who is even more skilful, but has not opportunity of using these means."

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with five or fix grains of ipecacuanha, to be made into a draught, and given for a vomit. This may be repeated once or twice at proper intervals, if the ficknefs or naufea continues.

THE body ought to be kept open either by clyfters or gentle laxatives, as weak infusions of senna and manna, small doses of the lenitive electuary, cream of tartar, tamarinds, stewed prunes, or the like; but all strong or drastic purgatives are to be carefully avoided.

By this courfe the fever in a few days may generally be brought to a pretty regular or diftinct intermiffion, in which cafe, the Peruvian bark may be administered, and it will feldom fail to perfect the cure. It is needless here to repeat the methods of giving the bark, as we have already had occasion frequently to mention them.

The most likely way to avoid this fever is to use a wholefome and nourifhing diet, to pay the most forupulous regard to cleanlines, to keep the body warm, to take fufficient exercise, and in hot countries to avoid damp fituations, night air, evening dews, and the like. In countries where it is endemical, the best preventive medicine which we can recommend, is the Peruvian bark, which may either be chewed or infused in brandy or wine, &c. Some recommend fmoking tobacco as very beneficial in marshy countries, both for the prevention of this and intermitting fevers.

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# CHAP. XXIII.

#### OF THE SMALL-POX.

THIS difeafe, which originally came from Arabia, is now become fo general, that very few escape it at one time of life or another. It is a most contagious malady; and has, for many years; proved the scourge of Europe.

THE fmall-pox generally appear towards the fpring. They are very frequent in fummer, lefs fo in autumn, and leaft of all in winter. Children are most liable to this difease; and those whose food is unwholefome, who want proper exercise, and abound with gross humours, run the greatest hazard from it.

THE difeafe is diffinguished into the diffinct and confluent kind; the latter of which is always attended with danger. There are likewise other diffinctions of the small-pox; as the crystalline, the bloody, &c.

CAUSES.— The fmall-pox is commonly caught by infection. Since the difeafe was first brought into Europe, the infection has never been wholly extinguished; nor have any proper methods, as far as I know, been taken for that purpose; fo that now it has become in a manner constitutional. Children who have over-heated themselves by running, wressling, &c. or adults after a debauch, are most apt to be feized with the small-pox.

SYMPTOMS.——This difeafe is fo generally known, that a minute defcription of it is unneceffary. Children commonly look a little dull, feem liftlefs and drowfy for a few days before the more violent fymptoms

fymptoms of the finall-pox appear. They are likewile more inclined to drink than ufual, have little appetite for folid food, complain of wearinefs, and, upon taking exercife, are apt to fweat. Thefe are fucceeded by flight fits of cold and heat in turns, which, at the time of the eruption approaches, become more violent, and are accompanied with pains of the head and loins, vomiting, &c. The pulfe is quick, with a great heat of the fkin, and reftleffnefs. When the patient drops afleep, he wakes in a kind of horror, with a fudden ftart, which is a very common fymptom of the approaching eruption: as are alfo convulfion-fits in very young children.

ABOUT the third or fourth day from the time of fickening, the fmall-pox generally begin to appear; fometimes indeed they appear fooner, but that is no favourable fymptom. At first they very nearly refemble flea-bites, and are foonest difcovered on the face, arms, and breast.

THE most favourable fymptoms are a flow eruption, and an abatement of the fever as foon as the pustules appear. In a mild distinct kind of fmallpox the pustules feldom appear before the fourth day from the time of fickening, and they generally keep coming out gradually for feveral days after. Pustules which are distinct, with a florid red basis, and which fill with thick purulent matter, first of a whitish, and afterwards of a yellowish colour, are the best.

A LIVID brown colour of the puftules is an unfavourable fymptom; as alfo when they are fmall and flat, with black fpecks in the middle. Puftules which contain a thin watery ichor are very bad. A great number of pox on the face is always attended with danger.

danger. It is likewife a very bad fign when they run into one another.

IT is a most unfavourable fymptom when petechiæ, or purple, brown, or black spots are interspersed among the puftules. These are figns of a putrid diffolution of the blood, and fhew the danger to be very Bloody stools or urine, with a swelled belly, great. are bad fymptoms; as is also a continual ftranguary. Pale urine and a violent throbbing of the arteries of the neck are figns of an approaching delirium, or of convultion-fits. When the face does not fwell, or falls before the pox come to maturity, it is very unfavourable. If the face begins to fall about the eleventh or twelfth day, and at the fame time the . hands and feet begin to fwell, the patient generally does well; but when these do not succeed to each other, there is reason to apprehend danger. When the tongue is covered with a brown crust, it is an unfavourable fymptom. Cold shivering fits coming on at the height of the difease are likewise unfavourable. Grinding of the teeth, when it proceeds from an affection of the nervous fystem, is a bad fign; but fometimes it is occasioned by worms, or a difordered ftomach.

REGIMEN.—When the first fymptoms of the finall-pox appear, people are ready to be alarmed, and often fly to the use of medicine, to the great danger of the patient's life. I have known children, to appease the anxiety of their parents, bled, bliftered, and purged, during the fever which preceded the eruption of the small-pox, to such a degree, that Nature was not only disturbed in her operation, but rendered unable to support the puscular after they were

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were out; so that the patient, exhausted by mere evacuations, funk under the disease.

WHEN convultions appear, they give a dreadful alarm. Immediately fome noftrum is applied, as if this were a primary difeafe; whereas it is only a fymptom, and far from being an unfavourable one, of the approaching eruption. As the fits generally go off before the actual appearance of the fmall-pox, it is attributed to the medicine, which by this means acquires a reputation without any merit \*.

ALL that is, generally speaking, necessary during the eruptive fever, is to keep the patient cool and easy, allowing him to drink freely of some weak diluting liquors; as balm-tea, barley-water, clear whey, gruels, &c. He should not be confined to bed; but should fit up as much as he is able, and should have his feet and legs frequently bathed in lukewarm water. His food ought to be very light; and he should be as little diffurbed with company as possible.

Much mifchief is done at this period by confining the patient too foon to his bed, and plying him with warm cordials or fudorific medicines. Every thing that heats and inflames the blood increases the fever, and pushes out the pustules prematurely. This has

\* Convultion-fits are no doubt very alarming, but their effects are often falutary. They feem to be one of the means made ufe of by Nature for breaking the force of a fever: I have always obferved the fever abated, and fometimes quite removed, after one or more convultion-fits This readily accounts for convulfions being a favourable fymptom in the fever which precedes the eruption of the fmall pox, as every thing that mitigates this fever leftens the eruption.

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numberles ill effects. It not only increases the number of pustules, but likewife tends to make them run into one another; and when they have been pushed out with too great violence, they generally fall in before they come to maturity.

THE good women, as foon as they fee the fmallpox begin to appear, commonly ply their tender charge with cordials, faffron and marigold-teas, wine, punch, and even brandy itfelf. All thefe are given with a view, as they term it, to throw out the eruption from the heart. This, like most other popular mistakes, is the abuse of a very just obtervation, That when there is a moissure on the skin, the pox rife better, and the patient is easier, than when it continues dry and parched. But that is no reason for forcing the patient into a sweat. Sweating never relieves unless where it comes spontaneously, or is the effect of drinking weak diluting liquors.

CHILDREN are often fo peevifh, that they will not lie a-bed without a nurfe conftantly by them. Indulging them in this, we have reafon to believe, has many bad effects both upon the nurfe and child. Even the natural heat of the nurfe cannot fail to augment the fever of the child; but if the too proves feverifh, which is often the cafe, the danger muft be increafed \*.

\* I have known a nurfe, who had the fmall-pox before, fo infected by lying conftantly a-bed with a child in a bad kind of fmall-pox, that fhe had not only a great number of pufules which broke out all over her body, but afterwards a malignant fever, which terminated in a number. of impofthumes or boils, and from which fhe narrowly escaped with her life. We mention this to put others upon their guard against the danger of this virulent infection.

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LAYING feveral children who have the finall pox in the fame bed, has many ill confequences. They ought, if poffible, never to be in the fame chamber, as the perfpiration; the heat; the fmell, &c. all tend to augment the fever, and to heighten the difeafe. It is common among the poor to fee two or three children lying in the fame bed, with fuch a load of puftules that even their fkins flick together. One can hardly view a fcene of this kind, without being fickened by the fight. But how muft the effluvia affect the poor patients, many of whom perifh by this ufage \*.

A very dirty cuftom prevails amongft the lower clafs of people, of allowing children in the fmall-pox to keep on the fame linen during the whole period of that loathfome difeafe. This is done left they fhould catch cold; but it has many ill confequences. The linen becomes hard by the moifture which it abforbs; and frets the tender fkin. It likewife occafions a bad fmell, which is very pernicious both to the patient and those about him; befides, the filth and fordes which adhere to the linen being reforbed, or taken up again into the body, greatly augment the difeafe.

\* This obfervation is likewife applicable to hofpitals, workhoufes, &c. where numbers of children happen to have the fmallpox at the fame time. I have feen above forty children cooped up in one apartment all the while they had this difeafe, without any of them being admitted to breathe the fresh air. No one can be at a loss to fee the impropriety of fuch conduct. It ought to be a rule, not only in hospitals for the small-pox, but likewife for other difeafes, that no patient should be within fight or hearing cf another. This is a matter to which too little regard is paid. In most hospitals and infirmaries, the fick, the dying, and the dead, are often to be feen in the fame apartment.

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A PATIENT fhould not be fuffered to be dirty in an internal difeafe, far lefs in the fmall-pox. Cutaneous diforders are often occafioned by naftinefs alone, and are always increafed by it. Were the patient's linen to be changed every day, it would greatly refresh him. Care indeed is to be taken that the linen be thoroughly dry. It ought likewife to be put on when the patient is most cool.

So ftrong is the vulgar prejudice in this country, notwithstanding all that has been faid against the hot regimen in the small-pox, that numbers still fall a facrifice to that error. I have feen poor women travelling in the depth of winter, and carrying their children along with them in the small-pox; and have frequently observed others begging by the way-fide, with infants in their arms covered with the pultules; yet I could never learn that one of these children died by this fort of treatment. This is certainly a fufficient proof of the fafety at leaft, of expoling patients in the fmall-pox to the open air. There can be no reafon, however, for exposing them to public view. It is now very common in the environs of great towns to meet patients in the fmall-pox on the public walks. This practice, however well it may fuit the purposes of boasting inoculators, is dangerous to the citizens, and contrary to the laws of humanity and found policy.

THE food in this difeafe ought to be very light, and of a cooling nature, as panado, or bread boiled with equal quantities of milk and water, good apples roafted or boiled with milk, and fweetened with a little fugar, or fuch like.

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THE drink may be equal parts of milk and water, clear fweet whey, barley-water, or thin gruel, &c. After the pox are full, butter-milk, being of an opening and cleanfing nature, is a very proper drink.

MEDICINE. — This difeafe is generally divided into four different periods, viz. the fever which precedes the eruption, the eruption itfelf, the fuppuration, or maturation of the puftules, and the fecondary fever.

It has already been obferved, that little more is neceffary during the primary fever than to keep the patient cool and quiet, allowing him to drink diluting liquors, and bathing his feet frequently in warm water. Though this be generally the fafeft courfe that can be taken with infants, yet adults of a ftrong conftitution and plethoric habit fometimes require bleeding. When a full pulfe, a dry fkin, and other fymptoms of inflammation render this operation neceffary, it ought to be performed; but, unlefs thefe fymptoms are urgent, it is fafer to let it alone; if the body is bound, emollient clyfters may be thrown in.

IF there is a great nausea or inclination to vomit, weak camomile-tea or lukewarm water may be drank, in order to clean the stomach. At the beginning of a fever, Nature generally attempts a discharge, either upwards or downwards, which, if promoted by gentle means, would tend greatly to abate the violence of the discase.

Though every method is to be taken during the primary fever, by a cool regimen, &c. to prevent too great an eruption; yet, after the pultules have R 3 made

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made their appearance, our bufinefs is to promote the fuppuration, by diluting drink, light food, and, if Nature feems to flag, by generous cordials. When a low, creeping pulfe, faintifhnefs, and great lofs of ftrength, render cordials neceffary, we would recommend good wine, which may be made into negus, with an equal quantity of water, and fharpened with the juice of orange, the jelly of currants, or the like. Wine-whey fharpened as above, is likewife a proper drink in this cafe; great care however must be taken not to overheat the patient by any of thefe things. This, inftead of promoting, would retard the eruption.

THE rifing of the fmall-pox is often prevented by the violence of the fever; in this cafe the cool regimen is ftrictly to be obferved. The patient's chamber must not only be kept cool, but he ought likewise frequently to be taken out of bed, and to be lightly covered with clothes while in it.

EXCESSIVE reftleffness often prevents the rising and filling of the small-pox. When this happens, gentle opiates are necessary. These however ought always to be administered with a sparing hand. To an infant, a tea-spoonful of the syrup of poppies may be given every five or fix hours till it has the defired effect. An adult will require a table-spoonful in order to answer the same purpose.

IF the patient be troubled with a firanguary, or fupprefion of urine, which often happens in the fmall-pox, he fhould be frequently taken out of bed, and, if he be able, fhould walk across the room with his feet bare. When he cannot do this, he may be frequently fet on his knees in bed, and fhould endeavour

deavour to pass his urine as often as he can. When these do not succeed, a tea-spoonful of the sweet fpirits of nitre may be occasionally mixed with his drink. Nothing more certainly relieves the patient, or is more beneficial in the finall-pox, than a plentiful discharge of urine.

IF the mouth be foul, and the tongue dry and chapped, it ought to be frequently walked, and the throat gargled with water and honey, sharpened with a little vinegar or currant jelly.

DURING the rifing of the finall-pox, it frequently happens that the patient is eight or ten days without a flool. This not only tends to heat and inflame the blood, but the faces, by lodging fo long in the body, become acrid, and even putrid; from whence bad confequences must enfue. It will therefore be proper, when the body is bound, to throw in an emollient clyfter every fecond or third day, through the whole course of the disease. This will greatly cool and relieve the patient.

WHEN petechiæ, or purple, black, or livid spots appear among the small-pox, the Peruvian bark must immediately be administered in as large doses as the patient's stomach can bear. For a child, two drachms of the bark in powder may be mixed in three ounces of common water, one ounce of fimple cinnamonwater, and two ounces of the fyrup of orange or lemon. This may be sharpened with the spirits of vitriol, and a table-spoonful of it given every hour. If it be given to an adult in the same form, he may take at least three or four spoonfuls every hour. This medicine ought not to be trifled with, but must be administered as frequently as the flomach can bear R 4 it;

it; in which cafe it will often produce very happy effects. I have frequently feen the petechiæ difappear, and the fmall-pox, which had a very threatening afpect, rife and fill with laudable matter, by the ufe of the bark and acids.

THE patient's drink ought likewife in this cafe to be generous, as wine or ftrong negus acidulated with fpirits of vitriol, vinegar, the juice of lemon, jelly of currants, or fuch like. His food muft confift of apples roafted or boiled, preferved cherries, plums, and other fruits of an acid nature.

THE bark and acids are not only necessary when the petechiæ or putrid fymptoms appear, but likewife in the lymphatic or chryftalline finall-pox, where the matter is thin, and not duly prepared. The Peruvian bark feems to poffefs a fingular power of affifting Nature in preparing laudable pus, or what is called good matter; confequently it must be beneficial both in this and other difeases, where the crifis depends on a fuppuration. I have often obferved where the finall-pox were flat, and the matter contained in them quite clear and transparent, and where at first they had the appearance of running into one another, that the Peruvian bark, acidulated as above, changed the colour and confistence of the matter, and produced the most happy effects.

WHEN the eruption fubfides fuddenly, or, as the good women term it, when the finall-pox *ftrike in*, before they have arrived at maturity, the danger is very great. In this cafe bliftering-plafters must be immediately applied to the wrists and ancles, and the patient's spirits supported with cordials.

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SOMETIMES bleeding has a furprifing effect in raifing the pultules after they have fubfided; but it requires fkill to know when this is proper, or to what length the patient can bear it. Sharp cataplasms however may be applied to the feet and hands, as they tend to promote the swelling of these parts, and by that means to draw the humours towards the extremities.

THE most dangerous period of this difease is what we call the fecondary fever. This generally comes on when the small-pox begin to blacken, or turn on the face, and most of those who die of the smallpox are carried off by this fever.

NATURE generally attempts, at the turn of the finall-pox, to relieve the patient by loofe ftools. Her endeavours this way are by no means to be counteracted, but promoted, and the patient at the fame time fupported by food and drink of a nourifhing and cordial nature.

IF, at the approach of the fecondary fever, the pulfe be very quick, hard, and ftrong, the heat intenfe, and the breathing laborious, with other fymptoms of an inflammation of the breaft, the patient muft immediately be bled. The quantity of blood to be let muft be regulated by the patient's ftrength, age, and the urgency of the fymptoms.

Bur, in the fecondary fever, if the patient be faintifh, the pultules become fuddenly pale, and if there be great coldnefs of the extremities, bliftering plafters must be applied, and the patient must be fupported with generous cordials. Wine and even spirits have fometimes been given in such cases with amazing fucces.

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As the fecondary fever is in great meafure, if not wholly, owing to the abforption of the matter, it would feem highly confonant to reafon, that the puftules, as foon as they come to maturity, fhould be opened. This is every day practifed in other phlegmons which tend to fuppuration; and there feems to be no caufe why it fhould be lefs proper here. On the contrary, we have reafon to believe, that by this means the fecondary fever might always be leffened, and often wholly prevented.

THE puftules fhould be opened when they begin to turn of a yellow colour. Very little art is neceffary for this operation. They may either be opened with a lancet or a needle, and the matter abforbed by a little dry lint. As the puftules are generally first ripe on the face, it will be proper to begin with opening these, and the others in course as they become ripe. The pustules generally fill again, a fecond or even a third time; for which cause the operation must be repeated, or rather continued as long as there is any confiderable appearance of matter in the pustules.

WE have reafon to believe, that this operation, rational as it is, has been neglected from a piece of miftaken tendernefs in parents. They believe, that it must give great pain to the poor child; and therefore would rather fee it die than have it thus tortured. This notion however is entirely without foundation. I have frequently opened the pustules when the patient did not fee me, without his being in the least fensible of it; but suppose it were attended with a little pain, that is nothing in comparison to the adyantages which arife from it.

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OPENING the puftules not only prevents the reforption of the matter into the blood, but likewife takes off the tenfion of the fkin, and by that means greatly relieves the patient. It likewife tends to prevent the pitting, which is a matter of no fmall importance. Acrid matter by lodging long in the puftules, cannot fail to corrode the tender fkin; by which many a handfome face becomes fo deformed as hardly to bear a refemblance to the human figure \*.

It is generally neceffary, after the finall-pox are gone off, to purge the patient. If however the body has been open through the whole courfe of the difeafe, or if butter-milk and other things of an opening nature have been drank freely after the height of the finall-pox, purging becomes lefs neceffary; but it ought never wholly to be neglected.

For very young children, an infufion of fenna and prunes, with a little rhubarb, may be fweetened with coarfe fugar, and given in fmall quantities till it operates. Thofe who are farther advanced muft take medicines of a fharper nature. For example, a child of five or fix years of age may take eight or ten grains of fine rhubarb in powder over night, and the fame quantity of jalap in powder next morning. This may be wrought off with fresh broth or water-gruel, and may be repeated three or four times, five or fix days intervening betwixt each dose. For children

\* Though this operation can never do harm, yet it is only neceffary when the patient has a great load of finall-pox, or when the matter which they contain is of fo thin and acrid a nature, that there is reafon to apprehend bad confequences from its being too quickly reforbed, or taken up again into the mafs of circulating humours.

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further advanced, and adults, the dofe must be increased in proportion to the age and constitution\*.

WHEN imposshumes happen after the small-pox, which is not feldom the cafe, they must be brought to suppuration as soon as possible, by means of ripening poultices; and, when they have been opened, or have broke of their own accord, the patient must be purged. The Peruvian bark and a milk diet will likewife be useful in this cafe.

WHEN a cough, a difficulty of breathing, or other fymptoms of a confumption, fucceed to the fmall pox, the patient must be fent to a place where the air is good, and put upon a course of affes milk, with such exercise as he can bear. For further directions in this case, see the article Confumptions.

#### OF INOCULATION.

THOUGH no difeafe, after it is formed, baffles the powers of medicine more effectually than the finallpox, yet more may be done before-hand to render this difeafe favourable than any one we know, as almost all the danger from it may be prevented by inoculation. This falutary invention has been known in Europe above half a century; but, like most other ufeful difcoveries, it has, till of late, made but flow progrefs. It must however be acknowledged, to the honour of this country, that inoculation has met with a more favourable reception here, than among any

\* I have of late been of use, after the small-pox, to give one, two, three, four, or five grains of calomel, according to the age of the patient, over night, and to work it off next morning with a fuitable dose of jalap.

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of our neighbours. It is still however far from being general, which we have reason to fear will be the case, as long as the practice continues in the hands of the Faculty.

No difcovery can be of general utility, while the practice of it is kept in the hands of a few. Had the inoculation of the finall-pox been introduced as a fashion, and not as a medical discovery, or had it been practifed by the fame kind of operators here, as it is in those countries from whence we learned it, it had long ago been universal. The fears, the jealousies, the prejudices, and the opposite interests of the Faculty, are, and ever will be, the most effectual obftacles to the progress of any falutary discovery. Hence it is that the practice of inoculation never be-- came, in any measure, general, even in England, till taken up by men not bred to phyfic. Thefe have not only rendered the practice more extensive, but likewife more fafe, and, by acting under lefs reftraint than the regular practitioners, have taught them that the patient's greatest danger arose, not from the want of care, but from the excels of it. 1 8

THEY know very little of the matter, who impute the fuccefs of modern inoculators to any fuperior fkill, either in preparing the patient or communicating the difeafe. Some of them indeed, from a fordid defire of engroffing the whole practice to themfelves, pretend to have extraordinary fecrets or noftrums for preparing perfons for inoculation, which never fail of fuccefs. But this is only a pretence calculated to blind the ignorant and inattentive. Common fenfe and prudence alone are fufficient both in the choice of the fubject and management of the operation. Whoever

Whoever is poffeffed of these may perform this office for his children whenever he finds it convenient, provided they be in a good state of health.

THIS fentiment is not the refult of theory, but of obfervation. Though few phyficians have had more opportunities of trying inoculation in all its different forms, fo little appears to me to depend on thefe, generally reckoned important circumftances, of preparing the body, communicating the infection by this or the other method, &c. that for feveral years paft I have perfuaded the parents or nurfes to perform the whole themfelves, and have found that method followed with equal fuccefs, while it is free from many inconveniencies that attend the other \*.

THE fmall-pox may be communicated in a great variety of ways with nearly the fame degree of fafety

\* A critical fituation, too often to be met with, first put me upon trying this method. A gentleman who had loft all his children except on'e fon by the natural small-pox, was determined to have him inoculated. He told me his intention, and defired I would perfuade the mother and grandmother, &c. of its propriety. But that was impossible. They were not to be perfuaded, and either could not get the better of their fears, or were determined against conviction. It was always a point with me, not to perform the operation without the confent of the parties concerned. I therefore advised the father, after giving his fon a dose or two of rhubarb, to go to a patient who had the small-pox of a good kind, to open two or three of the puflules, taking up the matter with a little cotton, and as foon as he came home to take his fon apart, and give his arm a flight fcratch with a pin, afterwards.to rub the place well with the cotton, and take no further notice of it. All this he punctually performed; and at the ufual period the fmall-pox made their appearance, which were of an exceeding good kind, and fo mild as not to confine the boy an hour to his bed. None of the other relations knew but the difeafe had come in the natural way, till the boy was well.

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and fuccefs. In Turkey, from whence we learned the practice, the women communicate the difeafe to children, by opening a bit of the fkin with a needle, and putting into the wound a little matter taken from a ripe puftule. On the coaft of Barbary they pafs a thread wet with the matter through the fkin, between the thumb and fore-finger; and in fome of the ftates of Barbary, inoculation is performed by rubbing in the variolous matter between the thumb and forefinger, or on other parts of the body. The practice of communicating the fmall-pox, by rubbing the variolous matter upon the fkin, has been long known in many parts of Afia and Europe, as well as in Barbary, and has generally gone by the name of *buying the fmall-pox*.

The prefent method of inoculating in Britain is to make two or three flanting incifions in the arm, fo fuperficial as not to pierce quite through the fkin, with a lancet wet with frefh matter taken from a ripe puftule; afterwards the wounds are clofed up, and left without any dreffing. Some make ufe of a lancet covered with the dry matter; but this is lefs certain, and ought never to be ufed unlefs where frefh matter cannot be obtained: when this is the cafe, the matter ought to be moiftened by holding the lancet for fome time in the fteam of warm water \*.

INDEED, if fresh matter be applied long enough to the skin, there is no occasion for any wound at all.

• Mr. TRONCHIN communicates this difeafe by a little bit of thread dipt in the matter, which he covers with a fmall blifteringplafter. This method may no doubt be used with advantage in those cases where the patient is very much alarmed at the fight of any cutting infrument.

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Let a bit of thread, about half an inch long, wet with the matter, be immediately applied to the arm, midway between the fhoulder and elbow, and covered with a piece of the common flicking-plafter, and kept on for eight or ten days. This will feldom fail to communicate the difeafe. We mention this method, becaufe many people are afraid of a wound; and doubtlefs the more eafily the operation can be performed, it has the greater chance to become general. Some people imagine, that the difcharge from a wound leffens the eruption; but there is no great ftrefs to be laid upon this notion; befides, deep wounds often ulcerate, and become troublefome.

WE do not find that inoculation is at all confidered as a medical operation in those countries from whence we learned it. In Turkey it is performed by the women, and in the East Indies by the Brachmins or priefts. In this country the custom is still in its infancy; we make no doubt, however, but it will soon become so familiar, that parents will think no more of inoculating their children, than at present they do of giving them a purge.

No fet of men have it fo much in their power to render the practice of inoculation general as the clergy, the greateft oppolition to it ftill arifing from fome fcruples of confcience, which they alone can remove. I would recommend it to them not only to endeavour to remove the religious objections which weak minds may have to this falutary practice, but to enjoin it as a duty, and to point out the danger of neglecting to make use of a mean which Providence has put in our power for faving the lives of our offspring. Surely fuch parents as wilfully neglect the means of faving their

their children's lives, are as guilty as those who put them to death. I will this matter were duly weighed. No one is more ready to make allowance for human weaknefs and religious prejudices, yet I cannot help recommending it, in the warmeft manner, to parents, to confider how great an injury they do their children, by neglecting to give them this difeafe in the early period of life.

THE numerous advantages arising from the inoculation of the small-pox have been pretty fully pointed out by the learned Dr. M'Kenzie, in his Hiftory of Health\*. To these mentioned by the Doctor we shall only

\* " Many and great, fays this humane author, are the dangers attending the natural infection, from all which the inoculation is quite fecure. The natural infection may invade weak or diftempered bodies, by no means disposed for its kindly reception. It may attack them at a feason of the year either violently hot or intenfely cold. It may be communicated from a fort of fmall-pox impregnated with the utmost virulence. It may lay hold upon people une pectedly, when a dangerous fort is imprudently imported into a maritime place. It may furprise us foon after ex. ceffes committed in luxury, intemperance, or lewdnefs. It may likewise seize on the innocent after indispensable watchings, hard labour, or necessary journies. And is it a trivial advantage, that all thefe unhappy circumftances can be prevented by inoculation ? By inoculation numbers are faved from deformity as well as from death. In the natural small-pox, how often are the finest features, and the most beautiful complexions, miserably disfigured ? Whereas inoculation rarely leaves any ugly marks or fcars, even where the number of pustules on the face has been very confiderable, and the fymptoms by no means favourable. And many other grievous complaints, that are frequently subsequent to the natural fort, seldom follow the artificial. Does not inoculation alfo prevent those inexpressible terrors that perpetually harafs perfons who never had this disease, insomuch that when the fmall-pox is epidemical, entire villages are depopulated, markets ruined, and S

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only add, that fuch as have not had the small-pox in the early period of life, are not only rendered unhappy, but likewife, in a great measure, unfit for suftaining many of the most useful and important offices. Few people would chuse even to hire a fervant who had not had the small-pox, far less to purchase a slave who had the chance of dying of this difease. How could a phyfician or a furgeon, who had never had the smallpox himfelf, attend others under that malady? How deplorable is the fituation of females, who arrive at mature age without having had the finall-pox ! A woman with child feldom furvives this difeafe : and if an infant happens to be feized with the fmall-pox upon the mother's breaft who has not had the difeafe herfelf, the scene must be distressing! If she continues to fuckle the child, it is at the peril of her own life; and if the weans it, in all probability it will perifh. How often is the affectionate mother forced to leave her houfe, and abandon her children, at the very time

the face of diffress spread over the whole country? From this terror it arifes, that juffice is frequently postponed, or discouraged, at feffions or affizes where the fmall-pox rages. Witneffes and juries dare not appear; and by reason of the necessary absence of fome gentlemen, our honourable and useful judges are not attended with that reverence and fplendor due to their office and merit. Does not inoculation, in like manner, prevent our brave failors from being feized with this diffemper on shipboard, where they mult quickly fpread the infection among fuch of the crew who never had it before, and where they have fcalce any chance to ofcape, being half fliffed with the clofeness of their cabins, and but very indifferently nurfed? Laftly, with regard to the foldiery, the miferies attending these poor creatures, when attacked by the fmall-pox on a march, are inconceivable, without attendance, without lodgings, without any accommodation : fo that one of three commonly perifhes."

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when her care is moft neceffary? Yet'fhould parental alfection get the better of her fears, the confequences would often prove fatal. I have known the tender mother and her fucking infant laid in the fame grave, both untimely victims to this dreadful malady. But thefe are feenes too fhocking even to mention. Let parents who run away with their children to avoid the finall-pox, or who refufe to inoculate them in infancy, confider to what deplorable fituations they may be reduced by this miftaken tendernefs.

As the fmall-pox has now become an epidemical disease in most parts of the known world, no other choice remains but to render the malady as mild as poffible. This is the only manner of extirpation now left in our power; and, though it may feem paradoxical, the artificial method of communicating the difeafe, could it be rendered univerfal, would amount to nearly the fame thing as rooting it out. It is a matter of small consequence, whether a disease be entirely extirpated, or rendered fo mild as neither to deftroy life nor hurt the conftitution; but that this may be done by inoculation, does not now admit of a doubt. The numbers who die under inoculation hardly deferve to be named. In the natural way, one in four or five generally dies; but by inoculation not one of a thousand. Nay, fome can boast of having inoculated ten thousand without the loss of a fingle patient.

I HAVE often wished to see some plan established for rendering this falutary practice universal; but am afraid I shall never be so happy. The difficulties indeed are many; yet the thing is by no means impracticable. The aim is great; no less than faving

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the lives of one-fourth part of mankind. What ought not to be attempted, in order to accomplish io defirable an end?

THE first step towards rendering the practice universal, must be to remove the religious prejudices against it. This, as already observed, can only be done by the clergy. They must not only recommend it as a duty to others, but likewise practife it on their own children. Example will ever have more influence than precept.

THE next thing requifite is to put it in the power of all. For this purpole we would recommend it to the Faculty to inoculate the children of the poor gratis. It is hard that fo uleful a part of mankind should, by their poverty, be excluded from fuch a benefit.

Should this fail, it is furely in the power of any State to render the practice general, at leaft as far as their dominion extends. We do not mean, that it ought to be enforced by a law. The beft way to promote it would be to employ a fufficient number of operators at the public expence to inoculate the children of the poor. This would only be neceffary till the practice became general; afterwards cuftom, the ftrongeft of all laws, would oblige every individual to inoculate his children to prevent reflections.

It may be objected to this fcheme, that the poor would refufe to employ the inoculators: This difficulty is eafily removed. A fmall premium to enable mothers to attend their children while under the difeafe, would be a fufficient inducement; befides, the fuccefs attending the operation would foon banifh all objections to it. Even confiderations of profit would induce

induce the poor to embrace this plan. They often bring up their children to the age of ten or twelve, and when they come to be useful, they are fnatched away by this malady, to the great loss of their parents, and detriment of the public.

THE British legislature has, of late years, shewn great attention to the prefervation of infant-lives, by supporting the foundling hospital, &c. But we will venture to fay, if one-tenth part of the fums laid out in fupporting that inftitution, had been bestowed towards promoting the practice of inoculation of the fmall-pox among the poor, that not only more ufeful lives had been faved, but the practice ere now rendered quite universal in this island. It is not to be imagined what effect example and a little money will have upon the poor; yet, if left to themfelves, they would go on for ever in the old way, without thinking of any improvement. We only mean this as a hint to the humane and public-fpirited. Should fuch a scheme be approved, a proper plan might eafily be laid down for the execution of it.

BUT as public plans are very difficult to bring about, and often, by the felfifh views and mifconduct of those intrusted with the execution of them, fail of answering the noble purposes for which they were defigned; we shall therefore point out some other methods by which the benefits of inoculation may be extended to the poor.

THERE is no doubt but inoculators will daily become more numerous. We would therefore have every parifh in Britain to allow one of them a fmall annual falary for inoculating all the children of the parifh at a proper age. This might be done at a very S 3 trifling

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trifling expence, and it would enable every one to enjoy the benefit of this falutary invention.

Two things chiefly operate to prevent the progrefs of inoculation. The one is a wifh to put the evil day as far off as poffible. This is a principle in our nature; and as inoculation feems rather to be anticipating a future evil, it is no wonder mankind are fo averfe to it. But this objection is fufficiently anfwered by the fuccefs. Who in his fenfes would not prefer a leffer evil to-day to a greater to-morrow, provided they were equally certain ?

THE other obffacle is the fear of reflections. This has very great weight with the bulk of mankind. Should the child die, they think the world would blame them. This they cannot bear. Here lies the difficulty which pinches, and till that be removed, inoculation will make but fmall progrefs. Nothing however can remove it but cuftom. Make the practice fashionable, and all objections will foon vanish. It is fashion alone that has led the multitude fince the beginning of the world, and will lead them to the end. We must therefore call upon the more enlightened part of mankind to fet a pattern to the reft. Their example, though it may for fome time meet with opposition, will at length prevail.

I AM aware of an objection to this practice from the expence with which it may be attended; this is eafily obviated. We do not mean that every parifh ought to employ a Sutton or a Dimfdale as inoculators. Thefe have, by their fuccefs, already recommended themfelves to crowned heads, and are beyond the vulgar reach; but have not others an equal chance to fucceed? They certainly have. Let them make

make the fame trial, and the difficulties will foon vanifh. There is not a parifh, and hardly a village in Britain, defitute of fome perfon who can bleed. But this is a far more difficult operation, and requires both more fkill and dexterity than inoculation.

THE perfons to whom we would chiefly recommend the performance of this operation are the clergy. Moft of them know fomething of medicine. Almoft all of them bleed, and can order a purge, which are all the qualifications neceffary for the practice of inoculation. The Priefts among the lefs enlightened Indians perform this office, and why fhould a Chriftian teacher think himfelf above it? Surely, the bodies of men, as well as their fouls, merit a part of the paftor's care; at leaft the greateft Teacher who ever appeared among men feems to have thought fo.

SHOULD all other methods fail, we would recommend it to parents to perform the operation themfelves. Let them take any method of communicating the disease they please, provided the subjects be healthy, and of a proper age, they will feldom fail to fucceed to their wifh. I have known many instances even of mothers performing the operation, and never so much as heard of one bad consequence. A planter in one of the West India islands is said to have inoculated, with his own hand, in one year, three hundred of his flaves, who, notwithftanding the warmth of the climate, and other unfavourable circumstances, all did well. Common mechanics have often, to my knowledge, performed the operation with as good success as physicians. We do not however mean to discourage those who have it in their power, from S 4 employ-

employing people of fkill to inoculate their children, and attend them while under the difeafe, but only to fhew, that where fuch cannot be had, the operation ought not upon that account to be neglected.

INSTEAD of multiplying arguments to recommend this practice, I fhall juft beg leave to mention the method which I took with my own fon, then an only child. After giving him two gentle purges, I ordered the nurfe to take a bit of thread which had been previoufly wet with frefh matter from a pock, and to lay it upon his arm, covering it with a piece of flicking plafter. This flaid on fix or feven days, till it was rubbed off by accident. At the ufual time the fmallpox made their appearance, and were exceedingly favourable. Sure this, which is all that is generally neceffary, may be done without any fkill in medicine.

WE have been the more full upon this fubject, becaufe the benefits of inoculation cannot be extended to fociety by any other means than making the practice general. 'While it is confined to a few, it muft prove hurtful to the whole. By means of it the contagion is fpread, and is communicated to many who might otherwife never have had the difeafe. Accordingly it is found that more die of the fmall-pox now, than before inoculation was introduced; and this important difcovery, by which alone more lives might be faved than by all the endeavours of the Faculty, is in a great measure loft by its benefits not being extended to the whole community\*.

\* By a well-laid plan for extending inoculation, more lives might be faved at a fmall expence, than are at prefent preferved by all the hofpitals in England, which coft the public fuch an amazing fum.

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The fpring and autumn have been ufually reckoned the most proper feasons for inoculation, on account of the weather being then most remperate; but it ought to be confidered that these are generally the most unhealthy seasons of the whole year. Undoubtedly the best preparation for the disease is a previous good state of health. I have always observed that children in particular are more fickly towards the end of spring and autumn, than at any other time of the year. On this account, as well as for the advantage of cool air, I would propose winter as the most proper season for inoculation; though, on every other confideration, the spring would seem to be preferable.

THE most proper age for inoculation is betwixt three and five. Many approve of inoculating on the breast, and where no circumstances forbid this practice, I have no objection to it. Children, however, are more liable to convulsions at this time than afterwards; besides, the anxiety of the mother or nurse, should the child be in danger, would not fail to heighten it by spoiling the milk.

CHILDREN who have conftitutional difeafes, muft neverthelefs be inoculated. It will often mend the habit of body; but ought to be performed at a time when they are most healthy. Accidental difeafes should always be removed before inoculation.

It is generally thought neceffary to regulate the diet for fome time before the difeafe be communicated. In children, however, great alteration in diet is feldom neceffary, their food being commonly of the most fimple and wholefome kind; as milk, water-pap, weak broths, bread, light pudding, mild roots, and white meats.

BUT

But children who have been accuftomed to a hotter diet, who are of a grofs habit, or abound with bad humours, ought to be put upon a fpare diet before they be inoculated. Their food fhould be of a light cooling nature; and their drink whey, butter-milk, and fuch like.

WE would recommend no other medicinal preparation but two or three mild purges, which ought to be fuited to the age and ftrength of the patient. The fuccefs of inoculators does not depend on the preparation of their patients, but on their management of them while under the difeafe. Their conftant care is to keep them cool, and their bodies gently open, by which means the fever is kept low, and the eruption greatly leffened. The danger is feldom great when the puftules are few; and their number is generally in proportion to the fever which precedes and attends the eruption. Hence the chief fecret of inoculation confifts in regulating the eruptive fever, which generally may be kept fufficiently low by the methods mentioned above.

THE regimen during the difeafe is in all refpects the fame as under the natural fmall-pox. The patient muft be kept cool, his diet fhould be light, and his drink weak and diluting, &c. Should any bad fymptoms appear, which is feldom the cafe, they muft be treated in the fame way as directed in the natural fmall-pox. Purging is not lefs neceffary after the fmall-pox by inoculation, than in the natural way, and ought by no means to be neglected.

ĊHAP.

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#### CHAP. XXIV.

#### OF THE MEASLES.

THE measles appeared in Europe about the fame time with the small-pox, and have a great affinity to that difease. They both came from the same quarter of the world, are both infectious, and feldom attack the same person more than once. The measles are most common in the spring feason, and generally disappear in summer. The disease itself, when properly managed, feldom proves statal; but its consequences are often very troublesome,

CAUSE. — This difeafe, like the finall-pox, proceeds from infection, and is more or lefs dangerous according to the conftitution of the patient, the feafon of the year, the climate, &c.

SYMPTOMS. — The measles, like other fevers, are preceded by alternate fits of heat and cold, with ficknefs, and lofs of appetite. The tongue is white, but generally moift. There is a short cough, a heaviness of the head and eyes, drowfiness, and a running at the nofe. Sometimes indeed the cough does not come before the eruption has appeared. There is an inflammation and heat in the eyes, accompanied with a defluxion of sharp tears, and great acuteness of fensation, fo that they cannot bear the light without pain. The eye-lids frequently fwell fo. as to occafion blindnefs. The patient generally complains of his throat; and a vomiting or loofeness often precedes the eruption. The stools in children are commonly greenish; they complain of an itching

ing of the fkin, and are remarkably peevifh. Bleeding at the nofe is common, both before and in the progrefs of the difeafe.

ABOUT the fourth day, finall fpots, refembling flea-bites, appear, first upon the face, then upon the breast, and afterwards on the extremities: These may be distinguished from the small-pox by their fcarcely rising above the skin. The fever, cough, and difficulty of breathing, instead of being removed by the eruption as in the small-pox, are rather increased; but the vomiting generally ceases.

ABOUT the fixth or feventh day from the time of fickening, the meafles begin to turn pale on the face, and afterwards upon the body; fo that by the ninth day they entirely difappear. The fever, however, and difficulty of breathing, often continue, efpecially if the patient has been kept upon too, hot a regimen. Petechiæ, or purple fpots, may likewife be occafioned by this error.

A VIOLENT loofeness fometimes succeeds the measles; in which case the patient's life is in imminent danger.

SUCH as die of the measles generally expire about the ninth day from the invasion, and are commonly carried off by a peripneumony, or inflammation of the lungs.

THE most favourable symptoms are, a moderate looseness, a moist skin, and a plentiful discharge of urine.

WHEN the eruption fuddenly falls in, and the patient is feized with a delirium, he is in the greateft danger. If the meafles turn too foon of a pale colour, it is an unfavourable fymptom, as are alfo great weaknefs, weaknefs, vomiting, reftleffnefs, and difficulty of fwallowing. Purple or black fpots appearing among the meafles, are very unfavourable. When a continual cough, with hoarfenefs, fucceeds the difeafe, there is reafon to fufpect an approaching confumption of the lungs.

OUR bufinefs in this difeafe is to affift Nature by proper cordials, in throwing out the morbific matter, if her efforts be too languid; but when they are too violent they must be restrained by evacuations, and cool diluting liquors, &c. We ought likewife to endeavour to appeale the most urgent fymptoms, as the cough, restless, and difficulty of breathing.

REGIMEN. — The cool regimen is neceffary here as well as in the fmall-pox. The food too muft be light, and the drink diluting. Acids however do not anfwer fo well in the meafles as in the fmall-pox, as they tend to exafperate the cough. Small-beer likewife, though a good drink in the fmall-pox, is here improper. The moft fuitable liquors are decoctions of liquorice with marfh-mallow roots and farfaparilla, infulions of linfeed, or of the flowers of elder, balm tea, clarified whey, barley-water, and fuch like. Thefe, if the patient be coftive, may befweetened with honey; or, if that fhould difagree with the ftomach, a little manna may occafionally be added to them.

MEDICINE. — The meafles being an inflammatory difeafe, without any critical difcharge of matter, as in the fmall-pox, bleeding is commonly neceffary, efpecially when the fever runs high, with difficulty of breathing, and great opprefilon of the 3 breaft. breaft. But if the difeafe be of a mild kind, bleeding may be omitted \*.

BATHING the feet and legs frequently in lukewarm water both tends to abate the violence of the fever, and to promote the eruption.

THE patient is often greatly relieved by vomiting. When there is a tendency this way, it ought to be promoted by drinking lukewarm water, or weak camomile-tea.

WHEN the cough is very troublefome, with drynefs of the throat, and difficulty of breathing, the patient may hold his head over the fteam of warm water, and draw the fteam into his lungs.

HE may likewife lick a little fperma ceti and fugarcandy pounded together; or take now and then a fpoonful of the oil of fweet almonds, with fugarcandy diffolved in it. Thefe will foften the throat, and relieve the tickling cough.

IF at the turn of the difeafe the fever affumes new vigour, and there appears great danger of fuffocation, the patient muft be bled according to his ftrength, and bliftering-plafters applied, with a view to prevent the load from being thrown on the lungs, where if an inflammation fhould fix itfelf, the patient's life will be in imminent danger.

IN cafe the meafles should fuddenly disappear, it will be necessary to purfue the same method which we have recommended when the small-pox recede. The patient must be supported with wine and cordials. Bliftering-plasters must be applied to the legs and

\* I do not know any difeafe wherein bleeding is more neceffary than in the meafles, efpecially when the fever runs high: in this cafe I have always found it relieve the patient.

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arms, and the body rubbed all over with warm flannels. Warm poultices may likewife be applied to the feet and palms of the hands.

WHEN purple or black fpots appear, the patient's drink should be sharpened with spirits of vitriol; and if the putrid fymptoms increase, the Peruvian bark must be administered in the same manner as directed in the small-pox.

OPIATES are sometimes necessary, but should never be given except in cases of extreme reftless, a violent loofenefs, or when the cough is very troublefome. For children, the fyrup of poppies is fufficient. A tea-spoonful or two may be occasionally given, according to the patient's age, or the violence of the fymptoms.

AFTER the measles are gone off, the patient ought to be purged. This may be conducted in the fame manner as directed in the fmall-pox.

IF a violent loofeness fucceeds the measles, it may be checked by taking for fome days a gentle dofe of rhubarb in the morning, and an opiate over night; but if these do not remove it, bleeding will seldom fail to have that effect.

PATIENTS recovering after the measles should be careful what they eat or drink. Their food, for fome time, ought to be light, and in fmall quantities, and their drink diluting, and rather of an opening nature; as butter-milk, whey, and fuch like. They ought also to beware of exposing themselves too foon to the cold air, left a fuffocating catarrh, an afthma, or a confumption of the lungs should enfue.

SHOULD a cough, with difficulty of breathing, and other fymptoms of a confumption, remain after the meafles,

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measles, small quantities of blood may be frequently let at proper intervals, as the patient's strength and constitution will permit. He ought likewise to drink affes milk, to remove to a free air, if in a large town, and to ride daily on horfeback. He must keep close to a diet consisting of milk and vegetables; and lastly, if these do not succeed, let him remove to a warmer climate \*.

### ... OF THE SCARLET FEVER.

THE fearlet fever is fo called from the colour of the patient's fkin, which appears as if it were tinged with red wine. It happens at any feafon of the year, but is most common towards the end of fummer; at which time it often feizes whole families: children and young perfons are most fubject to it.

\* Attempts have been made to communicate the measles, as well as the fmall-pox, by inoculation, and we make no doubt but in time the practice may succeed. Dr. Home of Edinburgh fays, he communicated the difease by the blood. Others have tried this method, and have not found it fucceed. Some think the difeafe would be more certainly communicated by rubbing the fkin of a patient who has the measles with cotton, and afterwards applying the cotton to a wound, as in the fmall-pox; while others recommend a bit of flannel which had been applied to the patient's skin, all the time of the disease, to be afterwards laid upon the arm or leg of the perfon to whom the infection is to be communicated. There is no doubt but this disease, as well as the fmall-pox, may be communicated various ways; the most probable, however, is either from cotton rubbed upon the fkin,' as mentioned above, or by introducing a little of the fharp humour which diffils from the eyes of the patient into the blood. It is agreed on all hands that fuch patients as have been inoculated had the discase very mildly ; we therefore with the practice were more general, as the meafles have of late become very fatal. 6 - - -

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### OF THE SCARLET FEVER. . 273 .

It begins like other fevers, with coldnefs and fhivering, without any violent ficknefs. Afterwards the fkin is covered with red fpots, which are broader, more florid, and lefs uniform than the meafles. They continue two or three days, and then difappear; after which the cuticle, or fcarf-fkin, falls off.

THERE is feldom any occasion for medicine in this difeafe. The patient ought however to keep within doors, to abstain from flesh, strong liquors, and cordials, and to drink freely of cool diluting liquors. If the fever runs high, the body must be kept gently open by emollient clysters, or small doses of nitre and rhubarb. A foruple of the former, with five grains of the latter, may be taken thrice a-day, or oftener, if necessary.

CHILDREN and young perfons are fometimes feized, at the beginning of this difeafe, with a kind of flupor and epileptic fits. In this cafe the feet and and legs fhould be bathed in warm water, a large bliftering-plafter applied to the neck, and a dofe of the fyrup of poppies given every night till the patient recovers \*.

THE fearlet fever, however, is not always of fo mild a nature. It is fometimes attended with putrid or malignant fymptoms, in which cafe it is always dangerous. In the malignant fearlet fever the patient is not only affected with coldnefs and fhivering, but with languor, ficknefs, and great oppreffion; to these fucceed exceffive heat, nausea and vomiting, with a foreness of the throat; the pulse is extremely quick, but small and depressed; the breathing fre-

\* Sydenhame

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quent and laborious; the fkin hot, but not quite dry; the tongue moift, and covered with a whitifh mucus; the tonfils inflamed and ulcerated. When the eruption appears, it brings no relief: on the contrary, the fymptoms generally grow worfe, and fresh ones come on, as purging, delirium, &c.

WHEN this difeafe is miftaken for a fimple inflammation, and treated with repeated bleedings, purging and cooling medicines, it generally proves fatal. The only medicines that can be depended on in this cafe are cordials and antifeptics, as the Peruvian bark, wine, fnake-root, and the like. The treatment muft be in general fimilar to that of the putrid fever, or of the malignant ulcerous fore throat \*.

#### OF THE BILIOUS FEVER.

WHEN a continual, remitting, or intermitting fever is accompanied with a frequent or copious evacuation of bile, either by vomit or ftool, the fever is denominated bilious. In Britain the bilious fever generally makes its appearance about the end of fummer, and ceafes towards the approach of winter. It is most frequent and fatal in warm countries, especially where the foil is marshy, and when great rains are fucceeded by fultry heats. Perfons who work with-

\* In the year 1774, during winter, a very bad fpecies of this fever prevailed in Edinburgh. It raged chiefly among young people. The eruption was generally accompanied with a quinfey, and the inflammatory fymptoms were fo blended with others of a putrid nature, as to render the treatment of the difeafe very difficult. Many of the patients, towards the decline of the fever, were afflicted with large fwellings of the fubmaxillary glands, and not a few had a fuppuration in one or both ears.

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## OF THE BILIOUS FEVER.

out doors, lie in camps, or who are exposed to the night air, are most liable to this kind of fever.

IF there are fymptoms of inflammation at the beginning of this fever, it will be neceffary to bleed, and to put the patient upon the cool diluting regimen recommended in the inflammatory fever. The faline draught may likewife be frequently administered, and the patient's body kept open by clysters or mild purgatives. But if the fever should remit or intermit, bleeding will feldom be neceffary. In this cafe a vomit may be administered, and, if the body be bound, a gentle purge; after which the Peruvian bark will generally complete the cure.

IN cafe of a violent loofenefs, the patient must be fupported with chicken broth, jellies of hartshorn, and the like; and he may use the *white decotion* for his ordinary drink \*. If a bloody-flux should accompany this fever, it must be treated in the manner recommended under the article *Dysentery*.

WHEN there is a burning heat, and the patient does not fweat, that evacuation may be promoted by giving him, three or four times a-day, a tablefpoonful of Mindererus's fpirit † mixed in a cup of his ordinary drink.

IF the bilious fever be attended with the nervous, malignant, or putrid fymptoms, which is fometimes the cafe, the patient must be treated in the fame manner as directed under these diseases.

AFTER this fever, proper care is neceffary to prevent a relapfe. For this purpose the patient, especially towards the end of autumn, ought to continue

\* See Appendix, White Decostion.

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<sup>+</sup> See Appendix, Spirit of Mindererus,

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the use of the Peruvian bark for some time after he is well. He should likewise abstain from all trashy fruits, new liquors, and every kind of slatulent aliment.

#### CHAP. XXV.

#### OF THE ERYSIPELAS, OR ST. AN-THONY'S FIRE.

HIS difeafe, which in fome parts of Britain is called *the rofe*, attacks perfons at any period of life, but is most common between the age of thirty and forty. Perfons of a fanguine or plethoric habit are most liable to it. It often attacks young people, and pregnant women; and fuch as have once been afflicted with it are very liable to have it again. Sometimes it is a primary difeafe, and at other times only a fymptom of fome other malady. Every part of the body is liable to be attacked by an eryfipelas, but it most frequently feizes the legs or face, efpecially the latter. It is most common in autumn, or when hot weather is fucceeded by cold and wet.

CAUSES.— The eryfipelas may be occafioned by violent paffions or affections of the mind; as, fear, anger, &c. When the body has been heated to a great degree, and is immediately exposed to the cold air, fo that the perfpiration is fuddenly checked, an eryfipelas will often enfue\*. It may alfo be occafioned

 'Fhe country people in many parts of Britain call this difeafe a blaft, and imagine it proceeds from foul air, or ill wind, as they term it. 'The truth is, they often lie down to reft them, when warm and fatigued, upon the damp ground, where they fall afleep, 4

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fioned by drinking to excefs, by continuing too long in a warm bath, or by any thing that overheats the blood. If any of the natural evacuations be obftructed, or in too fmall quantity, it may caufe an eryfipelas. The fame effect will follow from the ftoppage of artificial evacuations; as iffues, fetons, or the like.

SYMPTOMS.——The eryfipelas attacks with fhivering, thirft, lofs of ftrength, pain in the head and back, heat, reftleffnefs, and a quick pulfe; to which may be added vomiting, and fometimes a delirium. On the fecond, third, or fourth day, the part fwells, becomes red, and fmall puftules appear; at which time the fever generally abates.

WHEN the eryfipelas feizes the foot, the parts contiguous fwell, the fkin fhines; and, if the pain be violent, it will afcend to the leg, and will not bear to be touched.

WHEN it attacks the face, it fwells, appears red, and the fkin is covered with finall puftules filled with clear water. One or both eyes are generally clofed with the fwelling; and there is a difficulty of breathing. If the mouth and noftrils be very dry, and the patient drowfy, there is reafon to fufpect an inflammation of the brain.

IF the eryfipelas affects the breaft, it fwells and becomes exceedingly hard, with great pain, and is apt to fuppurate. There is a violent pain in the arm-pit on the fide affected, where an abfcefs is often formed.

and lie fo long as to catch cold, which occasions the eryfipelas. This difease may indeed proceed from other causes, but we may venture to fay, that nine times out of ten it is occasioned by cold caught after the body has been greatly heated or fatigued.

IF

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IF in a day or two the fwelling fubfides, the heat and pain abate, the colour of the part turns yellow, and the cuticle breaks and falls off in fcales, the danger is over.

WHEN the eryfipelas is large, deep, and affects a very fenfible part of the body, the danger is great. If the red colour changes into a livid or black, it will end in a mortification. Sometimes the inflammation cannot be difcuffed, but comes to a fuppuration; in which cafe fiftulas, a gangrene, or mortification, often enfue.

SUCH as die of this difeafe are commonly carried off by the fever, which is attended with difficulty of breathing, and fometimes with a delirium and great drowfinefs. They generally die about the feventh or eighth day.

REGIMEN.——In the eryfipelas the patient muft neither be kept too hot nor too cold, as either of thefe extremes will tend to make it retreat, which is always to be guarded againft. When the difeafe is mild, it will be fufficient to keep the patient within doors, without confining him to his bed, and to promote the perfpiration by diluting liquors, &c.

THE diet ought to be flender, and of a moderately cooling and moiftening quality, as groat-gruel, panado, chicken or barley-broth, with cooling herbs and fruits, &c. avoiding flefh, fifh, ftrong drink, fpices, pickles, and all other things that may heat and inflame the blood; the drink may be barleywater, an infufion of elder flowers, common whey, and fuch like.

But if the pulse be low, and the spirits funk, the patient must be supported with negus, and other

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#### OR ST. ANTHONY'S FIRE.

things of a cordial nature. His food may be fago gruel with a little wine, and nourifhing broths taken in fmall quantities, and often repeated. Great care however must be taken not to overheat him.

MEDICINE. ---- In this difease much mischief is often done by medicine, efpecially by external applications. People, when they fee an inflammation, immediately think that fomething ought to be applied to it. This indeed is neceffary in large phlegmons; but in an eryfipelas the fafer courfe is to apply nothing. Almost all ointments, falves, and plasters, being of a greafy nature, tend rather to obftruct and repel, than promote any discharge from the part. At the beginning of this difease it is neither fafe to promote a suppuration, nor to repel the matter too quickly. The eryfipelas in many respects refembles the gout, and is to be treated with the greatest caution. Fine wool, or very foft flannel, are the fafest applications to the part. These not only defend it from the external air, but likewife promote the perfpiration, which has a great tendency to carry off the difease. In Scotland the common people generally apply a mealy cloth to the parts affected, which is far from being improper.

It is common to bleed in the eryfipelas; but this likewife requires caution. If however the fever be high, the pulfe hard and ftrong, and the patient vigorous, it will be proper to bleed; but the quantity muft be regulated by thefe circumftances, and the operation repeated as the fymptoms may require. If the patient has been accustomed to ftrong liquors, and the difeafe attacks his head, bleeding is abfolutely neceffary.

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BATHING

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BATHING the feet and legs frequently in lukewarm water, when the difeafe attacks the face or brain, has an excellent effect. It tends to make a derivation from the head, and feldom fails to relieve the patient. When bathing proves ineffectual, poultices, or fharp finapifms, may be applied to the foles of the feet for the fame purpofe.

IN cafes where bleeding is requifite, it is likewife neceffary to keep the body open. This may be effected by emollient clyfters, or fmall dofes of nitre and rhubarb. Some indeed recommend very large dofes of nitre in the eryfipelas; but nitre feldom fits eafy on the ftomach when taken in large dofes. It is however one of the beft medicines when the fever and inflammation run high. Half a drachm of it, with four or five grains of rhubarb, may be taken in the patient's ordinary drink, four times a-day.

WHEN the eryfipelas leaves the extremities, and feizes the head fo as to occafion a delirium or ftupor, it is abfolutely neceffary to open the body. If clyfters and mild purgatives fail to have this effect, ftronger ones must be given. Bliftering-plasters must likewife be applied to the neck, or behind the ears, and fharp cataplasms laid to the foles of the feet.

WHEN the inflammation cannot be difcuffed, and the part has a tendency to ulcerate, it will then be proper to promote fuppuration, which may be done by the application of ripening poultices with faffron, warm fomentations, and fuch like.

WHEN the black, livid, or blue colour of the part fhews a tendency to mortification, the Peruvian bark must be administered. It may be taken along with acids, as recommended in the finall-pox, or in any other

#### OR ST. ANTHONY'S FIRE.

other form more agreeable to the patient. It must not however be trifled with, as the patient's life is at stake. A drachm may be given every two hours, if the fymptoms be threatening, and cloths dipped in warm camphorated spirits of wine, or the tincture of myrrh and aloes, may be applied to the part, and frequently renewed. It may likewise be proper in this case to apply poultices of the bark, or to foment the part affected with a strong decoction of it.

In what is commonly called the *fcorbutic eryfipelas*, which continues for a confiderable time, it will only be neceffary to give gentle laxatives, and fuch things as purify the blood, and promote the perfpiration. Thus, after the inflammation has been checked by opening medicines, the decoction of woods \* may be drank, after which a courfe of bitters will be proper.

SUCH as are liable to frequent attacks of the eryfipelas ought carefully to guard against all violent passions; to abstain from strong liquors, and all fat, viscid, and highly nourissing food. They should likewise take fufficient exercise, carefully avoiding the extremes of heat or cold. Their food should consist chiefly of milk, and such fruits, herbs, and roots, as are of a cooling quality; and their drink ought to be small-beer, whey, butter-milk, and such like. They should never suffer themselves to be long costive. If that cannot be prevented by fuitable diet, it will be proper to take frequently a gentle dofe of rhubarb, cream of tartar, the lenitive electuary, or some other mild purgative.

\* See Appendix, Decoction of Woods.

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#### CHAP. XXVI.

## OF THE PHRENITIS, OR INFLAMMA-TION OF THE BRAIN.

HIS is fometimes a primary difeafe, but oftener only a fymptom of fome other malady; as the inflammatory, eruptive, or fpotted fever, &c. It is very common however as a primary difeafe in warm climates, and is most incident to perfons about the prime or vigour of life. The passionate, the studious, and those whose nervous system is irritable in a high degree, are most liable to it.

CAUSES.— This difeafe is often occafioned by night-watching, efpecially when joined with hard ftudy: It may likewife proceed from hard drinking, anger, grief, or anxiety. It is often occafioned by the ftoppage of ufual evacuations; as the bleeding piles in men, the cuftomary difcharges of women, &cc. Such as imprudently expofe themfelves to the heat of the fun, efpecially by fleeping without doors in a hot feafon with their heads uncovered, are often fuddenly feized with an inflammation of the brain, fo as to awake quite delirious. When repellents are imprudently ufed in an eryfipelas, an inflammation of the brain is fometimes the conefquence. It may likewife be occafioned by external injuries, as blows or bruifes upon the head, &cc.

SYMPTOMS.— The fymptoms which ufually precede a true inflammation of the brain are, pain of the head, rednefs of the eyes, a violent flufhing of the

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the face, diffurbed fleep, or a total want of it, great dryneis of the fkin, coltiveneis, a retention of urine, a fmall dropping of blood from the nofe, finging of the ears, and extreme fenfibility of the nervous fyftem.

WHEN the inflammation is formed, the fymptoms in general are fimilar to those of the inflammatory fever. The pulse indeed is often weak, irregular, and trembling; but fometimes it is hard and contracted. When the brain itself is inflamed, the pulse is always foft and low; but when the inflammation only affects the integuments of the brain, viz. the dura and pia mater, it is hard. A remarkable quickness of hearing is a common fymptom of this difeafe; but that feldom continues long. Another ufual fyinptom is a great throbbing or pulfation in the arteries of the neck and temples. Though the tongue is often black and dry, yet the patient feldom complains of thirft, and even refuses drink. The mind chiefly runs upon fuch objects as have before made a deep impression on it; and fometimes, from a fullen filence, the patient becomes all of a fudden quite outrageous.

A CONSTANT trembling and flarting of the tendons, is an unfavourable fymptom, as are alfo a fuppreffion of urine; a total want of fleep; a conftant fpitting; a grinding of the teeth, which laft may be confidered as a kind of convultion. When a phrenitis fucceeds an inflammation of the lungs, of the inteftines, or of the throat, &c. it is owing to a translation of the difeafe from these parts to the brain, and generally proves fatal. This shews the necessity of proper evacuations, and the danger of repellents in all inflammatory difeafes.

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THE favourable fymptoms are, a free perspiration, a copious discharge of blood from the nose, the bleeding piles, a plentiful discharge of urine which lets fall a copious sediment. Sometimes the discass is carried off by a looseness, and in women by an excessive flow of the *menses*.

As this difeate often proves fatal in a few days, it requires the most speedy applications. When it is prolonged, or improperly treated, it sometimes ends in madness, or a kind of stupidity which continues for life.

In the cure, two things are chiefly to be attended to, *viz.* to leffen the quantity of blood in the brain, and to retard the circulation towards the head.

REGIMEN.— The patient ought to be kept yery quiet. Company, noife, and every thing that affects the fenfes, or difturbs the imagination, increafes the difeafe. Even too much light is hurtful; for which reafon the patient's chamber ought to be a little darkened, and he fhould neither be kept too hot nor cold. It is not however neceffary to exclude the company of an agreeable friend, as this has a tendency to footh and quiet the mind. Neither ought the patient to be kept too much in the dark, left it fhould occafion a gloomy melancholy, which is too often the confequence of this difeafe.

THE patient must, as far as possible, be soothed and humoured in every thing. Contradiction will ruffle his mind, and increase his malady. Even when he calls for things which are not be obtained, or which might prove hurtful, he is not to be positively denied them, but rather put off with the promise of having them as soon as they can be obtained, or by

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fome other excufe. A little of any, thing that the mind is fet upon, though not quite proper, will hurt the patient lefs than a politive refulal. In a word, whatever he was fond of, or ufed to be delighted with when in health, may here be tried, as pleafing ftories, foft mulic, or whatever has a tendency to footh the paffions, and compose the mind. Boerhaave proposes feveral mechanical experiments for this purpose; as the foft noise of water distilling by drops into a bafon, and the patient trying to reckon them, &c. Any uniform found, if low and continued, has a tendency to procure fleep, and confequently may be of fervice.

THE aliment ought to be light, confifting chiefly of farinaceous fubftances; as panado, and watergruel fharpened with jelly of currants, or juice of lemons, ripe fruits roafted or boiled, jellies, preferves, &c. The drink fmall, diluting, and cooling; as whey, barley-water, or decoctions of barley and tamarinds, which latter not only render the liquor more palatable, but likewife more beneficial, as they are of an opening nature.

MEDICINES.— In an inflammation of the brain, nothing more certainly relieves the patient than a free difcharge of blood from the nofe. When this comes of its own accord, it is by no means to be flopped, but rather promoted, by applying cloths dipped in warm water to the part. When bleeding at the nofe does not happen fpontaneoufly, it may be provoked, by putting a ftraw, or any other fharp body up the noftril.

BLEEDING in the temporal arteries greatly relieves the head: but as this operation cannot always be performed, we would recommend in its flead bleed-

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ing in the jugular veins. When the patient's pulfe and fpirits are fo low, that he cannot bear bleeding with the lancet, leeches may be applied to the temples. Thefe not only draw off the blood more gradually, but by being applied nearer to the part affected, generally give more immediate relief.

A DISCHARGE of blood from the hæmorrhoidal veins is likewife of great fervice, and ought by all means to be promoted. If the patient has been fubject to the bleeding piles, and that difcharge has been ftopped, every method must be tried to reftore it; as the application of leeches to the parts, fitting over the fteams of warm water, fharp clyfters or fuppofitories made of honey, aloes, and rock-falt.

IF the inflammation of the brain be occafioned by the ftoppage of evacuations either natural or artificial, as the menfes, iffues, fetons, or fuch like, all means must be used to restore them as soon as possible, or to fubstitute others in their stead.

THE patient's body must be kept open by stimulating clysters or smart purges; and small quantities of nitre ought frequently to be mixed with his drink. Two or three drachms, or more, if the case be dangerous, may be used in the space of twenty-four hours.

THE head fhould be fhaved and frequently rubbed with vinegar and rofe-water. Cloths dipped in this mixture may likewife be applied to the temples. The feet ought frequently to be bathed in lukewarm water, and foft poultices of bread and milk may be kept conftantly applied to them.

IF the difeafe proves obflinate, and does not yield to thefe medicines, it will be neceffary to apply a bliftering-plafter to the whole head.

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#### CHAP. XXVII.

### OF THE OPHTHALMIA, or INFLAM-MATION OF THE EYES.

HIS difeafe may be occasioned by external injuries; as blows, burns, bruifes, and the like. It may likewife proceed from duft, quicklime, or other fubstances, getting into the eyes. It is often cauled by the stoppage of customary evacuations; as the healing of old fores, drying up of iffues, the fupprefling of gentle morning fweats, or of the fweating of the feet, &c. Long expolure to the night-air, especially in cold northerly winds, or whatever fuddenly checks the perspiration, especially after the body has been much heated, is very apt to caufe an inflammation of the eyes. Viewing fnow or other white bodies for a long time, or looking fledfaftly at the fun, a clear fire, or any bright object, will likewife occasion this malady. A fudden transition from darkness to very bright light will often have the fame effect.

NOTHING more certainly occasions an inflammation of the eyes than night-watching, especially reading or writing by candle-light. Drinking spirituous liquors, and excess of venery, are likewife very hurtful to the eyes. The acrid fumes of metals, and of several kinds of fuel, are also pernicious. Sometimes an inflammation of the eyes proceeds from a venereal taint, and often from a fcrophulous or gouty habit. It may likewife be occasioned by hairs in the eye-lids turning inwards, and hurting the eyes. Sometimes the difease is epidemic, especially after wet feasons; and I have frequently known it prove infectious, particularly

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ticularly to those who lived in the fame house with the patient. It may be occasioned by moist air, or living in low, damp houses, especially in performs who are not accustomed to such situations. In children it often proceeds from imprudently drying up of scabbed heads, a running behind the ears, or any other discharge of that kind. Inflammations of the eyes often succeed the small-pox or measures, especially in children of a scrophulous habit.

SYMPTOMS.—An inflammation of the eyes is attended with acute pain, heat, rednefs, and fwelling. The patient is not able to bear the light, and fometimes he feels a pricking pain, as if his eyes were pierced with a thorn. Sometimes he imagines his eyes are full of motes, or thinks he fees flies dancing before him. The eyes are filled with a fealding rheum, which rufhes forth in great quantities, whenever the patient attempts to look up. The pulfe is generally quick and hard, with fome degree of fever.' When the difeafe is violent, the neighbouring parts fwell, and there is a throbbing or pulfation in the temporal arteries, &c.

A SLIGHT inflammation of the eyes, especially from an external cause, is easily cured; but when the disease is violent, and continues long, it often leaves specks upon the eyes, or dimness of sight, and sometimes total blindness.

IF the patient be feized with a loofenefs, it has a good effect; and when the inflammation paffes from one eye to another, as it were by infection, it is no unfavourable fymptom. But when the difeafe is accompanied with a violent pain of the head, and continueslong, the patient is in danger of lofing his fight.

REGIMEN

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REGIMEN.— The diet, unlefs in fcrophulous cafes, can hardly be too fpare, efpecially at the beginning. The patient mult abftain from every thing of a heating nature. His food fhould confift chiefly of mild vegetables, weak broths, and gruels. His drink may be barley-water, balm-tea, common whey, and fuch-like.

THE patient's chamber must be darkened, or his eyes shaded by a cover, so as to exclude the light, but not to press upon the eyes. He should not look at a candle, the fire, or any luminous object; and ought to avoid all smoke, as the sumes of tobacco, or any thing that may cause coughing, so so tobacco, or vomiting. He should be kept quiet, avoiding all violent efforts, either of body or mind, and encouraging fleep as much as possible.

MEDICINE.——This is one of those difeases wherein great hurt is often done by external applications. Almost every person pretends to be posses of a remedy for the cure of fore eyes. These remedies generally confist of eye-waters and ointments, with other external applications, which do mischies twenty times for once they do good. People ought therefore to be very cautious how they use fuch things, as even the preffure upon the eyes often increases the malady.

BLEEDING, in a violent inflammation of the eyes, is always neceffary. This fhould be performed as near the part affected as poffible. An adult may lofe ten or twelve ounces of blood from the jugular vein, and the operation may be repeated according to the urgency of the fymptoms. If it fhould not be convenient to bleed in the neck, the fame quantity

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tity may be let from the arm, or any other part of the body.

LEECHES are often applied to the temples, or under the eyes with good effect. The wounds must be fuffered to bleed for fome hours, and if the bleeding ftop foon, it may be promoted by the application of cloths dipt in warm water. In obstinate cafes, it will be neceffary to repeat this operation feveral times.

OPENING and diluting medicines are by no means to be neglected. The patient may take a small dofe of Glauber's falts, and cream of tartar, every fecond or third day, or a decoction of tamarinds with fenna. If these be not agreeable, gentle doses of rhubarb and nitre, a little of the lenitive electuary, or any other mild purgative, will answer the fame end. The patient at the fame time must drink freely of watergruel, tea, whey, or any other weak diluting liquor. He ought likewife to take, at bed-time, a large draught of very weak wine whey, in order to promote perspiration. His feet and legs must frequently be bathed in lukewarm water, and his head shaved twice or thrice a-week, and afterwards washed in cold water. This has often a remarkably good effect.

. IF the inflammation does not yield to thefe evacuations, bliftering-plafters must be applied to the temples, behind the ears, or upon the neck, and kept open for fome time by the mild bliftering ointment. I have feldom known thefe, if long enough kept open, fail to remove the most obstinate inflammation of the eyes; but, for this purpofe, it is often neccffary to continue the difcharge for feveral weeks.

WHEN the difease has been of long standing, I have feen very extraordinary effects from a deton in the

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the neck, or betwixt the fhoulders, efpecially the latter. It fhould be put upwards and downwards, or in the direction of the fpine, and in the middle between the fhoulder-blades. It may be dreffed twice a-day with yellow bafilicon. I have known patients, who had been blind for a confiderable time, recover fight by means of a feton placed as above. When the feton is put acrofs the neck, it foon wears out, and is both more painful and troublefome than between the fhoulders; befides, it leaves a difagreeable mark, and does not difcharge fo freely.

WHEN the heat and pain of the eyes are very great, a poultice of bread and milk foftened with fweet oil or fresh butter, may be applied to them, at least all night; and they may be bathed with lukewarm milk and water in the morning.

IF the patient cannot fleep, which is fometimes the cafe, he may take twenty or thirty drops of laudanum, or two fpoonfuls of the fyrup of poppies, over night, more or lefs according to his age, or the violence of the fymptoms.

AFTER the inflammation is gone off, if the eyes fill remain weak and tender, they may be bathed every night and morning with cold water and a little brandy, fix parts of the former to one of the latter. A method fhould be contrived by which the eye can be quite immerfed in the brandy and water, where it fhould be kept for fome time. I have generally found this, or cold water and vinegar, as good a ftrengthener of the eyes as any of the most celebrated collyriums.

WHEN an inflammation of the eyes proceeds from a fcrophulous habit, it generally proves very obstinate. In this case the patient's diet must not be too  $U_2$  low,

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low, and he may be allowed to drink fmall negus, or now and then a glafs of wine. The most proper medicine is the Peruvian bark, which may either be given in fubstance, or prepared in the following manner:

TAKE an ounce of bark in powder, with two drachms of Winter's bark, and boil them in an Englifh quart of water to a pint; when it has boiled nearly long enough, add half an ounce of liquorice-root fliced. Let the liquor be ftrained. Two, three, or four table-fpoonfuls, according to the age of the patient, may be taken three or four times a-day. It is impoffible to fay how long this medicine fhould be continued, as the cure is fooner performed in fome than in others; but in general it requires a confiderable time to produce any lafting effects.

DR. CHEYNE fays, 'That Æthiops mineral never fails in obftinate inflammations of the eyes, even fcrophulous ones, if given in a fufficient dofe, and duly perfifted in.' There is no doubt but this and other preparations of mercury may be of fingular fervice in ophthalmias of long continuance, but they ought always to be administered with the greatest caution, or by perfons of skill in physic.

It will be proper frequently to look into the eyes, to fee if any hairs be turned inwards, or preffing upon them \*. These ought to be removed by plucking them out with a pair of small pincers.

\* Any foreign body lodged in the eye may be expeditioufly removed by paffing a fmall hair pencil between the eye-lid and the ball of the eye. In fome places, the peafants do this very effectually, by using their tongue in the fame manner.

THOSE

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THOSE who are liable to frequent returns of this difeafe, ought conftantly to have an ifiue in one or both arms. Bleeding or purging in the fpring and autumn, will be very beneficial to fuch perfons. They ought likewife to live with the greateft regularity, avoiding ftrong liquor, and every thing of a heating quality. Above all, let them avoid the night-air and late ftudies \*.

### CHAP. XXVIII.

### OF THE QUINSEY, OR INFLAMMA-TION OF THE THROAT.

THIS difeafe is very common in Britain, and is frequently attended with great danger. It prevails in the winter and fpring, and is most fatal to young people of a fanguine temperament.

CAUSES.——In general it proceeds from the fame caufes as other inflammatory diforders, viz. an obftructed perfpiration, or whatever heats or inflames the blood. An inflammation of the throat is often occafioned by omitting fome part of the covering ufually worn about the neek, by drinking cold liquor when the body is warm, by riding or walking againft a cold northerly wind, or any thing that greatly cools the throat, and parts adjacent. It may likewife pro-

\* As most people are fond of using eye-waters and ointments in this and other difeases of the eyes, we have inferted some of the most approved forms of these medicines in the Appendix. See Appendix, Eye-water and Eye-salve.

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ceed from the neglect of bleeding, purging, or any cuftomary evacuation.

SINGING, fpeaking loud and long, or whatever ftrains the throat, may likewife caufe an inflammation of that organ. I have often known the quinfey prove fatal to jovial companions, who, after fitting long in a warm room, drinking hot liquors, and finging with vehemence, were fo imprudent as to go abroad in the cold night-air. Sitting with wet feet, or keeping on wet clothes, are very apt to occafion this malady. It is likewife frequently occafioned by continuing long in a moift place, fitting near an open window, fleeping in a damp bed, fitting in a room that has been newly plaftered, &c. I know people who never fail to have a fore throat if they fit even but a fhort time in a room that has been lately wafhed.

ACRID or irritating food may likewife inflame the throat, and occasion a quinfey. It may also proceed from bones, pins, or other sharp substances sticking in the throat, or from the caustic sumes of metals or minerals, as arfenic, antimony, &c. taken in by the breath. This disease is sometimes epidemic and infectious.

SYMPTOMS.— The inflammation of the throat is evident from infpection, the parts appearing red and fwelled; befides, the patient complains of pain in fwallowing. His pulfe is quick and hard, with other fymptoms of a fever. If blood be let, it is generally covered with a tough coat of a whitifh colour, and the patient fpits a tough phlegm. As the fwelling and inflammation increase, the breathing and fwallowing become more difficult; the pain affects the ears; the eyes generally appear red; and the

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the face fwells. The patient is often obliged to keep himfelf in an erect polture, being in danger of fuffocation; there is a conftant naufea, or inclination to vomit, and the drink, inftead of paffing into the ftomach, is often returned by the nofe. The patient is frequently flarved at laft, merely from an inability to fwallow any kind of food.

WHEN the breathing is laborious, with flraitnefs of the breaft, and anxiety, the danger is great. Though the pain in fwallowing be very great, yet while the patient breathes eafy, there is not fo much danger. An external fwelling is no unfavourable fymptom; but if it fuddenly falls, and the difeafe affects the breaft, the danger is very great. When a quinfey is the confequence of fome other difeafe, which has already weakened the patient, his fituation is dangerous. A frothing at the mouth, with a fwelled tongue, a pale, ghaftly countenance, and coldnefs of the extremities, are fatal fymptoms.

REGIMEN.——The regimen in this difeafe is in all refpects the fame as in the pleurify, or peripneumony. The food must be light, and in fmall quantity, and the drink plentiful, weak, and diluting, mixed with acids.

It is highly neceffary that the patient be kept eafy and quiet. Violent affections of the mind, or great efforts of the body, may prove fatal. He fhould not even attempt to fpeak but in a low voice. Such a degree of warmth as to promote a conftant gentle fweat, is proper. When the patient is in bed, his head ought to be raifed a little higher than ufual.

It is peculiarly neceffary that the neck be kept warm; for which purpose several folds of soft flan-

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nel may be wrapt round it. That alone will often remove a flight complaint of the throat, efpecially if applied in due time. We cannot here omit obferving the propriety of a cuftom which prevails amongft the peafants of this country. When they feel any uneafinefs of the throat, they wrap a flocking about it all night. So effectual is this remedy, that in many places it paffes for a charm, and the flocking is applied with particular ceremonies: The cuftom, however, is undoubtedly a good one, and fhould never be neglected. When the throat has been thus wrapt up all night, it muft not be expofed to the cold air through the day, but a handkerchief or a piece of flannel kept about it till the inflammation be removed.

THE jelly of black currants is a medicine very much in effeem for complaints of the throat; and indeed it is of fome ufe. It fhould be almost conftantly kept in the mouth, and fwallowed down leifurely. It may likewife be mixed in the patient's drink, or taken any other way. When it cannot be obtained, the jelly of red currants, or of mulberries, may be ufed in its ftead.

GARGLES for the throat are very beneficial. They may be made of fage-tea, with a little vinegar and honey, or by adding to half an English pint of the pectoral decoction two or three spoonfuls of honey, and the same quantity of currant jelly. This may be used three or sour times a-day; and if the patient be troubled with tough, viscid phlegm, the gargle may be rendered more sharp and cleansing, by adding to it a tea-spoonful of the spirit of sal ammoniac. Some recommend gargles made of a decoction decostion of the leaves or bark of the blackberrybush; but where the jelly can be had, these are unneceffary.

THERE is no difease wherein the benefit of bathing the feet and legs in lukewarm water is more apparent: That practice ought therefore never to be neglected. If people were careful to keep warm, to wrap up their throats with flannel, to bathe their feet and legs in warm water, and to use a spare diet, with diluting liquors, at the beginning of this disease, it would feldom proceed to a great height, or be attended with any danger; but when these precautions are neglected, and the disease becomes violent, more powerful medicines are necessary.

MEDICINE. An inflammation of the throat being a most acute and dangerous distemper, which fometimes takes off the patient very fuddenly, it will be proper, as foon as the fymptoms appear, to bleed in the arm, or rather in the jugular vein, and to repeat the operation if circumstances require.

THE body should likewife be kept gently open. This may either be done by giving the patient for his ordinary drink a decoction of figs and tamarinds, or small doses of rhubarb and nitre, as recommended in the eryfipelas. These may be increased according to the age of the patient, and repeated till they have the defired effect.

I HAVE often known very good effects from a bit of fal prunel, or purified nitre, held in the mouth, and fwallowed down as it melted. This promotes, the discharge of faliva, by which means it answers the end of a gargle, while at the same time it

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it abates the fever, by promoting the difcharge of urine, &c.

THE throat ought likewife to be rubbed twice or thrice a day with a little of the volatile liniment. This feldom fails to produce fome good effects. At the fame time the neck ought to be carefully covered with wool or flannel, to prevent the cold from penetrating the fkin, as this application renders it very tender. Many other external applications are recommended in this difeafe, as a fwallow's neft, poultices made of the fungus called Jews ears, album Græcum, &c. But as we do not look upon any of thefe to be preferable to a common poultice of bread and milk, we fhall take no farther notice of them.

Some recommend the gum guaiacum as a fpecific in this difeafe. Half a dram of the gum in powder may be made into an electuary with the rob of elderberries, or the jelly of currants for a dole, and repeated occasionally \*.

BLISTERING upon the neck or behind the ears in violent inflammations of the throat, is very beneficial; and in bad cafes it will be neceffary to lay a bliftering-plafter quite acrofs the throat, fo as to reach from ear to ear. After the plafters are taken off, the parts ought to be kept running by the application of iffue ointment, till the inflammation is gone; otherwife, upon their drying up, the patient will be in danger of a relapfe.

WHEN the patient has been treated as above, a fuppuration feldom happens. This however is fometimes the cafe, in fpite of all endeavours to prevent it. When the inflammation and fwelling continue,

\* Dr. Home.

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and it is evident that a fuppuration will enfue, it ought to be promoted by drawing the fteam of warm water into the throat through a tunnel, or the like. Soft poultices ought likewife to be applied outwardly, and the patient may keep a roafted fig conftantly in his mouth.

IT fometimes happens, before the tumour breaks, that the fwelling is fo great, as entirely to prevent any thing from getting down into the ftomach. In this cafe the patient must inevitably perifh, unlefs he can be fupported in fome other way. This can only be done by nourifhing clysters of broth, or gruel with milk, &c. Patients have often been fupported by thefe for feveral days, till the tumour has broke; and afterwards they have recovered.

Not only the fwallowing, but the breathing, is often prevented by the tumour. In this cafe nothing can fave the patient's life, but opening the *trachea* or wind-pipe. As that has been often done with fuccefs, no perfon, in fuch defperate circumftances, ought to hefitate a moment about the operation; but as it can only be performed by a furgeon; it is not neceffary here to give any directions about it.

WHEN a difficulty of fwallowing is not attended with an acute pain or inflammation, it is generally owing to an obftruftion of the glands about the throat, and only requires that the part be kept warm, and the throat frequently gargled with fomething that may gently ftimulate the glands, as a decoction of figs with vinegar and honey; to which may be added a little muftard, or a fmall quantity of fpirits. But this gargle is never to be ufed where there are figns of an inflammation. This fpecies of angina has various

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various names among the common people, as the pap of the throat, the falling down of the almonds of the ears, &c. Accordingly, to remove it, they lift the patient up by the hair of the head, and thruft their fingers under his jaws, &c. all which practices are at beft ufelefs, and often hurtful.

THOSE who are fubject to inflammations of the throat, in order to avoid that difeafe, ought to live temperate. Such as do not chufe to obferve this rule, must have frequent recourse to purging and other evacuations, to discharge the superfluous humours. They ought likewise to beware of catching cold, and should abstain from aliment and medicines of an aftringent or stimulating nature.

VIOLENT exercife, by increasing the motion and force of the blood, is apt to occasion an inflammation of the throat, especially if cold liquor be drank immediately after it, or the body fuffered fuddenly to cool. Those who would avoid this difease ought therefore, after speaking aloud, finging, running, drinking warm liquor, or doing any thing that may strain the throat, or increase the circulation of the blood towards it, to take care to cool gradually, and to wrap some additional coverings about their necks.

I HAVE often known perfons who had been fubject to fore throats, entirely freed from that complaint by only wearing a ribband, or a bit of flannel, conftantly about their necks, or by wearing thicker fhoes, a flannel waiftcoat, or the like. Thefe may feem triffing, but they have great effect. There is danger indeed in leaving them off after perfons have been accuftomed to them; but furely the inconveniency

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niency of using such things for life, is not to be compared with the danger which may attend the neglect of them.

SOMETIMES, after an inflammation, the glands of the throat continue fwelled, and become hard and callous. This complaint is not eafily removed, and is often rendered dangerous by the too frequent application of ftrong ftimulating and ftyptic medicines. The beft method is to keep it warm, and to gargle it twice a-day with a decoction of figs fharpened a little with the elixir or fpirit of vitriol.

### OF THE MALIGNANT QUINSEY, or PUTRID, ULCEROUS SORE THROAT.

THIS kind of quinfey is but little known in the northern parts of Britain, though, for fome time paft, it has been very fatal in the more fouthern counties. Children are more liable to it than adults, females than males, and the delicate than those who are hardy and robust. It prevails chiefly in autumn, and is most frequent after a long course of damp, or fultry weather.

CAUSES.—. This is evidently a contagious diftemper, and is generally communicated by infection. Whole families, and even entire villages, often receive the infection from one perfon. This ought to put people upon their guard against going near fuch patients as labour under the diforder; as by that means they endanger not only their own lives, but likewife those of their friends and connexions. Whatever tends to produce putrid or malignant fevers, may

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may likewife occafion the putrid ulcerous fore throat, as unwholefome air, damaged provisions, neglect of cleanlinefs; &c:

SYMPTOMS.----It begins with alternate fits of thivering and heat. The pulfe is quick, but low and unequal, and generally continues fo through the whole course of the difease. The patient complains greatly of weakness and oppression of the breast; his spirits are low, and he is apt to faint away when fet upright; he is troubled with a nausea, and often with a vomiting or purging. The two latter are most common in children. The eyes appear red and watery, and the face fwells. The urine is at first pale and crude; but, as the difease advances, it turns more of a yellowish colour. The tongue is white, and generally moift, which diftinguishes this from an inflammatory difease. Upon looking into the throat it appears swelled, and of a florid red colour. Pale or afh. coloured spots, however, are here and there interspersed, and sometimes one broad patch or spot, of an irregular figure, and pale white colour, furrounded with florid red, only appears. These whitish fpots or floughs cover fo many ulcers.

An efflorescence, or eruption upon the neck, arms, breast, and fingers, about the second or third day, is a common symptom of this disease. When it appears, the purging and vomiting generally cease.

THERE is often a slight degree of delirium, and the face frequently appears bloated, and the infide of the nostrils red and inflamed. The patient complains of a difagreeable putrid smell, and his breath is very offensive.

THE

#### PUTRID, ULCEROUS SORE THROAT. 303

THE putrid, ulcerous fore throat may be diffinguifhed from the inflammatory by the vomiting and loofenefs with which it is generally ufhered in; the foul ulcers in the throat covered with a white or livid coat; and by the exceffive weaknefs of the patient; with other fymptoms of a putrid fever.

UNFAVOURABLE fymptoms are, an obfinate purging, extreme weaknefs, dimnefs of the fight, a livid or black colour of the fpots, and frequent fhiverings, with a weak, fluttering pulfe. If the eruption upon the fkin fuddenly difappears, or becomes of a livid colour, with a difcharge of blood from the nofe or mouth, the danger is very great.

IF a gentle fweat break out about the third or fourth day, and continue with a flow, firm and equal pulfe; if the floughs caft off in a kindly manner, and appear clean and florid at the bottom; and if the breathing is foft and free, with a lively colour of the eyes, there is reafon to hope for a falutary crifis.

REGIMEN: The patient must be kept quiet, and, for the most part, in bed, as he will be apt to faint when taken out of it. His food must be nourishing and reftorative; as fago-gruel with red wine, jellies, strong broths, &c. His drink ought to be generous, and of an antifeptic quality; as redwine negus, white-wine whey, and fuch like.

MEDICINE.——The medicine in this kind of quinfey is entirely different from that which is proper in the inflammatory. All evacuations, as bleeding, purging, &c. which weaken the patient, must be avoided. Cooling medicines, as nitre and cream of tartar, are likewife hurtful. Strengthening cordials alone

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alone can be used with fafety; and these ought never to be neglected.

IF, at the beginning, there is a great nausea, or inclination to vomit, the patient must drink an infusion of green tea, camomile flowers, or *carduus benedistus*, in order to cleanse the stomach. If these are not sufficient, he may take a few grains of the powder of ipecacuanha, or any other gentle vomit.

IF the difeafe is mild, the throat may be gargled with an infulion of fage and rofe leaves, to a gill of which may be added a fpoonful or two of honey, and as much vinegar as will make it agreeably acid; but when the fymptoms are urgent, the floughs large and thick, and the breath very offenfive, the following gargle may be ufed:

To fix or feven ounces of the pectoral decoction, when boiling, add half an ounce of contrayerva-root; let it boil for fome time, and afterwards ftrain the liquor; to which add two ounces of white-wine vinegar, an ounce of fine honey, and an ounce of the tincture of myrrh. This ought not only to be ufed as a gargle, but a little of it fhould frequently be injected with a fyringe to clean the throat, before the patient takes any meat or drink. This method is peculiarly neceffary for children, who cannot ufe a gargle.

IT will be of great benefit if the patient frequently receives into his mouth, through an inverted funnel, the fteams of warm vinegar, myrrh, and honey.

But when the putrid fymptoms run high, and the difeafe is attended with danger, the only medicine that can be depended upon is the Peruvian bark. It may be taken in fubftance, if the patient's ftomach 2 will

# PUTRID, ULCEROUS SORE THROAT. 305

will bear it. If not, an ounce of bark großly powdered, with two drachms of Virginian fnake-root, may be boiled in an English pint and a half of water, to half a pint; to which a tea-spoonful of the elixir of vitriol may be added, and an ordinary teacupful of it taken every three or four hours. Blistering plasters are very beneficial in this difease, especially when the patient's pulse and spirits are low. They may be applied to the throat, behind the ears, or upon the back part of the neck.

SHOULD the vomiting prove troublefome, it will be proper to give the patient two table-spoonfuls of the faline julep every hour. Tea made of mint and a little cinnamon, will be very proper for his ordinary drink, especially if an equal quantity of red wine be mixed with it.

In cafe of a violent loofenefs; the fize of a nutmeg of *diafcordium*; or the japonic confection, may be taken two or three times a-day, or oftener if neceffary.

Ir a 'discharge of blood from the nose happens, the steams of warm vinegar may be received up the nostrils frequently; and the drink must be sharpened with spirits of vitriol, or tincture of roses.

In cafe of a stranguary, the belly must be fomented with warm water, and emollient clysters given three or four times a-day.

AFTER the violence of the difeafe is over the body fhould ftill be kept open with mild purgatives; as manna, fenna, rhubarb, or the like.

IF great weaknefs and dejection of fpirits, or night-fweats, with other fymptoms of a confumption, fhould enfue, we would advife the patient to continue the use of the Peruvian bark, with the X elixir

elixir of vitriol, and to take frequently a glass of generous wine. Thefe, together with a milk-diet, and riding on horfeback, are the most likely means for recovering his strength.

### CHAP. XXIX.

# OF COLDS AND COUGHS.

T has already been observed, that colds are the L effect of an obstructed perspiration; the common causes of which we have likewife endeavoured to point out, and shall not here repeat them. Neither shall we spend time in enumerating all the various fymptoms of colds, as they are pretty generally known. It may not however be amifs to obferve, that almost every cold is a kind of fever, which only differs in degree from fome of those that have already been treated of.

No age, fex, or conftitution is exempted from this difease: neither is it in the power of any medicine or regimen to prevent it. The inhabitants of every climate are liable to catch cold, nor can even the greatest circumspection defend them at all times from its attacks. Indeed, if the human body could be kept conftantly in an uniform degree of warmth, fuch a thing as catching cold would be impoffible: But as that cannot be effected by any means, the perfpiration must be liable to many changes. Such changes, however, when small, do not affect the health; but, when great, they must prove hurtful. WHEN

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WHEN opprefiion of the breaft, a fluffing of the nofe, unufual wearinefs, pain of the head, &c. give ground to believe that the perfpiration is obftructed, or, in other words, that the perfon has caught cold, he ought immediately to leffen his diet, at leaft the ufual quantity of his folid food, and to abftain from all ftrong liquors. Inftead of flefh, fifh, eggs, milk, and other nourifhing diet, he may eat light breadpudding, veal or chicken broth, panado, gruels, and fuch like. His drink may be water-gruel fweetened with a little honey; an infufion of balm, or linfeed fharpened with the juice of orange or lemon; a decoction of barley and liquorice with tamarinds, or any other cool, diluting, acid liquor.

ABOVE all, his fupper fhould be light; as fmall poffet, or water-gruel fweetened with honey, and a little toafted bread in it. If honey fhould difagree with the ftomach, the gruel may be fweetened with treacle or coarfe fugar, and fharpened with the jelly of currants. Those who have been accustomed to generous liquors may take wine-whey instead of gruel, which may be fweetened as above.

THE patient ought to lie longer than ufual a-bed, and to encourage a gentle fweat, which is eafily brought on towards morning, by drinking tea, or any kind of warm diluting liquor. I have often known this practice carry off a cold in one day, which in all probability, had it been neglected, would have coft the patient his life, or have confined him for fome months. Would people facrifice a little time to eafe and warmth, and practife a moderate degree of abstinence when the first fyinptoms of a cold appear, we have reason to believe, that most of the bad X 2 effects

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effects which flow from an obstructed perspiration, might be prevented. But, after the difease has gathered strength by delay, all attempts to remove it often prove vain. A pleurify, a peripneumony, or a fatal confumption of the lungs, are the common effects of colds which have either been totally neglected, or treated improperly.

MANY attempt to cure a cold, by getting drunk. But this, to fay no worfe of it, is a very hazardous experiment. No doubt it may fometimes fucceed, by fuddenly reftoring the perfpiration; but when there is any degree of inflammation, which is frequently the cafe, ftrong liquors, inftead of removing the malady, will increafe it. By this means a common cold may be converted into an inflammatory fever.

WHEN those who labour for their daily bread have the misfortune to catch cold, they cannot afford to lose a day or two, in order to keep themselves warm, and take a little medicine; by which means the diforder is often fo aggravated as to confine them for a long time, or even to render them ever after unable to fustain hard labour. But even fuch of the labouring poor as can afford to take care of themselves, are often too hardy to do it; they affect to despife colds, and as long as they can crawl about, fcorn to be confined by what they call a common cold. Hence it is, that colds deftroy fuch numbers of mankind. Like an enemy despised, they gather strength from delay, till, at length, they become invincible. We often fee this verified in travellers, who, rather than lofe a day in the profecution of their bufinefs, throw away their

their lives by purfuing their journey, even in the fevereft weather, with this difease upon them.

IT is certain, however, that colds may be too much indulged. When a perfon, for every flight cold, fhuts himfelf up in a warm room, and drinks great quantities of warm liquor, it may occasion such a general relaxation of the folids as will not be eafily removed. It will therefore be proper, when the difease will permit, and the weather is mild, to join to the regimen mentioned above gentle exercife; as walking, riding on horfeback, or in a carriage, &c. An obstinate cold, which no medicine can remove, will yield to gentle exercife and a proper regimen of the diet.

BATHING the feet and legs in warm water has a great tendency to reftore the perspiration. But care must be taken that the water be not too warm, otherwife it will do hurt. It fhould never be much warmer than the blood, and the patient fhould go immediately to bed after using it. Bathing the feet in warm water, lying in bed, and drinking warm water-gruel, or other weak liquors, will fooner take off a spasm, and restore the perspiration, than all the hot fudorific medicines in the world. This is all that is neceffary for removing a common cold; and if this courfe be taken at the beginning, it will feldom fail.

But when the fymptoms do not yield to abstinence, warmth, and diluting liquors, there is reafon to fear the approach of fome other difeafe, as an inflammation of the breast, an ardent fever, or the like. If the pulse therefore be hard and frequent; the skin hot and dry, and the patient complains of X 3 his

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his head or breaft, it will be neceffary to bleed, and to give the cooling powders recommended in the fcarlet fever, every three or four hours, till they give a ftool.

IT will likewife be proper to put a blifteringplafter on the back, to give two table-fpoonfuls of the faline mixture every two hours, and, in fhort, to treat the patient in all refpects as for a flight fever. I have often feen this courfe, when obferved at the beginning, remove the complaint in two or three days, when the patient had all the fymptoms of an approaching ardent fever, or an inflammation of the breaft.

THE chief fecret of preventing colds lies in avoiding, as far as poffible, all extremes either of heat or cold, and in taking care, when the body is heated, to let it cool gradually. Thefe and other circumftances relating to this important fubject, are fo fully treated of under the article *Obstructed Perspiration*, that it is needlefs here to refume the confideration of them.

#### OF A COMMON COUGH.

A cough is generally the effect of a cold, which has either been improperly treated, or entirely neglected. When it proves obftinate, there is always reafon to fear the confequences, as this fhews a weak ftate of the lungs, and is often the forerunner of a confumption.

IF the cough be violent, and the patient young and ftrong, with a hard quick pulfe, bleeding will be proper; but in weak and relaxed habits, bleeding rather prolongs the difeafe. When the patient fpits freely, OF A COMMON COUGH. 311

freely, bleeding is unneceffary, and fometimes hurtful, as it tends to leffen that difcharge.

WHEN the cough is not attended with any degree of fever, and the fpittle is vifcid and tough, fharp pectoral medicines are to be administered; as gum ammoniac, squills, &c. Two table-spoonfuls of the folution of gum ammoniac may be taken three or four times a-day, more or lefs, according to the age and conflitution of the patient. Squills may be given various ways: Two ounces of the vinegar, the oxymel, or the fyrup, may be mixed with the fame quantity of simple cinnamon-water, to which may be added an ounce of common water and an ounce of balfamic fyrup. Two table-spoonfuls of this mixture may be taken three or four times a-day.

A SYRUP made of equal parts of lemon-juice, honey, and fugar-candy, is likewife very proper in this kind of cough. A table-fpoonful of it may be taken at pleafure.

But when the defluxion is fharp and thin, thefe medicines rather do hurt. In this cafe gentle opiates, oils, and mucilages, are more proper. A cup of an infufion of wild poppy-leaves and marfh-mallow roots, or the flowers of colts-foot, may be taken frequently; or a tea-fpoonful of the paregoric elixir may be put into the patient's drink twice a-day. Fuller's Spanish infusion is also a very proper medicine in this cafe, and may be taken in the quantity of a tea-cupful three or four times a-day \*.

WHEN a cough is occasioned by acrid humours tickling the throat and *fauces*, the patient should

\* See Appendix, Spanish Infusion,

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keep fome foft pectoral lozenges almost constantly in his mouth; as the Pontefract liquorice cakes, barley-fugar, the common balfamic lozenges, Spanish juice, &c. These blunt the acrimony of the humours, and by taking off their stimulating quality, help to appeale the cough \*.

IN obfinate coughs, proceeding from a flux of humours upon the lungs, it will often be neceffary, befides expectorating medicines, to have recourfe to iffues, fetons, or fome other drain. In this cafe I have often obferved the most happy effects from a Burgundy-pitch plaster applied between the shoulders. I have ordered this simple remedy in the most obstinate coughs, in a great number of cases, and in many different constitutions, without ever knowing it fail to give relief, unless where there were evident figns of an ulcer in the lungs.

ABOUT the bulk of a nutmeg of Burgundy-pitch may be fpread thin upon a piece of foft leather, about the fize of the hand, and laid between the fhoulderblades. It may be taken off and wiped every three or four days, and ought to be renewed once a fortnight or three weeks. This is indeed a cheap and fimple medicine, and confequently apt to be defpifed; but we will venture to affirm, that the whole materia men

\* In a former edition of this book I recommended, for an obflinate tickling cough, an oily emulfion, made with the paregoric elixir of the Edinburgh Difpenfatory, inflead of the common alkaline fpirit. I have fince been told by feveral practitioners, that they found it to be an excellent medicine in this diforder, and every way deferving of the character which I had given it. Where this elixir is not kept, its place may be fupplied by adding to the common oily emulfion, an adequate proportion of the *Thebaic* tincture, or liquid laudanum.

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# OF A COMMON COUGH.

does not afford an application more efficacious in almost every kind of cough. It has not indeed always an immediate effect; but, if kept on for fome time, it will succeed where most other medicines fail.

THE only inconveniency attending this plafter is the itching which it occafions; but furely this may be difpenfed with, confidering the advantage which the patient may expect to reap from the application; befides, when the itching becomes very uneafy, the plafter may be taken off, and the part rubbed with a dry cloth, or wafhed with a little warm milk and water. Some caution indeed is neceffary in difcontinuing the ufe of fuch a plafter; this however may be fafely done by making it fmaller by degrees, and at length quitting it altogether in a warm feafon \*.

BUT coughs proceed from many other caufes befides defluctions upon the lungs. In these cases the cure is not to be attempted by pectoral medicines. Thus, in a cough proceeding from a foulness and debility of the stomach, syrups, oils, mucilages, and all kinds of balfamic medicines do hurt. The *stomach cough* may be known from one that is owing to a fault in the lungs by this, that in the latter the patient coughs whenever he inspires, or draws in his breath fully; but in the former that does not happen.

\* Some complain that the pitch plafter adheres too faft, while others find difficulty in keeping it on. This proceeds from the different kinds of pitch made use of, and likewise from the manner of making it. I generally find it answer best when mixed with a little bees-wax, and spread as cool as possible. The clear, hard, transparent pitch answers the purpose best.

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THE cure of this cough depends chiefly upon cleanfing and ftrengthening the ftomach; for which purpole gentle vomits and bitter purgatives are moft proper. Thus, after a vomit or two, the facred tincture, as it is called, may be taken for a confiderable time in the dofe of one or two table-fpoonfuls twice a-day, or as often as it is found neceffary, to keep the body gently open. People may make this tincture themfelves, by infufing an ounce of *biera picra*\* in an Englifh pint of white-wine, letting it ftand a few days, and then ftraining it.

In coughs which proceed from a debility of the ftomach, the Peruvian bark is likewife of confiderable fervice. It may either be chewed, taken in powder, or made into a tincture along with other ftomachic bitters.

A nervous cough can only be removed by change of air, and proper exercife; to which may be added the use of gentle opiates. Instead of the saponacious pill, the paregoric elixir, &c. which are only opium difguised, ten, fifteen, twenty, or twenty-five drops of liquid laudanum, more or less, as circumstances require, may be taken at bed-time, or when the cough is most troublesome. Immersing the feet and hands in warm water will often appease the violence of a nervous cough.

WHEN a cough is only the fymptom of fome other malady, it is in vain to attempt to remove it without first curing the disease from which it proceeds. Thus, when a cough is occasioned by *teething*, keeping the body open, fcarifying the gums, or whatever facili-

\* See Appendix, Hiera Picra,

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tates

### OF THE HOOPING-COUGH, &c. 315

tates the cutting of the teeth, likewife appeales the cough. In like manner, when *worms* occasion a cough, such medicines as remove these vermin will generally cure the cough; as bitter purgatives, oily clysters, and such like.

WOMEN, during the last months of pregnancy, are often greatly afflicted with a cough, which is generally relieved by bleeding, and keeping the body open. They ought to avoid all flatulent food, and to wear a loose easy dress.

A couch is not only a fymptom, but is often likewife the forerunner of difeafes. Thus, the gout is frequently ufhered in by a very troublefome cough, which affects the patient for fome days before the coming on of the fit. This cough is generally removed by a paroxyfm of the gout, which fhould therefore be promoted, by keeping the extremities warm, drinking warm liquors, and bathing the feet and legs frequently in lukewarm water.

## OF THE HOOPING-COUGH, or CHIN-COUGH.

THIS cough feldom affects adults, but proves often fatal to children. Such children as live upon thin watery diet, who breathe unwholefome air, and have too little exercife, are most liable to this difease, and generally fuffer most from it.

THE chin-cough is fo well known, even to nurfes, that a defeription of it is unneceffary. Whatever hurts the digeftion, obstructs the perfpiration, or relaxes the folids, difposes to this difease: Confequently its cure must depend upon cleansing and ftrengthening

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ftrengthening the ftomach, bracing the folids, and, at the fame time, promoting perfpiration, and the different fecretions.

THE diet must be light, and of easy digestion; for children, good bread made into pap or pudding, chicken-broth, with other light spoon-meats, are proper; but those who are farther advanced may be allowed sago gruel, and if the sever be not high, a sittle boiled chicken, or other white meats. The drink may be hyssop, or penny-royal tea, sweetened with honey or sugar-candy, small wine-whey; or, if the patient be weak, he may sometimes be allowed a little negus.

ONE of the most effectual remedies in the chincough is change of air. This often removes the malady, even when the change feems to be from a purer to a lefs wholefome air. This may in fome measure depend on the patient's being removed from the place where the infection prevails. Most of the difeases of children are infectious; nor is it at all uncommon to find the chin-cough prevailing in one town or village, when another, at a very small distance, is quite free from it. But whatever be the cause, we are fure of the fact. No time ought therefore to be lost in removing the patient at some distance from the place where he caught the disease, and, if possible, into a more pure and warm air \*.

\* Some think the air ought not to be changed till the difeafe is on the decline; but there feems to be no fufficient reafon for this opinion, as patients have been known to reap benefit from a change of air at all periods of the difeafe. It is not fufficient to take the patient out daily in a carriage. This feldom anfwers any good purpofe; but often does hurt, by giving him cold.

WHEN

WHEN the difeafe proves violent, and the patient is in danger of being fuffocated by the cough, he ought to be bled, efpecially if there be a fever with a hard full pulfe. But as the chief intention of bleeding is to prevent an inflammation of the lungs, and to render it more fafe to give vomits, it will feldom be neceffary to repeat the operation; yet if there be fymptoms of an inflammation of the lungs, a fecond, or even a third bleeding may be requifite.

It is generally reckoned a favourable fymptom when a fit of coughing makes the patient vomit. This cleanfes the ftomach, and greatly relieves the cough. It will therefore be proper to promote this difcharge, either by fmall dofes of ipecacuanha, or the vomiting julep recommended in the Appendix\*.

It is very difficult to make children drink after a vomit. I have often feen them happily deceived, by infufing a fcruple or half a drachm of the powder of ipecacuanha in a tea-pot, with half an English pint of boiling water. If this be difguised with a few drops of milk and a little fugar, they will imagine it tea, and drink it very greedily. A fmall tea-cupful of this may be given every quarter of 'an hour, or rather every ten minutes, till it operates. When the child begins to puke, there will be no occasion for drinking any more, as the water already on the ftomach will be fufficient.

VOMITS not only cleanfe the flomach, which in this difeafe is generally loaded with vifcid phlegm, but they likewife promote the perfpiration and other fecretions; and ought therefore to be repeated according to the obflinacy of the difeafe. They should

\* See Appendix, Vomiting Julep.

not

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not however be ftrong; gentle vomits frequently repeated are both lefs dangerous, and more beneficial, than ftrong ones.

THE body ought to be kept gently open. The beft medicines for this purpofe are rhubarb and its perparations, as the fyrup, tincture, &c. Of thefe a tea-fpoonful or two may be given to an infant twice or thrice a-day, as there is occasion. To fuch as are farther advanced, the dofe must be proportionally increased, and repeated till it has the defired effect. Those who cannot be brought to take the bitter tincture, may have an infusion of fenna and prunes, fweetened with manna, coarfe fugar, or honey; or a few grains of rhubarb mixed with a tea-spoonful or two of fyrup, or currant jelly, so as to difguise the taste. Most children are fond of syrups and jellies, and feldom refuse even a disagreeable medicine when mixed with them.

MANY people believe that oily, pectoral, and balfamic medicines poffers wonderful virtues for the cure of the chin-cough, and accordingly exhibit them plentifully to patients of every age and conftitution, without confidering that every thing of this nature muft load the ftomach, hurt the digeftion, and of courfe aggravate the diforder \*.

THE millepedes, or woodlice, are greatly recommended for the cure of a chin-cough. Those who chuse to make use of these infects, may infuse two

\* Dr. DUPLANIL fays, he has feen many good effects from the kermes mineral in this complaint, the cough being frequently alleviated even by the first dose. The dose for a child of one year old, is a quarter of a grain dissolved in a cup of any liquid, repeated two or three times a-day. For a child of two years the dose is half a grain; and the quantity must be thus increased in proportion to the age of the patient.

ounces

#### OR CHIN-COUGH.

ounces of them bruifed in an English pint of small white-wine for one night. Afterwards the liquor may be strained through a cloth, and a table-spoonful of it given to the patient three or four times a-day.

OPIATES are fometimes neceffary to allay the violence of the cough. For this purpose a little of the fyrup of poppies, or five, fix, or seven drops of laudanum, according to the age of the patient, may be taken in a cup of hyssop or penny-royal-tea, and repeated occasionally \*.

THE garlic ointment is a well-known remedy in North-Britain for the chin-cough. It is made by beating in a mortar garlic with an equal quantity of hogs lard. With this the foles of the feet may be rubbed twice or thrice a-day; but the beft method is to fpread it upon a rag, and apply it in the form of plafter. It fhould be renewed every night and morning at leaft, as the garlic foon lofes its virtue. This is an exceeding good medicine both in the chincough, and in moft other coughs of an obftinate nature. It ought not however to be used when the patient is very hot or feverifh, left it should increase these fymptoms.

THE feet fhould be bathed once every two or three days in lukewarm water; and a Burgundy-pitch plafter kept conftantly betwixt the fhoulders. But when the difeafe proves very violent, it will be neceffary, inftead of it, to apply a bliftering plafter, and

\* Some recommend the extract of hemlock as an extraordinary remedy in the hooping-cough; but fo far as I have been able to obferve, it is no way fuperior to opium, which, when properly administered, will often relieve fome of the most troublefome fymptoms of this diforder.

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to keep the part open for fome time with iffue-oint<sup>2</sup> ment. -

WHEN the difease is prolonged, and the patient is free from a fever, the Perugian bark, and other bitters, are the most proper medicines. The bark may either be taken in substance, or in a decoction or infusion, as is most agreeable. For a child, ten, fifteen, or twenty grains, according to the age of the patient; may be given three or four times a-day: For an adult, half a drachm or two fcruples will be proper. Some give the extract of the bark with cantharides : but to manage this requires a confiderable attention. It is more fafe to give a few grains of caftor along with the bark. A child of fix or feven years of age may take seven or eight grains of castor, with fifteen grains of powdered bark, for a dofe. This may be made into a mixture with two or three ounces of any fimple diftilled water, and a little fyrup, and taken three or four times a-day.

## CHAP. XX.

### INFLAMMATION OF THE STOMACH, AND OTHER VISCERA.

A

A LL inflainmations of the bowels are dangerous, and require the most speedy affistance; as they frequently end in a suppuration, and sometimes in a mortification, which is certain death.

CAUSES.——An inflammation of the ftomach may proceed from any of the caufes which produce an inflammatory fever; as cold liquor drank while the

## AND OTHER VISCERA.

the body is warm, obstructed perspiration, or the fudden striking in of any eruption. It may likewise proceed from the acrimony of the bile, or from acrid and stimulating substances taken into the stomach; as strong vomits or purges, corrosive poisons, and such like. When the gout has been repelled from the extremities, either by cold or improper applications, it often occasions an inflammation of the stomach. Hard or indigestible substances taken into the stomach, as bones, the stomes of fruit, &c. may likewise have that effect.

SYMPTOMS. — It is attended with a fixed pain and burning heat in the ftomach; great reftleffnefs and anxiety; a fmall, quick, and hard pulfe; vomiting, or, at leaft, a naufea and ficknefs; exceffive thirft; coldnefs of the extremities; difficulty of breathing; cold clammy fweats; and fometimes convultions and fainting fits. The ftomach is fwelled, and often feels hard to the touch. One of the most certain figns of this difeafe is the fenfe of pain, which the patient feels upon taking any kind of food or drink, especially if it be either too hot or too cold.

WHEN the patient vomits every thing he eats or drinks, is extremely reftlefs. has a hiccup, with an intermitting pulfe, and frequent fainting fits, the danger is very great.

REGIMEN.—All acrimonious, heating, and irritating food and drink are carefully to be avoided. The weaknefs of the patient may deceive the byftanders, and induce them to give him wines, fpirits, or other cordials; but thefe never fail to increase the disease, and often occasion fudden death. The incli-Y nation

### 322 INFLAMMATION of the STOMACH, &c.

nation to vomit may likewife impofe on the attendants, and make them think a vomit neceffary; but that too is almost certain death.

THE food must be light, thin, cool, and eafy of digestion. It must be given in small quantities, and should neither be quite cold, nor too hot. Thin gruel made of barley or oatmeal, light toasted bread diffolved in boiling water, or very weak chicken broth, are the most proper. The drink should be clear whey, barley-water, water in which toasted bread has been boiled, or decoctions of emollient vegetables; as liquorice and marsh-mallow roots, farsaparilla, &c.

MEDICINE. — Bleeding in this difeafe is abfolutely neceffary, and is almost the only thing that can be depended on. When the difease proves obflinate, it will often be proper to repeat this operation feveral times, nor must the low flate of the pulse deter us from doing fo. The pulse indeed generally rifes upon bleeding, and as long as that is the cafe, the operation is fase.

FREQUENT fomentations with lukewarm water, or a decoction of emollient vegetables, are likewife beneficial. Flannel cloths dipped in thefe must be applied to the region of the stomach, and removed as they grow cool. They must neither be applied too warm, nor be suffered to continue till they become quite cold, as either of these extremes would aggravate the diseafe.

THE feet and legs ought likewife to be frequently bathed in lukewarm water, and warm bricks or poultices may be applied to the foles of the feet. The warm bath, if it can be conveniently ufed, will be of great fervice.

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IN this, and all other inflammations of the bowels, an epifpaftic, or bliftering-plafter, applied over the part affected, is one of the beft remedies I know. I have often used it, and do not recollect one inflance wherein it did not give relief to the patient.

THE only internal medicines which we shall venture to recommend in this difease, are mild clysters. These may be made of warm water, or thin watergruel; and if the patient is costive, a little sweet oil, honey, or manna, may be added. Clysters answer the purpose of an internal somentation, while they keep the body open, and at the same time nourish the patient, who is often, in this difease, unable to retain any food upon his stomach. For these reasons they must not be neglected, as the patient's life may depend on them.

# INFLAMMATION OF THE INTESTINES.

This is one of the moft painful and dangerous difeafes that mankind is liable to. It generally proceeds from the fame *caufes* as the inflammation of the ftomach; to which may be added coffivenefs, worms, eating unripe fruits, or great quantities of nuts, drinking hard windy malt liquors, as ftale bottled beer or ale, four wine, cyder, &c. It may likewife be occafioned by a rupture, by fcirrhous tumours of the inteffines, or by their oppofite fides growing together.

THE inflammation of the inteffines is denominated Iliac passion, Enteritis, Gc. according to the name of the parts affected. The treatment however is nearly the same whatever part of the inteffinal canal be the

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feat

feat of the difease; we shall therefore omit these diftinctions, lest they should perplex the reader.

THE fymptoms here are nearly the fame as in the foregoing difeafe; only the pain, if poffible, is more acute, and is fituated lower. The vomiting is likewife more violent, and fometimes even the excrements, together with the clyfters and fuppofitories, are difcharged by the mouth. The patient is continually belching up wind, and has often an obftruction of his urine.

WHILE the pain fhifts, and the vomiting only returns at certain intervals, and while the clyfters pafs downwards, there is ground to hope; but when the clyfters and *faces* are vomited, and the patient is exceeding weak, with a low fluttering pulfe, a pale countenance, and a difagreeable or flinking breath, there is great reafon to fear that the confequences will prove fatal. Clammy fweats, black fortid flools, with a fmall intermitting pulfe, and a total ceffation of pain, are figns of a mortification already begun, and of approaching death.

REGIMEN.—The regimen in this difeafe is in general the fame as in an inflammation of the ftomach. The patient must be kept quiet, avoiding cold, and all violent passions of the mind. His food ought to be very light, and given in fmall quantities: his drink weak and diluting; as clear whey, barleywater, and fuch like.

MEDICINE.——Bleeding in this, as well as in the inflammation of the ftomach, is of the greatest importance. It should be performed as soon as the fymptoms appear, and must be repeated according to the

the ftrength of the patient, and the violence of the difeafe.

A BLISTERING plafter is here likewife to be applied immediately over the part where the most violent pain is. This not only relieves the pain of the bowels, but even clysters and purgative medicines, which before had no effect, will operate when the blifter begins to rife.

FOMENTATIONS and laxative clyfters are by no means to be omitted. The patient's feet and legs fhould frequently be bathed in warm water; and cloths dipped in it applied to his belly. Bladders filled with warm water may likewife be applied to the region of the navel, and warm bricks, or bottles filled with warm water, to the foles of the feet. The clyfters may be made of barley-water or thin gruel with falt, and foftened with fweet oil or fresh butter. Thefe may be administered every two or three hours, or oftener, if the patient continues coftive.

IF the difeafe does not yield to clyfters and fomentations, recourfe muft be had to pretty ftrong purgatives; but as thefe, by irritating the bowels, often increafe their contraction, and by that means fruftrate their own intention, it will be neceffary to join them with opiates, which, by allaying the pain, and relaxing the fpafmodic contractions of the guts, greatly affift the operation of purgatives in this cafe.

WHAT anfwers the purpofe of opening the body very well, is a folution of the bitter purging falts. Two ounces of thefe may be diffolved in an English pint of warm water, or thin gruel, and a tea-cupful of it taken 'every half-hour till it operates. At the fame time fifteen, twenty, or twenty-five drops of Y 3 laudanum

laudanum may be given in a glass of pepper-mint or fimple cinnamon-water, to appeale the irritation, and prevent the vomiting, &c.

ACIDS have often a very happy effect in ftaying the vomiting, and appealing the other violent fymptoms of this difeafe. It will therefore be of use to fharpen the patient's drink with cream of tartar, juice of lemon; or, when these cannot be obtained, with vinegar,

But it often happens that no liquid whatever will ftay on the flomach. In this cafe the patient must take purging pills. I have generally found the following answer very well: Take jalap in powder, and vitriolated tartar, of each half a drachm, opium one grain, Castile foap as much as will make the mass fit for pills. These must be taken at one dose, and if they do not operate in a few hours, the dose may be repeated.

IF a ftool cannot be procured by any of the above means, it will be neceffary to immerfe the patient in warm water up to the breaft. I have often feen this fucceed when other means had been tried in vain. The patient must continue in the water as long as he can eafily bear it without fainting, and if one immerfion has not the defired effect, it may be repeated as foon as the patient's ftrength and fpirits are recruited. It is more fafe for him to go frequently into the bath, than to continue too long at a time; and it is often neceffary to repeat it feveral times before it has the defired effect,

It has fometimes happened, after all other means of procuring a ftool had been tried to no purpole, that this was brought about by immerfing the patient's lower

lower extremities in cold water, or making him walk upon a wet pavement, and dashing his legs and thighs with the cold water. This method, when others fail, at least merits a trial. It is indeed attended with some danger; but a doubtful remedy is better than none.

In defperate cafes it is common to give quickfilver. This may be given to the quantity of feveral ounces, or even a pound, but fhould not exceed that\*. When there is reafon to fufpect a mortification of the guts, this medicine ought not to be tried. In that cafe it cannot cure the patient, and will only haften his death. But when the obftruction is occafioned by any caufe that can be removed by force, quickfilver is not only a proper medicine, but the beft that can be adminiftered, as it is the fitteft body we know for making its way through the inteftinal canal.

IF the difeafe proceed from a rupture, the patient must be laid with his head very low, and the inteftines returned by gentle preffure with the hand. If this, with fomentations and clysters, should not fucceed, recourfe must be had to a furgical operation, which may give the patient relief.

SUCH as would avoid this excruciating and dangerous difeafe, must take care never to be too long without a stool. Some who have died of it have had feveral pounds of hard, dry *faces* taken out of their guts. They should likewise beware of eating too

\* When quickfilver is given in too large quantities, it defeats its own intention, as it pulls down the bottom of the flomach, which prevents it getting over the Pylorus. In this cafe the patient flould be hung up by the heels, in order that the quickfilver may be difcharged by his mouth.

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freely of four or unripe fruits, or drinking stale windy liquors, &c. I have known it brought on by living too much on baked fruits, which are feldom good. It likewife proceeds frequently from cold caught by wet clothes, &c. but effectially from wet feet.

### OF THE COLIC.

THE colic has a great refemblance to the two preceding difeafes, both in its fymptoms and method of cure. It is generally attended with coffivenefs and acute pain of the bowels; and requires diluting diet, evacuations, fomentations, &c.

Colles are variously denominated according to their causes, as the *flatulent*, the *bilious*, the *bysteric*, the *nervous*, &c. As each of these requires a particular method of treatment, we shall point out their most general symptoms, and the means to be used for their relief.

THE flatulent, or wind-colic, is generally occafioned by an indifcreet use of unripe fruits, meats of hard digestion, windy vegetables, fermenting liquors, and fuch like. It may likewise proceed from an obstructed perspiration, or catching cold. Delicate people, whose digestive powers are weak, are most liable to this kind of colic.

THE flatulent colic may either affect the ftomach or inteffines. It is attended with a painful ftretching of the affected part. The patient feels a rumbling in his guts, and is generally relieved by a difcharge of wind either upwards or downwards. The pain is feldom confined to any particular part, as the vapour wanders from one division of the bowels to another, till it finds a vent.

WHEN

WHEN the difeafe proceeds from windy liquor, green fruit, four herbs, or the like, the beft medicine on the first appearance of the symptoms is a dram of brandy, gin, or any good spirits. The patient should likewife fit with his feet upon a warm hearth-stone, or apply warm bricks to them; and warm cloths may, be applied to his stomach and bowels.

THIS is the only colic wherein ardent fpirits, fpiceries, or any thing of a hot nature, may be ventured upon. Nor indeed are they to be ufed here unlefs at the very beginning, before any fymptoms of inflammation appear. We have reafon to believe, that a colic occafioned by wind or flatulent food might always be cured by fpirits and warm liquors, if they were taken immediately upon perceiving the firft uneafinefs; but when the pain has continued for a confiderable time, and there is reafon to fear an inflammation of the bowels is already begun, all hot things are to be avoided as poifon, and the patient is to be treated in the fame manner as for the inflammation of the inteflines.

SEVERAL kinds of food, as honey, eggs, &c. occafion colics in fome particular conftitutions. I have generally found, the best method of cure for these was to drink plentifully of small diluting liquors, as water-gruel, small posset, water with toassed bread foaked in it, &c.

Colics which proceed from excefs and indigeftion generally cure themfelves, by occasioning vomiting or purging. These discharges are by no means to be stopped, but promoted by drinking plentifully of warm water, or weak posset. When their violence is over, the patient may take a dose of rhubarb, or any

any other gentle purge, to carry off the dregs of his debauch.

Colics which are occafioned by wet feet, or catching cold, may generally be removed at the beginning, by bathing the feet and legs in warm water, and drinking fuch warm diluting liquors as will promote the perfpiration, as weak wine-whey, or water-gruel with a fmall quantity of fpirits in it.

THESE flatulent colics, which prevail fo much among country people, might generally be prevented were they careful to change their clothes when they get wet. They ought likewife to take a dram, or to drink fome warm liquor after eating any kind of green trafh. We do not mean to recommend the practice of dram-drinking, but in this cafe ardent fpirits prove a real medicine, and indeed the beft that can be administered. A glass of good pepper-mint water will have nearly the fame effect as a glass of brandy, and in fome cafes is rather to be preferred.

THE bilious colic is attended with very acute pains about the region of the navel. The patient complains of great thirft, and is generally coftive. He vomits a hot, bitter, yellow-coloured bile, which being difcharged, feems to afford fome relief, but is quickly followed by the fame violent pain as before. As the diftemper advances, the propenfity to vomit fometimes increafes fo as to become almost continual, and the proper motion of the inteflines is fo far perverted, that there are all the fymptoms of an impending iliac paffion.

IF the patient be young and ftrong, and the pulfe full and frequent, it will be proper to bleed, after which clyfters may be administered. Clear whey or

gruel,

gruel, fharpened with the juice of lemon, or cream of tartar, must be drank freely. Small chickenbroth, with a little manna diffolved in it, or a flight decoction of tamarinds, are likewife very proper, or any other thin, acid, opening liquor.

BESIDES bleeding and plentiful dilution, it will be neceffary to foment the belly with cloths dipped in warm water, and if this fhould not fucceed, the patient must be immerfed up to the breast in warm water.

In the bilious colic the vomiting is often very difficult to reftrain. When this happens, the patient may drink a decoction of toafted bread, or an infufion of garden-mint in boiling water. Should thefe not have the defired effect, the faline draught, with a few drops of laudanum in it, may be given, and repeated according to the urgency of the fymptoms. A fmall quantity of Venice treacle may be fpread in form of a cataplafin, and applied to the pit of the ftomach. Clyfters, with a proper quantity of Venice treacle or liquid laudanum in them, may likewife be frequently adminiftered.

Such as are liable to frequent returns of the bilious colic fhould use flesh sparingly, and live chiefly upon a light vegetable diet. They should likewise take frequently a dose of cream of tartar with tamarinds, or any other cool acid purge.

THE bysteric colic bears a great refemblance to the bilious. It is attended with acute pains about the region of the flomach, vomiting, &c. But what the patient vomits in this cafe is commonly of a greenish colour. There is a great finking of the spirits, with dejection of mind and difficulty of breathing, which are

are the characteristic symptoms of this diforder. Sometimes it is accompanied with the jaundice, but this generally goes off of its own accord in a few days.

In this colic all evacuations, as bleeding, purging, vomiting, &c. do hurt. Every thing that weakens the patient, or finks the fpirits, is to be avoided. If however the vomiting fhould prove violent, lukewarm water, or fmall poffet, may be drank to cleanfe the ftomach. Afterwards the patient may take fifteen, twenty, or twenty-five drops of liquid laudanum in a glafs of cinnamon-water. This may be repeated every ten or twelve hours till the fymptoms abate.

THE patient may likewife take four or five of the fætid pills every fix hours, and drink a cup of pennyroyal-tea after them. If afafætida fhould prove difagreeable, which is fometimes the cafe, a teafpoonful of the tincture of caftor in a cup of pennyroyal tea, or thirty or forty drops of the balfam of Peru dropped upon a bit of loaf-fugar, may be taken in its ftead. The anti-hyfteric plafter may alfo be ufed, which has often a good effect \*.

THE nervous colic prevails among miners, fmelters of lead, plumbers, the manufacturers of white lead, &c. It is very common in the cyder counties of England, and is fuppofed to be occafioned by the leaden veffels ufed in preparing that liquor. It is likewife a frequent difeafe in the Weft Indies, where it is termed the dry belly-ache.

No difease of the bowels is attended with more excruciating pain than this. Nor is it soon at an end. I have known it continue eight or ten days with very little intermission, the body all the while continuing

\* See Appendix, Anti-bysteric plaster.

bound

bound in fpite of medicine, yet at length yield, and the patient recover \*. It generally however leaves the patient weak, and often ends in a palfy.

THE general treatment of this difeafe is fo nearly the fame with that of the iliac paffion, or inflammation of the guts, that we fhall not infift upon it. The body is to be opened by mild purgatives given in finall dofes, and frequently repeated, and their operation must be affisted by fost oily clysters, fomentations, &c. The castor oil is reckoned peculiarly proper in this difease. It may both be mixed with the clysters and given by the mouth.

THE Barbadoes tar is faid to be an efficacious medicine in this complaint. It may be taken to the quantity of two drachms three times a-day, or oftener if the ftomach will bear it. This tar, mixed with an equal quantity of ftrong rum, is likewife proper for rubbing the fpine, in cafe any tingling, or other fymptoms of a palfy are felt. When the tar cannot be obtained, the back may be rubbed with ftrong fpirits, or a little oil of nutmegs or of rofemary.

IF the patient remains weak and languid after this difeafe, he must take exercise on horseback, and use an infusion of the Peruvian bark in wine. When the difease ends in a palsy, the Bath-waters are found to be extremely proper.

To avoid this kind of colic, people must shun all four fruits, acids, and austere liquors, &c. Those who

\* As the fmoke of tobacco thrown into the bowels will often procure a flool when all other means have failed, an apparatus for this purpofe ought to be kept by every furgeon. It may be purchafed at a fmall expence, and will be of fervice in feveral other cafes, as the recovery of drowned perfons, &c.

work

## 334 INFLAMMATION of the KIDNEYS.

work in lead ought never to go to their business fasting, and their food should be oily or fat. They may take a glass of fallad oil, with a little brandy or rum every morning, but should never take spirits alone. Liquid aliment is best for them; as fat broths, &c. but low living is bad. They should frequently go a little out of the tainted air; and should never suffer themselves to be costive. In the West Indies, and on the coast of Guinea, it has been found of great use, for preventing this colic, to wear a piece of stannel round the waist, and to drink an infusion of ginger by way of tea.

SUNDRY other kinds of this difeafe might be mentioned, but too many diffinctions would tend only to perplex the reader. These already mentioned are the most material, and should indeed be attended to, as their treatment is very different. But even persons who are not in a condition to diftinguish very accurately in these matters, may nevertheless be of great fervice to patients in colics of every kind, by only observing the following general rules, viz. To bathe the feet and legs in warm water; to apply bladders filled with warm water, or cloths dipped in it, to the ftomach and bowels; to make the patient drink freely of diluting mucilaginous liquors; and to give him an emollient clyfter every two or three hours. Should these not fucceed, the patient ought to be immersed in warm water.

## INFLAMMATION OF THE KIDNEYS.

CAUSES. — This difeafe may proceed from any of those causes which produce an inflammatory fever. It may likewise be occasioned by wounds or bruises of the

#### INFLAMMATION of the KIDNEYS. 335

the kidneys; fmall ftones or gravel lodging within them; by ftrong diuretic medicines; as fpirits of turpentine, tincture of cantharides, &c. Violent motion, as hard riding or walking, efpecially in hot weather, or whatever drives the blood too forcibly into the kidneys, may occafion this malady. It may likewife proceed from lying too foft, too much on the back, involuntary contractions, or fpafms, in the urinary veffels, &c.

SYMPTOMS.——There is a fharp pain about the region of the kidneys, with fome degree of fever, and a ftupor or dull pain in the thigh of the affected fide. The urine is at first clear, and afterwards of a reddifh colour; but in the worst kind of the difease it generally continues pale, is passed with difficulty, and commonly in small quantities at a time. The patient feels great uneasiness when he endeavours to walk or fit upright. He lies with most ease on the affected fide, and has generally a nausea or vomiting, refembling that which happens in the colic.

THIS difease however may be diftinguished from the colic by the pain being feated farther back, and by the difficulty of passing urine with which it is constantly attended.

REGIMEN.— Every thing of a heating or ftimulating nature is to be avoided. The food muft be thin and light; as panado, fmall broths, with mild vegetables, and the like. Emollient and thin liquors muft be plentifully drank; as clear whey, or balmtea fweetened with honey, decoctions of marfh-mallow roots, with barley and liquorice, &c. The patient, notwithftanding the vomiting, muft conftantly keep fipping fmall quantities of thefe or other diluting

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ing liquors. Nothing fo fafely and certainly abates the inflammation, and expels the obstructing cause, as copious dilution. The patient must be kept easy, quiet, and free from cold, as long as any symptoms of inflammation remain.

MEDICINE.—Bleeding is generally neceffary, efpecially at the beginning. Ten or twelve ounces may be let from the arm or foot with a lancet, and if the pain and inflammation continue, the operation may be repeated in twenty-four hours, efpecially if the patient be of a full habit. Leeches may likewife be applied to the hæmorrhoidal veins, as a difcharge from thefe will greatly relieve the patient.

CLOTHS dipped in warm water, or bladders filled with it, must be applied as near as possible to the part affected, and renewed as they grow cool. If, the bladders be filled with a decoction of mallows and camomile flowers, to which a little faffron is added, and mixed with about a third part of new milk, it will be still more beneficial.

EMOLLIENT clyfters ought frequently to be administered; and if these do not open the body, a little falt and honey or manna may be added to them.

THE fame courfe is to be followed where gravel or a ftone is lodged in the kidney; but when the gravel or ftone is feparated from the kidney, and lodges in the Urgter \*, it will be proper, befides the fomentations, to rub the fmall of the back with fweat oil, and to give gentle diuretics: as juniper water

\* The Ureters are two long and fmall canals, one on each fide, which carry the urine from the bason of the kidneys to the bladder. They are fometimes obstructed by fmall stones or gravel falling down from the kidneys, and lodging in them. fweetened

## INFLAMMATION of the KIDNEYS: 337

fweetened with the fyrup of marsh-mallows; a teaspoonful of the fweet spirits of nitre, with a few drops of laudanum, may now and then be put in a cup of the patient's drink. He ought likewise to take exercise on horseback, or in a carriage, if he be able to bear it.

WHEN the difeafe is protracted beyond the feventh or eighth'day, and the patient complains of a ftupor, and heavinefs of the part, has frequent returns of chillnefs, fhivering, &c. there is reafon to fufpect that matter is forming in the kidney, and that an abfcefs will enfue.

WHEN matter in the urine fhews that an ulcer is already formed in the kidney, the patient muft be careful to abftain from all acrid, four, and falted provifions; and to live chiefly upon mild mucilaginous herbs and fruits, together with the broth of young animals, made with barley and common potherbs, &c. His drink may be whey, and buttermilk that is not four. The latter is by fome reckoned a fpecific remedy in ulcers of the kidneys. To anfwer this character, however, it muft be drank for a confiderable time. Chalybeate waters have likewife been found beneficial in this difeafe. This medicine is eafily obtained, as it is found in every part of Great Britain. It muft likewife be ufed for a confiderable time, in order to produce any falutary effects.

THOSE who are liable to frequent returns of inflammation, or obftruction of the kidneys, must abstain from wines, especially such as abound with tartar; and their food ought to be light, and of easy digestion. They should use moderate exercise, and should not lie too hot, nor too much on their back.

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### 338 INFLAMMATION of the BLADDER.

#### INFLAMMATION OF THE BLADDER.

THE inflammation of the bladder proceeds, in a great measure, from the same causes as that of the kidneys. It is known by an acute pain towards the bottom of the belly, and difficulty of passing urine, with some degree of fever, a constant inclination to go to stool, and a perpetual defire to make water.

THIS difeafe must be treated on the fame principles as the one immediately preceding. The diet must be light and thin, and the drink of a cooling nature. Bleeding is very proper at the beginning, and in robust constitutions it will often be neceffary to repeat it. The lower part of the belly should be fomented with warm water, or a decoction of mild vegetables; and emollient clysters ought frequently to be administered, &c.

THE patient should abstain from every thing that is of a hot, acrid, and stimulating quality, and should live entirely upon small broths, gruels, or mild vegetables.

A STOPPAGE of urine may proceed from other caufes befides an inflammation of the bladder; as a fwelling of the hæmorrhoidal veins, hard *fæces* lodged in the *reflum*; a ftone in the bladder, excrefcences in the urinary paffages, a palfy of the bladder, hyfteric affections, &c. Each of thefe requires a particular treatment, which does not fall under our prefent confideration. We fhall only obferve, that in all of them mild and gentle applications are the fafeft, as ftrong diuretic medicines, or things of an irritating nature, generally increafe the dapger. I have known fome.

#### INFLAMMATION, of the LIVER. 339

fome perfons kill themfelves by introducing probes into the urinary paflages, to remove, as they thought, fomewhat that obftructed the difcharge of urine, and others bring on a violent inflammation of the bladder, by ufing ftrong diuretics, as oil of turpentine; &c. for that purpofe.

# INFLAMMATON OF THE LIVER.

THE liver is lefs fubject to inflammation than most of the other viscera, as in it the circulation is flower; but when an inflammation does happen, it is with difficulty removed, and often ends in a suppuration or fcirrhus.

CAUSES.—Befides the common caufes of inflammation, we may here reckon the following, viz. exceffive fatnefs, a fcirrhus of the liver itfelf, violent flocks from ftrong vomits when the liver was before unfound, an aduft or atrabiliarian ftate of the blood, any thing that fuddenly cools the liver after it has been greatly heated, ftones obftructing the courfe of the bile, drinking ftrong wines and fpirituous liquors, ufing hot fpicy aliment, obftinate hypochondriacal affections, &c.

SYMPTOMS.——This difeafe is known by a painful tenfion of the right fide under the falfe ribs, attended with fome degree of fever, a fenfe of weight, or fulnefs of the part, difficulty of breathing, loathing of food, great thirft, with a pale or yellowifh colour of the fkin and eyes.

THE fymptoms here are various, according to the degree of inflammation, and likewife according to the particular part of the liver where the inflammation Z 2 happens:

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happens. Sometimes the pain is fo inconfiderable, that an inflammation is not fo much as fufpected; but when it happens in the upper or convex part of the liver, the pain is more acute, the pulfe quicker, and the patient is often troubled with a dry cough, a hiccup, and a pain extending to the fhoulder, with difficulty of lying on the left fide, &c.

THIS difeafe may be diftinguished from the pleurify by the pain being less violent, feated under the false ribs, the pulse not fo hard, and by the difficulty of lying on the left fide. It may be diftinguished from the hysteric and hypochondriac diforders by the degree of fever with which it is always attended.

THIS difeafe, if properly treated, is feldom mortal. A conftant hiccuping, violent fever, and exceffive thirft, are bad fymptoms. If it ends in a fuppuration, and the matter cannot be difcharged outwardly, the danger is great. When the fcirrhus of the liver enfues, the patient, if he obferves a proper regimen, may neverthelefs live a number of years tolerably eafy; but if he indulge in animal food and ftrong liquors, or take medicines of an acrid or irritating nature, the fcirrhus will be converted into a cancer, which muft infallibly prove fatal.

REGIMEN.——The fame regimen is to be obferved in this as in other inflammatory diforders. All hot things are to be carefully avoided, and cool diluting liquors, as whey, barley-water, &c. drank freely. The food muft be light and thin, and the body, as well as the mind, kept eafy and quiet.

MEDICINE.——Bleeding is proper at the beginning of this difeafe, and it will often be neceffary, even though the pulfe should not feel hard, to repeat

it.

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it. All violent purgatives are to be avoided; the body however must be kept gently open. A decoction of tamarinds, with a little honey or manna, will answer this purpose very well. The fide affected must be fomented in the manner directed in the foregoing difeases. Mild laxative clysters should be frequently administered; and, if the pain should notwithstanding continue violent, a blistering-plaster may be applied over the part affected.

MEDICINES which promote the fecretion of urine have a very good effect here. For this purpose half a drachm of purified nitre, or a tea-spoonful of the sweet spirits of nitre, may be taken in a cup of the patient's drink three or four times a-day.

WHEN there is an inclination to fweat, it ought to be promoted, but not by warm fudorifics. The only thing to be used for that purpose is plenty of diluting liquors drank about the warmth of the human blood. Indeed the patient in this case, as well as in all other topical inflammations, ought to drink nothing that is colder than the blood.

IF the ftools fhould be loofe, and even ftreaked with blood, no means must be used to ftop them, unless they be so frequent as to weaken the patient. Loofe stools often prove critical, and carry off the difease.

IF an abscess or imposshume is formed in the liver, all methods should be tried to make it break and discharge itself outwardly, as somentations, the application of poultices, ripening cataplasms, &c. Sometimes indeed the matter of an abscess comes away in the urine, and sometimes it is discharged by stool, but these are efforts of Nature which no means can

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promote.

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promote. When the abfcefs burfts into the cavity of 'the *abdcmen* at large, death muft enfue; nor will the event be more favourable when the abfcefs is opened by an incifion, unlefs in cafes where the liver adheres to the *peritonæum*, fo as to form a bag for the matter, and prevent it from falling into the cavity of the *abdomen*; in which cafe opening the abfcefs by a fufficiently large incifion will probably fave the patient's life \*.

IF the diforder, in fpite of all endeavours to the contrary, fhould end in a fcirrhus, the patient muft be careful to regulate his diet, &c. in fuch a manner as not to aggravate the difeafe. He muft not indulge in flefh, fifh, ftrong liquors, or any highly feafoned or falted provifions; but fhould, for the moft part, live on mild vegetables, as fruits and roots; taking gentle exercife, and drinking whey, barley-water, or butter-milk. If he takes any thing ftronger, it fhould be fine mild ale, which is lefs heating than wines or fpirits.

WE fhall take no notice of inflammations of the other vifcera. They must in general be treated upon the fame principles as those already mentioned. The chief rule with respect to all of them, is to let blood, to avoid every thing that is strong, or of a heating nature, to apply warm fomentations to the part affected, and to cause the patient to drink a sufficient quantity of warm diluting liquors.

\* I know a gentleman who has had feveral abfceffes of the liyer opened, and is now a ftrong and healthy man, though above eighty years of age.

CHAP.

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#### CHAP. XXXI.

### OF THE CHOLERA MORBUS, AND OTHER EXCESSIVE DISCHARGES FROM THE STOMACH AND BOWELS.

THE cholera morbus is a violent purging and vomiting, attended with gripes, ficknefs, and a conflant defire to go to ftool. It comes on fuddenly, and is most common in autumn. There is hardly any difease that kills more quickly than this, when proper means are not used in due time for removing it.

CAUSES.—It is occafioned by a redundancy and putrid acrimony of the bile; cold; food that eafily turns rancid or four on the ftomach; as butter, bacon, fweet-meats, cucumbers, melons, cherries, and other cold fruits \*. It is fometimes the effect of ftrong acrid purges or vomits; or of poifonous fubftances taken into the ftomach. It may likewife proceed from violent paffions or affections of the mind; as fear, anger, &c.

SYMPTOMS.—It is generally preceded by a cardialgia, or heart-burn, four belchings, and flatulences, with pain of the ftomach and inteftines. To these succeffive vomiting, and purging of green, yellow, or blackiss coloured bile, with a differition of the stomach, and violent griping pains. There is likewise a great thirs, with a very quick

" I have been twice brought to the gates of death by this difeafe, and both times it was occasioned by eating rancid bacon.

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unequal

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unequal pulfe, and often a fixed acute pain about the region of the navel. As the difeafe advances, the pulfe often finks fo low as to become quite imperceptible, the extremities grow cold, or cramped, and are often covered with a clammy fweat, the urine is obftructed, and there is a palpitation of the heart. Violent hiccuping, fainting, and convulfions, are the figns of approaching death.

MEDICINE.—At the beginning of this difeafe the efforts of Nature to expel the offending caufe fhould be affifted, by promoting the purging and vomiting. For this purpofe the patient muft drink freely of diluting liquors; as whey, butter-milk, warm water, thin water-gruel, fmall poffet, or, what is perhaps preferable to any of them, very weak chicken broth. This fhould not only be drank plentifully to promote the vomiting, but a clyfter of it given every hour in order to promote the purging.

AFTER thefe evacuations have been continued for fome time, a decoclion of toafted oat-bread may be drank to ftop the vomiting. The bread fhould be toafted till it is of a brown colour, and afterwards boiled in fpring-water. If oat-bread cannot be had, wheat-bread, or oat-meal well toafted, may be ufed in its ftead. If this does not put a ftop to the vomiting, two table-fpoonfuls of the faline julep, with ten drops of laudanum, may be taken every hour till it ceafes.

THE vomiting and purging however ought never to be ftopped too foon. As long as thefe difcharges do not weaken the patient, they are falutary, and may be allowed to go on, or rather ought to be promoted. But when the patient is weakened by the revacuations,

#### Of the CHOLERA MORBUS, &c. 345

evacuations, which may be known from the finking of his pulfe, &c. recourfe muft immediately be had to opiates, as recommended above; to which may be added ftrong wines, with fpirituous cinnamonwaters, and other generous cordials. Warm negus, or ftrong wine-whey, will likewife be neceffary to fupport the patient's fpirits, and promote the perfpiration. His legs fhould be bathed in warm water, and afterwards rubbed with flannel cloths, or wrapped in warm blankets, and warm bricks applied to the foles of his feet. Flannels wrung out of warm fpirituous fomentations fhould likewife be applied to the region of the ftomach.

WHEN the violence of the difeafe is over, to prevent a relapfe, it will be neceffary, for fome time, to continue the ufe of fmall dofes of laudanum. Ten or twelve drops may be taken in a glafs of wine, at leaft twice a-day, for eight or ten days. The patient's food ought to be nourifhing, but taken in fmall quantities, and he fhould ufe moderate exercife. As the ftomach and inteftines are generally much weakened, an infufion of the bark, or other bitters, in fmall wine, fharpened with the elixir of vitriol, may be drank for fome time.

Тноион phyficians are feldom called in due time in this difeafe, they ought not to defpair of relieving the patient even in the moft defperate circumftances. Of this I lately faw a very ftriking proof in an old man and his fon, who had been both feized with it about the middle of the night. I did not fee them till next morning, when they had much more the appearance of dead than of living men'. No pulfe could be felt; the extremities were cold and rigid; the countenance

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countenance was ghaftly, and the ftrength almost quite exhausted. Yet from this deplorable condition they were both recovered by the use of opiates and cordial medicines.

## OF A DIARRHCEA, or LOOSENESS.

A LOOSENESS, in many cafes, is not to be confidered as a difeafe, but rather as a falutary evacuation. It ought therefore never to be flopped unlefs when it continues too long, or evidently weakens the patient. As this however fometimes happens, we fhall point out the most common caufes of a loofeness, with the proper method of treatment.

WHEN a loofeness is occasioned by catching cold, or an obstructed perspiration, the patient ought to keep warm, to drink freely of weak diluting liquors, to bathe his feet and legs frequently in lukewarm water, to wear flannel next his skin, and to take every other method to restore the perspiration.

IN a loofenefs which proceeds from excefs or repletion, a vomit is the proper medicine. Vomits not only cleanfe the ftomach, but promote all the fecretions, which renders them of great importance in carrying off a debauch. Half a drachm of ipecacuanha in powder will anfwer this purpofe very well. A day or two after the vomit, the fame quantity of rhubarb may be taken, and repeated two or three times, if the loofenefs continues. The patient ought to live upon light vegetable food of eafy digeftion, and to drink whey, thin gruel, or barley-water.

A LOOSENESS, occafioned by the obstruction of any customary evacuation, generally requires bleeding. If

# Of a DIARRHCEA, or LOOSENESS. 347

If that does not fucceed, other evacuations may be fubflituted in the room of those which are obstructed. At the same time, every method is to be taken to restore the usual discharges, as not only the cure of the discase, but the patient's life, may depend on this.

A PERIODICAL loofenefs ought never to be flopped. It is always an effort of Nature to carry off fome offending matter, which, if retained in the body, might have fatal effects. Children are very liable to this kind of loofenefs, efpecially while teething. It is however fo far from being hurtful to them, that fuch children generally get their teeth with leaft trouble. If thefe loofe flools flould at any time prove four or griping, a tea-fpoonful of magnefia alba, with four or five grains of rhubarb, may be given to the child in a little panado, or any other food. This, if repeated three or four times, will generally correct the acidity, and carry off the griping flools.

A DIARRHOEA, or loofenefs, which proceeds from violent paffions or affections of the mind, muft be treated with the greateft caution. Vomits in this cafe are highly improper. Nor are purges fafe, unlefs they be very mild, and given in fmall quantities. Opiates, and other antifpafmodic medicines, are moft proper. Ten or twelve drops of liquid laudanum may be taken in a cup of valerian or penny-royal tea, every eight or ten hours, till the fymptoms abate. Eafe, cheerfulnefs, and tranquillity of mind, are here of the greateft importance.

WHEN a loofeness proceeds from acrid or poisonous substances taken into the stomach, the patient must

#### 343 Of a DIARRHCEA, or LOOSENESS.

must drink large quantities of diluting liquors, with oil or fat broths, to promote vomiting and purging. Afterwards, if there be reason to suspect that the bowels are inflamed, bleeding will be necessary. Small doses of laudanum may likewise be taken to remove their irritation.

WHEN the gout, repelled from the extremities, occasions a loofenefs, it ought to be promoted by gentle dofes of rhubarb, or other mild purgatives. The gouty matter is likewife to be folicited towards the extremities by warm fomentations, cataplasms, &c. The perspiration ought at the same time to be promoted by warm diluting liquors; as winewhey, with spirits of hartshorn, or a few drops of liquid laudanum in it.

WHEN a loofenefs proceeds from worms, which may be known from the fliminefs of the ftools mixed with pieces of decayed worms, &c. medicines muft be given to kill and carry off thefe vermin, as the powder of tin with purges of rhubarb and calomel. Afterwards lime-water, either alone, or with a fmall quantity of rhubarb infufed, will be proper to ftrengthen the bowels, and prevent the new generation of worms.

A LOOSENESS is often occafioned by drinking bad water. When this is the cafe, the difeafe generally proves epidemical. When there is reafon to believe that this or any other difeafe proceeds from the ufe of unwholefome water, it ought immediately to be changed, or, if that cannot be done, it may be corrected by mixing with it quick-lime, chalk, or the like. In people whofe flomachs are weak, violent exercife immediately after eating, will occafion a loofenefs. Though the cure of this is obvious, yet it will be proper, belides avoiding violent exercife, to ufe fuch medicines as tend to brace and ftrengthen the ftomach, as infufions of the bark, with other bitter and aftringent ingredients, in white-wine. Such perfons ought likewife to take frequently a glafs or two of old red port, or good claret.

FROM whatever caufe a loofenefs proceeds, when it is found neceffary to check it, the diet ought to confift of rice boiled with milk, and flavoured with cinnamon; rice-jelly; fago, with red port; and the lighter forts of flefh-meat roafted. The drink may be thin water-gruel, rice-water, or weak broth made from lean yeal, or with a fheep's head, as being more gelatinous than mutton, beef, or chicken-broth.

PERSONS who, from a peculiar weaknefs, or too great an irritability of the bowels, are liable to frequent returns of this difeafe, fhould live temperately, avoiding crude fummer fruits, all unwholefome food, and meats of hard digeftion. They ought likewife to beware of cold, moifture, or whatever may obftruct the perfpiration, and fhould wear flannel next their fkin. All violent paffions, as fear, anger, &c. are likewife carefully to be guarded againft.

#### OF VOMITING.

VOMITING may proceed from various caules; as excels in eating and drinking; foulnels of the ftomach; the acrimony of the aliments; a translation of the morbific matter of ulcers, of the gout, the eryfitelas, or other difeafes to the flomach. It may likewife proceed from a loofenefs having been too fuddenly flopped; from the floppage of any cuftomary evacuation, as the bleeding piles, the *menfes*, &c. from a weaknefs of the flomach, the cholic, the iliac paffion, a rupture, a fit of the gravel, worms; or from any kind of poifon taken into the flomach. It is an ufual fymptom of injuries done to the brain; as contufions, compreffions, &c. It is likewife a fymptom of wounds, or inflammations of the diaphragm, inteftines, fpleen, liver, kidneys, &c.

VOMITING may be occafioned by unufual motions; as failing, being drawn backwards in a cart or coach, &c. It may likewife be excited by violent paffions, or by the idea of naufeous or difagreeable objects, efpecially of fuch things as have formerly produced vomiting. Sometimes it proceeds from a regurgitation of the bile into the ftomach: in this cafe, what the patient vomits is generally of a yellow or greenifh colour, and has a bitter tafte. Perfons who are fubject to nervous affections are often fuddenly feized with violent fits of vomiting. Laftly, vomiting is a common fymptom of pregnancy. In this cafe it generally comes on about two weeks after the ftoppage of the menfes, and continues during the firft three or four months.

WHEN vomiting proceeds from a foul flomach or indigeflion, it is not to be confidered as a difeafe, but as the cure of a difeafe. It ought therefore to be promoted by drinking lukewarm water, or thin gruel. If this does not put a flop to the vomiting, a dofe of ipecacuanha may be taken, and worked off with weak camomile-tea.

WHEN

WHEN the retroceffion of the gout, or the obftruction of cuftomary evacuations, occafion vomiting, all means muft be ufed to reftore thefe difcharges; or, if that cannot be effected, their place muft be fupplied by others, as bleeding, purging, bathing the extremities in warm water, opening iffues, fetons, perpetual blifters, &c.

WHEN vomiting is the effect of pregnancy, it may generally be mitigated by bleeding, and keeping the body gently open. The bleeding however ought to be in fmall quantities at a time, and the purgatives should be of the mildest kind, as figs, stewed prunes, manna, or fenna. Pregnant women are most apt to vomit in the morning, immediately after getting out of bed, which is owing partly to the change of pofture, but more to the emptinels of the ftomach. It may generally be prevented by taking a difh of coffee, tea, or some light breakfast in bed. Pregnant women who are afflicted with vomiting ought to be kept eafy both in body and mind. They fhould neither allow their ftomachs to be quite empty, nor should they eat much at once. Cold water is a very proper drink in this cafe; if the ftomach be weak, a little brandy may be added to it. If the fpirits are low, and the perfon apt to faint, a fpoonful of cinnamon-water, with a little marmalade of quinces or oranges, may be taken.

IF vomiting proceeds from weaknefs of the ftomach, bitters will be of fervice. Peruvian bark infufed in wine or brandy, with as much rhubarb as will keep the body gently open, is an excellent medicine in this cafe. The elixir of vitriol is alfo a good medicine. It may be taken in the dofe of fifteen or twenty

## OF VOMITING.

twenty drops, twice or thrice a-day, in a glafs of wine or water. Habitual vomitings are fometimes alleviated by making oyfters a principal part of diet.

A VOMITING, which proceeds from acidities in the ftomach, is relieved by alkaline purges. The beft medicine of this kind is the magnefia alba, a teafpoonful of which may be taken in a difh of tea or a little milk, three or four times a-day, or oftener if neceffary, to keep the body open.

WHEN vomiting proceeds from violent paffions, or affections of the mind, all evacuants muft be carefully avoided, efpecially vomits. Thefe are exceeding dangerous. The patient in this cafe ought to be kept perfectly eafy and quiet, to have the mind foothed, and to take fome gentle cordial, as negus, or a little brandy and water, to which a few drops of laudanum may occafionally be added.

WHEN vomiting proceeds from fpalmodic affections of the ftomach, mufk, caftor, and other antifpalmodic medicines, are of ufe. Warm and aromatic plafters have likewife a good effect. The ftomach-plafter of the London or Edinburgh difpenfatory may be applied to the pit of the ftomach, or a plafter of *theriaca*, which will anfwer rather better. Aromatic medicines may likewife be taken inwardly, as cinnamon or mint-tea, wine with fpiceries boiled in it, &c. The region of the ftomach may be rubbed with æther, or, if that cannot be had, with ftrong brandy, or other fpirits. The belly fhould be fomented with warm water, or the patient immerfed up to the breaft in a warm bath.

I HAVE always found the faline draughts taken in the act of effervelcence, of fingular use in stopping a vomiting,

vomiting, from whatever caufe it proceeded. Thefe may be prepared by diffolving a drachm of the falt of tartar in an ounce and half of fresh lemon-juice, and adding to it an ounce of peppermint-water, the fame quantity of simple cinnamon-water, and a little white fugar. This draught must be swallowed before the effervescence is quite over, and may be repeated every two hours, or oftener, if the vomiting be violent. A violent vomiting has fometimes been stopped by cupping on the region of the stomach after all other means had failed.

As the leaft motion will often bring on the vomiting again, even after it has been ftopped, the patient must avoid all manner of action. The diet must be fo regulated as to fit eafy upon the ftomach, and nothing should be taken that is hard of digestion. We do not however mean that the patient should live entirely upon slops. Solid food, in this case, often fits easier on the stomach than liquids.

### CHAP. XXXII.

### OF THE DIABETES, AND OTHER DISORDERS OF THE KIDNEYS AND BLADDER.

THE diabetes is a frequent and exceffive difcharge of urine. It is feldom to be met with among young people; but often attacks perfons in the decline of life, especially those who follow the more violent employments, or have been hard drinkters in their youth.

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CAUSES.

#### OF A DIABETES, &c.

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CAUSES, A diabetes is often the confequence of acute difeases, as fevers, fluxes, &c. where the patient has fuffered by exceffive evacuations; it may alfo be occafioned by great fatigue, as riding long journies upon a hard-trotting horfe, carrying heavy burdens, running, &c. It may be brought on by hard drinking, or the use of strong stimulating diuretic medicines, as tincture of cantharides, spirits of turpentine, and fuch like. It is often the effect of drinking too great quantities of mineral waters. Many imagine that thefe will do them no fervice unlefs they be drank in great quantities, by which miftake it happens that they often occasion worfe difeases than those they were intended to cure. In a word, this difease may either proceed from too great a laxity of the organs which fecrete the urine, from fomething that stimulates the kidneys too much, or from a thin diffolved state of the blood, which makes too great a quantity of it run off by the urinary passages.

SYMPTOMS.— In a diabetes the urine generally exceeds in quantity all the liquid food which the patient takes. It is thin and pale, of a fweetifh tafte, and an agreeable fmell. The patient has a continual thirft, with fome degree of fever; his mouth is dry, and he fpits frequently a frothy fpittle. The ftrength fails, the appetite decays, and the flefh waftes away till the patient is reduced to fkin and bone. There is a heat of the bowels; and frequently the loins, tefticles, and feet are fwelled.

THIS difeafe may generally be cured at the beginning; but, after it has continued long, the cure becomes very difficult. In drunkards, and very old people, a perfect cure is not to be expected.

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REGIMEN. — Every thing that ftimulates the urinary paflages, or tends to relax the habit, must be avoided. For this reafon the patient should live chiefly on folid food. His thirst may be quenched with acids; as forrel, juice of lemon, or vinegar. The mucilaginous vegetables, as rice, fago, and falop, with milk, are the most proper food. Of animal substances, shell-fish are to be preferred; as oysters, crabs, &c.

THE drink may be Briftol-water. When that cannot be obtained, lime-water, in which a due proportion of oak-bark has been macerated, may be used. The white decoction is with inglass diffolved in it, is likewise a very proper drink. The many sets

THE patient ought daily to take exercise, but it should be fo gentle as not to fatigue him. He should lie upon a hard bed or matrals. Nothing hurts the kidneys more than lying too foft. A warm dry air, the ufe of the steff-brush, and every thing that promotes perspiration, is of service. For this reason the patient ought to wear flannel next his skin. A large strengthening plaster may be applied to the back; or, what will answer better, a great part of the body may be wrapt in plaster.

MEDICINE. — Gentle purges, if the patient be not too much weakened by the difeafe, have a good effect. They may confift of rhubarb, with cardamum feeds, or any other fpiceries, infufed in wine, and may be taken in fuch quantity as to keep the body gently open.

THE patient must next have recourse to aftringents and corroborants. Half a drachm of powder made of

\* See Appendix, White Decostion.

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equal.

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equal parts of allum and the infpiffated juice commonly called *Terra Japonica*, may be taken four times a-day, or oftener, if the ftomach will bear it. The allum must first be melted in a crucible; afterwards they may both be pounded together. Along with every dose of this powder the patient may take a tea-cupful of the tincture of roses \*.

Ir the patient's ftomach cannot bear the allum in fubftance, whey may be made of it, and taken in the dofe of a tea-cupful three or four times a-day. The allum-whey is prepared by boiling two English quarts of milk over a flow fire, with three drachms of allum, till the curd feparates.

OPIATES are of fervice in this difeafe, even though the patient refts well. They take off fpafm and irritation, and at the fame time leffen the force of the circulation. Ten or twelve drops of liquid laudanum may be taken in a cup of the patient's drink three or four times a-day.

THE best corroborants which we know, are the Peruvian bark and wine. A drachm of bark may be taken in a glass of red port or claret three times a-day. The medicine will be both more efficacious and less disagreeable, if fifteen or twenty drops of the acid elixir of vitriol be added to each dose. Such as cannot take the bark in substance may use the decoction, mixed with an equal quantity of red wine, and sharpened as above.

• THERE is a difease pretty incident to labouring people in the decline of life, called an INCON-TINENCY of urine. But this is entirely different from a diabetes, as the water passes of involuntarily

\* See Appendix, Tinsure of Rofes.

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by drops, and does not exceed the ufual quantity. This difeafe is rather troublefome than dangerous. It is owing to a relaxation of the fphincter of the bladder, and is often the effect of a palfy. Sometimes it proceeds from hurts, or injuries occafioned by blows, bruifes, preternatural labours, &c. Sometimes it is the effect of a fever. It may likewife be occafioned by a long ufe of ftrong diuretics, or of ftimulating medicines injected into the bladder.

THIS difeafe may be mitigated by the use of astringent and corroborating medicines, such as have been mentioned above; but we do not remember ever to have seen it cured.

In an incontinency of urine, from whatever caufe, a piece of fponge ought to be worn, or a bladder applied in fuch a manner as to prevent the urine from galling and excoriating the parts.

#### OF A SUPPRESSION OF URINE.

It has already been observed, that a suppression of urine may proceed from various causes; as an inflammation of the kidneys, or bladder; small stones or gravel lodging in the urinary passages, hard faces lying in the ressum, pregnancy, a spass or contraction of the neck of the bladder, clotted blood in the bladder itself, a swelling of the hæmorrhoidal veins,  $\mathfrak{S}_{c}$ .

Some of these cases require the catheter, both to remove the obstructing matter, and to draw off the urine; but as this instrument can only be managed with fastery by perfors skilled in surgery, we shall say nothing further of its use. A Bougee may be used A a 3 by

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by any cautious hand, and will often fucceed better than the catheter.

WE would chiefly recommend, in all obstructions of urine, fomentations and evacuants. Bleeding, as far as the patient's strength will permit, is necessfary, especially where there are symptoms of topical inflammation. Bleeding in this case not only abates the fever, by lessening the force of the circulaton, but, by relaxing the folids, it takes off the spass or stricture upon the vessels which occasioned the obstruction,

AFTER bleeding, fomentations must be used. These may either confist of warm water alone, or of decoctions of mild vegetables; as mallows, camomile-flowers, &c. Cloths dipped in these may either be applied to the part affected, or a large bladder filled with the decoction may be kept continually upon it. 'Some put the herbs themselves into a flannel-bag, and apply them to the part, which is far from being a bad method. These continue longer warm than cloths dipped in the decoction, and at the fame time keep the part equally moist.

In all obftructions of urine, the body ought to be kept open. This is not however to be attempted by ftrong purgatives, but by emollient clyfters, or gentle infufions of fenna and manna. Clyfters in this cafe not only open the body, but anfwer the purpofe of an internal fomentation, and greatly affift in removing the fpafms of the bladder and parts adjacent.

THE food must be light, and taken in small quantities. The drink may be weak broth, or decostions and infusions of mucilaginous vegetables, as marshmallow roots, lime-tree buds, &c. A tea-spoonful of

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the fweet fpirits of nitre, or a drachm of Caffile foap, may be frequently put into the patient's drink; and, if there be no inflammation, he may drink finall gin-punch without acid.

PERSONS fubject to a fupprefilion of urine ought to live very temperate. Their diet fhould be light, and their liquor diluting. They fhould avoid all acids and auftere wines, fhould take fufficient exercife, lie hard, and avoid ftudy and fedentary occupations.

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WHEN fmall ftones are lodged in the kidneys, or difcharged along with the urine, the patient is faid to be afflicted with the gravel. If one of these ftones happens to make a lodgment in the bladder for some time, it accumulates fresh matter, and at length becomes too large to pass off with the urine. In this case the patient is faid to have the ftone.

CAUSES.— The ftone and gravel may be occalioned by high living; the use of strong astringent wines; a fedentary life; lying too hot, soft, or too much on the back; the constant use of water impregnated with earthy or strong particles; aliments of an astringent or windy nature, &c. It may likewise proceed from an hereditary disposition. Perfons in the decline of life, and those who have been much afflicted with the gout or rheumatism, are most liable to it.

SYMPTOMS. ——Small ftones or gravel in the kidneys occafion pain in the loins; ficknefs; vomiting; and fometimes bloody urine. When the ftone defcends into the *ureter*, and is too large to pafs along with eafe, all the above fymptoms are increafed; the pain extends towards the bladder; the thigh and leg A a 4 of

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of the affected fide are benumbed; the testicles are drawn upwards, and the urine is obstructed.

A STONE in the bladder is known from a pain, at the time, as well as before and after making water; from the urine coming away by drops, or flopping fuddenly when it was running in a full ftream; by a violent pain in the neck of the bladder upon motion, efpecially on horfeback, or in a carriage on a rough road; from a white, thick, copious, ftinking, mucous fediment in the urine; from an itching in the top of the *penis*; from bloody urine; from an inclination to go to flool during the difcharge of urine; from the patient's paffing his urine more eafily when lying than in an erect potture; from a kind of convulfive motion occafioned by the fharp pain in difcharging the laft drops of the urine; and laftly, from founding or fearching with the catheter.

REGIMEN .---- Perfons afflicted with the gravel or stone should avoid aliments of a windy or heating nature, as falt meats, sour fruits, &c. Their diet ought chiefly to confift of fuch things as tend to promote the fecretion of urine, and to keep the body open. Artichokes, asparagus, spinnage, lettuce, parsley, fuccory, purslane, turnips, potatoes, carrots, and radifhes may be fafely eat. Onions, leeks, and cellery are, in this cafe, reckoned medicinal. The moft proper drinks are whey, butter-milk, milk and water, barley-water; decoctions or infusions of the roots of marsh-mallows, parsley, liquorice, or of other mild mucilaginous vegetables, as linfeed, lime-tree buds or leaves, &c. If the patient has been accustomed to generous liquors, he may drink fmall gin-punch without acid.

GENTLE

+ .

GENTLE exercife is proper; but violent motion is apt to occafion bloody urine. We would therefore advife that it fhould be taken in moderation. Perfons afflicted with gravel often pafs a great number of ftones after riding on horfeback, or in a carriage; but those who have a ftone in the bladder are feldom able to bear these kinds of exercise. Where there is a hereditary tendency to this discafe, a fedentary life ought never to be indulged. Were people careful, upon the first fymptoms of gravel, to obferve a proper regimen of diet, and to take fufficient exercise, it might often be carried off, or, at least, prevented from increasing; but if the fame course which occasioned the discase be persisted in, it must be aggravated.

MEDICINE.——In what is called a fit of the gravel, which is commonly occafioned by a ftone fticking in the *ureter* or fome part of the urinary paffages, the patient muft be bled, warm fomentations fhould likewife be applied to the part affected, emollient clyfters administered, and diluting mucilaginous liquors drank, &c. The treatment of this cafe has been fully pointed out under the articles, *inflammation* of the kidneys and bladder, to which we refer.

DR. WHYTE advifes patients who are fubject to frequent fits of gravel in the kidneys, but have no ftone in the bladder, to drink every morning, two or three hours before breakfaft, an English pint of oyster or cockle-shell lime-water. The Doctor very justly observes, that though this quantity might be too small to have any fensible effect in diffolving a stone in the bladder, yet it may very probably prevent its growth.

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WHEN a flone is formed in the bladder, the Doctor recommends Alicant foap, and oyfter or cockle-fhell lime-water \*, to be taken in the following manner: The patient muft fwallow every 'day, in any form that is leaft difagreeable, an ounce of the internal part of Alicant foap, and drink three or four Englifh pints of oyfter or cockle-fhell lime-water. The foap is to be divided into three dofes; the largeft to be taken fafting in the morning early; the fecond at noon; and the third at feven in the evening, drinking above each dofe a large draught of the lime-water; the remainder of which he may take any time betwixt dinner and fupper, initead of other liquors.

THE patient should begin with a smaller quantity of the lime-water and foap than that mentioned above; at first an English pint of the former, and three drachms of the latter, may be taken daily. This quantity, however, he may increase by degrees, and ought to perfevere in the use of these medicines, especially if he finds any abatement of his complaints, for feveral months; nay, if the ftone be very large, for years. It may likewife be proper for the patient, if he be feverely pained, not only to begin with the foap and lime-water in finall quantities, but to take the fecond or third lime-water inftead of the first. However, after he has been for fome time accultomed to these medicines, he may not only take the first water, but, if he finds he can eafily bear it, heighten its diffolving power still more by pouring it a fecond time on fresh calcined shells.

THE cauftic alkali, or foap-lees, is the medicine chiefly in vogue at prefent for the ftone. It is of a very

\* See Appendix, Lime-Water.

acrid

acrid nature, and ought therefore to be given in fome gelatinous or mucilaginous liquor; as veal-broth, new milk, linfeed-tea, a folution of gum-arabic, or a decoction of marsh-mallow roots. The patient must begin with small doses of the lees, as thirty or forty drops, and increase by degrees, as far as the stomach will bear it \*.

THOUGH the foap-lees and lime-water are the most powerful medicines which have hitherto been difcovered for the stone; yet there are fome things of a more simple nature, which in certain cases are found to be beneficial, and therefore deferve a trial. An infusion of the seeds of daucus sylvestris, or wild carrot, fweetened with honey, has been found to give confiderable ease in cases where the stomach could not bear any thing of an acrid nature. A decoction of raw coffee-berries taken morning and evening, to the quantity of eight or ten ounces, with ten drops of fweet spirit of nitre, has likewife been found very efficacious in bringing away large quantities of earthy matter in flakes. Honey is likewife found to be of confiderable fervice, and may be taken in gruel, or in any other form that is more agreeable.

THE only other medicine which we fhall mention is the *uva urfi*. It has been greatly extolled of late both for the gravel and stone. It feems, however, to be, in all respects, inferior to the foap and lime-water; but it is less difagreeable, and has frequently, to my

\* The cauftic alcali may be prepared by mixing two parts of quick-lime with one of potafhes, and fuffering them to fland till ... the lixivium be formed, which muft be carefully filtrated before it be ufed. If the folution does not happen readily, a fmall quantity of water may be added to the mixture.

knowledge,

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knowledge, relieved gravelly complaints. It is geperally taken in powder from half a drachm to a whole drachm, two or three times a-day. It may however be taken to the quantity of feven or eight drachms a-day, with great fafety and good effect.

#### CHAP. XXXIII.

## OF INVOLUNTARY DISCHARGES OF BLOOD.

S PONTANEOUS, or involuntary difcharges of blood, often happen from various parts of the body. Thefe however are fo far from being always dangerous, that they prove often falutary. When fuch difcharges are critical, which is frequently the cafe in fevers, they ought not to be ftopped. Nor indeed is it proper at any time to ftop them, unlefs they be fo great as to endanger the patient's life. Moft people, afraid of the fmalleft difcharge of blood from any part of the body, fly immediately to the ufe of ftyptic and aftringent medicines, by which means an inflammation of the brain, or fome other fatal difeafe, is occafioned, which, had the difcharge been allowed to go on, might have been prevented.

PERIODICAL discharges of blood, from whatever part of the body they proceed, must not be stopped. They are always the efforts of Nature to relieve herfelf; and fatal diseases have often been the confequence of obstructing them. It may indeed be sometimes necessary to check the violence of such discharges; but even this requires the greatest caution. Instances might be given where the stopping of a small

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fmall periodical flux of blood, from one of the fingers, has proved fatal.

In the early period of life, bleeding at the nofe is very common. Thofe who are farther advanced in years are more liable to hæmoptoe, or difcharge of blood from the lungs. After the middle period of life, hæmorrhoidal fluxes are most common; and in the decline of life, difcharges of blood from the urinary passages.

INVOLUNTARY fluxes of blood may proceed from very different, and often from quite oppofite caufes. Sometimes they are owing to a particular conftruction of the body, as a fanguine temperament, a laxity of the veffels, a plethoric habit, &c. At other times they proceed from a determination of the blood towards one particular part, as the head, the hæmorrhoidal veins, &c. They may likewife proceed from an inflammatory difpofition of the blood, in which cafe there is generally fome degree of fever; this likewife happens when the flux is occafioned by an obftructed perfpiration, or a ftricture upon the fkin, the bowels, or any particular part of the fyftem.

But a diffolved ftate of the blood will likewife occasion hæmorrhages. Thus, in putrid fevers, the dyfentry, the fcurvy, the malignant fmall-pox, &c. there are often very gréat difcharges of blood from different parts of the body. They may likewife be brought on by too liberal an use of medicines which tend to diffolve the blood, as cantharides, the volatile alkaline falts, &c. Food of an acrid or irritating quality may likewife occasion hæmorrhages; as also ftrong purges and vomits, or any thing that greatly ftimulates the bowels.

VIOLENT

# 366 INVOLUNTARY DISCHARGES, &c.

VIOLENT paffions or agitations of the mind will likewife have this effect. These often cause bleeding at the nose, and I have known them sometimes occassion an hæmorrhage in the brain. Violent efforts of the body, by overstraining or hurting the vessels, may have the same effect, especially when the body is long kept in an unnatural posture, as hanging the head very low, &c.

THE cure of an hæmorrhage must be adapted to its cause. When it proceeds from too much blood, or a tendency to inflammation, bleeding, with gentle purges and other evacuations, will be necessfary. It will likewise be proper for the patient in this case to live chiefly upon a vegetable diet, to avoid all strong liquors, and food that is of an acrid, hot, or stimulating quality. The body should be kept cool, and the mind easy.

WHEN an hæmorrhage is owing to a putrid or diffolved ftate of the blood, the patient ought to live chiefly upon acid fruits with milk, and vegetables of a nourifhing nature, as fago, falop, &c. His drink may be wine diluted with water, and fharpened with the juice of lemon, vinegar, or fpirits of vitriol. The beft medicine in this cafe is the Peruvian bark, which may be taken according to the urgency of the fymptoms.

WHEN a flux of blood is the effect of acrid food, or of ftrong ftimulating medicines, the cure is to be effected by foft and mucilaginous diet. The patient may likewife take frequently about the bulk of a nutmeg of Locatelli's balfam, or the fame quantity of fperma-ceti.

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WHEN an obstructed perspiration, or a stricture upon any part of the system, is the cause of an hæmorrhage, it may be removed by drinking warm diluting liquors, lying a-bed, bathing the extremities in warm water, &c.

## OF BLEEDING AT THE NOSE.

BLEEDING at the nofe is commonly preceded by fome degree of quickness of the pulle, flushing in the face, pulsation of the temporal arteries, heaviness in the head, dimness of the fight, heat and itching of the nostrils, &c.

To perfons who abound with blood this difcharge is very falutary. It often cures a vertigo, the headach, a phrenzy, and even an epilepfy. In fevers, where there is a great determination of blood towards the head, it is of the utmost fervice. It is likewife beneficial in inflammations of the liver and fpleen, and often in the gout and rheumatifm. In all difeafes where bleeding is neceffary, a fpontaneous difcharge of blood from the nose is of much more fervice than the fame quantity let with a lancet.

IN a difcharge of blood from the nofe, the great point is to determine whether it ought to be ftopped or not. It is a common practice to ftop the bleeding, without confidering whether it be a difeafe, or the cure of the difeafe. This conduct proceeds from fear; but it has often bad, and fometimes fatal confequences.

WHEN a discharge of blood from the nose happens in an inflammatory disease, there is always reason to believe that it may prove salutary; and therefore it should

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fhould be fuffered to go on, at least as long as the patient is not weakened by it.

WHEN it happens to perfons in perfect health, who are full of blood, it ought not to be fuddenly ftopped, efpecially if the fymptoms of plethora, mentioned above, have preceded it. In this cafe it cannot be ftopped without rifking the patient's life.

In fine, whenever bleeding at the nofe relieves any bad fymptom, and does not proceed fo far as to endanger the patient's life, it ought not to be ftopped. But when it returns frequently, or continues till the pulfe becomes low, the extremities begin to grow cold, the lips pale, or the patient complains of being fick, or faint, it must immediately be ftopped.

For this purpose the patient should be set nearly upright, with his head reclining a little, and his legs immersed in water about the warmth of new milk. His hands ought likewise to be put in lukewarm water, and his garters may be tied a little tighter than usual. Ligatures may be applied to the arms, about the place where they are usually made for bleeding, and with nearly the same degree of tightness. These must be gradually flackened as the blood begins to stop, and removed entirely as soon as it gives over.

SOMETIMES dry lint put up the noftrils will ftop the bleeding. When this does not fucceed, doffils of lint dipped in ftrong fpirits of wine, may be put up the noftrils, or if that cannot be had, they may be dipped in brandy. Blue vitriol diffolved in water may likewife be ufed for this purpofe, or a tent dipped in the white of an egg well beat up, may be rolled in a powder made of equal parts of white fugar, burnt allum,

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allum, and white vitriol, and put up the noftril from whence the blood iffues.

INTERNAL medicines can hardly be of ufe here, as they have feldom time to operate. It may not however be amils to give the patient half an ounce of Glauber's falt, and the fame quantity of manna, diffolved in four or five ounces of barley-water. This may be taken at a draught, and repeated, if it does not operate, in a few hours. Ten or twelve grains of nitre may be taken in a glafs of cold water and vinegar every hour, or oftener, if the ftomach will bear it. If a ftronger medicine be neceffary, a tea-cupful of the tincture of rofes, with twenty or thirty drops of the weak fpirit of vitriol, may be taken every hour. When thefe things cannot be had, the patient may drink water, with a little common falt in it, or equal parts of water and vinegar.

IF the genitals be immerfed for fome time in cold water, it will generally ftop a bleeding at the nofe.— I have feldom known this fail.

SOMETIMES, when the bleeding is ftopped outwardly, it continues inwardly. This is very troublefome, and requires particular attention, as the patient is apt to be fuffocated with the blood, efpecially if he falls afleep, which he is very ready to do after lofing a great quantity of blood.

WHEN the patient is in danger of fuffocation from the blood getting into his throat, the paffages may be ftopped by drawing threads up the noftrils, and bringing them out at the mouth, then faftening pieces of fpunge, or fmall rolls of linen cloth to their extremities; afterwards drawing them back, and tying them on the outfide with a fufficient degree of tightnefs.

AFTER

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AFTER the bleeding is ftopped, the patient ought to be kept as eafy and quiet as possible. He should not pick his nose, nor take away the tents or clotted blood, till they fall off of their own accord, and should not lie with his head low.

THOSE who are affected with frequent bleeding at the nofe ought to bathe their feet often in warm water, and to keep them warm and dry. They ought to wear nothing tight about their necks, to keep their body as much in an erect pofture as poffible, and never to view any object obliquely. If they have too much blood, a vegetable diet, with now and then a cooling purge, is the fafeft way to leffen it.

But when the difeafe proceeds from a thin diffolved ftate of the blood, the diet fhould be rich and nourifhing; as ftrong broths and jellies, fago-gruel with wine and fugar, &c. Infufions of the Peruvian bark in wine ought likewife to be taken and perfifted in for a confiderable time.

## OF THE BLEEDING AND BLIND PILES.

A DISCHARGE of blood from the hæmorrhoidal veffels is called the *bleeding piles*. When the veffels only fwell, and difcharge no blood, but are exceeding painful, the difeafe is called the *blind piles*.

PERSONS of a loofe fpungy fibre, of a bulky fize, who live high, and lead a fedentary inactive life, are most subject to this difease. It is often owing to a hereditary disposition. Where this is the case, is attacks perfons more early in life than when it is accidental. Men are more liable to it than womenespecially

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especially those of a sanguine plethoric habit, or of a melancholy disposition.

The piles may be occafioned by an excefs of blood, by ftrong aloetic purges, high-feafoned food, drinking great quantities of fweet wines, the neglect of bleeding, or other cuftomary evacuations, much riding, great coltivenefs, or any thing that occafions hard or difficult ftools. Anger, grief, or other violent paffions, will likewife occafion the piles. I have often known them brought on by cold, efpecially about the feat. A pair of thin breeches will excite the diforder in a perfon who is fubject to it, and fometimes even in those who never had it before. Pregnant women are often afflicted with the piles.

A FLUX of blood from the *anus* is not always to be treated as a difeafe. It is even more falutary than bleeding at the nofe, and often prevents or carries off difeafes. It is peculiarly beneficial in the gout, rheumatifm, althma, and hypochondriacal complaints, and often proves critical in colics, and inflammatory fevers.

In the management of the patient, regard must be had to his habit of body, his age, ftrength, and manner of living. A discharge which might be excessive and prove hurtful to one, may be very moderate, and even falutary to another. That only is to be effecemed dangerous which continues too long, and is in fuch quantity as to waste the patient's strength, hurt the digestion, nutrition, and other functions necessary to life.

WHEN this is the cafe, the difcharge must be checked by a proper regimen, and astringent medicines. B b 2 The

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The DIET must be cool but nourishing, confisting chiefly of bread, milk, cooling vegetables and broths. The DRINK may be chalybeate water, orange-whey, decoctions or infufions of the aftringent and mucilaginous plants, as the tormentil root, biftort, the marshmallow-roots, &c.

OLD conferve of red rofes is a very good medicine in this cafe. It may be mixed with new milk, and taken in the quantity of an ounce three or four times a-day. This medicine is in no great repute, owing to its being feldom taken in fuch quantity as to produce any effects; but when taken as here directed, and duly perfitted in, I have known it perform very extraordinary cures in violent hæmorrhages, efpecially when affifted by the tincture of rofes; a teacupful of which may be taken about an hour after every dofe of the conferve.

THE Peruvian bark is likewife proper in this cafe, both as a strengthener and astringent. Half a drachm of it may be taken in a glass of red wine, sharpened with a few drops of the elixir of vitriol, three or four times a-day.

THE bleeding piles are fometimes periodical, and return regularly once a-month, or once in three weeks. In this cafe they are always to be confidered as a falutary difcharge, and by no means to be ftopped. Some have entirely ruined their health by ftopping a periodical discharge of blood from the hæmorrhoidal veins.

In the blind piles bleeding is generally of use. The diet must be light and thin, and the drink cool and diluting. It is likewife neceffary that the body be kept

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kept gently open. This may be done by finall dofes of the flowers of brimftone and cream of tartar. These may be mixed in equal quantities, and a teafpoonful taken two or three times a day, or oftener if necessary. Or an ounce of the flowers of brimftone and half an ounce of purified nitre may be mixed with three or four ounces of the lenitive electuary, and a tea-spoonful of it taken three or four times a-day.

EMOLLIENT clysters are here likewise beneficial; but there is fometimes fuch an aftriction of the anus, that they cannot be thrown up. In this cafe I have known a vomit have a very good effect.

WHEN the piles are exceeding painful and fwelled, but discharge nothing, the patient must fit over the steams of warm water. He may likewife apply a linen cloth dipped in warm spirits of wine to the part, or poultices made of bread and milk, or of leeks fried with butter. If thefe do not produce a discharge, and the piles appear large, leeches must be applied as near them as possible, or, if they will fix upon the piles themfelves, fo much the better. When leeches will not fix, the piles may be opened with a lancet. The operation is very eafy, and is attended with no danger.

VARIOUS ointments, and other external applications, are recommended in the piles; but I do not remember to have feen any effects from these worth mentioning. Their principal use is to keep the part moift, which may be done as well by a foft poultice, or an emollient cataplasm. When the pain however is very great, a liniment made of two ounces of Bb3 emollient 

emollient ointment, and half an ounce of liquid laudanum, beat up with the yolk of an egg, may be applied.

# SPITTING OF BLOOD.

WE mean here to treat of that difcharge of blood from the lungs only which is called an *hæmoptoe*, or *fpitting of blood*. Perfons of a flender make, and a lax fibre, who have long necks and ftrait breafts, are most liable to this difeafe. It is most common in the fpring, and generally attacks people before they arrive at the prime or middle period of life. It is a common obfervation, that those who have been fubject to bleeding at the nose when young, are afterwards most liable to an hæmoptoe.

CAUSES—An hæmoptoe may proceed from excefs of blood, from a peculiar weaknefs of the lungs, or a bad conformation of the breaft. It is often occafioned by exceffive drinking, running, wreftling, finging, or fpeaking aloud. Such as have weak lungs ought to avoid all violent exertions of that organ, as they value life. They fhould likewife guard against violent passions, exceffive drinking, and every thing that occasions a rapid circulation of the blood.

THIS difeafe may likewife proceed from wounds of the lungs. Thefe may either be received from without, or they may be occasioned by hard bodies getting into the wind-pipe, and fo falling down upon the lungs, and hurting that tender organ. The obftruction of any customary evacuation may occasion a spitting of blood; as neglect of bleeding or purging at the usual seasons, the stoppage of the bleeding

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bleeding piles in men, or the menfes in women, &c. It may likewife proceed from a polypus, fcirrhous concretions, or any thing that obftructs the circulation of the blood in the lungs. It is often the effect of a long and violent cough; in which cafe it is generally the forerunner of a confumption. A violent degree of cold fuddenly applied to the external parts of the body will occafion an hæmoptoe. It may likewife be occafioned by breathing air which is too much rarified to be able properly to expand the lungs. This is often the cafe with thofe who work in hot places, as furnaces, glafs-houfes, or the like. It may likewife happen to fuch as afcend to the top of very high mountains, as the Peak of Teneriff, &cc.

SPITTING of blood is not always to be confidered as a primary difeafe. It is often only a fymptom, and in fome difeafes not an unfavourable one. This is the cafe in pleurifies, peripneumonies, and fundry other fevers. In a dropfy, fcurvy, or confumption, it is a bad fymptom, and fhews that the lungs are ulcerated.

SYMPTOMS. — Spitting of blood is generally preceded by a fenie of weight, and opprefiion of the breaft, a dry tickling cough, hoarfenefs, and a difficulty of breathing. Sometimes it is ufhered in with fhivering, coldnefs of the extremities, coffivenefs, great laffitude, flatulence, pain of the back and loins, &c. As thefe fhew a general ftricture upon the vefiels, and a tendency of the blood to infiammation, they are commonly the forerunners of a very copious difcharge. The above fymptoms do not attend a difcharge of blood from the gums or B b 4 fauces,

fauces, by which means thefe may always be diftinguifhed from an hæmoptoe. Sometimes the blood that is fpit up is thin, and of a florid red colour; and at other times it is thick, and of a dark or blackifh colour; nothing however can be inferred from this circumftance, but that the blood has lain a longer or fhorter time in the breaft before it was difcharged.

SPITTING of blood, in a ftrong healthy perfon, of a found confficution, is not very dangerous; but when it attacks the tender and delicate, or perfons of a weak lax fibre, it is with difficulty removed. When it proceeds from a fcirrhus or polypus of the lungs, it is bad. The danger is greater when the difcharge proceeds from the rupture of a large vefiel than of a fmall one. When the extravafated blood is not fpit up, but lodges in the breaft, it corrupts, and greatly increafes the danger. When the blood proceeds from an ulcer in the lungs, it is generally fatal.

REGIMEN. — The patient ought to be kept cool and eafy. Every thing that heats the body or quickens the circulation, increafes the danger. The mind ought likewife to be foothed, and every occafion of exciting the paffions avoided. The diet fhould be foft, cooling, and flender; as rice boiled with milk, fmall broths, barley-gruels, panado, &c. The diet, in this cafe, can fcarce be too low. Even watergruel is fufficient to fupport the patient for fome days. All ftrong liquors muft be avoided. The patient may drink milk and water, barley-water, whey, butter-milk, and fuch like. Every thing however fhould be drank cold, and in fmall quantities at a i time.

time. He should observe the strictest silence, or at least speak with a very low voice.

MEDICINE. — This, like the other involuntary difcharges of blood, ought not to be fuddenly ftopped by aftringent medicines. More mifchief is often done by thefe than if it were fuffered to go on. It may however proceed fo far as to weaken the patient, and even endanger his life, in which cafe proper means must be used for restraining it.

THE body fhould be kept gently open by laxative diet; as roafted apples, flewed prunes, and fuch like. If these should not have the defired effect, a teaspoonful of the lenitive electuary may be taken twice or thrice a-day, as is found neceffary. If the bleeding proves violent, ligatures may be applied to the extremities, as directed for a bleeding at the nose.

Ir the patient be hot or feverifh, bleeding and fmall dofes of nitre will be of ufe; a fcruple or half a drachm of nitre may be taken in a cup of his ordinary drink twice or thrice a-day. His drink may likewife be fharpened with acids, as juice of lemon, or a few drops of the fpirit of vitriol; or he may take frequently a cup of the tincture of rofes.

BATHING the feet and legs in lukewarm water has likewife a very good effect in this difeafe. Opiates too are fometimes beneficial; but thefe must be administered with caution. Ten or twelve drops of laudanum may be given in a cup of barley-water twice a day, and continued for fome time, provided they be found beneficial.

THE conferve of rofes is likewife a very good medicine in this cafe, provided it be taken in fufficient quantity, and long enough perfifted in. It may be taken

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taken to the quantity of three or four ounces a-day; and, if the patient be troubled with a cough, it fhould be made into an electuary with balfamic fyrup, and a little of the fyrup of poppies.

IF stronger astringents be necessary, fifteen or twenty drops of the acid elixir of vitriol may be given in a glass of water, three or four times a-day.

THOSE who are fubject to frequent returns of this difeafe, fhould avoid all excefs. Their diet fhould be light and cool, confifting chiefly of milk and vegetables. Above all, let them beware of vigorous efforts of the body, and violent agitations of the mind.

# VOMITING OF BLOOD.

THIS is not fo common as the other difcharges of blood which have already been mentioned; but it is very dangerous, and requires particular attention.

VOMITING of blood is generally preceded by pain of the flomach, fickness, and nausea; and is accompanied with great anxiety, and frequent fainting fits.

THIS difeafe is fometimes periodical; in which cafe it is lefs dangerous. It often proceeds from an obftruction of the menfes in women; and fometimes from the ftopping of the hæmorrhoidal flux in men. It may be occafioned by any thing that greatly flimulates or wounds the ftomach, as ftrong vomits or purges, acrid poifons, fharp or hard fubftances taken into the ftomach, &c. It is often the effect of obftructions in the liver, the fpleen, or fome of the other vifcera. It may likewife proceed from external violence, lence, as blows or bruifes, or from any of the caufes which produce inflammation. In hyfteric women, vomiting of blood is a very common, but by no means a dangerous fymptom.

A GREAT part of the danger in this difease arifes from the extravafated blood lodging in the bowels, and becoming putrid, by which means a dysentery or putrid fever may be occasioned. The best way of preventing this, is to keep the body gently open, by frequently exhibiting emollient clyfters. Purges muft not be given till the discharge is stopt, otherwise they will irritate the ftomach, and increase the diforder. All the food and drink must be of a mild cooling nature, and taken in fmall quantities. Even drinking cold water has fometimes proved a remedy, but it will fucceed better when sharpened with the spirits of vitriol. When there are figns of an inflammation, bleeding may be neceffary; but the patient's weakness will seldom permit it. Opiates may be of use; but they must be given in very small doses, as four or five drops of liquid laudanum twice or thrice a-day.

AFTER the difcharge is over, as the patient is generally troubled with gripes, occafioned by the acrimony of the blood lodged in the inteftines, gentle purges will be neceffary.

#### OF BLOODY URINE.

THIS is a discharge of blood from the vessels of the kidneys or bladder, occasioned by their being either enlarged, broken, or eroded. It is more or less dangerous

# OF BLOODY URINE.

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dangerous according to the different circumstances which attend it.

WHEN pure blood is voided fuddenly without interiuption and without pain, it proceeds from the kidneys; but if the blood be in fmall quantity, of a dark colour, and emitted with heat and pain about the bottom of the belly, it proceeds from the bladder. When bloody urine is occafioned by a rough ftone defcending from the kidneys to the bladder, which wounds the *ureters*, it is attended with a fharp pain in the back, and difficulty of making water. If the coats of the bladder are hurt by a ftone, and the bloody urine follows, it is attended with the most acute pain, and a previous ftoppage of urine.

BLOODY urine may likewife be occafioned by falls, blows, the lifting or carrying of heavy burdens, hard riding, or any violent motion. It may alfo proceed from ulcers of the bladder, from a ftone lodged in the kidneys, or from violent purges, or fharp diuretic medicines, efpecially cantharides.

BLOODY urine is always attended with fome degree of danger: but it is peculiarly fo when mixed with purulent matter, as this fhews an ulcer fomewhere in the urinary paffages. Sometimes this difcharge proceeds from excefs of blood, in which cafe it is rather to be confidered as a falutary evacuation than a difeafe. If the difcharge however be very great, it may wafte the patient's ftrength, and occafion an ill habit of body, a dropfy, or a confumption.

THE treatment of this diforder must be varied according to the different causes from which it proceeds.

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#### OF BLOODY URINE.

WHEN it is owing to a flone in the bladder, the cure depends upon an operation; a defcription of which would be foreign to our purpofe.

Is it be attended with a plethora, and fymptoms of inflammation, bleeding will be neceffary. The body must likewife be kept open by emollient clyfters, or cooling purgative medicines; as cream of tartar, rhubarb, manna, or fmall dofes of lenitive electurary.

WHEN bloody\_urine proceeds from a diffolved ftate of the blood, it is commoly the fymptom of fome malignant difeafe; as the fmall-pox, a putrid fever, or the like. In this cafe the patient's life depends on the liberal use of the Peruvian bark and acids, as has already been shewn.

WHEN there is reafon to fufpect an ulcer in the kidneys or bladder, the patient's diet muft be cool, and his drink of a foft, healing, balfamic quality, as decoctions of marfh-mallow roots with liquorice, folutions of gum-arabic, &c. Three ounces of marfhmallow roots, and half an ounce of liquorice, may be boiled in two Englifh quarts of water to one; two ounces of gum-arabic, and half an ounce of purified nitre, may be diffolved in the ftrained liquor, and a tea-cupful of it taken four or five times a-day.

THE early use of aftringents in this difease has often bad confequences. When the flux is stopped too foon, the grumous blood, by being confined in the vessels, may produce inflammations, abscess, and ulcers. If however the case be urgent, or the patient seems to suffer from the loss of blood, gentle aftringents may be necessary. In this case the patient may take

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take three or four ounces of lime water, with half an ounce of the tincture of Peruvian bark, three times a-day.

# OF THE DYSENTERY, OR BLOODY FLUX.

This difeafe prevails in the fpring and autumn. It is most common in marshy countries, where, after hot and dry summers, it is apt to become epidemic. Perfons are most liable to it who are much exposed to the night-air, or who live in places where the air is confined and unwholesome. Hence it often proves fatal in camps, on shipboard, in jails, hospitals, and such like places.

CAUSES.— The dyfentery may be occafioned by any thing that obstructs the perspiration, or renders the humours putrid; as damp beds, wet clothes, unwholefome diet, air, &c. But it is most frequently communicated by infection. This ought to make people extremely cautious in going near such persons as labour under the difease. Even the smell of the patient's excrements has been known to communicate the infection.

SYMPTOMS——It is known by a flux of the belly attended with violent pain of the bowels, a conftant inclination to go to ftool, and generally more or lefs blood in the ftools. It begins, like other fevers, with chillnefs, lofs of ftrength, a quick pulfe, great thirft, and an inclination to vomit. The ftools are at firft greafy or frothy, afterwards they are ftreaked with blood, and, at laft, have frequently the appearance of pure blood, mixed with fmall filaments

# OR BLOODY FLUX.

filaments refembling bits of fkin. Worms are fometimes paffed both upwards and downwards through the whole courfe of the difeafe. When the patient goes to ftool, he feels a bearing down, as if the whole bowels were falling out, and fometimes a part of the inteftine is actually protruded, which proves exceeding troublefome, efpecially in children. Flatulency is likewife a troublefome fymptom, efpecially towards the end of the difeafe.

THIS difeafe may be diftinguished from a diarrhœa or loofenefs, by the acute pain of the bowels, and the blood which generally appears in the ftools. It may be diftinguished from the *cholera morbus* by its not being attended with, fuch violent and frequent fits of vomiting, &c.

WHEN the dyfentery attacks the old, the delicate, or fuch as have been wafted by the gout, the fcurvy, or other lingering difeafes, it generally proves fatal. Vomiting and hiccuping are bad figns, as they fhew an inflammation of the ftomach. When the ftools are green, black, or have an exceeding difagreeable cadaverous fmell, the danger is very great, as it fhows the difeafe to be of the putrid kind. It is an unfavourable fymptom when clyfters are immediately returned; but ftill more fo, when the paffage is fo obftinately flut, that they cannot be injected. A feeble pulfe, coldnefs of the extremities, with difficulty of fwallowing, and convulfions, are figns of approaching death.

REGIMEN.——Nothing is of more importance in this difeafe than cleanlinefs. It contributes greatly to the recovery of the patient, and no lefs to the 1 fafety

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fafety of fuch as attend him. In all contagious difeafes the danger is increafed, and the infection fpread, by the neglect of cleanlinefs; but in no one more than this. Every thing about the patient fhould be frequently changed. The excrements fhould never be fuffered to continue in his chamber, but removed immediately and buried under ground. A conftant ftream of fresh air fhould be admitted into the chamber; and it ought frequently to be fprinkled with vinegar, juice of lemon, or fome other ftrong acid.

THE patient must not be discouraged, but his spirits kept up in hopes of a cure. Nothing tends more to render any putrid disease mortal, than the fears and apprehensions of the sick. All diseases of this nature have a tendency to sink and depress the spirits, and when that is increased by fears and alarms from those whom the patient believes to be perfons of skill, it cannot fail to have the worst effects.

A FLANNEL waiftcoat worn next the fkin has often a very good effect in the dyfentery. This promotes the perfpiration without over-heating the body. Great caution however is neceffary in leaving it off. I have often known a dyfentery brought on by imprudently throwing off a flannel waiftcoat before the feafon was fufficiently warm. For whatever purpofe this piece of drefs is worn, it fhould never be left off but in a warm feafon.

IN this difeafe the greateft attention must be paid to the patient's diet. Flesh, fish, and every thing that has a tendency to turn putrid or rancid on the stomach, must be abstained from. Apples boiled in milk, water-pap; and plain light pudding, with broth made of the gelatinous parts of animals, may

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be eat. Gelatinous broth not only answers the purpose of food, but likewise of medicine. I have often known dyfenteries, which were not of a putrid nature, cured by it, after pompous medicines had proved ineffectual \*.

ANOTHER kind of food very proper in the dyfentery, which may be used by fuch as cannot take the broth mentioned above, is made by boiling a few handfuls of fine flour, tied in a cloth, for fix or feven hours, till it becomes as hard as ftarch. Two or three table-spoonfuls of this may be grated down, and boiled in fuch a quantity of new milk and water as to be of the thickness of pap. This may be sweetened to the patient's tafte, and taken for his ordinary food +.

• The manner of making this broth is, to take a sheep's head and feet with the fkin upon them, and to burn the wool off with a hot iron; afterwards to boil them till the broth is quite a jelly. A little cinnamon or mace may be added, to give the broth an agreeable flavour, and the patient may take a little of it warm with toasted bread, three or four times a-day. A clyster of it may likewife be given twice a-day. Such as cannot ufe the broth made in this way, may have the head and feet fkinned; but we have reason to believe that this hurts the medicine. It is not our bufinefs here to reason upon the nature and qualities of medicine, otherwife this might be fhewn to posses virtues every way fuited to the cure of a dysentery which does not proceed from a putrid. ftate of the humours. One thing we know, which is preferable to all reasoning, that whole families have often been cured by it, after they had used many other medicines in vain. It will however be proper that the patient take a vomit, and a dofe or two of rhubarb, before he begins to use the broth. It will likewise be neceffary to continue the use of it for a confiderable time, and to make it the principal food.

+ The learned and humane Dr. Rutherford, late professor of medicine in the univerfity of Edinburgh, used to mention this food Cc

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In a putrid dysentery the patient may be allowed to eat freely of most kinds of good ripe fruit; as apples, grapes, gooseberries, currant-berries, strawberries, &c. These may either be eat raw or boiled, with or without milk, as the patient chuses. The prejudice against fruit in this disease is so great, that many believe it to be the common caufe of dyfenteries. This however is an egregious mistake. Both reason and experience shew, that good fruit is one of the best medicines, both for the prevention and cure of the dysentery. Good fruit is in every respect calculated to counteract that tendency to putrefaction, from whence the most dangerous kind of dysentery proceeds. The patient in fuch a cafe ought therefore to be allowed to eat as much fruit as he pleafes, provided it be good \*.

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in his public lectures with great encomiums. He directed it to be made by tying a pound or two of the fineft flour, as tight as poffible, in a linen rag, afterwards to dip it frequently in water, and to dridge the outfide with flour, till a cake or cruft was formed around it, which prevents the water from foaking into it while boiling. It is then to be boiled till it becomes a hard dry mafs, as directed above. This, when mixed with milk and water, will not only anfwer the purpofe of food, but may likewife be given in clyfters.

\* I lately faw a young man who had been feized with a dyfentery in North America. Many things had been tried there for his relief, but to no purpofe. At length, tired out with difappointments from medicine, and reduced to fkin and bone, he came over to Britain, rather with a view to die among his relations, than with any hopes of a cure. After taking fundry medicines here with no better fuccefs than abroad, I advifed him to leave off the ufe of drugs, and to truft entirely to a diet of milk and fruits, with gentle exercife. Strawberries was the only fruit he could procure at that feafon. Thefe he cat with milk twice, and fometimes thrice

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THE most proper drink in this diforder is whey. The dyfentery has often been cured by the use of clear whey alone. It may be taken both for drink, and in form of clyster. When whey cannot be had, barley-water sharpened with cream of tartar may be drank, or a decoction of barley and tamarinds; two ounces of the former and one of the latter may be boiled in two English quarts of water to one. Warm water, water-gruel, or water wherein hot iron has been frequently quenched, are all very proper, and may be drank in turns. Camomile-tea, if the stomach will bear it, is an exceeding proper drink. It both strengthens the stomach, and by its antiseptic quality tends to prevent a mortification of the bowels.

MEDICINE. — At the beginning of this difeafe it is always neceffary to cleanfe the first passages. For this purpose a vomit of ipecacuanha must be given, and wrought off with weak camomile-tea. Strong vomits are feldom neceffary here. A scruple, or at most half a drachm of ipecacuanha, is generally sufficient for an adult, and sometimes a very few grains will suffice. The day after the vomit, half a drachm, or two scruples of rhubarb, must be taken; or, what will answer the purpose rather better, an ounce or an ounce and a half of Epsom falts. This dose may be repeated every other day for two or three times. Afterwards scale doses of ipecacuanha may be taken for some time. Two or three grains of

thrice a-day. The confequence was, that in a flort time his flools were reduced from upwards of twenty in a day, to three or four, and fometimes not fomany. He used the other fruits as they came in, and was, in a few weeks, fo well as to leave that part of the country where I was, with a view to return to America.

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the powder may be mixed in a table-fpoonful of the fyrup of poppies, and taken three times a-day.

THESE evacuations, and the regimen prefcribed above, will often be fufficient to effect a cure. Should it however happen otherwife, the following aftringent medicines may be used.

A CLYSTER of flarch or fat mutton-broth, with thirty or forty drops of liquid laudanum in it, may be administered twice a-day. At the fame time an ounce of gum-arabic, and half an ounce of gumtragacanth, may be diffolved in an English pint of barley-water, over a flow fire, and a table-spoonful of it taken every hour.

IF these have not the desired effect, the patient may take, four times a-day, about the bulk of a nutmeg of the *Japonic confection*, drinking after it a tea-cupful of the decoction of logwood \*.

PERSONS who have been cured of this difeafe are very liable to fuffer a relapfe; to prevent which, great circumfpection with refpect to diet is neceffary. The patient muft abstain from all fermented liquors, except now and then a glass of good wine; but he muft drink no kind of malt-liquor. He should likewife abstain from animal food, as fish and flesh, and live principally on milk and vegetables.

GENTLE exercife and wholefome air are likewife of importance. The patient fhould go to the country as foon as his ftrength will permit, and fhould take exercife daily on horfeback, or in a carriage. He may likewife ufe bitters infufed in wine or brandy, and may drink twice a-day a gill of lime-water mixed with an equal quantity of new milk.

\* See Appendix, Decostion of Logwood.

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WHEN dyfenteries prevail, we would recommend a ftrict attention to cleanlinefs, a fpare use of animal food, and the free use of found ripe fruits, and other vegetables. The night air is to be carefully avoided, and all communication with the fick. Bad fmells are likewise to be shunned, especially those which arise from putrid animal substances. The necessaries where the fick go are carefully to be avoided.

WHEN the first fymptoms of the dysentery appear, the patient ought immediately to take a vomit, to go to bed, and drink plentifully of weak warm liquor, to promote a fweat. This, with a dofe or two of rhubarb at the beginning, would often carry off the difease. In countries where dysenteries prevail, we would advise fuch as are liable to them, to take either a vomit or a purge every spring or autumn. as a preventive.

THERE are fundry other fluxes of the belly, as the LIENTERY and COELIAC PASSION, which, though lefs dangerous than the dyfentery, yet merit confideration. Thefe difeafes generally proceed from a relaxed ftate of the ftomach and inteltines, which is fometimes fo great, that the food paffes through them without almost any fensible alteration; and the patient dies merely from the want of nourifhment.

WHEN the lientery or cœliac paffion fucceeds to a dyfentery, the cafe is bad. They are always dangerous in old age, efpecially when the conftitution has been broken by excefs or acute difeafes. If the ftools be very frequent, and quite crude, the thirft great, with little urine, the mouth ulcerated, and the face marked with fpots of different colours, the danger is very great.

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THE treatment of the patient is in general the fame as in the dyfentery. In all obfinate fluxes of the belly, the cure muft be attempted, by first cleanfing the stomach and bowels with gentle vomits and purges; afterwards such a diet as has a tendency to heal and strengthen the bowels, with opiates and aftringent medicines, will generally perfect the cure.

THE fame observation holds with respect to a TENESMUS, or frequent defire of going to stool. This difease resembles the dysentery so much, both in its symptoms and method of cure, that we think it needless to infift upon it.

# CHAP. XXXIV. OF THE HEAD-ACH.

A CHES and pains proceed from very different caufes, and may affect any part of the body; but we shall point out those only which occur most frequently, and are attended with the greatest danger.

WHEN the head-ach is flight, and affects a particular part of the head only, it is called *cephalalgia*; when the whole head is affected, *cephalæa*; and when on one fide only, *hemicrania*. A fixed pain in the forehead, which may be covered with the end of the thumb, is called the *clavis byftericus*.

THERE are also other distinctions. Sometimes the pain is internal, sometimes external; sometimes it is

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an original difeafe, and at other times only fymptomatic. When the head-ach proceeds from a hot bilious habit, the pain is very acute and throbbing, with a confiderable heat of the part affected. When from a cold phlegmatic habit, the patient complains of a dull heavy pain, and has a fenfe of coldnefs in the part. This kind of head-ach is fometimes attended with a degree of ftupidity or folly.

WHATEVER obstructs the free circulation of the blood through the vessels of the head, may occasion a head-ach. In perfons of a full habit, who abound with blood, or other humours, the head-ach often proceeds from the suppression of customary evacuations; as bleeding at the nose, sweating of the feet, &c. It may likewise proceed from any cause that determines a great flux of blood towards the head; as coldness of the extremities, or hanging down the head for a long time. Whatever prevents the return of the blood from the head will likewise occasion a headach; as looking long obliquely at any object, wearing any thing tight about the neck, or the like.

WHEN a head-ach proceeds from the floppage of a running at the nofe, there is a heavy, obtufe, preffing pain in the fore-part of the head, in which there feems to be fuch a weight, that the patient can fcarce hold it up. When it is occafioned by the cauftic matter of the venereal difeafe, it generally affects the fkull, and often produces a *caries* of the bones.

Sometimes the head-ach proceeds from the repulfion, or retroceffion of the gout, the eryfipelas, the fmall-pox, meafles, itch, or other eruptive difeafes. What is called a *hemicrania* generally proceeds from crudities or indigeftion. Inanition, or emptinefs, will C c 4 alfo

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alfo occafion head-achs. I have often feen inftances of this in nurfes who gave fuck too long, or who did not take a fufficient quantity of folid food.

THERE is likewife a most violent, fixed, constant, and almost intolerable head-ach, which occasions great debility both of body and mind, prevents sleep, destroys the appetite, causes a vertigo, dimness of fight, a noise in the ears, convulsions, epileptic fits, and sometimes vomiting, costiveness, coldness of the extremities, &c.

THE head-ach is often fymptomatic in continual and intermitting fevers, efpecially quartans. It is likewife a very common fymptom in hyfteric and hypochondriac complaints.

WHEN a head-ach attends an acute fever, with pale urine, it is an unfavourable fymptom. In exceffive head-achs, coldnefs of the extremities is a bad fign.

WHEN the difease continues long, and is very violent, it often terminates in blindness, an apoplexy, deasness, a vertigo, the palfy, epilepsy, &c.

In this difeafe the cool regimen in general is to be obferved. The diet ought to confift of fuch emollient fubftances as will correct the acrimony of the humours, and keep the body open; as apples boiled in milk, fpinage, turnips, and fuch like. The drink ought to be diluting; as barley-water, infufions of mild mucilaginous vegetables, decoctions of the fudorific woods, &c. The feet and legs ought to be kept warm, and frequently bathed in luke-warm water; the head fhould be fhaved, and bathed with water and vinegar. The patient ought, as much as poffible, to keep in an erect pofture, and not to lie with his head too low.

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WHEN the head-ach is owing to excefs of blood, or an hot bilious conflitution, bleeding is neceffary. The patient may be bled in the jugular vein, and the operation repeated if there be occafion. Cupping alfo, or the application of leeches to the temples, and behind the ears, will be of fervice. Afterwards a bliftering-plafter may be applied to the neck, behind the ears, or to any part of the head that is most affected. In fome cafes it will be proper to blifter the whole head. In perfons of a grofs habit, iffues or perpetual blifters will be of fervice. The body ought likewife to be kept open by gentle laxatives.

But when the head-ach proceeds from a copious vitiated *ferum* ftagnating in the membranes, either within or without the fkull, with a dull, heavy, continual pain, which will neither yield to bleeding nor gentle laxatives, then more powerful purgatives are neceffary, as pills made of aloes, refin of jalap, or the like. It will alfo be neceffary in this cafe to blifter the whole head, and to keep the back part of the neck open for a confiderable time by a perpetual blifter.

WHEN the head-ach is occafioned by the ftoppage of a running at the nofe, the patient fhould frequently fmell to a bottle of volatile falts; he may likewife take fnuff, or any thing that will irritate the nofe, fo as to promote a difcharge from it; as the herb maftich, ground-ivy, &c.

A *bemicrania*, especially a periodical one, is generally owing to a foulness of the stomach, for which gentle vomits must be administered, as also purges of rhubarb. After the bowels have been sufficiently cleared,

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cleared, chalybeate waters, and fuch bitters as ftrengthen the ftomach, will be neceffary.

WHEN the head-ach arifes from a vitiated flate of the humours, as in the fourvy and venereal difeafe, the patient, after proper evacuations, must drink freely of the decoction of woods, or the decoction of farfaparilla, with raifins and liquorice \*. Thefe promote perfpiration, fweeten the humours, and, if duly perfifted in, will produce very happy effects. When a collection of matter is felt under the fkin, it must be difcharged by an incifion, otherwife it will render the bone carious.

WHEN the head-ach is fo intolerable as to endanger the patient's life, or is attended with continual watching, delirium, &c. recourfe muft be had to opiates. Thefe, after proper evacuations by clyfters, or mild purgatives, may be applied both externally and internally. The affected part may be rubbed with Bate's anodyne balfam, or a cloth dipped in it may be applied to the part. The patient may, at the fame time, take twenty drops of laudanum, in a cup of valerian or penny-royal tea, twice or thrice a-day. This is only to be done in cafe of extreme pain. Proper evacuations ought always to accompany and follow the ufe of opiates  $\dagger$ .

WHEN the patient cannot bear the loss of blood, bis feet ought frequently to be bathed in luke-warm

\* See Appendix, Decoction of Sarfaparilla.

+ When the pain is very violent, and does not yield to fmall dofes of laudanum, the quantity may be increased. I have known a patient in extreme pain take three hundred drops in twenty-four hours; but fuch dofes ought only to be administered by a perfon of skill.

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water, and well rubbed with a coarfe cloth. Cataplasms with mustard or horferadish ought likewise to be applied to them. This course is peculiarly neceffary when the pain proceeds from a gouty humour affecting the head.

WHEN the head-ach is occafioned by great heat, hard labour, or violent exercise of any kind, it may be allayed by cooling medicines; as the faline draughts with nitre, and the like.

A LITTLE of Ward's effence, dropt into the palm of the hand and applied to the forehead, will fometimes remove a violent head-ach; and fo will æther, when applied in the fame manner.

#### OF THE TOOTH-ACH.

THIS difeafe is fo well known, that it needs no defcription. It has great affinity with the rheumatifm, and often fucceeds pains of the fhoulders and other parts of the body.

It may proceed from obftructed perfpiration, or any of the other caufes of inflammation. I have often known the tooth-ach occalioned by neglecting fome part of the ufual coverings of the head, by fitting with the head bare near an open window, or exposing it any how to a draught of cold air. Food or drink taken either too hot or too cold is very hurtful to the teeth. Great quantities of fugar, or other fweet-meats, are likewife hurtful. Nothing is more deftructive to the teeth than cracking nuts, or chewing any kind of hard fubftances. Picking the teeth with pins, needles, or any thing that may hurt the enamel with which they are covered, does great mifchief,

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chief, as the tooth is fure to be fpoiled whenever the air gets into it. Breeding women are very fubject to the tooth-ach, efpecially during the first three or four months of pregnancy. The tooth-ach often proceeds from fcorbutic humours affecting the gums. In this cafe the teeth are fometimes wasted, and fall out without any confiderable degree of pain. The more immediate cause of the tooth-ach is a rotten or *carious* tooth.

In order to relieve the tooth-ach, we must first endeavour to draw off the humours from the part affected. This may be done by mild purgatives, fcarifying the gums, or applying leeches to them, and bathing the feet frequently with warm water. The perfpiration ought likewife to be promoted, by drinking freely of weak wine-whey, or other diluting liquors, with small doses of nitre. Vomits too have often an exceeding good effect in the tooth-ach. It is feldom fafe to administer opiates, or any kind of heating medicines, or even to draw a tooth till proper evacuations have been premifed; and these alone will often effect the cure.

IF this fails, and the pain and inflammation ftill increafe, a fuppuration may be expected, to promote which a toafted fig fhould be held between the gum and the cheek; bags filled with boiled camomileflowers, flowers of elder, or the like, may be applied near the part affected, with as great a degree of warmth as the patient can bear, and renewed as they grow cool: the patient may likewife receive the fteams of warm water into his mouth, through an inverted funnel, or by holding his head over the mouth of a porringer filled with warm water, &c.

SUCH

Such things as promote the difcharge of faliva, or cause the patient to spit, are generally of service. For this purpofe; bitter, hot, or pungent vegetables may be chewed; as gentian, calamus aromaticus, or pellitory of Spain. Allen recommends the root of vellow water flower-de-luce in this cafe. This root may either be rubbed upon the tooth, or a little of it chewed. Brookes fays he hardly ever knew it fail to eafe the tooth-ach. It ought however to be used with caution.

MANY other herbs, roots, and feeds, are recommended for curing the tooth-ach; as the leaves or roots of millefoil or varrow chewed, tobacco finoked or chewed, staves-acre, or the feeds of mustard chewed, &c. These bitter, hot, and pungent things, by occasioning a greater flow of faliva, frequently give eafe in the tooth-ach.

OPIATES often relieve the tooth-ach. For this purpofe a little cotton wet with laudanum may be held between the teeth; or a piece of flicking-plaster, about the bigness of a shilling, with a bit of opium in the middle of it, of a fize not to prevent the flicking of the other, may be laid on the temporal artery, where the pulfation is most fensible. De la Motte affirms, that there are few cafes wherein this will not give relief. If there be a hollow tooth, a fmall pill made of equal parts of camphire and opium, put into the hollow, is often beneficial. When this cannot be had, the hollow tooth may be filled with gum maftich, wax, lead, or any fubstance that will flick in it, and keep out the external air.

Few applications give more relief in the tooth-ach than bliftering-plasters. These may be applied betwixt the shoulders, but they have the best effect when A.

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when put behind the ears, and made fo large as to cover a great part of the lower-jaw.

AFTER all, when a tooth is carious, it is often impoffible to remove the pain without extracting it; and, as a fpoilt tooth never becomes found again, it is prudent to draw it foon, left it fhould affect the reft. Tooth-drawing, like bleeding, is very much practifed by mechanics as well as perfons of the medical profession. The operation however is not without danger, and ought always to be performed with care. A perfon unacquainted with the ftructure of the parts will be in danger of hurting the jaw-bone, or of drawing a found tooth instead of a rotten one \*.

WHEN the tooth-ach returns periodically, and the pain chiefly affects the gums, it may be cured by the bark.

Some pretend to have found great benefit in the tooth-ach, from the application of an artificial magnet to the affected tooth. We fhall not attempt to account for its mode of operation, but, if it be found to anfwer, though only in particular cafes, it certainly deferves a trial, as it is attended with no expence, and cannot do any harm. Electricity has likewife been recommended, and particular inftruments have been invented for fending a fhock through the affected tooth.

PERSONS who have returns of the tooth-ach at certain feafons, as fpring and autumn, might often prevent it by taking a purge at thefe times.

<sup>\*</sup> This may always be prevented by the operator flriking upon the teeth with any piece of metal, as this never fails to excite the pain in the carious tooth.

#### OF THE EAR-ACH.

KEEPING the teeth clean has no doubt a tendency to prevent the tooth-ach. The best method of doing this is to wash them daily with falt and water, a decoction of the bark, or with cold water alone. All brushing and scraping of the teeth is dangerous, and, unless it be performed with great care, does mischief.

#### OF THE EAR-ACH.

THIS diforder chiefly affects the membrane which lines the inner cavity of the ear called the *meatus auditorius*. It is often fo violent as to occafion great reftleffnefs, anxiety, and even delirium. Sometimes epileptic fits, and other convulfive diforders, have been brought on by extreme pain in the ear.

THE ear-ach may proceed from any of the caufes which produce inflammation. It often proceeds from a fudden fuppreffion of perfpiration, or from the head being exposed to cold when covered with fweat. It may alfo be occasioned by worms, or other infects getting into the ear, or being bred there; or from any hard body sticking in the ear. Sometimes it proceeds from the translation of morbific matter to the ear. This often happens in the decline of malignant fevers, and occasions deafnes, which is generally reckoned a favourable symptom.

WHEN the ear-ach proceeds from infects, or any hard body flicking in the ear, every method muft be taken to remove them as foon as poffible. The membranes may be relaxed by dropping into the ear oil of fweet almonds, or olive oil. Afterwards the patient fhould be made to fneeze, by taking fnuff, or fome ftrong flernutatory. If this fhould not force 2 out

#### OF THE EAR-ACH.

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out the body, it must be extracted by art. I have feen infects, which had got into the ear, come out of their own accord upon pouring in oil, which is a thing they cannot bear.

WHEN the pain of the ear proceeds from inflammation, it must be treated like other topical inflammations, by a cooling regimen and opening medicines. Bleeding at the beginning, either in the arm or jugular vein, or cupping in the neck, will be proper. The ear may likewife be fomented with steams of warm water, or flannel bags filled with boiled mallows and camomile flowers may be applied to it warm; or bladders filled with warm milk and water. An exceeding good method of fomenting the ear is to apply it close to the mouth of a jug filled with warm water, or a ftrong decoction of camomile flowers.

THE patient's feet fhould be frequently bathed in lukewarm water, and he ought to take fmall dofes of nitre and rhubarb, viz. a fcruple of the former, and ten grains of the latter, three times a-day. His drink may be whey, or decoctions of barley and liquorice with figs or raifins. The parts behind the ear ought frequently to be rubbed with camphorated oil, or a little of the volatile liniment.

WHEN the inflammation cannot be difcuffed, a poultice of bread and milk, or roafted onions, may be applied to the ear, and frequently renewed, till the abfcefs breaks, or can be opened. Afterwards the humours may be diverted from the part by gentle laxatives, blifters, or iffues; but the difcharge must not be fuddenly dried up by any external application.

PAIN

#### PAIN OF THE STOMACH, Ge.

This may proceed from various caufes; as indigeftion; wind; the acrimony of the bile; fharp, acrid, or poifonous fubftances taken into the ftomach,  $\mathfrak{Sc.}$  It may likewife proceed from worms; the ftoppage of cuftomary evacuations; a translation of gouty matter to the ftomach, the bowels, &c.

WOMEN in the decline of life are very liable to pains of the ftomach and bowels, especially such as are afflicted with hysteric complaints. It is likewise very common to hypochondriac men of a sedentary and luxurious life. In such persons it often proves so extremely obstinate as to baffle all the powers of medicine.

WHEN the pain of the flomach is moft violent after eating, there is reafon to fufpect that it proceeds from fome fault either in the digeftion or the food. In this cafe the patient ought to change his diet, till he finds what kind of food agrees beft with his flomach, and fhould continue chiefly to ufe it. If a change of diet does not remove the complaint, the patient may take a gentle vomit, and afterwards a dofe or two of rhubarb. He ought likewife to take an infufion of camomile flowers, or fome other flomachic bitter, either in wine or water. I have often known exercife remove this complaint, efpecially failing, or a long journey on horfeback, or in a carriage.

WHEN a pain of the flomach proceeds from flatulency, the patient is conftantly belching up wind, and feels an uneafy diffension of the stomach after meals. This is a most deplorable difease, and is feldom tho-D d roughly

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roughly cured. In general, the patient ought to avoid all windy diet, and every thing that fours on the ftomach, as greens, roots, &c. This rule however admits of fome exceptions. There are many inftances of perfons very much troubled with wind, who received great benefit from eating parched peafe, though that grain is generally fuppofed to be of a windy nature \*.

THIS complaint may likewife be greatly relieved by labour, efpecially digging, reaping, mowing, or any kind of active employment by which the bowels are alternately compressed and dilated. The most obstinate case of this kind I ever met with was in a perfon of a fedentary occupation, whom I advised, after he had tried every kind of medicine in vain, to turn gardener; which he did, and has ever fince enjoyed good health.

WHEN a pain of the flomach is occasioned by the fwallowing of acrid or poisonous substances, they must be discharged by vomit; this may be excited by butter, oils, or other soft things, which sheath and defend the stomach from the acrimony of its contents.

WHEN pain of the flomach proceeds from a tranflation of gouty matter, warm cordials are neceffary, as generous wines, French brandy, &c. Some have drank a whole bottle of brandy or rum, in this cafe, in a few hours, without being in the leaft intoxicated, or even feeling the flomach warmed by it. It is im-

\* These are prepared by sceping or soaking pease in water, and afterwards drying them in a pot or kiln till they be quite hard. They may be used at pleasure.

possible

### PAIN OF THE STOMACH, &c. 403

poffible to afcertain the quantities neceffary upon these occasions. This must be left to the feelings and diferentiation of the patient. The fafer way however is, not to go too far. When there is an inclination to vomit, it may be promoted by drinking an infusion of camomile flowers, or *carduus benedictus*.

IF a pain of the ftomach proceeds from the ftoppage of cuftomary evacuations, bleeding will be neceffary, efpecially in fanguine and very full habits. It will likewife be of ufe to keep the body gently open by mild purgatives; as rhubarb or fenna, &c. When this difeafe affects women in the decline of life, after the ftoppage of the *menfes*, making an iffue in the leg or arm will be of peculiar fervice.

WHEN the difease is occasioned by worms, they must be destroyed, or expelled by such means as are recommended in the following section.

WHEN the flomach is greatly relaxed and the digeftion bad, which often occasion flatulencies, the acid elixir of vitriol will be of fingular fervice. Fifteen or twenty drops of it may be taken in a glass of wine or water twice or thrice a-day.

PERSONS afflicted with flatulency are generally unhappy unlefs they be taking fome purgative medicines; thefe, though they may give immediate eafe, tend to weaken and relax the ftomach and bowels, and confequently increase the diforder. Their beft method is to mix purgatives and ftomachics together. Equal parts of Peruvian bark and rhubarb may be infused in brandy or wine, and taken in such quantity as to keep the body gently open.

Dd 2

CHAP.

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# C H A P. XXXV.

#### OF WORMS.

THESE are chiefly of three kinds, viz. the tania, or tape-worm; the teres, or round and long worm; and the ascarides, or round and fhort worm. There are many other kinds of worms found in the human body; but as they proceed, in a great meafure, from fimilar causes, have nearly the same fymptoms, and require almost the same method of treatment, as those already mentioned, we shall not spend time in enumerating them.

THE tape-worm is white, very long, and full of joints. It is generally bred either in the ftomach or fmall inteftines. The round and long worm is likewife bred in the fmall guts, and fometimes in the ftomach. The round and fhort worms commonly lodge in the *restum*, or what is called the end gut, and occasion a difagreeable itching about the feat.

, THE long round worms occasion fqueamifhnefs, vomiting, a difagreeable breath, gripes, loofenefs, fwelling of the belly, fwoonings, loathing of food, and at other times a voracious appetite, a dry cough, convultions, epileptic fits, and fometimes a privation of speech. These worms have been known to perforate the intestines, and get into the cavity of the belly. The effects of the tape-worm are nearly the fame with those of the long and round, but rather more violent.

ANDRY fays, the following fymptoms particularly attend the *folium*, which is a fpecies of the tape-worm, viz. viz. fwoonings, privation of fpeech, and a voracious appetite. The round worms called *afcarides*, befides an itching of the *anus*, caufe fwoonings, and tenefmus, or an inclination to go to ftool.

CAUSES.— Worms may proceed from various caufes; but they are feldom found except in weak and relaxed ftomachs, where the digeftion is bad. Sedentary perfons are more liable to them than the active and laborious. Thofe who eat great quantities of unripe fruit, or who live much on raw herbs and roots, are generally fubject to worms. There feems to be a hereditary difpofition in fome perfons to this difeafe. I have often feen all the children of a family fubject to worms of a particular kind. They feem likewife frequently to be owing to the nurfe. Children of the fame family, nurfed by one woman, have often worms, when thofe nurfed by another have none.

SYMPTOMS. The common fymptoms of worms, are palenefs of the countenance, and, at other times, an universal flushing of the face; itching of the nofe; this however is doubtful, as children pick their nofes in all difeafes; ftarting, and grinding of the teeth in fleep; fwelling of the upper lip; the appetite sometimes bad, at other times quite voracious; loofenefs; a four or ftinking breath; a hard fwelled belly; great thirst; the urine frothy, and fometimes of a whitish colour; griping, or colic pains; an involuntary difcharge of faliva, especially when afleep; frequent pains of the fide, with a dry cough, and unequal pulse; palpitations of the heart; fwoonings; drowfinefs; cold fweats; palfy; epileptic fits, with many other unaccountable nervous Dd<sub>3</sub> fymptoms.

fymptoms, which were formerly attributed to witchcraft, or the influence of evil fpirits. Small bodies in the excrements refembling melon or cucumber feeds are fymptoms of the tape-worm.

I LATELY faw fome very furprifing effects of worms in a girl about five years of age, who ufed to lie for whole hours as if dead. She at laft expired, and, upon opening her body, a number of the teres, or long round worms, were found in her guts, which were confiderably inflamed; and what anatomifts call an *intus fufceptio*, or involving of one part of the gut within another, had taken place in no lefs than four different parts of the inteftinal canal \*.

MEDICINE. — Though numberlefs medicines are extolled for killing and expelling worms †, yet no difeafe more frequently baffles the phyfician's fkill. In general, the most proper medicines for their expulsion are firong purgatives; and to prevent their breeding, flomachic bitters, with now and then a glass of good wine.

THE best purge for an adult is jalap and calomel. Five-and-twenty or thirty grains of the former with

\* That worms exift in the human body there can be no doubt; and that they muft fometimes be confidered as a difeafe, is equally certain: but this is not the cafe fo often as people imagine. The idea that worms occafion many difeafes gives an opportunity to the profeffed worm-doctors of impofing on the credulity of mankind, and doing much mifchief. They find worms in every cafe, and liberally throw in their antidotes, which generally confift of ftrong, draftic purges: I have known thefe given in delicate conflitutions to the defruction of the patient, where there was not the leaft fymptom of worms.

+ A medical writer of the prefent age has enumerated upwards of fifty British plants, all celebrated for killing and expelling worms.

fix or feven of the latter, mixed in fyrup, may be taken early in the morning, for a dofe. It will be proper that the patient keep the house all day, and drink nothing cold. The dofe may be repeated once or twice a-week, for a fortnight or three weeks. On the intermediate days the patient may take a drachm of the powder of tin, twice or thrice a-day, mixed with fyrup, honey, or treacle.

THOSE who do not chuse to take calomel may make use of the bitter purgatives; as aloes, hiera picra, tincture of fenna, and rhubarb, &c.

OILY medicines are sometimes sound beneficial for expelling worms. An ounce of fallad oil and a tablefpoonful of common falt, may be taken in a glass of red port-wine thrice a-day, or oftener, if the ftomach will bear it. But the more common form of using oil is in clyfters. Oily clyfters, fweetened with fugar or honey, are very efficacious in bringing away the fhort round worms called ascarides, and likewife the teres.

THE Harrowgate water is an excellent medicine for expelling worms, especially the ascarides. As this water evidently abounds with fulphur, we may hence infer, that fulphur alone must be a good medicine in this cafe; which is found to be a fact. Many practitioners give flour of fulphur in very large dofes, and with great fuccefs. It should be made into an electuary with honey or treacle, and taken in fuch quantity as to purge the patient.

WHERE Harrowgate-water cannot be obtained, fea-water may be used, which is far from being a contemptible medicine in this cafe. If sea-water cannot be had, common falt disfolved in water may be drunk. Dd4

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### OF WORMS.

I have often feen this ufed by country nurfes with very good effect. Some flour of fulphur may be taken over night, and the falt water in the morning.

But worms, though expelled, will foon breed again, if the ftomach remains weak and relaxed; to prevent which, we would recommend the Peruvian bark. Half a drachm of bark in powder may be taken in a glafs of red port-wine, three or four times a-day, after the above medicines have been ufed. Lime-water is likewife good for this purpofe, or a table-fpoonful of the chalybeate-wine taken twice or thrice a-day. Infufions or decoctions of bitter herbs may likewife be drank; as the infufion of tanfy, water-trefoil, camomile-flowers, tops of wormwood, the leffer centaury, &c.

For a child of four or five years old, fix grains of rhubarb, five of jalap, and two of calomel, may be mixed in a fpoonful of fyrup or honey, and given in the morning. The child fhould keep the houfe all day, and take nothing cold. This dofe may be repeated twice a-week for three or four weeks. On the intermediate days the child may take a foruple of powdered tin and ten grains of æthiops mineral in a fpoonful of treacle twice a-day. This dofe muft be increafed or diminifhed according to the age of the patient.

BISSET fays, the great baftard black hellebore, or bear's foot, is a most powerful vermifuge for the long round worms. 'He orders the decoction of about a drachm of the green leaves, or about fifteen grains of the dried leaves in powder, for a dose to a child betwixt four and seven years of age. This dose is to be

be repeated two or three times. He adds, that the green leaves made into a fyrup with coarfe fugar is almost the only medicine he has used for round worms for three years past. Before pressing out the juice, he moistens the bruised leaves with vinegar, which corrects the medicine. The dose is a tea-spoonful at bed-time, and one or two next morning.

I HAVE frequently known those big bellies, which in children are commonly reckoned a fign of worms, quite removed by giving them. white foap in their pottage, or other food. Tanfy, garlic, and rue, are all good against worms, and may be used various ways. We might here mention many other plants, both for external and internal use, as the cabbagebark, &c. but think the powder of tin with æthiops mineral, and the purges of rhubarb and calomel, are more to be depended on.

BALL's purging vermifuge powder is a very powerful medicine. It is made of equal parts of rhubarb, fcammony, and calomel, with as much double refined fugar as is equal to the weight of all the other ingredients. Thefe muft be well mixed together, and reduced to a fine powder. The dofe for a child is from ten grains to twenty, once or twice a-week. An adult may take a drachm for a dofe\*.

PARENTS who would preferve their children from worms ought to allow them plenty of exercife in the open air; to take care that their food be wholefome and fufficiently folid; and, as far as poffible, to pre-

\* A powder for the tape-worm refembling this, was long kept a fecret on the Continent: it was lately purchased by the French king, and will be found under the article *Powder*, in the Appendix.

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vent their eating raw herbs, roots, or green trafhy fruits. It will not be amifs to allow a child who is fubject to worms, a glafs of red wine after meals; as every thing that braces and ftrengthens the ftomach is good both for preventing and expelling thefe vermin \*.

#### CHAP. XXXVI.

#### OF THE JAUNDICE.

THIS difeafe is first observable in the white of the eye, which appears yellow. Afterwards the whole skin puts on a yellow appearance. The urine too is of a faffron hue, and dies a white cloth of the same colour. There is likewise a species of this difease called the Black Jaundice.

CAUSES. — The immediate caufe of the jaundice is an obstruction of the bile. The remote or occasional caufes are, the bites of poisonous animals, as the viper, mad dog, &c. the bilious or hysteric colic; violent passions, as grief, anger, &c. Strong purges or vomits will likewife occasion the jaundice.

\* We think it neceffary here to warn people of their danger who buy cakes, powders, and other worm medicines at random from quacks, and give them to their children without proper care. The principal ingredients in most of these medicines is mercury, which is never to be trifled with. I lately faw a shocking instance of the danger of this conduct. A girl who had taken a dose of worm powder, bought of a travelling quack, went out, and perhaps was so imprudent as to drink cold water, during its operation. She immediately swelled, and died on the following day, with all the symptoms of having been poisoned.

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#### OF THE JAUNDICE. 411

Sometimes it proceeds from obstinate agues, or from that difease being prematurely stopped by astringent medicines. In infants it is often occasioned by the *meconium* not being sufficiently purged off. Pregnant women are very subject to it. It is likewise a symptom in feveral kinds of fever. Catching cold, or the stoppage of customary evacuations, as the *menses*, the bleeding piles, iffues, &c. will occasion the jaundice.

SYMPTOMS, — The patient at first complains of exceffive weariness, and has great aversion to every kind of motion. His skin is dry, and he generally feels a kind of itching or pricking pain over the whole body. The store of a whitish or clay colour, and the urine, as was observed above, is yellow. The breathing is difficult, and the patient complains of an unufual load or oppression on his breast. There is a heat in the nostrils, a bitter taste in the mouth, loathing of food, sickness at the store from the store of the store of

IF the patient be young, and the difeafe complicated with no other malady, it is feldom dangerous; but in old people, where it continues long, returns frequently, or is complicated with the dropfy or hypochondriac fymptoms, it generally proves fatal. The black jaundice is more dangerous than the yellow.

REGIMEN.——The diet fhould be cool, light, and diluting, confifting chiefly of ripe fruits and mild vegetables: as apples boiled or roafted, ftewed prunes, preferved plums, boiled spinage, &c. Veal or

#### A12 OF THE JAUNDICE.

or chicken-broth; with light bread, are likewife very proper. Many have been cured by living almost wholly for fome days on raw eggs. The drink should be butter-milk, whey sweetened with honey, or decoctions of cool opening vegetables; or marshmallow-roots, with liquorice, &cc.

THE patient fhould take as much exercife as he can bear, either on horfeback, or in a carriage; walking, running, and even jumping, are likewife proper, provided he can bear them without pain, and there be no fymptoms of inflammation. Patients have been often cured of this difeafe by a long journey, after medicines had proved ineffectual.

AMUSEMENTS are likewife of great use in the jaundice. The difease is often occasioned by a sedentary life, joined to a dull melancholy disposition. Whatever therefore tends to promote the circulation, and to cheer the spirits, must have a good effect; as dancing, laughing, finging, &c.

MEDICINE.——If the patient be young, of a full fanguine habit, and complains of pain in the right fide about the region of the liver, bleeding will be neceffary. After this a vomit muft be adminiftered, and if the difeafe proves obflinate, it may be repeated once or twice. No medicines are more beneficial in the jaundice than vomits, efpecially where it is not attended with inflammation. Half a drachm of ipecacuanha in powder will be a fufficient dofe for an adult. It may be wrought off with weak camomile-tea, or lukewarm water. The body muft likewife be kept open by taking a fufficient quantity of Caftile foap, or the pills for the jaundice recommended in the Appendix.

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FOMENTING the parts about the region of the ftomach and liver, and rubbing them with a warm hand or flefh brufh, are likewife beneficial; but it is ftill more fo for the patient to fit in a bath of warm water up to the breaft. He ought to do this frequently, and fhould continue in it as long as his ftrength will permit.

MANY dirty things are recommended for the cure of the jaundice; as lice, millepedes, &c. But thefe do more harm than good, as people truft to them, and neglect more valuable medicines; befides, they are feldom taken in fufficient quantity to produce any effects. People always expect that fuch *things* fhould act as charms, and confequently feldom perfift in the ufe of them. Vomits, purges, fomentations, and exercife, will feldom fail to cure the jaundice when it is a fimple difeafe; and when complicated with the dropfy, a fchirrous liver, or other chronic complaints, it is hardly to be cured by any means.

NUMBERLESS British herbs are extolled for the cure of this difeafe. The author of the Medicina Britannica mentions near a hundred, all famous for curing the jaundice. The fact is, the difeafe often goes off of its own accord; in which cafe the last medicine is always faid to have performed the cure. I have fometimes however feen confiderable benefit, in a very obstinate jaundice, from a decoction of hempfeed. Four ounces of the feed may be boiled in two English quarts of ale, and sweetened with coarse fugar. The dose is half an English pint every morning. It may be continued for eight or nine days.

I HAVE likewife known Harrowgate fulphur-water cure a jaundice of very long standing. It should be 4 used

used for some weeks, and the patient must both drink and bathe.

THE foluble tartar is a very proper medicine in the jaundice. A drachm of it may be taken every night and morning in a cup of tea or water gruel. If it does not open the body, the dofe may be increafed. A very obftinate jaundice has been cured by fwallowing raw eggs.

PERSONS fubject to the jaundice ought to take as much exercife as poffible, and to avoid all heating and aftringent aliments.

# CHAP. XXXVII. OF THE DROPSY.

HE dropfy is a preternatural fwelling of the whole body, or fome part of it, occasioned by a collection of watery humour. It is diffinguished by different names, according to the part affected, as the *anafarca*, of a collection of water under the skin; the *afcites*, or a collection of water in the belly; the bydrops pectoris, or dropfy of the breast'; the bydrosepbalus, or dropfy of the brain, &c.

CAUSES.——The dropfy is often owing to an hereditary difpolition. It may likewife proceed from drinking ardent fpirits, or other ftrong liquors. It is true almost to a proverb, that great drinkers die of a dropfy. The want of exercise is also a very common cause of the dropsy. Hence it is justly reckoned among the diseases of the sedentary. It often pro-2 cceds ceeds from exceffive evacuations, as frequent and copious bleedings, ftrong purges often repeated, frequent falivations, &c. The fudden ftoppage of cuftomary or neceffary evacuations, as the *menfes*, the hæmorrhoids, fluxes of the belly, &c. may likewife caufe a dropfy.

I HAVE known the dropfy occafioned by drinking large quantities of cold, weak, watery liquor, when the body was heated by violent exercife. A low, damp, or marfhy fituation is likewife a frequent caufe of it. Hence it is a common difeafe in moift, flat, fenny countries. It may alfo be brought on by a long ufe of poor watery diet, or of vifcous aliment that is hard of digeftion. It is often the effect of other difeafes, as the jaundice, a fcirrhus of the liver, a violent ague of long continuance, a diarrhœa, a dyfentery, an empyema, or a confumption of the lungs. In fhort, whatever obftructs the perfpiration, or prevents the blood from being duly prepared, may occafion a dropfy.

SYMPTOMS.— The anafarca generally begins with a fwelling of the feet and ancles towards night, which, for fome time, difappears in the morning. In the evening the parts, if preffed with the finger, will pit. The fwelling gradually afcends, and occupies the trunk of the body, the arms, and the head. Afterwards the breathing becomes difficult, the urine is in fmall quantity, and the thirft great; the body is bound, and the perfpiration is greatly obftructed. To thefe fucceed torpor, heavinefs, a flow wasting fever, and a troublefome cough. This laft is generally a fatal fymptom, as it fnews that the lungs are affected.

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In an *afeites*, befides the above fymptoms, there is a fwelling of the belly, and often a fluctuation, which may be perceived by ftriking the belly on one fide, and laying the palm of the hand on the oppofite. This may be diftinguished from a *tympany* by the weight of the fwelling, as well as by the fluctuation. When the *anafarca* and *afeites* are combined, the cafe is very dangerous. Even a fimple *afeites* feldom admits of a radical cure. Almost all that can be done is to let off the water by tapping, which feldom affords more than a temporary relief.

WHEN the difeafe comes fuddenly on, and the patient is young and ftrong, there is reafon however to hope for a cure, efpecially if medicine be given early. But if the patient be old, has led an irregular or a fedentary life, or if there be reafon to fufpect that the liver, lungs, or any of the vifcera are unfound, there is great ground to fear that the confequences will prove fatal.

REGIMEN.—. The patient muft abftain, as much as poffible, from all drink, efpecially weak and watery liquors, and muft quench his thirft with muftard-whey, or acids, as juice of lemons, oranges, forrel, or fuch like. His aliment ought to be dry, of a ftimulating and diuretic quality, as toafted bread, the flefh of birds, or other wild animals roafted; pungent and aromatic vegetables, as garlic, muftard, onions, creffes, horfe-radifh, rocambole, fhalot, &c. He may alfo eat fea-bifcuit dipt in wine or a little brandy. This is not only nourifhing, but tends to quench thirft. Some have been actually cured of a dropfy by a total abftinence from all liquids, and living entirely upon fuch things as are mentioned above.

above. If the patient must have drink, the Spawwater, or Rhenish wine, with diuretic medicines infused in it, are the best.

Exercise is of the greatest importance in a dropfy. If the patient be able to walk, dig, or the like, he ought to continue these exercises as long as he can. If he is not able to walk or labour, he must ride on horfeback, or in a carriage, and the more violent the motion so much the better, provided he can bear it. His bed ought to be hard, and the air of his apartments warm and dry. . If he lives in a damp country, he ought to be removed into a dry one, and, if poffible, into a warmer climate. In a word, every method should be taken to promote the perspiration, and to brace the folids. For this purpose it will likewife be proper to rub the patient's body, two or three times a-day, with a hard cloth, or the flefhbrush; and he ought constantly to wear flannel next his skin.

MEDICINE.—If the patient be young; his conftitution good, and the difeafe has come on fuddenly, it may generally be removed by ftrong vomits, brifk purges, and fuch medicines as promote a difcharge by fweat and urine. For an adult, half a drachm of ipecacuanha in powder, and half an ounce of oxymel of fquills, will be a proper vomit. This may be repeated as often as is found neceffary, three or four days intervening between the dofes. The patient muft not drink much after taking the vomit, otherwife he deftroys its effect. A cup or two of camomile-tea will be fufficient to work it off.

BETWIXT each vomit, on one of the intermediate days, the patient may take the following purge: Ja-E e lap

lap in powder half a drachm, cream of tartar two drachms, calomel fix grains. Thefe may be made into a bolus with a little fyrup of pale rofes, and taken early in the morning. The lefs the patient drinks after it the better. If he be much griped, he may take now and then a cup of chicken-broth.

THE patient may likewife take every night at bedtime the following bolus: To four or five grains of camphor add one grain of opium, and as much fyrup of orange-peel as is fufficient to make them into a bolus. This will generally promote a gentle fweat, which fhould be encouraged by drinking now and then a fmall cup of wine-whey, with a tea-fpoonful of the fpirits of hartfhorn in it. A tea-cupful of the following diuretic infufion may likewife be taken every four or five hours through the day.

TAKE juniper-berries, mustard-seed, and horseradish, of each half an ounce, asses of broom half a pound; infuse them in a quart of Rhenish wine or strong ale for a few days, and asterwards strain off the liquor. Such as cannot take this infusion, may use the decostion of seneka-root, which is both diuretic and sudorific. I have known an obstinate anafarca cured by an infusion of the assess of broom in wine.

THE above courfe will often cure an incidental dropfy, if the conftitution be good; but when the difeafe proceeds from a bad habit, or an unfound flate of the vifcera, flrong purges and vomits are not to be ventured upon. In this cafe, the fafer courfe is to palliate the fymptoms by the ufe of fuch medicines as promote the fecretions, and to fupport the patient's flrength by warm and nourifhing cordials.

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THE fecretion of urine may be greatly promoted by nitre. Brookes fays, he knew a young woman who was cured of a dropfy by taking a drachm of nitre every morning in a draught of ale, after she had been given over as incurable. The powder of fquills is likewise a good diuretic. Six or eight grains of it; with a scruple of nitre, may be given twice a-day in a glass of strong cinnamon-water. Ball says, a large spoonful of unbruifed mustard-feed taken every night and morning, and drinking half an English pint of the decoction of the tops of green broom after it, has performed a cure, after other powerful medicines had proved ineffectual.

I HAVE sometimes seen good effects from cream of tartar in this difeafe. It promotes the difcharges by ftool and urine, and will at least palliate, if it does not perform a cure. The patient may begin by taking an ounce every fecond or third day, and may increase the quantity to two or even to three ounces, if the ftomach will bear it. This quantity is not however to be taken at once; but divided into three or four doses.

To promote perspiration, the patient may use the decoction of seneka-root, as directed above; or he may take two table-spoonfuls of Mindererus's spirit in a cup of wine-whey three or four times a-day. To promote a difcharge of urine, the following infusion of the London hospitals will likewise be beneficial.

TAKE of zedoary-root, two drachms; dried fquills, rhubarb, and juniper-berries bruised, of each a drachm; cinnamon in powder, three drachms; falt of wormwood, a drachm and a half: infuse in an English pint and a half of old hock-wine, and when fit

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fit for use, filter the liquor. A wine-glass of it may be taken three or four times a-day.

In the *anafarca* it is ufual to fcarify the feet and legs. By this means the water is often difcharged; but the operator must be cautious not to make the incifions too 'deep; they ought barely to pierce through the skin, and especial care must be taken, by spirituous fomentations and proper digestives, to prevent a gangrene.

In an *afcites*, when the difeafe does not evidently and fpeedily give way to purgative and diuretic medicines, the water ought to be let off by tapping. This is a very fimple and fafe operation, and would often fucceed, if it were performed in due time; but if it be delayed till the humours are vitiated, or the bowels fpoiled, by long foaking in water, it can hardly be expected that any permanent relief will be procured \*.

AFTER the evacuation of the water, the patient is to be put on a courfe of ftrengthening medicines; as the Peruvian bark; the elixir of vitriol; warm aromatics, with a due proportion of rhubarb, infufed in wine, and fuch like. His diet ought to be dry and nourifhing, fuch as is recommended in the beginning of the Chapter; and he fhould take as much exercife as he can bear without fatigue. He fhould wear

\* The very name of an operation is dreadful to most people, and they wish to try every thing before they have recourse to it. This is the reason why tapping so feldom succeeds to our wish. I have had a patient who was regularly tapped once a month for feveral years, and who used to eat her dinner as well after the operation as if nothing had happened. She died at last rather worn out by age than by the difease.

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#### OF THE GOUT.

flannel next his skin, and make daily use of the flesh-brush.

#### CHAP. XXXVIII.

### OF THE GOUT.

THERE is no difease which shews the imperfection of medicine, or sets the advantages of temperance and exercise in a stronger light, than the gout. Excess and idleness are the true sources from whence it originally sprung, and all who would avoid it must be allive and temperate.

Тноисн idlenefs and intemperance are the principal caufes of the gout, yet many other things may contribute to bring on the diforder in those who are not, and to induce a paroxysm in those who are subject to it; as intense study; too free an use of acid lliquors; night-watching; grief or uneasiness of mind; an obstruction or defect of any of the cuftomary discharges, as the menses, sweating of the steet, perspiration, &c.

SYMPTOMS.—A fit of the gout is genetrally preceded by indigeftion, drowfinefs, belching of wind, a flight head-ach, ficknefs, and fometimes vomiting. The patient complains of wearinefs and dejection of fpirits, and has often a pain in the limbs, with a fenfation as if wind or cold water were paffing down the thigh. The appetite is often remarkably keen a day or two before the fit, and there is a flight pain in paffing urine, and fometimes an involuntary  $E e_3$  fhedding

#### OF THE GOUT.

fhedding of tears. Sometimes thefe fymptoms are much more violent, especially upon the near approach of the fit; and some observe, that as is the fever which ushers in the gout, fo will the fit be; if the fever be short and sharp, the fit will be so site is is the fit it be feeble, long, and lingering, the site will be fuch also. But this observation can only hold with respect to very regular fits of the gout.

THE regular gout generally makes its attack in the fpring, or beginning of winter, in the following manner: About two or three in the morning, the patient is feized with a pain in his great toe, fometimes in the heel, and at other times in the ancle or calf of the leg. This pain is accompanied with a fensation as if cold water were poured upon the part, which is fucceeded by a fhivering, with fome degree of fever. Afterwards the pain increases, and fixing among the fmall bones of the foot, the patient feels all the different kinds of torture, as if the part were stretched, burnt, squeezed, gnawed, or torn in pieces, &c. The part at length becomes fo exquifitely fenfible, that the patient cannot bear to have it touched, or even fuffer any perfon to walk across the room.

THE patient is generally in exquisite torture for twenty-four hours, from the time of the coming on of the fit: He then becomes easier, the part begins to swell, appears red, and is covered with a little moisture. Towards morning he drops assept, and generally falls into a gentle breathing sweat. This terminates the first paroxysm, a number of which constitutes a fit of the gout; which is longer or shorter according to the patient's age, ftrength, the feason

feason of the year, and the disposition of the body to this disease.

THE patient is always worfe towards night, and eafier in the morning. The paroxyfms however generally grow milder every day, till at length the difeafe is carried off by perfpiration, urine, and the other evacuations. In fome patients this happens in a few days; in others, it requires weeks, and in fome, months, to finish the fit. Those whom age and frequent fits of the gout have greatly debilitated, feldom get free of it before the approach of summer, and sometimes not till it be pretty far advanced.

REGIMEN.——As there are no medicines yet known that will cure the gout, we fhall confine our obfervations chiefly to regimen, both in and out of the fit.

In the fit, if the patient be young and ftrong, his diet ought to be thin and cooling, and his drink of a diluting nature; but where the conftitution is weak, and the patient has been accustomed to live high, this is not a proper time to retrench. In this cafe he must keep nearly to his usual diet, and should take frequently a cup of strong negus, or a glass of generous wine. Wine-whey is a very proper drink in this cafe, as it promotes the perfpiration without greatly heating the patient. It will answer this purpose better if a tea-spoonful of sal volatile oleosum, or spirits of hartshorn, be put into a cup of it twice 2-day. It will likewise be proper to give at bed-time a tea-spoonful of the volatile tincture of guaiacum in a large draught of warm wine-whey. This will greatly promote perspiration through the night.

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As the most fafe and efficacious method of difcharging the gouty matter is by perfpiration, this ought to be kept up by all means, especially in the affected part. For this purpose the leg and foot should be wrapt in soft flannel, fur, or wool. The last is most readily obtained, and seems to answer the purpose better than any thing else. The people of Lancashire look upon wool as a kind of specific in the gout. They wrap a great quantity of it about the leg and foot affected, and cover it with a fkin of foft dreffed leather. This they fuffer to continue for eight or ten days, and fometimes for a fortnight or three weeks, or longer, if the pain does not ceafe. I never knew any external application anfwer fo well in the gout. I have often feen it applied when the fwelling and inflammation were very great, with violent pain, and have found all thefe fymptoms relieved by it in a few days. The wool which they use is generally greafed, and carded or combed. They chuse the softest which can be had, and seldom or never remove it till the fit be entirely gone off.

THE patient ought likewife to be kept quiet and eafy during the fit. Every thing that affects the mind difturbs the paroxyfm, and tends to throw the gout upon the nobler parts. All external applications that repel the matter are to be avoided as death. They do not cure the difeafe, but remove it from a fafer to a more dangerous part of the body, where it often proves fatal. A fit of the gout is to be confidered as Nature's method of removing fomething that might prove deftructive to the body, and all that we can do, with fafety, is to promote her intentions, and to affift her in expelling the enemy in her own way. way. Evacuations by bleeding, ftool, &c. are likewife to be ufed with caution; they do not remove the caufe of the difeafe, and fometimes by weakening the patient prolong the fit: But, where the conftitution is able to bear it, it will be of ufe to keep the body gently open by diet, or very mild laxative medicines.

MANY things will indeed fhorten a fit of the gout, and fome will drive it off altogether; but nothing has yet been found which will do this with fafety to the patient. In pain we eagerly grafp at any thing that promifes immediate eafe, and even hazard life itfelf for a temporary relief. This is the true reafon why fo many infallible remedies have been propofed for the gout, and why fuch numbers have loft their lives by the ufe of them. It would be as prudent to ftop the fmall-pox from rifing, and to drive them into the blood, as to attempt to repel the gouty matter after it has been thrown upon the extremities. The latter is as much an effort of nature to free herfelf from an offending caufe as the former, and ought equally to be promoted.

WHEN the pain however is very great, and the patient is reftlefs, thirty or forty drops of laudanum; more or lefs, according to the violence of the fymptoms, may be taken at bed-time. This will eafe the pain, procure reft, promote perfpiration, and forward the crifis of the difeafe.

AFTER the fit is over, the patient ought to take a gentle dole or two of the bitter tincture of rhubarb, or fome other warm ftomachic purge. He fhould alfo drink a weak infufion of ftomachic bitters in fmall wine or ale, as the Peruvian bark, with cinnamon, mon, Virginian fnake-root, and orange-peel. The diet at this time fhould be light, but nourifhing, and gentle exercife ought to be taken on horfeback, or in a carriage.

Out of the fit, it is in the patient's power to do many things towards preventing a return of the diforder, or rendering the fit, if it fhould return, lefs fevere. This however is not to be attempted by medicine. I have frequently known the gout kept off for feveral years by the Peruvian bark and other aftringent medicines; but in all the cafes where I had occafion to fee this tried, the perfons died fuddenly, and, to all appearance for want of a regular fit of the gout. One would be apt, from hence, to conclude, that a fit of the gout, to fome conftitutions, in the decline of life, is rather falutary than hurtful.

THOUGH it may be dangerous to ftop a fit of the gout by medicine, yet if the conftitution can be fo changed by diet and exercife, as to leffen or totally prevent its return, there certainly can be no danger in following fuch a courfe. It is well known that the whole habit may be fo altered by a proper regimen, as quite to eradicate this difeafe; and those only who have fufficient resolution to perfift in fuch a courfe have reason to expect a cure.

THE course which we would recommend for preventing the gout, is as follows: In the first place, universal temperance. In the next place sufficient exercise \*.

\* Some make a fecret of curing the gout by *muscular exercise*. This fecret, however, is as old as Celfus, who firongly recommends that mode of cure; and whoever will fubmit to it, in the fullest extent, may expect to reap folid and permanent advantages.

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#### OF THE GOUT.

By this we do not mean fauntering about in a nindolent manner, but labour, fweat, and toil. Thefe only can render the humours wholefome, and keep them fo. Going early to bed, and rifing betimes, are alfo of great importance. It is likewife proper to avoid night fludies, and all intenfe thought. The fupper fhould be light, and taken early. All ftrong liquors, efpecially generous wines and four punch, are to be avoided.

WE would likewife recommend fome dofes of magnesia alba and rhubarb to be taken every spring and autumn; and afterwards a course of stomachic bitters, as tansey or water-trefoil tea, an infusion of gentian and camomile flowers, or a decoction of burdock root, &c. Any of these, or an infusion of any wholefome bitter that is more agreeable to the patient, may be drank for two or three weeks in March and October twice a-day, An iffue or perpetual blifter has a great tendency to prevent the gout. If thefe were more generally used in the decline of life, they would not only often prevent the gout, but also other chronic maladies. Such as can afford to go to Bath, will find great benefit from bathing and drinking the water. It both promotes digestion and invigorates the habit.

THOUGH there is little room for medicine during a regular fit of the gout, yet when it leaves the extremities, and falls on fome of the internal parts, proper applications, to recal and fix it, become abfolutely neceffary. When the gout affects the head, the pain of the joints ceafes, and the fwelling difappears, while either fevere head-ach, drowfinefs, trembling, giddinefs, convultions, or delirium come on. When When it feizes the lungs, great opprefion, with cough and difficulty of breathing, enfue. If it attacks the ftomach, extreme ficknefs, vomiting, anxiety, pain in the epigatric region, and total lofs of ftrength, will fucceed.

WHEN the gout attacks the head or lungs, every method muft be taken to fix it in the feet. They muft be frequently bathed in warm water, and acrid cataplaims applied to the foles. Bliftering-plafters ought likewife to be applied to the ancles or calves of the legs. Bleeding in the feet or ancles is alfon neceffary, and warm ftomachic purges. The patient ought to keep in bed for the molt part, if there be any figns of inflammation, and fhould be very careful not to catch cold.

IF it attacks the ftomach with a fenfe of cold, the moft warm cordials are neceffary; as ftrong wine boiled up with cinnamon or other fpices; cinnamonwater; peppermint-water; and even brandy or rum. The patient fhould keep his bed, and endeavour to promote a fweat by drinking warm liquors; and if he fhould be troubled with a naufea, or inclination to vomit, he may drink camomile-tea, or any thing that will make him vomit freely.

WHEN the gout attacks the kidneys, and imitates gravel-pains, the patient ought to drink freely of a decoction of marsh-mallows, and to have the parts fomented with warm water. An emollient clyster ought likewise to be given, and afterwards an opiate. If the pain be very violent, twenty or thirty drops of laudanum may be taken in a cup of the decoction.

PERSONS who have had the gout fhould be very attentive to any complaints that may happen to them about

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about the time when they have reafon to expect a return of the fit. The gout imitates many other diforders, and by being miltaken for them, and treated improperly, is often diverted from its regular courfe, to the great danger of the patient's life.

THOSE who never had the gout, but who, from their conflitution or manner of living, have reafon to expect it, ought likewife to be very circumfpect with regard to its first approach. If the difease, by wrong conduct or improper medicines, be diverted from its proper course, the miserable patient has a chance to be ever after tormented with head-achs, coughs, pains of the storm and intestines; and to fall, at last, a victim to its attack upon some of the more noble parts.

#### OF THE RHEUMATISM.

This difease has often a refemblance to the gout. It generally attacks the joints with exquisite pain, and is fometimes attended with inflammation and fwelling. It is most common in the spring, and towards the end of autumn. It is usually distinguished into acute and chronic; or the rheumatism with and without a fever.

CAUSES. ——The caufes of a rheumatifm are frequently the fame as those of an inflammatory fever; viz. an obstructed perspiration, the immoderate use of strong liquors, and the like. Sudden changes of the weather, and all quick transitions from heat to cold, are very apt to occasion the rheumatism. The most extraordinary case of a rheumatism that I ever faw, where almost every joint of the body was distorted,

torted, was in a man who used to work one part of the day by the fire, and the other part of it in the water. Very obfinate rheumatisms have likewise been brought on by perfons not accustomed to it, allowing their feet to continue long wet. The same effects are often produced by wet clothes, damp beds, fitting or lying on the damp ground, travelling in the night,  $\mathfrak{Sc}$ .

THE rheumatism may likewisé be occasioned by excessive evacuations, or the stoppage of customary discharges. It is often the effect of chronic diseases; which vitiate the humours; as the scurvy, the lues venerea, obstinate autumnal agues; &c.

THE rheumatism prevails in cold, damp, marshy countries. It is most common amongst the pooter fort of peasants, who are ill clothed, live in low damp houses, and eat coarse unwholes food, which contains but little nouriss and is not easily digested.

SYMPTOMS.— The *acute* rheumatism commonly begins with weariness, shivering, a quick pulse, reftleffness, thirst, and other symptoms of fever. Afterwards the patient complains of slying pains, which are increased by the least motion. These at length fix in the joints, which are often affected with swelling and inflammation. If blood be let in this difease, it has generally the same appearance as in the pleurify.

IN this kind of rheumatifun the treatment of the patient is nearly the fame as in an acute or inflammatory fever. If he be young and ftrong, bleeding is neceffary, which may be repeated according to the exigencies of the cafe. The body ought likewife to

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be kept open by emollient clyfters, or cool opening liquors; as decoctions of tamarinds, cream tartar whey, fenna tea, and the like. The diet fhould be light, and in fmall quantity, confifting chiefly of roafted apples, groat-gruel, or weak chicken broth. After the feverifh fymptoms have abated, if the pain ftill continues, the patient muft keep his bed, and take fuch things as promote perfpiration; as winewhey, with *fpiritus Mindereri*, &cc. He may likewife take, for a few nights, at bed-time, in a cup of winewhey, a drachm of the cream of tartar, and half a drachm of gum guaiacum in powder.

WARM bathing, after proper evacuations, has often an exceeding good effect. The patient may either be put into a bath of warm water, or have cloths wrung out of it applied to the parts affected. Great care must be taken that he do not catch cold after bathing.

THE chronic rheumatifm is feldom attended with any confiderable degree of fever, and is generally confined to fome particular part of the body, as the fhoulders, the back, or the loins. There is feldom any inflammation or fwelling in this cafe. Perfons in the decline of life are most fubject to the chronic rheumatifm. In fuch patients it often proves extremely obstinate, and fometimes incurable.

In this kind of rheumatism the regimen should be nearly the same as in the acute. Cool and diluting diet, confisting chiefly of vegetable substances, as stewed prunes, coddled apples, currants or goofeberries boiled in milk, is most proper. Arbuthnot fays, "If there be a specific in aliment for the rheumatism, it is certainly whey;" and adds, "That he 8 knew

knew a perfon fubject to this difeafe, who could never be cured by any other method but a diet of whey and bread." He likewife fays, "That cream of tartar in water gruel, taken for feveral days, will eafe rheumatic pains confiderably." This I have often experienced, but found it always more efficacious when joined with gum guaiacum, as already directed. In this cafe the patient may take the dofe formerly mentioned twice a-day, and likewife a tea-fpoonful of the volatile tincture of gum guaiacum, at bedtime, in wine-whey.

THIS courfe may be continued for a week, or longer, if the cale proves obstinate, and the patient's ftrength will permit. It ought then to be omitted for a few days, and repeated again. At the fame time leeches or a bliftering-plafter may be applied to the part affected. What I have generally found answer better than either of these, in obstinate fixed rheumatic pains, is the warm plaster \*. I have likewife known a platter of Burgundy pitch worn for fome time on the part affected give great relief in rheumatic pains. My ingenious friend, Dr. Alexander of Edinburgh, fays, he has frequently cured very obftinate rheumatic pains by rubbing the part affected with tincture of cantharides. When the common tincture did not succeed, he used it of a double or treble strength. Cupping upon the part affected is likewife often very beneficial, and is greatly preferable to the application of leeches.

THOUGH this difease may not seem to yield to medicines for some time, yet they ought still to be

\* See Appendix, Warm Plafer.

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perfifted in. Perfons who are fubject to frequent returns of the rheumatifu, will often find their account in using medicines, whether they be immediately affected with the difease or nor. The chronic rheumatism is similar to the gout in this respect, that the most proper time for using medicines to extirpate it, is when the patient is most free from the diforder.

To those who can afford the expence, I would recommend the warm baths of Buxton or Matlock in Derbyshire. These have often, to my knowledge, cured very obstinate rhéumatisms, and are always fase either in or out of the fit. When the rheumatism is complicated with scorbutic complaints, which is not feldom the case, the Harrowgate waters and those of Mosffat are proper. They should likewise be drank and used as a warm bath.

THERE are several of our own domestic plants which may be used with advantage in the rheumatism. One of the best is the white mustard. A table-spoonful of the feed of this plant may be taken twice or thrice a-day, in a glass of water or small wine. The water-trefoil is likewife of great use in this complaint. It may be infused in wine or ale, or drank in form of tea. The ground-ivy, camomile, and feveral other bitters, are also beneficial, and may be used in the fame manner. No benefit however is to be expected from these, unless they be taken for a confiderable time. Excellent medicines are often despised in this disease, because they do not perform an immediate cure; whereas nothing would be more certain than their effect, were they duly perfisted in. Want of perfeverance in the use of Ff medi-

medicines is one reafon why chronic difeafes are fo feldom cured.

COLD bathing, efpecially in falt water, often cures the rheumatifin. We would also recommend riding on horfeback, and wearing flannel next the skin. Issues are likewise very proper, especially in chronic cases. If the pain affects the shoulders, an issue may be made in the arm; but if it affects the loins, it should be put in the leg, or thigh.

PERSONS afflicted with the fcurvy are very fubject to rheumatic complaints. The beft medicines in this cafe are bitters and mild purgatives. Thefe may either be taken feparately or together, as the patient inclines. An ounce of Peruvian bark, and half an ounce of rhubarb in powder, may be infufed in a bottle of wine; and one, two, or three wine glaffes of it.taken daily, as fhall be found neceffary for keeping the body gently open. In cafes where the bark itfelf proves fufficiently purgative, the rhubarb may be omitted.

SUCH as are fubject to frequent attacks of the rheumatifm ought to make choice of a dry, warm fituation, to avoid the night-air, wet clothes, and wet feet, as much as possible. Their clothing should be warm, and they should wear flannel next their skin, and make frequent use of the steft-brush.

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# CHAP. XXXIX.

#### OF THE SCURVY.

THIS difeafe prevails chiefly in cold northern countries, especially in low damp fituations, near large marshes, or great quantities of stagnating water. Sedentary people, of a dull melancholy disposition, are most subject to it. It proves often fatal to failors on long voyages, particularly in ships that are not properly ventilated, have many people on board, or where cleanlines is neglected.

It is not neceffary to mention the different fpecies into which this difeafe has been divided, as they differ from one another chiefly in degree. What is called the *land fourvy*, however, is feldom attended with those highly putrid fymptoms which appear in patients who have been long at fea, and which, we prefume, are rather owing to confined air, want of exercife, and the unwholefome food eat by failors on long voyages, than to any fpecific difference in the difeafe.

CAUSES.— The fourvy is occasioned by cold moift air; by the long use of falted or smoke-dried provisions, or any kind of food that is hard of digestion, and affords little nourishment. It may also proceed from the suppression of customary evacuations; as the *menses*, the hæmorrhoidal flux, &cc. It is sometimes owing to a hereditary taint, in which case a very small cause will excite the latent diforder. Grief, fear, and other depressions, have a great tendency both to excite and aggravate this dif-F f 2 ease. eafe. The fame obfervation holds with regard to neglect of cleanlinefs; bad clothing; the want of proper exercife; confined air; unwholefome food; or any difeafe which greatly weakens the body, or vitiates the humours.

SYMPTOMS. This difease may be known by unufual wearinefs, heavinefs, and difficulty of breathing, especially after motion; rottenness of the gums, which are apt to bleed on the flighteft touch; a flinking breath; frequent bleeding at the nofe; crackling of the joints; difficulty of walking; fometimes a fwelling and fometimes a falling away of the legs, on which there are livid, yellow, or violetcoloured spots; the face is generally of a pale or leaden colour. As the difeafe advances, other fymptoms come on; as rottenness of the teeth, hæmorrhages, or discharges of blood from different parts of the body, foul obstinate ulcers, pains in various parts, especially about the breast, dry scaly eruptions all over the body, &c. At last a wasting or hectic fever comes on, and the miferable patient is often carried off by a dysentery, a diarrhœa, a dropsy, the palfy, fainting fits, or a mortification of fome of the bowels.

CURE.—We know no way of curing this difeafe but by purfuing a plan directly opposite to that which brings it on. It proceeds from a vitiated ftate of the humours, occasioned by errors in diet, air, or exercise; and this cannot be removed but by a proper attention to these important articles.

IF the patient has been obliged to breathe a cold, damp, or confined air, he should be removed, as foon

foon as possible, to a dry, open, and moderately warm one. If there is reafon to believe that the difease proceeds from a fedentary life, or depressing passions, as grief, fear, &c. the patient must take daily as much exercife in the open air as he can bear, and his mind fhould be diverted by cheerful com-, pany and other amufements. Nothing has a greater tendency either to prevent, or remove this difeafe, than conftant cheerfulness and good humour. But this, alas! is feldom the lot of perfons'afflicted with the fcurvy; they are generally furly, peevifh, and morose.

WHEN the fcurvy has been brought on by a long use of falted provisions, the proper medicine is a diet confifting chiefly of fresh vegetables; as oranges, apples, lemons, limes, tamarinds, water-creffes, fcurvy-grafs, brook-lime, &c. The use of these with milk, pot-herbs, new bread, and fresh beer or cyder, will feldom fail to remove a fcurvy of this kind, if taken before it be too far advanced; but/to have this effect, they must be persisted in for a confiderable time. When fresh vegetables cannot be obtained, pickled or preferved ones may be ufed; and where these are wanting, recourse must be had to the chymical acids. All the patient's food and drink should in this cafe be sharpened with cream of tartar, elixir of vitriol, vinegar, or the fpirit of fea-falt.

THESE things however will more certainly prevent than cure the fcurvy; for which reason fea-faring people, especially on long voyages, ought to lay in plenty of them. Cabbages, onions, goofeberries, and many other vegetables, may be kept a long time by

Ff 3

by *pickling*, *preferving*, &c. and when thefe fail, the chymical acids, recommended above, which will keep for any length of time, may be ufed. We have reafon to believe, if fhips were well ventilated, had good flore of fruits, greens, cyder, &c. laid in, and if proper regard were paid to cleanlinefs and warmth, that failors would be the moft healthy people in the world, and would feldom fuffer either from the fcurvy or putrid fevers, which are fo fatal to that ufeful fet of men; but it is too much the temper of fuch people to defpife all precaution; they will not think of any calamity till it overtakes them, when it is too late to ward off the blow.

It must indeed be owned, that many of them have it not in their power to make the provision we are speaking of; but in this case it is the duty of their employers to make it for them; and no man ought to engage in a long voyage without having these articles fecured.

I HAVE often feen very extraordinary effects in the land-fcurvy from a milk diet. This preparation of Nature is a mixture of animal and vegetable properties, which of all others is the moft fit for reftoring a decayed conflitution, and removing that particular acrimony of the humours, which feems to conflitute the very effence of the fcurvy, and many other difeafes. But people defpife this wholefome and nourifhing food, becaufe it is cheap, and devour with greedinefs, flefh, and fermented liquors, while milk is only deemed fit for their hogs.

• THE most proper drink in the fourvy is whey or butter-milk. When these cannot be had, found cyder, perry, or spruce-beer, may be used. Wort has likewife

likewife been found to be a proper drink in the fcurvy, and may be ufed at fea, as malt will keep during the longeft voyage. A decoction of the tops of the fpruce fir is likewife proper. It may be drank in the quantity of an Englifh pint twice 'a-day. Tarwater may be ufed for the fame purpofe, or decoctions of any of the mild mucilaginous vegetables; as farfaparilla, marfh-mallow roots, &c. Infufions of the bitter plants, as ground-ivy, the leffer centaury, marfh-trefoil, &c. are likewife beneficial. I have feen the peafants in fome parts of Britain express the juice of the laft-mentioned plant, and drink it with good effect in those foul fcorbutic eruptions with which they are often troubled in the fpring feafon.

HARROWGATE-water is certainly an excellent medicine in the land-fcury. I have often feen patients who had been reduced to the moft deplorable condition by this difeafe, greatly relieved by drinking the fulphur-water, and bathing in it. The chalybeate-water may alfo be ufed with advantage, effecially with a view to brace the ftomach after drinking the fulphur-water, which, though it fharpens the appetite, never fails to weaken the powers of digeftion.

A SLIGHT degree of fcurvy may be carried off by frequently fucking a little of the juice of a bitterorange, or a lemon. When the difeafe affects the gums only, this practice, if continued for fome time, will generally carry it off. We would however recommend the bitter-orange as greatly preferable to lemon; it feems to be as good a medicine, and is not near fo hurtful to the flomach. Perhaps our own forrel may be little inferior to either of them.

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ALL kinds of fallad are good in the feury, and ought to be eat very plentifully, as fpinage, lettuce, parfley, celery, endive, radifh, dandelion, &c. It is amazing to fee how foon frefh vegetables in the fpring cure the brute animals of any feab or foulnefs which is upon their fkins. It is reafonable to fuppofe that their effects would be as great upon the human fpecies, were they ufed in proper quantity for a fufficient length of time.

I HAVE fometimes feen good effects in fcorbutic complaints of very long standing, from the use of a decoction of the roots of water-dock. It is ufually made by boiling a pound of the fresh root in fix English pints of water, till about one-third of it be confumed. The dofe is from half a pint to a whole pint of the decoction every day. But in all the cafes where I have feen it prove beneficial, it was made much ftronger, and drank in larger quantities. The fafeft way, however, is, for the patient to begin with fmall dofes, and increase them both in ftrength and quantity as he finds his ftomach will bear it. It must be used for a confiderable time. I have known fome take it for many months, and have been told of others who had used it for feveral years, before they were fenfible of any benefit, but who, neverthelefs, were cured by it at length.

THE LEPROSY, which was fo common in this country long ago, feems to have been near a-kin to the feurvy. Perhaps its appearing fo feldom now, may be owing to the inhabitants of Britain eating more vegetable food than formerly, living more upon tea and other diluting diet, using lefs falted meat, being more cleanly, better lodged and clothed, &c.

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### OF THE SCROPHULA, &c. 441

&c.—For the cure of this difease we would recommend the same course of diet and medicine as in the scurvy.

#### OF THE SCROPHULA, OR KING'S EVIL.

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THIS difease chiefly affects the glands, especially those of the neck. Children and young persons of a sedentary life are very subject to it. It is one of those difeases which may be removed by proper regimen, but seldom yields to medicine. The inhabitants of cold, damp, marshy countries are most liable to the scrophula.

CAUSES .---- This difease may proceed from a hereditary taint, from a scrophulous nurse, &c. Children who have the misfortune to be born of fickly parents, whofe conftitutions have been greatly injured by the pox, or other chronic difeases, are apt to be affected with the scrophula. It may likewise proceed from fuch difeases as weaken the habit or vitiate the humours, as the fmall-pox, measles, &c. External injuries, as blows, bruifes, and the like, fometimes produce scrophulous ulcers; but we have reason to believe, when this happens, that there has been a predisposition in the habit to this disease. In short, whatever tends to vitiate the humours or relax the folids, paves the way to the fcrophula; as the want of proper exercise, too much heat or cold, confined. air, unwholesome food, bad water, the long use of poor, weak, watery aliments, the neglect of cleanlinefs, &c. Nothing tends more to induce this dif-· eafe

# 442 OF THE SCROPHULA,

eafe in children than allowing them to continue long wet \*.

SYMPTOMS.—At first small knots appear under the chin or behind the ears, which gradually increase in number and fize, till they form one large hard tumour. This often continues for a long time without breaking, and when it does break, it only discharges a thin *fanies*, or watery humour. Other parts of the body are likewise liable to its attack, as the arm-pits, groins, feet, hands, eyes, breasts, &c. Nor are the internal parts exempt from it. It often affects the lungs, liver, or spleen; and I have frequently seen the glands of the mysentery greatly enlarged by it.

THOSE obstinate ulcers which break out upon the feet and hands with fwelling, and little or no redness, are of the fcrophulous kind. They feldom difcharge good matter, and are exceedingly difficult to cure. The white fwellings of the joints feem likewife to be of this kind. They are with difficulty brought to a fuppuration, and when opened they only difcharge a thin ichor. There is not a more general fymptom of the fcrophula than a fwelling of the upper lip and nofe.

REGIMEN.——As this difeafe proceeds, in a great meafure, from relaxation, the diet ought to be generous and nourifhing, but at the fame time light and of eafy digeftion; as well fermented bread, made of found grain, the flefh and broth of young animals, with now and then a glafs of generous wine, or good ale. The air ought to be open, dry, and not

\* The fcrophula, as well as the rickets, is found to prevail in large manufacturing towns, where people live groß, and lead fedentary lives. too cold, and the patient fhould take as much exercife as he can bear. This is of the utmost importance. Children who have enough of exercife are feldom troubled with the scrophula.

MEDICINE. — The vulgar are remarkably credulous with regard to the cure of the fcrophula, many of them believing in the virtue of the royal touch, that of the feventh fon, &c. The truth is, we know but little either of the nature or cure of this disease, and where reason or medicines fail, superstition always comes in their place. Hence it is, that in diseases which are the most difficult to understand, we generally hear of the greatest number of miraculous cures being performed. Here, however, the deception is eafily accounted for. The fcrophula, at a certain period of life, often cures of itself; and, if the patient happens to be touched about this time, the cure is imputed to the touch, and not to Nature, who is really the phyfician. In the fame way the infignificant noftrums of quacks and old women often gain applause when they deferve none.

THERE is nothing more pernicious than the cuftom of plying children in the fcrophula with ftrong purgative medicines. People imagine it proceeds from humours which must be purged off, without confidering, that these purgatives increase the debility, and aggravate the disease. It has indeed been found, that keeping the body gently open, for fome time, especially with fea-water, has a good effect; but this should only be given in gross habits, and in such quantity as to procure one, or at most two stools every day.

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BATHING in the falt water has likewife a very good effect, efpecially in the warm feafon. I have often known a courfe of bathing in falt water, and drinking it in fuch quantities as to keep the body gently open, cure a fcrophula, after many other medicines had been tried in vain. When falt water cannot be obtained, the patient may be bathed in fresh water, and his body kept open by small quantities of falt and water, or fome other mild purgative.

NEXT to cold bathing, and drinking the falt-water, we would recommend the Peruvian bark. The cold bath may be ufed in fummer, and the bark in winter. To an adult half a drachm of the bark in powder may be given, in a glafs of red wine, four or five times aday. Children, and fuch as cannot take it in fubftance, may ufe the decoction made in the following manner:

BOIL an ounce of Peruvian bark and a drachm of Winter's bark, both grofsly powdered, in an English quart of water to a pint: towards the end half an ounce of fliced liquorice-root, and a handful of raifins may be added, which will both render the decoction less difagreeable, and make it take up more of the bark. The liquor must be strained, and two, three, or four table-spoonfuls, according to the age of the patient, given three times a-day.

THE Moffat and Harrowgate waters, especially the latter, are likewise very proper medicines in the fcrophula. They ought not however to be drank in large quantities, but should be taken fo as to keep the body gently open, and must be used for a confiderable time.

THE hemlock may fometimes be used with advantage in the scrophula. Some lay it down as a general

rule,

rule, that the fea-water is most proper before there are any fuppuration or fymptoms of *tabes*; the Peruvian bark, when there are running fores, and a degree of hectic fever; and the hemlock in old inveterate cases, approaching to the fcirrhous or cancerous state. Either the extract or the fresh juice of this plant may be used. The dose must be small at first, and increased gradually as far as the stomach is able to bear it.

EXTERNAL applications are of little ufe. Before the tumour breaks, nothing ought to be applied to it, unlefs a piece of flannel, or fomething to keep it warm. After it breaks, the fore may be dreffed with fome digeftive ointment. What I have always found to answer beft, was the yellow basilicon mixed with about a fixth or eighth part of its weight of red precipitate of mercury. The fore may be dreffed with this twice a-day; and if it be very fungous, and does not digeft well, a larger proportion of the precipitate may be added.

MEDICINES which mitigate this difeafe, though they do not cure it, are not to be defpifed. If the patient can be kept alive by any means till he arrives at the age of puberty, he has a great chance to get well; but if he does not recover at this time, in all probability he never will.

THERE is no malady which parents are fo apt to communicate to their offspring as the fcrophula, for which reafon people ought to beware of marrying into families affected with this difeafe.

For the means of preventing the fcrophula, we must refer the reader to the observations on nursing, at the beginning of the book.

OF

### OF THE ITCH.

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THOUGH this difeafe is commonly communicated by infection, yet it feldom prevails where due regard is paid to cleanlinefs, frefh air, and wholefome diet. It generally appears in form of fmall watery puftules, firft about the wrifts, or between the fingers; afterwards it affects the arms, legs, thighs, &c. Thefe puftules are attended with an intolerable itching, efpecially when the patient is warm a-bed, or fits by the fire. Sometimes indeed the fkin is covered with large blotches or fcabs, and at other times with a white fcurf, or fcaly eruption. This laft is called the dry itch, and is the moft difficult to cure.

THE itch is feldom a dangerous difeafe, unlefs when it is rendered fo by neglecl, or improper treatment. If it be fuffered to continue too long, it may vitiate the whole mafs of humours; and, if it be fuddenly drove in, without proper evacuations, it may occasion fevers, inflammations of the viscera, or other internal diforders.

THE beft medicine yet known for the itch is fulphur, which ought to be ufed both externally and internally. The parts moft affected may be rubbed with an ointment made of the flowers of fulphur, two ounces; crude fal ammoniac finely powdered two drachms; hog's lard, or butter, four ounces. If a fcruple or half a drachm of the effence of lemon be added, it will entirely take away the difagreeable fmell. About the bulk of a nutmeg of this may be rubbed upon the extremities, at bed-time, twice or thrice a-week. It is feldom neceffary to rub the whole body;

#### OF THE ITCH.

body; but when it is, it ought not to be done all at once, but by turns, as it is dangerous to flop too many pores at the fame time.

BEFORE the patient begins to use the ointment, he ought, if he be of a full habit, to bleed or take a purge or two. It will likewise be proper, during the use of it, to take every night and morning as much of the flower of brimstone and cream of tartar, in a little treacle or new milk, as will keep the body gently open. He should beware of catching cold, should wear more clothes than usual, and take every thing warm. The same clothes, the linen excepted, ought to be worn all the time of using the ointment; and sunder the discase, are not to be used again, unless they have been sum to be used again, unless they have been fumigated with brimstone, and thoroughly cleaned, otherwise they will communicate the infection anew \*.

I NEVER knew brimftone, when used as directed above, fail to cure the itch; and I have reason to believe, that, if duly persisted in, it never will fail; but if it be only used once or twice, and cleanliness neglected, it is no wonder if the diforder returns. The quantity of ointment mentioned above will gene+ rally be sufficient for the cure of one person; but, if any symptoms of the difease should appear again, the

\* Sir John Pringle obferves that, though this difeafe may feem trifling, there is no one in the army that is more troublefome to cure, as the infection often lurks in clothes, &c. and breaks out a fecond, or even a third time. The fame inconveniency occurs in private families, unlefs particular regard is paid to the changing or cleaning of their clothes, which last is by no means an cafy operation.

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medicine may be repeated. It is both more fafe and efficacious when perfifted in for a confiderable time, than when a large quantity is applied at once. As most people diflike the fmell of fulphur, they may use, in its place, the powder of white hellebore root, made up into an ointment, in the fame manner, which will feldom fail to cure the itch.

PEOPLE ought to be extremely cautious left they take other eruptions for the itch; as the ftoppage of thefe may be attended with fatal confequences. Many of the eruptive diforders to which children are liable, have a near refemblance to this difeafe; and I have often known infants killed by being rubbed with greafy ointments that made thefe eruptions ftrike fuddenly in, which Nature had thrown out to preferve the patient's life, or prevent fome other malady.

Much milchief is likewife done by the ule of mercury in this difeafe. Some perfons are fo fool-hardy as to walk the parts affected with a ftrong folution of the corrofive fublimate. Others ule the mercurial pintment, without taking the leaft care either to avoid cold, keep the body open, or obferve a proper regimen. The confequences of fuch conduct may be eafily gueffed. I have known even the mercurial girdles produce tragical effects, and would advife every perfon, as he values his health, to beware how he ules them. Mercury ought never to be uled as a medicine without the greateft care. Ignorant people look upon thefe girdles as a kind of charm, without confidering that the mercury enters the body.

It is not to be told what mifchief is done by using mercurial ointment for curing the itch and killing vermin; yet it is unneceffary for either: The former

#### OF THE ASTHMA.

mer may be always more certainly cured by fulphur, and the latter will never be found where due regard is paid to cleanlinefs.

THOSE who would avoid this deteftable difease ought to beware of infected perfons, to use wholefome food, and to study universal cleanlines \*.

### CHAP. XL. OF THE ASTHMA.

HE afthma is a difeafe of the lungs, which feldom admits of a cure. Perfons in the decline of life are most liable to it. It is diffinguished into the moist and dry, or humoural and nervous. The former is attended with expectoration or spitting; but in the latter the patient feldom spits, unless fometimes a little tough phlegm by the mere force of coughing.

CAUSES.—The afthma is fometimes hereditary. It may likewife proceed from a bad formation of the breaft; the fumes of metals or minerals taken into the lungs; violent exercife, efpecially running; the obftruction of cuftomary evacuations, as the menfes, hæmorrhoids, &c. the fudden retroceffion

\* The itch is now by cleanline's banished from every genteel family in Britain. It fill however prevails among the poorer fort of peafants in Scotland, and among the manufacturers in England. These are not only sufficient to keep the feeds of the difease alive, bat to foread the infection among others. It were to be wished that some effectual method could be devised for extirpating it altogether. Several country clergymen have told me, that by getting fuch as were infected cured, and ftrongly recommending an attention to cleanline's, they have banished the itch entirely out of their parishes. Why might not others do the fame ?

of

of the gout, or striking in of eruptions, as the fmallpox, measles, &c. violent passions of the mind, as sudden fear, or surprise. In a word, the disease may proceed from any cause that either impedes the circulation of the blood through the lungs, or prevents their being duly expanded by the air.

SYMPTOMS.—An afthma is known by a quick laborious breathing, which is generally performed with a kind of wheezing noife. Sometimes the difficulty of breathing is fo great that the patient is obliged to keep in an erect pofture, otherwife he is in danger of being fuffocated. A fit or paroxyfm of the afthma generally happens after a perfon has been exposed to cold eafterly winds, or has been abroad in thick foggy weather, or has got wet, or continued long in a damp place under ground, &c.

THE paroxylm is commonly ulhered in with liftleffnefs, want of fleep, hoarlenefs, a cough, belching of wind, a fenfe of heavinefs about the breaft, and difficulty of breathing. To thefe fucceed heat, fever, pain of the head, ficknefs and naufea, great opprefiion of the breaft, palpitation of the heart a weak, and fometimes intermitting pulfe, an involuntary flow of tears, bilious vomitings, &c. All the fymptoms grow worfe towards night; the patient is eafier when up, than in bed, and is very defirous of cool air.

REGIMEN. — The food ought to be light, and of eafy digeftion. Boiled meats are to be preferred to roafted, and the flefh of young animals to that of old. All windy food, and whatever is apt to fwell in the ftomach, is to be avoided. Light puddings, white broths, and ripe fruits baked, boiled, or roafted, are proper. Strong liquors of all kinds, efpecially

especially malt-liquor, are hurtful. The patient fhould eat a very light fupper, or rather none at all, and fhould never fuffer himfelf to be long coffive. His clothing fhould be warm, especially in the winterfeafon. As all diforders of the breast are much relieved by keeping the feet warm, and promoting the perspiration; a flannel shirt or waistcoat, and thick shoes; will be of singular service.

But nothing is of fo great importance in the afthma as pure and moderately warm air. Afthmatic people can feldom bear either the close heavy air of a large town, or the fharp, keen atmosphere of a bleak hilly country; a medium therefore between these is to be chosen: The air near a large town is often better than at a diftance, provided the patient be removed fo far as not to be affected by the imoke. Some afthmatic patients indeed breath eafier in town than in the country; but this is feldom the cafe, especially in. towns where much coal is burnt. Afthmatic perfons who are obliged to be in town all day, ought, at least, to fleep out of it: Even this will often prove of great fervice. Those who can afford it ought to travel into a warmer climate. Many afthmatic perfons who canhot live in Britain; enjoy very good health in the fouth of France, Portugal, Spain, or Italy.

EXERCISE is likewife of very great importance in the afthma, as it promotes the digeftion, preparation of the blood, &c. The blood of afthmatic perfons is feldom duly prepared, owing to the proper action of the lungs being impeded. For this reafon fuch people ought daily to take as much exercise, either on foot, horfeback, or in a carriage, as they can bear.

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MEDICINE. ---- Almost all that can be done by medicine in this difeafe, is to relieve the patient when feized with a violent fit. This indeed requires the greatest expedition, as the disease often proves fuddenly fatal. In the paroxyfm or fit, the body is generally bound; a purging glyfter, with a folution of afafætida, ought therefore to be administered, and if there be occasion, it may be repeated two or three times. The patient's feet and legs ought to be immerfed in warm water, and afterwards rubbed with a warm hand, or dry cloth. Bleeding, unless extreme weaknefs or old age should forbid it, is highly proper. If there be a violent spafm about the breast or stomach, warm fomentations, or bladders filled with warm milk and water, may be applied to the part affected, and warm cataplaims to the foles of the feet. The patient must drink freely of diluting liquors, and may take a tea-spoonful of the tincture of caftor and of faffron mixed together, in a cup of valerian-tea, twice or thrice a-day. Sometimes a vomit has a very good effect, and fnatches the patient, as it were, from the jaws of death. This however will be more fafe after other evacuations have been premised. A very strong infusion of roasted coffee is faid to give eafe in an afthmatic paroxyfm.

In the moift afthma, fuch things as promote expectoration or fpitting ought to be ufed; as the fyrup of fquills, gum ammoniac, and fuch like. A common fpoonful of the fyrup of oxymel of fquills, mixed with an equal quantity of cinnamon-water, may be taken three or four times through the day, and four or five pills, made of equal equal parts of alafœtida and gum-ammoniac, at bed-time \*.

For the convultive or nervous afthma, antifpafmodics and bracers are the moft proper medicines. The patient may take a tea-fpoonful of the paregoric elixir twice a-day. The Peruvian bark is fometimes found to be of use in this cafe. It may be taken in fubftance, or infused in wine. In short, every thing that braces the nerves, or takes off spasm, may be of use in a nervous afthma. It is often relieved by the use of affes milk; I have likewise known cows milk drank warm in the morning have a very good effect in this cafe.

IN every fpecies of afthma, fetons and iffues have a good effect; they may either be put in the back or fide, and fhould never be allowed to dry up. We fhall here, once for all, obferve, that not only in the afthma, but in most chronic difeases, iffues are extremely proper. They are both a fase and efficacious remedy; and though they do not always cure the difease, yet they will often prolong the patient's life.

\* After copious evacuations, large dofes of æther have been found very efficacious in removing a fit of the afthma. I have likewife known the following mixture produce very happy effects: To four or five ounces of the folution of gum-ammoniac add two ounces of fimple cinnamon-water, the fame quantity of balfamic fyrup, and half an ounce of the paregoric elixir. Of this two mble-fpoonfuls may be taken every three hours.

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# CHAP. XLI.

# OF THE APOPLEXY.

HE apoplexy is a fudden lofs of fenfe and motion, wherein the patient is to all appearance dead; the heart and lungs however ftill continue to move. Though this difeafe proves often fatal, yet it may fometimes be removed by proper care. It chiefly attacks fedentary perfons of a grofs habit, who ufe a rich and plentiful diet, and indulge in ftrong liquors. People in the decline of life are moft fubject to the apoplexy. It prevails moft in winter, efpecially in rainy feafons, and very low ftates of the barometer.

CAUSES.——The immediate caufe of an apoplexy is a compression of the brain, occasioned by an excess of blood, or a collection of watery humours. The former is called a *fanguine*, and the latter a *ferons apoplexy*. It may be occasioned by any thing that increases the circulation towards the brain, or prevents the return of the blood from the head; as intense fludy; violent passions\*; viewing objects for a long time obliquely; wearing any thing too tight about the neck; a rich and luxurious diet;

\* I knew a woman who in a violent fit of anger was feized with a fanguine apoplexy. She at first complained of extreme pain, as if daggers had been thruft through her bead, as the expressed it. Afterwards the became comatofe, her pulfe funk very low, and was exceeding flow. By bleeding, bliftering, and other evacuations, the was kept alive for about a forthight When her head was opened, a large quantity of extravastated blood was found in the left ventricle of the brain.

fuppression

# OF THE APOPLEXY.

fupprefion of urine; fuffering the body to cool fuddenly after having been greatly heated; continuing long in a warm bath; the exceffive ufe of fpiceries, or high-feafoned food; excefs of venery; the fudden ftriking in of any eruption; fuffering iffues, fetons, &c. fuddenly to dry up, or the ftoppage of any cuftomary evacuation; a mercurial falivation pufhed too far, or fuddenly checked by cold; wounds or bruifes on the head; long expofure to exceffive cold; poifonous exhalations, &c.

SYMPTOMS, and method of cure.—The usual forerunners of an apoplexy are giddines, pain and fwimming of the head; loss of memory; drowfines; noise in the ears; the night-mare; a fpontaneous flux of tears, and laborious respiration. When perions of an apoplectic make observe these symptoms, they have reason to fear the approach of a fit, and should endeavour to prevent it by bleeding, a slender diet, and opening medicines.

In the fanguine apoplexy, if the patient does not die fuddenly, the countenance appears florid, the face is fwelled or puffed up, and the blood-veffels, efpecially about the neck and temples, are turgid; the pulfe beats ftrong; the eyes are prominent and fixed, and the breathing is difficult, and performed with a fnorting noife. The excrements and urineare often voided fpontaneoufly, and the patient is fometimes feized with vomiting.

In this species of apoplexy every method must be taken to lessen the force of the circulation towards the head. The patient should be kept perfectly easy and cool. His head should be raifed pretty high, and his feet suffered to hang down. His clothes G g 4 ought

#### 456 OF THE APOPLEXY.

ought to be loofened, efpecially about the neck, and fresh air admitted into his chamber. His gatters should be tied pretty tight, by which means the motion of the blood from the lower extremities will be retarded. As foon as the patient is placed in a proper posture, he should be bled freely in the neck or arm, and, if there be occasion, the operation may be repeated in two or three hours. A laxative clyster, with plenty of fweet oil, or fresh butter, and a spoonful or two of common falt in it, may be administered every two hours; and blisteringplasters applied betwixt the shoulders, and to the calves of the legs.

As foon as the fymptoms are a little abated, and the patient is able to fwallow, he ought to drink freely of fome diluting opening liquor; as a decoction of tamarinds and liquorice, cream-tartar-whey, or common whey with cream of tartar diffolved in it. Or he may take any cooling purge, as Glauber's falts, manna diffolved in an infufion of fenna, or the like. All fpirits and other ftrong liquors are to be avoided. Even volatile falts held to the nofe do mifchief. Vomits, for the fame reafon, ought not to be given, nor any thing that may increafe the motion of the blood towards the head.

IN the ferous apoplexy, the fymptoms are nearly the fame, only the pulfe is not fo ftrong, the countenance is lefs florid, and the breathing lefs difficult. Bleeding is not fo neceffary here, as in the former cafe. It may however generally be performed once with fafety and advantage, but fhould not be repeated. The patient fhould be placed in the fame posture as directed above, and should have bliftering-. plasters

# OF THE APOPLEXY.

plasters applied, and receive opening clysters in the fame manner. Purges here are likewife neceffary, and the patient may drink strong balm-tea. If he be inclined to sweat, it ought to be promoted by drinking small wine-whey, or an infusion of carduus benedictus. A plentiful sweat kept up for a confiderable time, has often carried off a ferous apoplexy.

WHEN apoplectic fymptoms proceed from opium, or other narcotic fubftances taken into the ftomach, vomits are neceffary. The patient is generally relieved as foon as he has difcharged the poifon in this way.

PERSONS of an apoplectic make, or those who have been attacked by it, ought to use a very spare and slender diet, avoiding all strong liquors, spiceries, and high-feasoned food. They ought likewife to guard against all violent passions, and to avoid the extremes of heat and cold. The head should be shaved, and daily washed with cold water. The feet ought to be kept warm, and never fuffered to continue long wet. The body must be kept open either by food or medicine, and a little blood may be let every fpring and fall. Exercise should by no means be neglected; but it ought to be taken in moderation. Nothing has a more happy effect in preventing an apoplexy than perpetual iffues or fetons; great care however must be taken not to fuffer them to dry up, without opening others in their flead. Apoplectic perfons ought never to go to reft with a full ftomach, or to lie with their heads low, or wear any thing too tight about their necks.

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# CHAP.' XLII.

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### OF COSTIVENESS, AND OTHER AFFECTIONS OF THE STOMACH AND BOWELS.

W E do not here mean to treat of those aftrictions of the bowels which are the symptoms of diseafes, as of the cholic, the iliac passion, &c. but only to take notice of that infrequency of stools which sometimes happens, and which in some particular constitutions may occasion diseafes.

COSTIVENESS may proceed from drinking rough red wines, or other aftringent liquors; too much exercife, efpecially on horfeback; It may likewife proceed from a long ufe of cold infipid food, which does not fufficiently frimulate the inteffines. Sometimes it is owing to the bile not defcending to the inteffines, as in the jaundice; and at other times it proceeds from difeafes of the inteffines themfelves, as a palfy, fpafms, torpor, tumors, a cold dry ftate of the inteffines, &c.

Excessive coftiveness is apt to occasion pains of the head, vomiting, colics, and other complaints of the bowels. It is peculiarly hurtful to hypochondriac and hysteric perfons, as it generates wind and other grievous symptoms. Some people however can bear costiveness to a great degree. I know perfons who enjoy pretty good health, yet do not go to sto above once a-week, and others not above once a-fortnight.

Persons

PERSONS who are generally coffive fhould live upon a moiftening and laxative diet, as roafted or boiled apples, pears, flewed prunes, raifins, gruels with currants, butter, honey, fugar, and fuch like. Broths with fpinage, leeks, and other foft pot-herbs, are likewife proper. Rye-bread, or that which is made of a mixture of wheat and rye together, ought to be eat. No perfon troubled with coffivenefs fhould eat white bread alone, efpecially that which is made of fine flour. The beft bread for keeping the body foluble is what in fome parts of England they call *meflin*. It is made of a mixture of wheat and rye, and is very agreeable to thofe who are accuftomed to it.

COSTIVENESS is increased by keeping the body too warm, and by every thing that promotes the perspiration; as wearing flannel, lying too long a-bed, &c. Intense thought, and a sedentary life, are likewise hurtful. All the secretions and excretions are promoted by moderate exercise without doors, and by a gay, cheerful, sprightly temper of mind.

THE drink should be of an opening quality. All ardent spirits, austere and astringent wines, as port, claret, &c. ought to be avoided. Malt-liquor that is fine, and of a moderate strength, is very proper. Butter-milk, whey, and other watery liquors, are likewife proper, and may be drank in turns, as the patient's inclination directs.

THOSE who are troubled with coffiveness, ought, if possible, to remedy it by diet, as the constant use of medicines for that purpose is attended with many incon-

#### 460. OF COSTIVENESS; &c.

inconveniencies, and often with bad confequences \*. I never knew any one get into a habit of taking medicine for keeping the body open, who could leave it off. In time the cuftom becomes neceffary, and generally ends in a total relaxation of the bowels, indigeftion, loss of appetite, washing of the strength, and death.

WHEN the body cannot be kept open without medicine, we would recommend gentle dofes of rhubarb to be taken twice or thrice a-week. This is not near fo injurious to the flomach as aloes, jalap, or the other draftic purgatives fo much in ufe. Infufions of fennal and manna may likewife be taken,

\* The learned Dr. Arbuthnot advifes those who are troubled with cofliveness to use animal oils, as fresh butter, cream, marrow, fat broths, especially those made of the internal parts of animals, as the liver, heart, midriff; &c. He likewise recommends the expressed oils of mild vegetables, as olives, almonds, passaches, and the fruits themselves; all oily and mild fruits, as figs; decostions of mealy vegetables; these lubricate the intestines; fome faponaceous substances which flimulate gently, as honcy, hydromel, or boiled honey and water, unrefined fugar, &c.

The Doctor obferves, that fuch lenitive fubflances are proper for perfons of dry atrabilarian conflitutions, who are fubject to affriction of the belly, and the piles, and will operate when fronger medicinal fubflances are fometimes ineffectual; but that fuch lenitive diet hurts thofe whofe bowels are weak and lax. He likewife obferves, that all watery fubflances are lenitive, and that even common water, whey, four milk, and butter milk have that effect; — That new milk, efpecially affes milk, flimulates fill more when it fours on the flomach; and that whey turned four will purge flrongly; — That moft garden fruits are likewife laxative; and that fome of them, as grapes, will throw fuch as take them immoderately, into a cholera morbus, or incurable diarrhœa.

Or

# WANT OF APPETITE.

or half an ounce of foluble tartar diffolved in watergruel. About the fize of a nutmeg of lenitive electuary taken twice or thrice a-day, generally answers the purpose very well.

### WANT OF APPETITE: Oa

THIS may proceed from a foul ftomach; indigeftion; the want of free air and exercife; grief; fear; anxiety, or any of the depreffing paffions; exceffive heat; the ufe of ftrong broths, fat meats, or any thing that palls the appetite, or is hard of digeftion; the immoderate ufe of ftrong liquors, tea, tobacco, opium, &c.

THE patient ought, if possible, to make choice of an open dry air; to take exercise daily on horseback or in a carriage; to rise betimes; and to avoid all intense thought. He should use a diet of easy digestion; and should avoid excessive heat and great fatigue.

• IF want of appetite proceeds from errors in diet, or any other part of the patient's regimen, it ought to be changed. If naufea and reachings fhew that the ftomach is loaded with crudities, a vomit will be of fervice. After this a gentle purge or two of rhubarb, or of any of the bitter purging falts, may be taken. The patient ought next to use fome of the, ftomachic bitters infused in wine. Though gentle, evacuations be neceffary, yet ftrong purges and, vomits are to be avoided, as they weaken the fto-mach, and hurt digestion.

-ELIXIR of vitriol is an excellent medicine in moft cases of indigestion, weakness of the stomach, or want

want of appetite: Twenty or thirty drops of it may be taken twice of thrice a-day in a glafs of wine or water: It may likewife be mixed with the tincture of the bark, one drachm of the former to an ounce of the latter; and two tea-fpoonfuls of it taken in wine or water; as above:

THE chalybeate waters, if drank in moderation, are generally of confiderable fervice in this cafe. The falt water has likewife good effects; but it muft not be ufed too freely. The waters of Harrowgate; Scarborough, Moffat, and moft other Spas in Britain, may be ufed with advantage. We would advife all who are afflicted with indigeftion and want of appetite, to repair to thefe places of public rendezvous. The very change of air, and the cheerful company; will be of fervice; not to mention the exercife, diffipation, amufements, &c.

# OF THE HEART-BURN.

WHAT is commonly called the *beart-burn*; is not a difeafe of that organ, but an uneafy fenfation of heat or acrimony about the pit of the ftomach, which is fometimes attended with anxiety, naufea, and vomiting.

It may proceed from debility of the ftomach, indigeftion, bile, the abounding of an acid in the ftomach, &c. Perfons who are liable to this complaint ought to avoid ftale liquors, acids, windy or greafy aliments, and fhould never use violent exercise foon after a plentiful meal. I know many perfons who never fail to have the heart-burn, if they ride foon after dinner, provided they have drank ale, wine, or

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## OF THE HEART-BURN.

any fermented liquor; but are never troubled with it when they have drank rum or brandy and water without any fugar or acid.

WHEN the heart-burn proceeds from debility of the ftomach or indigeftion, the patient ought to take a dofe or two of rhubarb; afterwards he may ufe infufions of the Peruvian bark, or any other of the ftomachic bitters, in wine or brandy. Exercife in the open air will likewife be of ufe, and every thing that promotes digeftion.

WHEN bilious humours occasion the heart-burn, a tea-fpoonful of the fweet spirit of nitre in a glass of water, or a cup of tea, will generally give ease. If it proceeds from the use of greafy aliments, a dram of brandy or rum may be taken.

IF acidity or fourness of the ftomach occasions the heart-burn, absorbents are the proper medicines. In . this cafe an ounce of powdered chalk, half an ounce of fine fugar, and a quarter of an ounce of gumarabic, may be mixed in an English quart of water, and a tea-cupful of it taken as often as is necessary. Such as do not chuse chalk may take a tea-spoonful of prepared oyfter-shells, or of the powder called cabs-eyes, in a glafs of cinnamon or peppermintwater. But the safest and best absorbent is magnesia alba. This not only acts as an abforbent, but likewife as a purgative; whereas chalk, and other ab- . forbents of that kind, are apt to lie in the inteffines, at and occasion obstructions. This powder is not difagreeable, and may be taken in a cup of tea; or a' glass of mint-water. A large tea-spoonful is the ufual dofe; but it may be taken in a much greaters: quantity when there is occasion, ( ... These things are)

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now generally made up into lozenges for the conveniency of being carried in the pocket, and taken at pleafure.

IF wind be the caufe of this complaint, the moft proper medicines are those called carminatives; as annifeeds, juniper-berries, ginger, canella alba, cardamom seeds, &c. These may either be chewed, or infused in wine, brandy, or other spirits. One of the fafest medicines of this kind is the tincture made by infusing an ounce of rhubarb, and a quarter of an ounce of the lesser cardamon seeds, in an English pint of brandy. After this has digested for two or three days, it ought to be strained, and four ounces of white sugar-candy added to it. It must stand to digest a second time till the sugar be dissolved. A table-spoonful of it may be taken occasionally for a dofe.

I HAVE frequently known the heart-burn cured, particularly in pregnant women, by chewing green tea.

### C H A P. XLIII.

### OF NERVOUS DISEASES.

O F all difeafes incident to mankind, those of the nervous kind are the most complicated and difficult to cure. A volume would not be fufficient to point out their various appearances. They imitate almost every difease; and are feldom alike in two different perfons, or even in the same perfon at different times. Proteus-like, they are continually 4

changing fhape; and upon every fresh attack, the patient thinks he feels symptoms which he never experienced before. Nor do they only affect the body; the mind likewise suffers, and is often thereby rendered extremely weak and peevish. The low spirits, timorous field, melancholy, and fickleness of temper, which generally attend nervous diforders, induce many to believe, that they are entirely difeases of the mind; but this change of temper is rather a consequence, than the cause of nervous difeases.

CAUSES.— Every thing that tends to relax or weaken the body, difpofes it to nervous difeafes, as indolence, exceffive venery, drinking too much tea, or other weak watery liquors, frequent bleeding, purging, vomiting, &c. Whatever hurts the digeftion, or prevents the proper affimilation of the food, has likewife this effect; as long fafting, excefs in eating or drinking, the ufe of windy, crude, or unwholefome aliments, an unfavourable pofture of the body, &c.

NERVOUS diforders often proceed from intenfe application to fludy. Indeed few fludious perfons are entirely free from them. Nor is this at all to be wondered at; intenfe thinking not only preys upon the fpirits, but prevents the perfon from taking proper exercife, by which means the digeftion' is impaired, the nourifhment prevented, the folids relaxed, and the whole mafs of humours vitiated. Grief and difappointment likewife produce the fame effects. I have known more nervous patients, who dated the commencement of their diforders from the lofs of a hufband, a favourite child, or from fome difappointment in life, than from any other caufe. In a word, H h whatever

whatever weakens the body, or depresses the spirits, may occasion nervous diforders, as unwholesome air, want of sleep, great fatigue, disagreeable apprehensions, anxiety, vexation, &c.

SYMPTOMS.----We shall only mention fome of the most general fymptoms of these diforders, as it would be both an useless and an endless task to enumerate the whole. They generally begin with windy inflations or diffentions of the ftomach and inteftines; the appetite and digeftion are usually bad; yet fometimes there is an uncommon craving for food, and a quick digeftion. The food often turns four on the ftomach; and the patient is troubled with vomiting of clear water, tough phlegm, or a blackifh coloured liquor refembling the grounds of coffee. Excruciating pains are often felt about the navel, attended with a rumbling or murmuring noife in the bowels. The body is fometimes loofe, but more commonly bound, which occasions a retention of wind and great uneafinefs.

THE urine is fometimes in finall quantity, at other times very copious and quite clear. There is a great ftraitnefs of the breaft, with difficulty of breathing; violent palpitations of the heart; fudden flufhings of heat in various parts of the body; at other times a fenfe of cold, as if water were poured on them; flying pains in the arms and limbs; pains in the back and belly, refembling those occasioned by gravel; the pulse very variable, fometimes uncommonly flow, and at other times very quick; yawning, the hiccup, frequent fighing, and a fense of fuffocation, as if from a ball or lump in the throat; alternate fits of crying and convulsive laughing; the fleep is unfound and feldom feldom refreshing; and the patient is often troubled with the night-mare.

As the difeafe increafes, the patient is molefted with head-achs, cramps, and fixed pains in various parts of the body; the eyes are clouded, and often affected with pain and drynefs; there is a noife in the ears, and often a dulnefs of hearing; in fhort, the whole animal functions are impaired. The mind is difturbed on the moft trivial occafions, and is hurried into the moft perverfe commotions, inquietudes, terror, fadnefs, anger, diffidence, &c. The patient is apt to entertain wild imaginations, and extravagant fancies; the memory becomes weak, and the judgment fails.

NOTHING is more characteristic of this difease than a constant dread of death. This renders those unhappy perfons who labour under it peevish, fickle, impatient, and apt to run from one physician to another; which is one reason why they feldom reap any benefit from medicine, as they have not sufficient resolution to persist in any one course till it has time to produce its proper effects. They are likewise apt to imagine that they labour under diseases from which they are quite free, and are very angry if any one attempts to set them right, or laugh them out of their ridiculous notions.

REGIMEN.—Perfons afflicted with nervous difeafes ought never to fast long. Their food should be folid and nourishing, but of easy digestion. Fat meats, and heavy fauces, are hurtful. All excess should be carefully avoided. They ought never to eat more at a time than they can easily digest: but if they feel themselves weak and faint between meals, H h 2 they

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they ought to eat a bit of bread, and drink a glafs of wine. Heavy fuppers are to be avoided. Though wine in excess enfeebles the body, and impairs the faculties of the mind, yet taken in moderation, it ftrengthens the stomach, and promotes digestion. Wine and water is a very proper drink at meals: but if wine fours on the stomach, or the patient is much. troubled with wind, brandy and water will answer better. Every thing that is windy, or hard of digeftion, must be avoided. All weak and warm liquors are hurtful, as tea, coffee, punch, &c. People may find a temporary relief in the use of these, but they always increase the malady, as they weaken the ftomach and hurt digeftion. Above all things, drams are to be avoided. Whatever immediate ease the patient may feel from the use of ardent spirits, they are fure to aggravate the malady, and prove certain poifons at laft. These cautions are the more necessary, as most nervous people are peculiarly fond of tea and ardent spirits; to the use of which many of them fall victims.

EXERCISE in nervous diforders is fuperior to all medicines. Riding on horfeback is generally efteemed the beft, as it gives motion to the whole body, without fatiguing it. I have known fome patients, however, with whom walking agreed better, and others who were most benefited by riding in a carriage. Every one ought to use that which he finds most beneficial. Long fea-voyages have an excellent effect; and to those who can afford to take them, and have fufficient resolution, we would by all means recommend this course. Even change of place, and the fight of new objects, by diverting the mind, have a great

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great tendency to remove these complaints. For this reason a long journey, or a voyage, is of much more advantage than riding short journeys near home.

A cool and dry air is proper, as it braces and invigorates the whole body. Few things tend more to relax and enervate than hot air, efpecially that which is rendered to by great fires, or floves in finall apartments. But when the stomach or bowels are weak, the body ought to be well guarded againft cold, especially in winter, by wearing a thin flannel waistcoat next the skin. This will keep up an equal perspiration, and defend the alimentary canal from many impreffions to which it would otherwife be fubject, upon every fudden change from warm to cold weather. Rubbing the body frequently with a flefhbrush, or a coarse linen cloth, is likewise beneficial, as it promotes the circulation, perspiration, &c. Perfons who have weak nerves ought to rife early, and take exercife before breakfast, as lying too long a-bed cannot fail to relax the folids. They ought likewise to be diverted, and to be kept as easy and cheerful as possible. There is not any thing which hurts the nervous fystem, or weakens the digestive powers, more than fear, grief, or anxiety.

MEDICINES. — Though nervous difeafes are feldom radically cured, yet their fymptoms may fornetimes be alleviated, and the patient's life rendered, at leaft, more comfortable, by proper medicines.

WHEN the patient is coftive, he ought to take 1 little rhubarb, or fome other mild purgative, and hould never fuffer his body to be long bound. All frong and violent purgatives are however to be H h 3 avoided,

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avoided, as aloes, jalap, &c. I have generally feen an infufion of fenna and rhubarb in brandy anfwer very well. This may be made of any ftrength, and taken in fuch quantity as the patient finds neceffary. When digeftion is bad, or the ftomach relaxed and weak, the following infufion of Peruvian bark and other bitters may be ufed with advantage:

TAKE of Peruvian bark an ounce, gentian-root, orange-peel and coriander-feed, of each half an ounce; let these ingredients be all bruised in a mortar, and infused in a bottle of brandy or whiskey, for the space of five or six days. A table-spoonful of the strained liquor may be taken in half a glass of water an hour before breaksaft, dinner, and supper.

FEW things tend more to ftrengthen the nervous fyftem than cold bathing. This practice, if duly perfifted in, will produce very extraordinary effects; but when the liver or other *vifcera* are obftructed, or otherwife unfound, the cold bath is improper. It is therefore to be ufed with very great eaution. The moft proper feafons for it are fummer and autumn. It will be fufficient, efpecially for perfons of a fpare habit, to go into the cold bath three or four times a-week. If the patient be weakened by it, or feels chilly for a long time after coming out, it is improper.

IN patients afflicted with wind, I have always obferved the greateft benefit from the acid elixir of vitriol. It may be taken in the quantity of fifteen, twenty, or thirty drops, twice or thrice 7-day in a glafs of water. This both expels wind, ftrengthens the ftomach, and promotes digeftion.

OPIATES

#### OF, MELANCHOLY.

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OPIATES are generally extolled in these maladies; but as they only palliate the symptoms, and generally afterwards increase the disease, we would advise people to be extremely sparing in the use of them, left habit render them at last absolutely necessary.

IT would be an eafy matter to enumerate many medicines which have been extolled for relieving nervous diforders; but whoever wifhes for a thorough cure muft expect it from regimen alone; we fhall therefore omit mentioning more medicines, and again recommend the ftricteft attention to DIET, AIR, EXERCISE, and AMUSEMENTS.

#### OF MELANCHOLY.

MELANCHOLY is that flate of alienation or weaknefs of mind which renders people incapable of enjoying the pleafures, or performing the duties of life. It is a degree of infanity, and often terminates in abfolute madnefs.

CAUSES.—It may proceed from a hereditary difpolition; intenfe thinking, efpecially where the mind is long occupied about one object; violent paffions or affections of the mind, as love, fear, joy, grief, over-weening pride, and fuch like. It may alfo be occafioned by exceffive venery; narcotic or fupefactive poifons; a fedentary life; folitude; the fuppreffion of cuftomary evacuations; acute fevers, or other difeafes. Violent anger will change melancholy into madnefs; and exceffive cold, efpecially of the lower extremities, will force the blood into the brain, and produce all the fymptoms of madnefs. H h 4 It may likewife proceed from the ufe of aliment that is hard of digeflion, or which cannot be eafily affimilated; from a callous ftate of the integuments of the brain, or a drynefs of the brain itfelf. To all which we may add gloomy or miftaken notions of religion.

SYMPTOMS. ---- When perfons begin to be melancholy, they are timorous; watchful; fond of folitude; fretful; fickle; captious and inquifitive; folicitous about trifles; fometimes niggardly, and at other times prodigal. The body is generally bound; the urine thin, and in fmall quantity; the ftomach and bowels inflated with wind; the complexion pale; the pulfe flow and weak. The functions of the mind are also greatly perverted, in so much that the patient often imagines himfelf dead, or changed into fome other animal. Some have imagined their bodies were made of glass, or other brittle substances, and were afraid to move, left they should be broken to pieces. The unhappy patient, in this cafe, unlefs carefully watched, is apt to put an end to his own miserable life.

WHEN the difease is owing to an obstruction of customary evacuations, or any bodily diforder, it is easier cured than when it proceeds from affections of the mind, or an hereditary taint. A discharge of blood from the nose, looseness, scabby eruptions, the bleeding piles, or the *menses*, sometimes carry off this difease.

REGIMEN.——The diet fhould confift chiefly of vegetables of a cooling and opening quality. Animal food, especially falted or smoke-dried fish or flesh, ought to be avoided. All kinds of shell-fish are

#### OF MELANCHOLY.

are bad. Aliments prepared with onions, garlic, or any thing that generates thick blood, are likewife improper. All kind of fruits that are wholefome may be eat with advantage. Boerhaave gives an inftance of a patient who, by a long ufe of whey, water, and garden-fruit, recovered, after having evacuated a great quantity of black-coloured matter.

STRONG liquors of every kind ought to be avoided as poifon. The moft proper drink is water, whey, or very finall beer. Tea and coffee are improper. If honey agrees with the patient, it may be eat freely, or his drink may be fweetened with it. Infufions of balm-leaves, penny-royal, the roots of wild valerian, or the flowers of the lime-tree may be drank freely, either by themfelves, or fweetened with honey, as the patient fhall chufe.

THE patient ought to take as much exercise in the open air as he can bear. This helps to diffolye the viscid humours, it removes obstructions, promotes the perspiration, and all the other fecretions. Every kind of madnels is attended with a diminished perfpiration; all means ought therefore to be used to promote that neceffary and falutary difcharge. Nothing can have a more direct tendency to increase the difease than confining the patient to a close apartment. Were he forced to ride or walk a certain number of miles every day, it would tend greatly to alleviate his diforder; but it would have still a better effect, if he were obliged to labour a piece of ground. By digging, hoeing, planting, fowing, &c. both the body and mind would be exercifed. A long journey, or a voyage, especially towards a warmer climate, with agreeable companions, has often very happy effects,

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effects. A plan of this kind, with a ftrict attention to diet, is a much more rational method of cure, than confining the patient within doors and plying him with medicines.

MEDICINE.----In the cure of this difeafe particular attention must be paid to the mind. When the patient is in a low ftate, his mind ought to be foothed and diverted with variety of amufements, as entertaining stories, pastimes, music, &c. This feems to have been the method of curing melancholy among the Jews, as we learn from the ftory of King Saul; and indeed it is a very rational one. Nothing can remove difeafes of the mind fo effectually as applications to the mind itself, the most efficacious of which is mufic. The patient's company ought likewife to confift of fuch perfons as are agreeable to him. People in this ftate are apt to conceive unaccountable averfions against particular perfons; and the very fight of fuch perfons is fufficient to distract their minds, and throw them into the utmost perturbation.

WHEN the patient is high, evacuations are neceffary. In this cafe he must be bled, and have his body kept open by purging medicines, as manna, rhubarb, cream of tartar, or the foluble tartar. I have feen the last have very happy effects. It may be taken in the dose of half an ounce, disfolved in watergruel, every day, for fundry weeks, or even for months, if neceffary. More or less may be given according as it operates. Vomits have likewise a good effect; but they must be pretty strong, otherwise they will not operate.

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WHATEVER increases the evacuation of urine or promotes perspiration, has a tendency to remove this difease. Both these fecretions may be promoted by the use of nitre and vinegar. Half a drachm of purified nitre may be given three or four times a-day in any manner that is most agreeable to the patient; and an ounce and a half of distilled vinegar may be daily mixed with his drink. Dr. Locker seems to think vinegar the best medicine that can be given in this disease.

- CAMPHIRE and muſk have likewiſe been uſed in this caſe with advantage. Ten or twelve grains of camphire may be rubbed in a mortar with half a drachm of nitre, and taken twice a-day, or oftener, if the ftomach will bear it. If it will not fit upon the ftomach in this form, it may be made into pills with gum aſaſœtida and Ruſſian caſtor, and taken in the quantity above directed. If muſk is to be adminiſtered, a ſcruple or twenty-five grains of it may be made into a bolus with a little honey or common ſyrup, and taken twice or thrice a-day. We do not mean that all theſe medicines ſhould be adminiſtered at once; but whichever of them is given, muſt be duly perſiſted in, and where one fails another may be tried.

As it is very difficult to induce patients in this difeafe to take medicines, we shall mention a few outward applications which fometimes do good; the principal of these are iffues, second, and warm bathing. Iffues may be made in any part of the body, but they generally have the best effect near the spine. The discharge from these may be greatly promoted by by dreffing them with the mild bliftering ointment, and keeping what are commonly called the orrice peafe in them. The most proper place for a feton is between the shoulder-blades; and it ought to be placed upwards and downwards, or in the direction of the spine,

### OF THE PALSY.

The palfy is a lofs or diminution of fenfe or motion, or of both, in one or more parts of the body. Of all the affections called nervous, this is the most fuddenly fatal. It is more or lefs dangerous, according to the importance of the part affected. A palfy of the heart, lungs, or any part neceflary to life, is mortal. When it affects the stomach, the intestines, or the bladder, it is highly dangerous. If the face be affected, the cafe is bad, as it shews that the difeafe proceeds from the brain. When the part affected feels cold, is infensible, or wastes away, or when the judgment and memory begin to fail, there is fmall hope of a cure.

CAUSES.—The immediate caufe of palfy is any thing that prevents the regular exertion of the nervous power upon any particular mufcle or part of the body. The occafional and predifpofing caufes are various, as drunkennefs; wounds of the brain, or fpinal marrow; preffure-upon the brain or nerves; very cold or damp air; the fuppreffion of cuftomary evacuations; fudden fear; want of exercife; or whatever greatly relaxes the fystem, as drinking much

#### OF THE PALSY.

much tea\*, or coffee, &c. The palfy may likewife proceed from wounds of the nerves themfelves, from the poilonous fumes of metals or minerals, as mercury, lead, arfenic.

In young perfons of a full habit, the palfy must be treated in the fame manner as the fanguine apoplexy. The patient must be bled, blistered, and have his body opened by fharp clyfters or purgative medicines. But, in old age, or when the difeafe proceeds from relaxation or debility, which is generally the cafe, a quite contrary courfe must be pursued. The diet must be warm and invigorating, feafoned with spicy and aromatic vegetables, as mustard, horse-radish, &c. The drink may be generous wine, multard, whey, or brandy and water. Friction with the flefhbrufh, or a warm hand, is extremely proper, efpecially on the parts affected. Bliftering-plafters may likewife be applied to the affected parts with advantage. When this cannot be done, they may be rubbed with the volatile liniment, or the nerve ointment of the Edinburgh difpenfatory. One of the best external applications is electricity. The fhocks fhould be received on the part affected; and they ought daily to be repeated for feveral weeks.

\* Many people imagine, that tea has no tendency to hurt the nerves, and that drinking the fame quantity of warm water would be equally pernicious. This however feems to be a miftake. Many perfons drink three or four cups of warm milk and water daily, without feeling any bad confequences; yet the fame quantity of tea will make their hands fhake for twenty-four hours. That tea affects the nerves is likewife evident from its preventing fleep, occasioning giddines, dimness of the fight, fickness, &c.

VOMITS

I

## OF THE EPILEPSY,

: VOMITS are very beneficial in this kind of palfy, and ought frequently to be administered. Cephalic fnuff, or any thing that makes the patient fneeze, is likewife of ufe. Some pretend to have found great benefit from rubbing the parts affected with nettles; but this does not feem to be any way preferable to bliftering. If the tongue is affected, the patient may gargle his mouth frequently with brandy and mustard: or he may hold a bit of fugar in his mouth wet with the palfy-drops or compound spirits of lavender. The wild valerian-root is a very proper medicine in this cafe. It may either be taken in an infusion with fage-leaves, or half a drachm of it in powder may be given in a glass of wine three times a-day. If the patient cannot use the valerian, he may take of sal volatile oleosum, compound spirits of lavender, and tincture of caftor, each half an ounce; mix thefe together, and take forty or fifty drops in a glafs of wine, three or four times a-day. A table-fpoonful of mustard-feed taken frequently is a very good medicine. The patient ought likewife to chew cinnamonbark, ginger, or other warm fpiceries.

EXERCISE is of the utmost importance in the palfy; but the patient must beware of cold, damp, and moist air. He ought to wear flannel next his soft is and, if possible, should remove into a warmer climate.

### OF THE EPILEPSY, or FALLING SICKNESS.

THE epilepfy is a fudden deprivation of all the fenfes, wherein the patient falls fuddenly down, and is

is affected with violent convulsive motions. Children, especially those who are delicately brought up, are most subject to it. It more frequently attacks men than women, and is very difficult to cure. When the epileps attacks children, there is reason to hope it may go off about the time of puberty. When it attacks any person after twenty years of age, the cure is difficult; but when after forty, a cure is hardly to be expected. If the fit continues only for a short space, and returns feldom, there is reason to hope; but if it continues long and returns frequently, the prospect is bad. It is a very unfavourable symptom when the patient is feized with the fits in his sleep.

CAUSES. — The epilepfy is fometimes hereditary. It may likewife proceed from frights of the mother when with child; from blows, bruifes, or wounds on the head; a collection of water, blood, or ferous humours in the brain; a polypus; tumours or concretions within the fkull; exceffive drinking; intenfe ftudy; excefs of venery; worms; teething; fuppreffion of cuftomary evacuations; too great emptinefs or repletion; violent paffions or affections of the mind, as fear, joy, &c. hyfteric affections; contagion received into the body, as the infection of the fmall-pox, meafles, &c.

SYMPTOMS.—An epileptic fit is generally preceded by unufual wearinefs; pain of the head; dulnefs; giddinefs; noife in the ears; dimnefs of fight; palpitation of the heart; diffurbed fleep; difficult breathing; the bowels are inflated with wind; the urine is in great quantity, but thin; the complexion is pale; the extremities are cold, and the patient

## OF THE EPILEPSY,

țient often feels, as it were, a stream of cold air ascending towards his head.

In the fit, the patient generally makes an unufual noife; his thumbs are drawn in towards the palms of the hands; his eyes are difforted; he ftarts, and foams at the mouth; his extremities are bent or twifted various ways; he often difcharges his feed, urine, and fæces involuntarily; and is quite deftitute of all fenfe and reafon. After the fit is over, his fenfes gradually return, and he complains of a kind of ftupor, wearinefs, and pain of his head; but has no remembrance of what happened to him during the fit.

THE fits are fometimes excited by violent affections of the mind, a debauch of liquor, exceffive heat, cold, or the like.

THIS difeafe, from the difficulty of inveftigating its caufes, and its ftrange fymptoms, was formerly attributed to the wrath of the gods, or the agency of evil fpirits. In modern times it has often, by the vulgar, been imputed to witchcraft or fafcination. It depends however as much upon natural caufes as any other malady; and its cure may often be effected by perfifting in the ufe of proper means.

REGIMEN. — Epileptic patients ought, if poffible, to breathe a pure and free air. Their diet fhould be light but nourifhing. They ought to drink nothing ftrong, to avoid fwines flefth, water-fowl, and likewife all windy and oily vegetables, as cabbage, nuts, &c. They ought to keep themfelves cheerful, carefully guarding against all violent paffions, as anger, fear, exceffive joy, and the like.

EXERCISE is likewife of great ufe; but the patient must be careful to avoid all extremes either of heat or cold,

## OR FALLING SICKNESS.

cold, all dangerous fituations, as ftanding upon precipices, riding deep waters, and fuch like.

MEDICINE. The intentions of cure must vary according to the caufe of the difeafe. If the patient be of a fanguine temperament, and there be reason to fear an obstruction in the brain, bleeding and other evacuations will be neceffary. When the difease is occasioned by the stoppage of customary evacuations, these, if possible, must be restored; if this cannot be done, others may be substituted in their place. Iffues or fetons, in this cafe, have often a very good effect. When there is reason to believe that the difeafe proceeds from worms, proper medicines must be used to kill, or carry off these vermin. When the difease proceeds from teething, the body fhould be kept open by emollient clyfters, the feet frequently bathed in warm water, and, if the fits prove obstinate, a blistering-plaster may be put betwixt the shoulders. The fame method is to be followed, when epileptic fits precede the eruption of the small-pox, or measles, &c.

WHEN the difeafe is hereditary, or proceeds from a wrong formation of the brain, a cure is not to be expected. When it is owing to a debility, or too great an irritability of the nervous fyftem, fuch medicines as tend to brace and ftrengthen the nerves may be ufed, as the Peruvian bark, and fteel; or the *anti epileptic* electuaries, recommended by Fuller and Mead \*.

\* See Appendix, Electuary for the Epilepfy.

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THE flowers of zinc have of late been highly extolled for the cure of the epilepfy. Though this medicine will not be found to anfwer the expectations which have been raifed concerning it, yet in obflinate epileptic cafes it deferves a trial. The dofe is from one to three or four grains, which may be taken either in pills, or a bolus, as the patient inclines. The beft method is to begin with a fingle grain four or five times a-day, and gradually to increase the dose as far as the patient can bear it. I have known this medicine, when duly perfifted in, prove beneficial.

Musk has fometimes been found to fucceed in the epilepfy. Ten or twelve grains of it, with the fame quantity of factitious cinnabar, may be made up into a bolus, and taken every night and morning.

Sometimes the epilepfy has been cured by electricity.

CONVULSION FITS proceed from the fame caufes, and must be treated in the fame manner as the epilepfy.

THERE is one particular fpecies of convultion fits which commonly goes by the name of St. Vitus's dance, wherein the patient is agitated with ftrange motions and gefticulations, which by the common people are generally believed to be the effects of witchcraft. This difeafe may be cured by repeated bleedings and purges: and afterwards using the medicines preferibed above for the epilepfy, viz. the Peruvian bark, and fnake-root, &c. Chalybeatewaters are found to be beneficial in this cafe. The cold bath is likewife of fingular fervice, and ought never to be neglected when the patient can bear it.

O F

### OF THE HICCUP.

THE hiccup is a spasmodic or convulsive affection of the ftomach and midriff, arifing from any caufe that irritates their nervous fibres.

IT may proceed from excess in eating or drinking; from a hurt of the ftomach; poifons; inflammations or fcirrhous tumours of the stomach, inteftines, bladder, midriff, or the rest of the viscera. In gangrenes, acute and malignant fevers, a hiccup is often the forerunner of death.

WHEN the hiccup proceeds from the use of aliment that is flatulent, or hard of digestion, a draught of generous wine, or a dram of any spirituous liquor, will generally remove it. If poifon be the caufe, plenty of milk and oil must be drank, as has been formerly recommended. When it proceeds from an inflammation of the ftomach, &cc: it is very dangerous. In this cafe the cooling regimen ought to be strictly observed. The patient must be bled, and take frequently a few drops of the fweet spirits of nitre in a cup of wine-whey. His ftomach should likewife be fomented with cloths dipped in warm water; or have bladders filled with warm milk and water applied to it.

WHEN the hiccup proceeds from a gangrene or mortification, the Peruvian bark, with other antifeptics, are the only medicines which have a chance to fucceed. When it is a primary difeafe, and proceeds from a foul flomach, loaded either with a pituitous or a bilious humour, a gentle vomit and purge, if the patient be able to bear them, will be of fervice. If

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If it arifes from flatulencies, the carminative medicines, directed for the heart-burn, must be used.

WHEN the hiccup proves very obftinate, recourfe must be had to the most powerful aromatic and antifpasmodic medicines. The principal of these is musk; fifteen or twenty grains of which may be made into a bolus, and repeated occasionally. Opiates are likewise of fervice; but they must be used with caution. A bit of fugar dipped in compound spirits of lavender, or the volatile aromatic tincture, may be taken frequently. External applications are sometimes also beneficial; as the stomach plaster, or a cataplasm of the Venice treacle of the Edinburgh or London difpensatory, applied to the region of the stomach.

I LATELY attended a patient who had almost a conftant hiccup for above nine weeks. It was frequently ftopped by the use of musk, opium, wine, and other cordial and antispass medicines, but always returned. Nothing however gave the patient so much ease as brisk small-beer. By drinking freely of this, the hiccup was often kept off for several days, which was more than could be done by the most powerful medicines. The patient was at length seized with a vomiting of blood, which foon put an end to his life. Upon opening the body, a large foirrhous tumour was found near the pylorus or right orifice of the storach.

### CRAMP OF THE STOMACH.

This difease often feizes people fuddenly, is very dangerous, and requires immediate affistance. It is most incident to persons in the decline of life, especially CRAMP, OF THE STOMACH. 485

cially the nervous, gouty, hysteric, and hypochondriac.

IF the patient has any inclination to vomit, he ought to take fome draughts of warm water, or weak camomile-tea, to cleanse his stomach. After this, if he has been coftive, a laxative clyfter may be given. He ought then to take laudanum. The best way of administering it, is in a clyster. Sixty or feventy drops of liquid laudanum may be given in a clyfter of warm water. This is much more certain than laudanum given by the mouth, which is often vomited, and in fome cafes increases the pain and spasms in the stomach.

IF the pain and cramps return with great violence, after the effects of the anodyne clyfter are over, another, with an equal or a larger quantity of opium, may be given; and every four or five hours a bolus, with ten or twelve grains of musk, and half a drachm of the Venice treacle.

In the mean time, the flomach ought to be fomented with cloths dipped in warm water, or bladders filled with warm milk and water, should be constantly applied to it. I have often feen these produce the most happy effects. The anodyne balsam may also be rubbed on the part affected; and an antihysteric plaster worn upon it, for some time after the cramps are removed, to prevent their return.

In very violent and lafting pains of the ftomach, fome blood ought to be let, unlefs the weaknefs of the patient forbids it. When the pain or cramps proceed from a suppression of the menses, bleeding is of use. If they be owing to the gout, recourse must be had to fpirits, or fome of the warm cordial waters. Ii3 Blifter-

#### 486 OF THE NIGHT-MARE.

Bliftering-plafters ought likewife, in this cafe, to be applied to the ancles. I have often feen violent cramps and pains of the ftomach removed by covering it with a large plafter of Venice treacle.

#### OF THE NIGHT-MARE.

In this difeafe the patient, in time of fleep, imagines he feels an uncommon oppreffion or weight about his breaft or ftomach, which he can by no means fhake off. He groans, and fometimes cries out, though oftener he attempts to fpeak in vain. Sometimes he imagines himfelf engaged with an enemy, and, in danger of being killed, attempts to run away, but finds he cannot. Sometimes he fancies himfelf in a houfe that is on fire, or that he is in danger of being drowned in a river. He often thinks he is falling over a precipice, and the dread of being dafhed to pieces fuddenly awakes him.

THIS diforder has been fuppofed to proceed from too much blood; from a ftagnation of blood in the brain, lungs, &c. But it is rather a nervous affection, and arifes chiefly from indigeftion. Hence we find that perfons of weak nerves, who lead a fedentary life, and live full, are most commonly afflicted with the night-mare. Nothing tends more to produce it than heavy fuppers, efpecially when ate late, or the patient goes to bed foon after. Wind is likewife a very frequent caufe of this difeafe; for which reafon thofe who are afflicted with it ought to avoid all flatulent food. Deep thought, anxiety, or any thing that oppreffes the mind, ought alfo to be avoided.

As perfons afflicted with the night-mare generally moan, or make fome noife in the fit, they fhould be waked,

#### OF SWOONINGS.

waked, or spoken to by such as hear them, as the uneafinefs generally goes off as foon as the patient is awake. Dr. Whytt fays, he generally found a dram of brandy, taken at bed-time, prevent this diseafe. That, however, is a bad cuftom, and, in time, lofes its effect. We would rather have the patient depend upon the use of food of easy digestion, cheerfulness, exercife through the day, and a light fupper taken early, than to accustom himself to drams. A glass of peppermint-water will often promote digeftion as much as a glass of brandy, and is much faser. After a person of weak digestion, however, has ate flatulent food, a dram may be neceffary; in this cafe we would recommend it as the most proper medicine.

PERSONS who are young, and full of blood, if troubled with the night-mare, ought to take a purge frequently, and use a spare diet.

#### OF SWOONINGS.

PEOPLE of weak nerves' or delicate conflitutions are liable to fwoonings or fainting fits. These indeed are feldom dangerous when duly attended to; but when wholly neglected, or improperly treated, they often prove hurtful, and fometimes fatal.

THE general causes of swoonings are sudden transitions from cold to heat; breathing air that is deprived of its proper fpring or elasticity; great fatigue; exceffive weaknefs; lofs of blood; long fasting; fear, grief, and other violent passions or affections of the mind.

It is well known, that perfons who have been long exposed to cold, often faint or fall into a fwoon, Ii4 upon

#### OF SWOONINGS,

upon coming into the houfe, efpecially if they drink hot liquor, or fit near a large fire. This might eafily be prevented by people taking care not to go into a warm room immediately after they have been expofed to the cold air, to approach the fire gradually, and not to eat or drink any thing hot, till the body has been gradually brought into a warm temperature.

WHEN any one, in confequence of neglecting thefe precautions, falls into a fwoon, he ought immediately to be removed to a cooler apartment, to have ligatures applied above his knees and elbows, and to have his hands and face fprinkled with vinegar or cold water. He fhould likewife be made to finell to vinegar, and fhould have a fpoonful or two of water, if he can fwallow, with about a third part of vinegar mixed with it, poured into his mouth. If thefe fhould not remove the complaint, it will be neceffary to bleed the patient, and afterwards to give him a clyfter.

As air that is breathed frequently, lofes its elafticity or fpring, it is no wonder if perfons who refpire in it often fall into a fwoon or fainting fit. They are, in this cafe, deprived of the very principle of life. Hence it is that fainting fits are fo frequent in all crowded affemblies, efpecially in hot feafons. Such fits however must be confidered as a kind of temporary death; and, to the weak and delicate, they fometimes prove fatal. They ought therefore with the utmost care to be guarded against. The method of doing this is obvious. Let affembly-rooms, and all other places of public refort, be large and well ventilated;

ventilated; and let the weak and delicate avoid fuch places, particularly in warm feafons.

A PERSON who faints, in fuch a fituation, ought immediately to be carried into the open air; his temples fhould be rubbed with ftrong vinegar or brandy, and volatile fpirits or falts held to his nofe. He fhould be laid upon his back with his head low, and have a little wine, or fome other cordial, as foon as he is able to fwallow it, poured into his mouth. If the perfon has been fubject to hyfteric fits, caftor or afafœtida fhould be applied to the nofe, or burnt feathers, horn, or leather, &c.

· WHEN fainting fits proceed from mere weaknefs or exhauftion, which is often the cafe after great fatigue, long fasting, loss of blood, or the like, the patient must be supported with generous cordials, as jellies, wines, spirituous liquors, &c. These however must be given at first in very small quantities, and increafed gradually as the patient is able to bear them. He ought to be allowed to lie quite still and eafy upon his back, with his head low, and fhould have fresh air admitted into his chamber. His food should confift of nourishing broths, fago-gruel with wine, new milk, and other things of a light and cordial nature. These things are to be given out of the fit. All that can be done in the fit is, to let him simell to a bottle of Hungary-water, eau de luce, or fpirits of hartshorn, and to rub his temples with warm brandy, or to lay a compress dipped in it to the pit of the ftomach.

IN fainting fits that proceed from fear, grief, or other violent paffions or affections of the mind, the patient must be very cautiously managed. He should be

be fuffered to remain at reft, and only made to fmell to fome vinegar. After he is come to himfelf he may drink freely of warm lemonade, or balm-tea, with fome orange or lemon-peel in it. It will likewife be proper, if the fainting-fits have been long and fevere, to clean the bowels by throwing in an emollient clyfter.

It is common in fainting fits, from whatever caufe they proceed, to bleed the patient. This practice may be very proper in ftrong perfons of a full habit; but in thofe who are weak and delicate, or fubject to nervous diforders, it is dangerous. The proper method with fuch people is to expose them to the free air, and to use cordial and ftimulating medicines, as volatile falts, Hungary-water, fpirits of lavender, tincture of caftor, and the like.

### OF FLATULENCIES, OR WIND.

ALL nervous patients, without exception, are afflicted with wind or flatulencies in the ftomach and bowels, which arife chiefly from the want of tone or vigour in thefe organs. Crude flatulent aliment, as green peas, beans, coleworts, cabbages, and fuch like, may increafe this complaint; but ftrong and healthy people are feldom troubled with wind, unlefs they either overload their ftomachs, or drink liquors that are in a fermenting flate, and confequently full of elaftic air. While therefore the matter of flatulence proceeds from our aliments, the caufe which makes air feparate from them in fuch quantity as to occafion complaints, is almost always a fault of the bowels themfelves, which are too weak either to prevent

vent the production of elastic air, or to expel it after it is produced.

To relieve this complaint, fuch medicines ought to be used as have a tendency to expel wind, and, by strengthening the alimentary canal, to prevent its being produced there \*.

THE lift of medicines for expelling wind is very numerous; they often however difappoint the expectations of both the phyfician and his patient. The most celebrated among the class of carminatives are, juniper berries; the roots of ginger and zedoary; the feeds of anife, caraway, and coriander; gum afafœtida and opium; the warm waters, tinctures, and fpirits, as the aromatic water, the tincture of woodfoot, the volatile aromatic fpirit, æther, &c.

DR. WHYTT fays, he found no medicines moreefficacious in expelling wind than æther and laudanum. He generally gave the laudanum in a mixture with peppermint-water and tincture of caftor, or fweet fpirits of nitre. Sometimes, in place of this, he gave opium in pills with afafœtida. He obferves that the good effects of opiates are equally confpicuous, whether the flatulence be contained in the ftomach or inteftines; whereas thefe warmmedicines, commonly called *carminatives*, do not often give immediate relief, except when the wind is in the ftomach.

\* Many nervous people find great benefit from eating a dry bifcuit, efpecially when the flomach is empty. I look upon this as one of the best carminative medicines; and would recommend it in all complaints of the flomach, arifing from flatulence, indigestion, &c.

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WITH regard to æther, the Doctor fays, he has often feen very good effects from it in flatulent complaints, where other medicines failed. The dofe is a tea-fpoonful mixed with two table-fpoonfuls of water \*. In gouty cafes he obferves that æther, a glafs of French brandy, or of the aromatic water; or ginger, either taken in fubftance or infufed in boiling water, are among the beft medicines for expelling wind.

WHEN the cafe of flatulent patients is fuch as makes it improper to give them warm medicines inwardly, the Doctor recommends external applications, which are fometimes of advantage. Equal parts of the anti-hyfteric and ftomach plafter may be fpread upon a piece of foft leather, of fuch fize as to cover the greater part of the belly. This fhould be kept on for a confiderable time, provided the patient be able to bear it; if it fhould give great uneafinefs, it may be taken off, and the following liniment ufed in its ftead.

TAKE of Bate's anodyne balfam an ounce; of the expressed oil of mace half an ounce; oil of mint two drachms. Let these ingredients be mixed together, and about a table-spoonful well rubbed on the parts at bed time.

For strengthening the stomach and bowels, and confequently for lessening the production of flatulence the Doctor recommends the Peruvian bark, bitters, chalybeates, and exercise. In flatulent cases, '

\* Though the patient may begin with this quantity, it will be neceffary to increase the dose gradually as the stomach can bear it. Æther is now given in confiderably greater doses than it was in Dr. Whytt's time.

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he thinks fome nutmeg or ginger fhould be added to the tincture of the bark and bitters, and that the aromatic powder fhould be joined with the filings of iron.

WHEN windy complaints are attended with coftivenefs, which is often the cafe, few things will be found to anfwer better than four or five of the following pills taken every night at bed-time.

TAKE of afafœtida two drachms; fuccotrine aloes, falt of iron, and powdered ginger, of each one drachm; as much of the *elixir proprietatis* as will be fufficient to form them into pills.

ON the other hand, when the body is too open, twelve or fifteen grains of rhubarb, with half a drachm or two fcruples of the Japonic confection, given every other evening, will have very good effects.

In those flatulent complaints which come on about the time the *menses* cease, repeated small bleedings often give more relief than any other remedy.

WITH regard to diet, the Doctor observes, that tea, and likewise all flatulent aliments, are to be avoided; and that for drink, water with a little brandy or rum is not only preferable to malt liquor, but, in most cases, also to wine.

As Dr. Whytt has paid great attention to this fubject, and as his fentiments upon it in a great measure agree with mine, I have taken the liberty to adopt them; and shall only add to his observations, that exercise is, in my opinion, superior to all medicine, both for preventing the production, and likewise for expelling of flatulencies. These effects, however, are not to be expected from fauntering about,

### 494 OF LOW SPIRITS.

about, or lolling in a carriage; but from labour, or fuch active amufements as give exercise to every part of the body.

### OF LOW SPIRITS.

ALL who have weak nerves are fubject to low fpirits in a greater or lefs degree. Generous diet, the cold bath, exércife and amufements, are the molt likely means to remove this complaint. It is greatly increafed by folitude and indulging gloomy ideas; but may often be relieved by cheerful company and fprightly amufements.

WHEN low fpirits are owing to a weak relaxed flate of the flomach and bowels, an infufion of the Peruvian bark with cinnamon or nutmeg will be proper. Steel joined with aromatics may likewife in this cafe be u<sup>c</sup>ed with advantage; but riding, and a proper diet, are most to be depended on.

WHEN they arife from a foulnefs of the ftomach and inteflines, or obstruction in the hypocondriac viscera, aloetic purges will be proper. I have sometimes known the Harrowgate supplur-water of service in this case.

WHEN low fpirits proceed from a fuppreffion of the menftrual or of the hæmorrhoidal flux, thefe evacuations may either be reftored, or fome others fubflituted in their place, as iffues, fetons, or the like. Dr. Whytt obferves, that nothing has fuch fudden good effects in this cafe as bleeding.

WHEN low fpirits have been brought on by longcontinued grief, anxiety, or other diffrefs of mind, agreeable company, variety of amufements, and change

change of place, especially travelling into foreign countries, will afford the most certain relief.

PERSONS afflicted with low fpirits fhould avoid all kinds of excefs, efpecially of venery and ftrong liquors. The moderate use of wine and other ftrong liquors is by no means hurtful; but when taken to excefs they weaken the flomach, vitiate the humours, and deprefs the spirits. This caution is the more neceffary, as the unfortunate and melancholy often fly to ftrong liquors for relief, by which means they never fail to precipitate their own deftruction.

#### OF HYSTERIC AFFECTIONS.

THESE likewife belong to the numerous tribe of nervous difeafes, which may be juftly reckoned the reproach of medicine. Women of a delicate habit, whofe ftomach and inteftines are relaxed, and whofe nervous fyftem is extremely fenfible, are most fubject to hyfteric complaints. In fuch perfons a hyfteric fit, as it is called, may be brought on by an irritation of the nerves of the ftomach or inteftines, by wind, acrid humour, or the like. A fudden fuppreffion of the menfes often gives rife to hyfteric fits. They may likewife be excited by violent paffions or affections of the mind, as fear, grief, anger, or great difappointments.

SOMETIMES the hysteric fit refembles a fwoon or fainting fit, during which the patient lies as in a fleep, only the breathing is fo low as fcarce to be perceived At other times the patient is affected with catchings and ftrong convulsions. The fymptoms which precede hysteric fits are likewise various

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in different perfons. Sometimes the fits come on with coldness of the extremities, yawning and stretching, lownefs of spirits, oppression and anxiety. At other times the approach of the fit is foretold by a feeling, as if there were a ball at the lower part of the belly, which gradually rifes towards the ftomach, where it occasions inflation, fickness, and fometimes vomiting; afterwards it rifes into the gullet, and occasions a degree of suffocation, to which quick breathing, palpitation of the heart, giddiness of the head, dimnefs of the fight, lofs of hearing, with convulfive motions of the extremities and other parts of the body, fucceed. The hyfteric paroxyfin is often introduced by an immoderate fit of laughter, and fometimes it goes off by crying. Indeed there is not much difference between the laughing and crying of an highly hyfteric lady.

OUR aim in the treatment of this difeafe must be to shorten the fit or paroxysm when present, and to prevent its return. The longer the fits continue, and the more frequently they return, the difease becomes the more obstinate. Their strength is increased by habit, and they induce so great a relaxation of the system, that it is with difficulty removed.

It is cuftomary, during the hyfteric fit or paroxyfin, to bleed the patient. In ftrong perfons of a plethoric habit, and where the pulfe is full, this may be proper; but in weak and delicate conftitutions, or where the difeafe has been of long ftanding, or arifes from inanition, it is not fafe. The beft courfe in fuch cafes is to roufe the patient by ftrong fmells, as burnt feathers, afafœtida, or fpirits of hartfhorn, held to the nofe.

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Hot

Hot bricks may also be applied to the foles of the feet, and the legs, arms, and belly may be ftrongly rubbed with a warm cloth. But the best application is to put the feet and legs into warm water. This is peculiarly proper when the fits precede the flow of the menses. In case of costiveness, a laxative clyster with as a focultation will be proper; and, as foon as the patient can swalllow, two table-spoonfuls of a folution of as a focultation, cor of some cordial julep, may be given \*.

THE radical cure of this diforder will be best attempted at a time when the patient is most free from the fits. It will be greatly promoted by a proper attention to diet. A milk and vegetable diet, when duly perfifted in, will often perform a cure. IIf, however, the patient has been accustomed to a more generous diet, it will not be fafe to leave it off call at once, but by degrees. The most proper drink is water with a fmall quantity of fpirits. A cool dry air is the beft. Cold bathing and every thing that braces the nerves, and invigorates the fystem, is beineficial; but lying too long in bed, or whatever relaxes the body, is hurtful. It is of the greatest importance to have the mind kept conftantly eafy and cheerful, and, if possible, to have it always engaged in fome agreeable and interesting pursuit.

• When hyfteric fits are occafioned by fympathy, they may be cured by exciting an oppofite paffion. This is faid to have been the cafe of a whole fchool of young ladies in Holland, who were all cured by being told, that the first who was feized should be burnt to death. But this method of cure, to my knowledge, will not always fucceed. I would therefore advife, that young ladies who are subject to hysteric fits should not be fent to boarding fchools, as the difease may be caught by imitation.<sup>1</sup>

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THE proper medicines are those which ftrengthen the alimentary canal and the whole nervous system, as the preparations of iron, the Peruvian bark, and other bitters. Twenty drops of the elixir of vitriol, in a cup of the infusion of the bark, may be taken twice or thrice a-day. The bark and iron may likewise be taken in substance, provided the stomach can bear them; but they are generally given in too small doses to have any effect. The chalybeate waters generally prove beneficial in this diforder.

Ir the ftomach is loaded with phlegm, vomits will be of ufe; but they fhould not be too ftrong, nor frequently repeated, as they tend to relax and weaken the ftomach. If there be a tendency to coffiveness, it must be removed either by diet, or by taking an opening pill as often as it shall be found necessfary.

To leffen the irritability of the fyftem, antifpafmodic medicines will be of ufe. The beft antifpafmodic medicines, are mufk, opium, and caftor. When opium difagrees with the ftomach, it may either be applied externally, or given in clyfters. It is often fuccefsful in removing those periodical headachs to which hyfteric and hypochondriac patients are fubject. Caftor has in fome cafes been found to procure fleep where opium failed; for which reafon Dr. Whytt advises, that they fhould be joined together. He likewife recommends the anti-hyfteric plafter to be applied to the *abdomen*\*.

\* Though antifpasmodics and anodynes are universally recommended in this discase, yet all the extraordinary cures that I ever knew in hysteric cases, were performed by means of tonic and corroborating medicines.

HYSTERIC

#### OF HYSTERIC AFFECTIONS. 499

HYSTERIC women are often afflicted with cramps in various parts of the body, which are moft apt to feize them in bed, or when alleep. The moft efficacious medicines in this cafe are opium, blifteringplafters, and warm bathing or fomentations. When the cramp or fpafm is very violent, opium is the remedy moft to be depended on. In milder cafes, immerfing the feet and legs in warm water, or applying a bliftering-plafter to the part affected, will often be fufficient to remove the complaint. In patients whole nerves are uncommonly delicate and fenfible, it will be better to omit the blifteringplafter, and to attempt the cure by opiates, mufk, camphire, and the warm bath.

CRAMPS are often prevented or cured by compreffion. Thus cramps in the legs are prevented, and fometimes removed, by tight bandages; and when convulsions arife from a flatulent diftention of the inteftines, or from fpasms beginning in them, they may be often leffened or cured by making a pretty flrong compression upon the abdomen by means of a broad belt. A roll of brimftone held in the hand is frequently used as a remedy for cramps : Though this feems to owe its effect chiefly to imagination; yet, as it fometimes fucceeds, it merits a trial \*. When spalms or convulsive motions arise from sharp humours in the fromach and inteffines, no lafting relief can be procured till these are either corrected or expelled. The Peruvian bark has fometimes cured periodic convultions after other medicines had failed.

\* Some perfons afflicted with cramps pretend to reap great benefit from fmall bundles of rolemary tied all night about their feet, ancles, and knees.

OF

### OF HYPOCHONDRIAC ÀFFECTIONS.

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THIS difeafe generally attacks the indolent, the luxurious, the unfortunate, and the ftudious. It becomes daily more common in this country, owing, no doubt; to the increase of luxury and fedentary employments. It has so near a refemblance to the immediately preceding, that many authors confider them as the fame difease, and treat them accordingly. They require however a very different regimen; and the symptoms of the latter, though less violent, are more permanent than those of the former.

MEN of a melancholy temperament, whole minds are capable of great attention, and whole paffions are not eafily moved, are, in the advanced periods of life, most liable to this difease. It is usually brought on by long and serious attention to abstruct fubjects, grief, the suppression of customary evacuations, excess of venery, the repulsion of cutaneous eruptions, long continued evacuations, obstructions in some of the viscera, as the liver, spleen, &c.

HYPOCHONDRIAC perfons ought never to fast long, and their food should be folid and nourishing. All acefcent and windy vegetables are to be avoided. Flesh means agree best with them, and their drink should be old claret, or good madeira. Should these difagree with the stomach, water with a little brandy or rum in it may be drank.

CHEERFULNESS and ferenity of mind are by all means to be cultivated. Exercise of every kind is useful. The cold bath is likewise beneficial; and, where

### OF HYPOCHONDRIAC AFFECTIONS. 501

where it does not agree with the patient, frictions with the flefh-brufh or a coarfe cloth may be tried. If the patient has it in his power, he ought to travel either by fea or land. A voyage or a long journey, especially towards a warmer climate, will be of more fervice than any medicine.

THE general intentions of cure, in this difeafe, are to ftrengthen the alimentary canal, and to promote the fecretions. Thefe intentions will be beft anfwered by the different preparations of iron and the Peruvian bark, which, after proper evacuations, may be taken in the fame manner as directed in the preceding difeafe.

IF the patient be coffive, it will be neceffary to make use of fome gentle opening medicine, as pills composed of equal parts of aloes, rhubarb, and afafœtida, with as much of the elixir proprietatis as is neceffary to form the ingredients into pills. Two, three, or four of these may be taken as often as it shall be found needful, to keep the body gently open. Such as cannot bear the afafætida may subftitute Spanish foap in its place.

THOUGH a cheerful glass may have good effects in this difease, yet all manner of excess is hurtful. Intense study, and every thing that depresses the spirits, are likewise pernicious.

Тноисн the general fymptoms and treatment of nervous diforders were pointed out in the beginning of this chapter; yet, for the behoof of the unhappy perfons afflicted with those obstinate and complicated maladies, I have treated feveral of their capital fymptoms under diftinct or feparate heads. These however are not to be confidered as different difeases, K k 3 but

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but as various modifications of the fame difeafe. They all arife from the fame general caufes, and require nearly the fame method of treatment. There are many other fymptoms that merit particular attention, which the nature of my plan will not permit me to treat of at full length. I fhall therefore omit them altogether, and conclude this chapter with a few general remarks on the most obvious means of preventing or avoiding nervous diforders.

In all perfons afflicted with nervous diforders, there is a great delicacy and fenfibility of the whole nervous fyftem, and an uncommon degree of weaknefs of the organs of digeftion. Thefe may be either natural or acquired. When owing to a defect in the conftitution, they are hardly to be removed; but may be mitigated by proper care. When induced by difeafes, as long or repeated fevers, profuse hæmorrhages, or the like, they prove alfo very obftinate, and will yield only to a courfe of regimen calculated to reftore and invigorate the habit.

BUT nervous affections arife more frequently from caufes, which it is, in a great meafure, in our own power to avoid, than from difeafes, or an original fault in the conftitution, &c. Exceffive grief, intenfe fludy, improper diet, and neglect of exercife, are the great fources of this extensive class of difeafes.

It has been already observed, that grief indulged destroys the appetite and digestion, depresses the spirits, and induces an universal relaxation and debility of the whole system. Instances of this are daily to be seen. The loss of a near relation, or any other missfortune in life, is often sufficient to occasion the most

### OF HYPOCHONDRIAC AFFECTIONS. 503

most complicated feries of nervous fymptoms. Such misfortunes indeed are not to be avoided, but furely their effects, by a vigorous and proper exertion of the mind, might be rendered less hurtful. For directions in this matter we must refer the reader to the article GRIEF, in the Chapter on the Passions.

THE effects of intenfe ftudy are pretty fimilar to those occasioned by grief. It preys upon the animal spirits, and destroys the appetite and digestion. To prevent these effects, studious perfons ought, according to the Poet, to toy with their books \*. They should never study too long at a time; nor attend long to one particular subject, especially if it be of a ferious nature. They ought likewise to be attentive to their posture, and should take care frequently to unbend their minds by music, diversions, or going into agreeable company.

WITH regard to diet, I shall only observe, that nervous difeases may be induced either by excess or inanition. Both of these extremes hurt digestion, and vitiate the humours. When Nature is oppressed with fresh loads of food, before she has had time to digest and assimilate the former meal, her powers are weakened, and the vessels are filled with crude humours. On the other hand, when the food is not fufficiently nouriss or is taken too feldom, the bowels are inflated with wind, and the humours, for want of regular fresh supplies of wholesome chyle, are vitiated. These extremes are therefore with equal care to be avoided. They both tend to induce a

\* Armftrong on Health.

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### 504 DISORDERS OF THE SENSES.

relaxation and debility of the nervous fystem, with all its dreadful train of confequences.

But the most general cause of nervous diforders is *indolence*. The active and laborious are feldom troubled with them. They are referved for the children of ease and affluence, who generally seel their keenest force. All we shall fay to such perfons is, that the means of prevention and cure are both in their own power. If the constitution of human nature be such, that man must either labour or suffer diseases, furely no individual has any right to expect an exemption from the general rule.

THOSE, however, who are willing to take exercife, but whofe occupations confine them to the houfe, and perhaps to an unfavourable pofture, really deferve our pity. We have in a former part of the book endeavoured to lay down rules for their conduct; and fhall only add, that where thefe cannot be complied with, their place may, in fome meafure, be fupplied by the ufe of bracing and ftrengthening medicines, as the Peruvian bark, with other bitters; the preparations of fteel; the elixir of vitriol, &c.

#### CHAP. XLIV.

#### DISORDERS OF THE SENSES.

E do not mean to treat of the nature of our fenfations, or to give a minute defcription of the various organs by which they are performed; but to point out fome of the difeafes to which thefe organs

#### OF THE EYE.

organs are most liable, and to shew how they may be prevented or remedied.

#### OF THE EYE.

No organ of the body is subject to more difeafes than the eye; nor is there any one of which the difeases are more difficult to cure. Though more ignorant perfons pretend to cure these than any other class of difeases; yet a very superficial acquaintance with the structure of the eye, and the nature of vision, will be fufficient to convince any one of the danger of trufting to them. These difeases often exceed the skill of the most learned physician; hence we may eafily infer the danger of trufting them to ignorant quacks, who, without all peradventure, put out more eyes than they cure. But, though the difeases of the eye can feldom be cured, they might often, by due care, be prevented; and, even where the fight is totally loft, many things might be done, which are generally neglected, to render the unhappy perfon both more useful to himself and to fociety \*.

\* It is pity those who have the misfortune to be born blind, or who lose their fight when young, should be fuffered to remain in ignorance, or to beg. This is both cruelty and want of economy. There are many employments of which blind perfons are very capable, as knitting, carding, turning a wheel, teaching languages, &c. Nor are inflances wanting of perfons who have arrived at the highest pitch of learning, without having the least idea of light. Witness the late famous Nicholas Sanderson of Cambridge, and my worthy friend Dr. Thomas Blacklock of Edinburgh. The former was one of the first mathematicians of shis age, and the latter, besides being a good poet and philosoher, is master of all the learned languages, and a very confiderable adept in the liberal arts.

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THE eyes are hurt by viewing bright or luminous objects; keeping the head too long in a hanging pofture; violent head-achs; exceffive venery; the long ufe of bitters; the effluvia from acrid or volatile fubftances; various difeafes; as the fmall-pox, meafles, &c. but, above all, from night-watching, and candle-light ftudies. Long fafting is likewife hurtful to the eyes, and frequent heats and colds are no lefs pernicious. The eyes are often hurt by the ftoppage of cuftomary evacuations; as morning fweats; fweating of the feet; the menfes in women; and the bleeding piles in men. All kinds of excefs are likewife hurtful to the fight, particularly the immoderate ufe of ardent fpirits and other ftrong liquors.

IN all difeafes of the eyes, especially those attended with inflammation, the cool regimen ought to be obferved. The patient must abstain from all spirituous liquors. The smoke of tobacco, smoky rooms, the vapours of onions and garlic, and all vivid lights and glaring colours, are carefully to be avoided. The drink may be water, whey, or small beer; and the aliment must be light and of easy digestion.

For preventing diforders of the eyes, iffues and fetons are of prime ufe. Every perfon, whofe eyes are tender, ought to have one or more of thefe in fome part of the body. It will likewife be of ufe to keep the body gently open, and either to bleed or purge every fpring and fall. All excefs and night ftudies are to be avoided. Such as do not chufe a feton or an iffue, will find benefit from wearing a finall Burgundy-pitch plafter between their fhoulders.

A gutta

# OF THE EYE.

A gutta serena, or amaurosis, is an abolition of the fight without any apparent caufe or fault in the eyes. When it is owing to a decay or wasting of the optic nerve, it does not admit of a cure; but when it proceeds from a compression of the nerves by redundant humours, these may in some measure be drained off, and the patient relieved. For this purpofe, the body must be kept open with the laxative mercurial pills. If the patient be young and of a fanguine habit, he may be bled. Cupping, with fcarifications on the back part of the head, will likewise be of use. A running at the nose may be promoted by volatile falts, stimulating powders, &c. But the most likely means for relieving the patient are iffues or blifters kept open for a long time on the back part of the head, behind the ears, or on the neck. I have known these restore sight, even after it had been for a confiderable time loft.

SHOULD thefe fail, recourfe must be had to a mercurial falivation; or what will perhaps answer the purpose better, twelve grains of the corrosive sublimate of mercury may be diffolved in an English pint and a half of brandy, and a table-spoonful of it taken twice a day, drinking half a pint of the decoction of farsaparilla after it.

A cataratt is an obfiruction of the pupil, by the interpolition of fome opaque fubfiance which either diminifhes or totally extinguishes the fight. It is generally an opacity of the crystalline humour. In a recent or beginning cataract, the fame medicines are to be used as in the gutta ferena; and they will fometimes fucceed. But when this does not happen, and the cataract becomes firm, it must be couched, or.

#### OF THE EYÈ.

or rather extracted. I have refolved a recent cataract by giving the patient frequent purges with calomel, keeping a poultice of fresh hemlock constantly upon the eye, and a perpetual blister on the neck.

THE myopia, or *fhort-fightednefs*, and the *prefbyopia*, or *feeing only at too great a diftance*, are diforders which depend on the original ftructure or figure of the eye, therefore admit of no cure. The inconveniencies arifing from them may however be, in fome measure, remedied by the help of proper glass. The former requires the aid of a concave, and the latter of a convex glass.

A ftrabifmus, or fquinting, depends upon an irregular contraction of the muscles of the eye from a spafm, palfy, epilepsy, or an ill habit. Children often contract this disorder by having their eyes unequally exposed to the light. They may likewise acquire it by imitation from a squinting nurse or playfellow, &c. 'As this disorder can hardly be cured, parents ought to be careful to prevent it. Almost the only thing which can be done for it is, to contrive a mask for the child to wear, which will only permit him to fee in a straight direction.

Spots or fpecks on the eyes are generally the effect of inflammation, and often appear after the fmallpox, the meafles, or violent ophthalmias. They are very difficult to cure, and often occafion total blindnefs. If the fpecks are foft and thin, they may fometimes be taken off by gentle cauftics and difcutients; as vitriol, the juice of celandine, &cc. When thefe do not fucceed, a furgical operation may be tried: The fuccefs of this however is always very doubtful.

THE

#### OF THE EAR.

THE blood-fhot eye may be occasioned by a stroke, a fall, retching, vomiting, violent coughing, &c. I have frequently known it happen to children in the hooping-cough. It appears at first like a bit of fcarlet, and is afterwards of a livid or blackiss colour. This diforder generally goes off without medicine. Should it prove obstinate, the patient may be bled, and have his eyes fomented with a decoction of comphry roots and elder flowers. A fost poultice may be applied to the eyes; and the body should be kept open by gentle purgatives.

THE watery, or weeping eye, is generally occafioned by a relaxation or weaknels of the glandular parts of that organ. Thefe may be braced and ftrengthened by bathing the eye with brandy and water, Hungary-water, rofe-water with white vitriol diffolved in it, &c. Medicines which make a revulfion are likewife proper; as mild purgatives, perpetual blifters on the neck, bathing the feet frequently in lukewatm water, &c.

WHEN this difease proceeds from an obstruction of the lachrymal duct, or natural passage of the tears, it is called a *fiscula lachrymalis*, and can only be cured by a furgical operation.

#### OF THE EAR.

THE functions of the ear may be injured by wounds, ulcers, or any thing that hurts its fabric. The hearing may likewife be hurt by exceffive noife; violent colds in the head; fevers; hard wax, or other fubftances flicking in the cavity of the ear; too great a degree of moifture or drynefs of the ear. Deafnefs

Deafnels is very often the effect of old age, and is incident to most people in the decline of life. Sometimes it is owing to an original fault in the structure or formation of the ear itself. When this is the case, it admits of no cure; and the unhappy perfort not only continues deaf, but generally likewise dumb, for life \*.

WHEN deafnels is the effect of wounds or ulcers of the ears, or of old age, it is not eafily removed. When it proceeds from cold of the head, the patient

\* Though those who have the misfortune to be born deaf are generally fuffered to continue dumb, and confequently are in a great measure lost to fociety, yet nothing is more certain than that fuch perfons may be taught, not only to read and write, but alfo to fpeak, and to understand what others fay to them. Teaching the dumb to speak will appear paradoxical to those who do not confider that the formation of founds is merely mechanical, and may be taught without the affiftance of the ear. This is not only capable of demonstration, but is actually reduced to practice by the ingenious Mr. Thomas Braidwood of Edinburgh. This gentleman has, by the mere force of genius and application, brought the teaching of dumb perfons to fuch a degree of perfection, that his fcholars are generally more forward in their education than those of the fame age who enjoy all their faculties. They not only read and write with the utmost readiness, but likewise speak, and are capable of holding conversation with any person in the light: What a pity any of the human species should remain in a state of idiotifin, who are capable of being rendered as useful and intelligent as others! We mention this not only from humanity to those who have the misfortune to be born deaf, but also in justice to Mr. Braidwood, whofe fuccefs has far exceeded all former attempts this way; and indeed it exceeds imagination itfelf fo far, that no person who has not seen and examined his pupils, can believe what they are capable of .- As this gentleman, however willing, is only able to teach a few, and as the far greater part of those who are born deaf cannot afford to attend him, it would be an act of great humanity, as well as of public utility, to creft an academy for their behoof. muft

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must be careful to keep his head warm, especially in the night; he should likewise take some gentle purges, and keep his seet warm, and bathe them frequently in luke-warm water at bcd-time. When deasness is the effect of a sever, it generally goes off after the patient recovers. If it proceeds from dry wax sticking in the ears, it may be softened by dropping oil into them; afterwards they must be syringed with warm milk and water.

IF deafnels proceeds from drynels of the ears, which may be known by looking into them, half an ounce of the oil of fweet almonds, and the fame quantity of liquid apodeldoch, or tincture of alafœtida, may be mixed together, and a few drops of it put into the ear every night at bed-time, ftopping them afterwards with a little wool or cotton. Some, inftead of oil, put a fmall flice of the fat of bacon into each ear, which is faid to anfwer the purpofe very well. When the ears abound with moifture, it may be drained off by an iffue or feton, which fhould be made as near the affected parts as poffible.

Some, for the cure of deafnefs, recommend the gall of an eel mixed with fpirit of wine, to be dropped into the ear; others, equal parts of Hungarywater and fpirit of lavender. Etmuller extols amber and mufk; and Brookes fays, he has often known hardnefs of hearing cured by putting a grain or two of mufk into the ear with cotton-wool. But thefe and other applications muft be varied according to the caufe of the diforder \*.

#### Тноисн

# A gentleman, on whose veracity I can depend, told me, that after using many things to no purpose for an obstinate deafness, he

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THOUGH fuch applications may fometimes be of fervice, yet they much oftener fail, and frequently they do hurt. Neither the eyes nor ears ought to be tampered with; they are tender organs, and require a very delicate touch. For this reafon, what we would chiefly recommend in deafnefs, is, to keep the head warm. From whatever caufe the diforder proceeds, this is always proper; and I have known more benefit from it alone, in the most obftinate cafes of deafnefs, than from all the medicines I ever ufed.

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THOUGH these series are not of so great importance to man in a flate of society, as the sight and hearing, yet, as the loss of them is attended with some inconveniency, they deferve our notice. They are feldom to be reftored when lost; which ought to make us very attentive to their prefervation, by carefully avoiding whatever may in the least prove injurious to them. As there is a very great affinity betwixt the organs of tafting and soften series whatever hurts the one generally affects the other.

LUXURY is highly injurious to these organs. When the nose and palate are frequently ftimulated by fragrant and poignant difnes, they soon lose the power of diffinguishing taftes and odours with any degree of nicety. Man, in a state of nature, may perhaps have these faculties as acute as any other animal.

he was at last advised to put a few drops of his own urine warin into his ears every night and morning, from which he received great benefit. It is probable that a folution of *fal ammaniac*, in water, would produce the same effect.

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The fenfe of fmelling may be diminifhed or deftroyed by difeafes; as, the moifture, drynefs, inflammation or fuppuration of that membrane which lines the infide of the nofe, commonly called the olfactory membrane; the compression of the nerves which fupply this membrane, or some fault in the brain itself at their origin. A defect, or too great a degree of folidity, of the small spungy bones of the upper jaw, the caverns of the forehead, &c. may likewife impair the fense of smelling. It may also be injured by a collection of scetid matter in those caverns, which keeps constantly exhaling from them. Few things are more hurtful to the fense of smelling than taking great quantities of fnuff.

WHEN the nofe abounds with moifture, after gentle evacuations, fuch things as tend to take off irritation, and coagulate the thin fharp ferum, may be applied; as the oil of anife mixed with fine flour; camphire diffolved in oil of almonds, &c. The vapours of amber, frankincenfe, gum-maftic, and benjamin, may likewife be received into the nofe and mouth.

For moiftening the mucus when it is too dry, fome recommend fnuff made of the leaves of marjoram, mixed with the oil of amber, marjoram, and anifeed; or a fternutatory of calcined white vitriol; twelve grains of which may be mixed with two ounces of marjoram-water, and filtrated. The fteam or vapour of vinegar upon hot iron received up the noftrils is likewile of use for fostening the mucus, opening obstructions, &c.

IF there is an ulcer in the nofe, it ought to be dreffed with fome emollient ointment, to which, if

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the pain be very great, a little laudanum may be added. If it be a venereal ulcer, it is not to be cured without mercury. In that cafe, the folution of the corrofive fublimate in brandy may be taken, as directed in the gutta ferena. The ulcer ought likewife to be washed with it; and the fumes of cinnabar may be received up the noftrils.

IF there be reafon to fuspect that the nerves which fupply the organs of fmelling are inert, or want ftimulating, volatile falts, ftrong fnuffs, and other things which occasion fneezing, may be applied to the nofe. The forehead may likewife be anointed with balfam of Peru, to which may be added a little of the oil of amber.

THE tafte may be diminished by crusts, filth, mucus, aphthæ, pellicles, warts, &c. covering the tongue: It may be depraved by a fault of the faliva, which, being discharged into the mouth, gives the fame fenfation'as if the food which the perfon takes had really a bad tafte; or it may be entirely deftroyed by injuries done to the nerves of the tongue and palate. Few things prove more hurtful either to the fense of tasting or fmelling than obstinate colds, especially those which affect the head.

WHEN the tafte is diminished by filth, mucus, &c. the tongue ought to be fcraped and frequently washed with a mixture of water, vinegar, and honey, or some other detergent. When the faliva is vitiated, which feldom happens, unlefs in fevers or other difeafes, the curing of the diforder is the cure of this 'fymptom. To relieve it however in the mean time, the following things may be of ule: If there be a bitter tafte, it may be taken away by vomits, purges, and

#### OF THE TOUCH.

and other things which evacuate bile: What is called a nidorous tafte, arifing from putrid humours, is corrected by the juice of citrons, oranges, and other acids: A falt tafte is cured by plentiful dilution with watery liquors: An acid tafte is deftroyed by abforbents, and alkaline falts, as powder of oyfterfhells, falt of wormwood, &c.

WHEN the fenfibility of the nerves which fupply the organs of tafte is diminished, the chewing of horfe-radish, or other ftimulating substances, will help to recover it.

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THE fenfe of touching may be hurt by any thing that obftructs the nervous influence, or prevents its being regularly conveyed to the organs of touching; as preffure, extreme cold, &c. It may likewife be hurt by too great a degree of fenfibility, when the nerve is not fufficiently covered by the cuticle or ifcarf-fkin, or where there is too great a tenfion of it, or it is too delicate. Whatever diforders the functions of the brain and nerves, hurts the fenfe of touching. Hence it appears to proceed from the ifame general caufes as palfy and apoplexy, and requires nearly the fame method of treatment.

IN a *flupor*, or defect of touching, which arifes from an obftruction of the cutaneous nerves, the patient must first be purged; afterwards such medicines as excite the action of the nerves, or stimulate the fystem, may be used. For this purpose, the spirit of hartshorn, *fal volatile oleofum*, horse-radish, &cc. may be taken inwardly; the difordered parts, L12 at

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at the fame time, may be frequently rubbed with fresh nettles or spirit of *fal ammoniac*. Blisteringplasters and sinapisms applied to the parts will likewise be of use, as also warm bathing, especially in the natural hot baths.

#### CHAP. XLV.

#### OF A SCIRRHUS AND CANCER.

A SCIRRHUS is a hard indolent tumour feated in fome of the glands; as the breafts, the arm-pits, &c. If the tumour becomes large, unequal, of a livid, blackifh or leaden colour, and is attended with violent pain, it gets the name of an occult cancer. When the fkin is broken, and a fanies or ichorous matter of an abominably fœtid fmell is difcharged from the fore, it is called an open or ulcerated cancer. Perfons after the age of 45, particularly women, and those who lead an indolent fedentary life, are most fubject to this difease.

CAUSES. — This difeafe is often owing to fupprefied evacuations; hence it proves fo frequently fatal to women of a grofs habit, particularly old maids and widows, about the time when the menftrual flux ceafes. It may likewife be occafioned by exceffive grief, fear, anger, religious melancholy, or any of the deprefiing paffions. Hence the unfortunate, the choleric, and those perfons who devote themfelves to a religious life in convents or monafteries, are often afflicted with it. It may alfo be occafioned

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occafioned by the long-continued use of food that is too hard of digestion, or of an acrid nature; by barrennes; celibacy; indolence; cold; blows; friction; preffure; or the like. Women often fuffer from the last of these by means of their stays, which squeeze and compress their breast for as to occasion great mischief. Sometimes the difease is owing to an hereditary disposition.

SYMPTOMS. \_\_\_\_ This diforder feems often very triffing at the beginning. A hard tumour about the fize of a hazel nut, or perhaps smaller, is generally the first fymptom. This will often continue for a long time without feeming to increase, or giving the patient great uneafinefs; but if the conftitution be hurt, or the tumor irritated by preffure, or improper treatment of any kind, it begins to extend itself towards the neighbouring parts, by pushing out a kind of roots or limbs. It then gets the name of cancer, from a fancied refemblance between these limbs and the claws of a crab. The colour of the fkin begins to change, which is first red, afterwards purple, then bluish, livid, and at last black. The patient complains of heat, with a burning, gnawing, shooting pain. The tumor is very hard, rough, and unequal, with a protuberance, or rifing, in the middle; its fize increases daily, and the neighbouring veins become thick, knotty, and of a blackish colour.

THE fkin at length gives way, and a thin, fharp ichor begins to flow, which corrodes the neighbouring parts till it forms a large unfightly ulcer. More occult cancers arife, and communicate with the neighbouring glands. The pain and ftench become L13 intolerable;

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intolerable; the appetite fails; the ftrength is exhaufted by a continual hectic fever; at laft, a violent hæmorrhåge, or difcharge of blood, from fome part of the body, with faintings, or convultion fits, generally put an end to the miferable patient's life.

REGIMEN.— The diet ought to be light, but nourithing. All ftrong liquors, and high-feafoned or falted provisions, are to be avoided. The patient may take as much exercise as he can easily bear; and should use every method to divert thought, and amuse his fancy. All kinds of external injury are carefully to be guarded against, particularly of the affected part, which ought to be defended from all preffure, and even from the external air, by covering it with fur or fost flannel.

MEDICINE. — This is one of those difeases for which no certain remedy is yet known. Its progress however may fometimes be retarded, and some of its most difagreeable symptoms mitigated by proper applications. One missfortune attending the difease is, that the unhappy patient often conceals it too long. Were proper means used in due time, a cancer might often be cured; but after the diforder has arrived at a certain height, it generally fets all medicine at defiance.

WHEN a fcirrhous tumour is first discovered, the patient ought to observe a proper regimen, and to take twice or thrice a-week a dose of the common purging mercurial pill. Some blood may also be let, and the part affected may be gently rubbed twice a-day with a little of the mercurial ointment, and kept, warm with fur or flannel. The food mult be light, and an English pint of the decoction of woods

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or farfaparilla may be drank daily. I have fometimes difcuffed hard tumors, which had the appearance of beginning cancers, by a courfe of this kind.

SHOULD the tumor however not yield to this treatment, but, on the contrary, become larger and harder, it will be proper to extirpate it, either by the knife or caustic. Indeed, whenever this can be done with fafety, the fooner it is done the better. It can answer no purpose to extirpate a cancer after the constitution is ruined, or the whole mass of humours corrupted by it. This however is the common way, which makes the operation fo feldom fucceed. Few people will fubmit to the extirpation till death flares them in the face; whereas, if it were done early, the patient's life would not be endangered by the operation, and it would generally prove a radical cure.

WHEN the cancer is fo fituated that it cannot be cut off, or if the patient will not fubmit to the operation, fuch medicines as will mitigate or relieve the most urgent symptoms may be used. Dr. Home fays, that half a grain of the corrofive fublimate of mercury, diffolved in a proper quantity of brandy, and taken night and morning, will often be of fervice in cancers of the face and nofe. He likewife recommends an infusion of the folanum, or nightinade, in cancers of the breafts.

But the medicine most in repute at present for this disease is hemlock. Dr. Stork, physician at Vienna, has of late recommended the extract of this plant as very efficacious in cancers of every kind. The Doctor fays, he has given fome hundred weights of it without ever hurting any body, and often with manifest ad-LI4 vantage.

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vantage. He advifes the patient however to beginwith very fmall dofes, as two or three grains, and to increafe the dofe gradually till fome good effect be perceived, and there to reft without further increafe. From two or three grains at first, the Doctor fays he has increafed the dofe to two, three, or four drachms a-day, and finds that fuch dofes may be continued for feveral weeks without any bad confequences.

THE regimen which the Doctor recommends during the use of the medicine, is to avoid farinaceous fubftances not fermented, and too acrid aromatics. He fays, good wine will not be hurtful to those who are accustomed to it, nor a moderate use of acids; and adds, that the patient should live in a pure free air, and keep his mind as quiet and cheerful as possible.

THE Doctor does not pretend to fix the time in which a cancer may be refolved by the ufe of hemlock, but fays he has given it for above two years in large dofes without any apparent benefit; neverthelefs the patient has been cured by perfifting in the ufe of it for half a year longer. This is at leaft encouragement to give it a fair trial. Though we are far from thinking the hemlock merits those extravagant encomiums which the Doctor has bestowed upon it, yet, in a difease which has so long baffled the boasted powers of medicine, we think it ought always to be tried.

THE powder of hemlock is by fome preferred to the extract. They are both made of the fresh leaves, and may be used nearly in the same manner. Dr. Nicholson of Berwick says, he gradually increased

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the dole of the powder from a few grains to half a drachm, and gave near four drachms of it in the day with remarkably good effects. The hemlock may alfo be ufed externally either as a poultice or fomentation. The fore may likewife be kept clean by injecting daily a ftrong decoction of the tops and leaves into it.

FEW things contribute more to the healing of foul fordid ulcers of any kind than keeping them thoroughly clean. This ought never to be neglected. The beft application for this purpofe feems to be the carrot poultice. The root of the common carrot may be grated, and moistened with as much water as will bring it to the confistence of a poultice or cataplasm. This must be applied to the fore, and renewed twice a-day. It generally cleans the fore, eafes the pain, and takes away the difagreeable smell, which are objects of no small importance in such a dreadful diforder \*.

WORT, or an infusion of malt, has been recommended not only as a proper drink, but as a powerful medicine in this difeafe. It must be frequently made fresh, and the patient may take it at pleasure. Two, three, or even four English pints of it may be drank every day for a confiderable time. No benefit can be expected from any medicine in this difease, unless it be persisted in for a long time. It is of too obstinate a nature to be foon removed; and, when it admits of a cure at all, it must be brought about by inducing an almost total change of the habit, which must always be a work of time. Setons or issues

\* London Medical Estays,

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the neighbourhood of the cancer have fometimes good effects \*.

WHEN all other medicines fail, recourfe must be had to opium, as a kind of folace. This will not indeed cure the difease, but it will ease the patient's agony, and render life more tolerable while it continues.

To avoid this dreadful diforder, people ought to ule wholefome food; to take fufficient exercise in the open air; to be as easy and cheerful as possible; and carefully to guard against all blows, bruises, and every kind of pressure upon the breasts or other glandular parts  $\dagger$ .

\* In a cancer which had fet all medicines, and even furgery at defiance, I lately faw remarkable effects from an obstinate perseverance in a course of antiseptics. I ordered the deep plcers to be washed to the bottom by means of a fyringe, twice or thrice a-day, either with an infusion of the bark, or a decoction of carrot, and that the patient should take four or five times a-day, a glafs of good wine with half a drachm of the best powdered bark in it. The fores, after being washed, were likewife fprinkled with the fame powder. When the patient began this courfe, her death was daily expected. She continued it for above two years, with manifest advantage; but being told by an eminent furgeon, that the bark would not cure a cancer, and that the fores ought not to be washed, she discontinued the practice, and died in a few weeks. This course was not intended to cure the cancer, but to prolong the patient's life, which it evidently did almost to a miracle.

+ As hemlock is the principal medicine recommended in this difeafe, we would have given fome directions for the gathering and preparing of that plant; but as its different preparations are now kept in the fhops, we think it much fafer for people to get them there, with proper directions for using them.

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CHAP.

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### CHAP. XLVI. OF POISONS.

E VERY perfon ought, in fome measure, to be acquainted with the nature and cure of poilons. They are generally taken unawares, and their effects are often fo fudden and violent, as not to admit of delay, or allow time to procure the affistance of physicians. Happily indeed no great degree of medical knowledge is here necessary; the remedies for most poisons being generally at hand, or easily obtained, and nothing but common prudence needful in the application of them.

THE vulgar notion, that every poifon is cured by fome counter-poifon, as a fpecific, has done much hurt. People believe they can do nothing for the patient, unlefs they know the particular antidote to that kind of poifon which he has taken. Whereas the cure of all poifons taken into the ftomach, without exception, depends chiefly on difcharging them as foon as poffible.

THERE is no cafe wherein the indications of cure are more obvious. Poifon is feldom long in the ftomach before it occafions ficknefs, with an inclination to vomit. This fhews plainly what ought to be done. Indeed common fenfe dictates to every one, that, if any thing has been taken into the ftomach which endangers life, it ought immediately to be difcharged. Were this duly regarded, the danger arifing from poifons might generally be avoided. The method of prevention is obvious, and the means are in the hands of every man.

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WE fhall not take up the reader's time with a detail of the ridiculous notions which have prevailed among ignorant people in different ages with regard to poifons; neither fhall we mention the boafted antidotes, which have been recommended either for preventing or obviating their effects; but fhall content ourfelves with pointing out the poifons most common in this country, and the means of avoiding their dangerous confequences.

Poisons either belong to the mineral, the vegetable, or the animal kingdom.

MINERAL poifons are commonly of an acrid or corrofive quality; as arfenic, cobalt; the corrofive fublimate of mercury, &c.

THOSE of the vegetable kind are generally of a narcotic, or stupefactive quality; as poppy, hemlock, henbane, berries of the deadly night-shade, &c.

POISONOUS animals communicate their infection either by the bite or fting. This poifon is very different from the former, and only produces its effects when received into the body by a wound.

MINERAL POISONS.——Arfenic is the most common of this class; and, as the whole of them are pretty fimilar both in their effects and method of cure, what is faid with respect to it, will be applicable to every other species of corrosive poilon.

WHEN a perfon has taken arfenic, he foon perceives a burning heat, and a violent pricking pain in his ftomach and bowels, with an intolerable thirft, and an inclination to vomit. The tongue and throat feel rough and dry; and, if proper means be not foon administered, the patient is feized with great anxiety, hiccuping,

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hiccuping, faintings, and coldness of the extremities. To these fucceed black vomits, setid stools, with a mortification of the stomach and intestines, which are the immediate forerunners of death.

On the first appearance of these symptoms the patient should drink large quantities of new milk and fallad-oil till he vomits; or he may drink warm water mixed with oil. Fat broths are likewise proper, provided they can be got ready in time. Where no oil is to be had, fresh butter may be melted and mixed with the milk or water. These things are to be drank as long as the inclination to vomit continues. Some have drank eight or ten English quarts before the vomiting ceased; and it is never fase to leave off drinking while one particle of the poison remains in the storact.

THESE oily or fat fubftances not only provoke vomiting, but likewife blunt the acrimony of the poifon, and prevent its wounding the bowels; but if they fhould not make the perfor vomit, half a drachm or two feruples of the powder of ipecacuanha muft be given, or a few fpoonfuls of the oxymel or vinegar of fquills may be mixed with the water which he drinks. Vomiting may likewife be excited by tickling the infide of the throat with a feather. Should thefe methods however fail; half a drachm of white vitriol, or five or fix grains of emetic tartar, muft be adminiftered.

IF tormenting pains are felt in the lower belly, and there is reason to fear that the poison has got down to the intestines, clysters of milk and oil must be very frequently thrown up; and the patient must drink emollient decoctions of barley, oatmeal, marshmallows, 426 OF POISONS.

mallows, and fuch like. He must likewise take at infusion of senna and manna, a solution of Glauber's falts, or fome other purgative.

AFTER the poifon has been evacuated, the patient ought, for fome time, to live upon fuch things as are of a healing and cooling quality; to abstain from flefh and all ftrong liquors, and to live upon milk, broth, gruel, light puddings, and other spoon meats of easy digeftion. His drink should be barley-water, linfeed-tea, or infusions of any of the mild mucilaginous vegetables.

VEGETABLE POISONS, befides heat and pain of the ftomach, commonly occasion fome degree of giddiness, and often a kind of stupidity or folly. Perfons who have taken these poisons must be treated in the fame manner as for the mineral or corrofive.

THOUGH the vegetable poifons, when allowed to remain in the ftomach, often prove fatal; yet the danger is generally over as foon as they are difcharged. Not being of fuch a cauffic or corrofive nature, they are lefs apt to wound or inflame the bowels than mineral fubstances; no time, however, ought to be loft in having them discharged.

OPIUM, being frequently taken by miltake, merits particular attention. It is used as a medicine both in a folid and liquid form, which latter commonly goes by the name of laudanum. It is indeed a valuable medicine when taken in proper quantity, but as an over-dose proves a ftrong poison; we shall point out its common effects, together with the method of cure.

An over-dose of opium generally occasions great drowfinefs, with ftupor and other apoplectic fymptoms.

toms. Sometimes the perfon has fo great an inclination to fleep, that it is almost impossible to keep him awake. Every method must however be tried for this purpose. He should be tossed, shaked, and moved about. Sharp blistering-plasters should be applied to his legs or arms, and stimulating medicines, as falts of hartshorn, &c. held under his nose. It will also be proper to let blood. At the same time every method must be taken to make him discharge the poison. This may be done in the manner directed above, viz. by the use of strong vomits, drinking plenty of warm water with oil, &c.

MEAD, befides vomits, in this cafe, recommends acid medicines with lixivial falts. He fays, that he has often given falt of wormwood mixed with juice of lemon in repeated dofes with great fuccefs.

Ir the body fhould remain weak and languid after the poifon has been difcharged, nourifhing diet and cordials will be proper; but when there is reafon to fear that the ftomach or bowels are inflamed, the greatest circumspection is necessary both with regard to food and medicine.

### OF THE BITES OF POISONOUS ANIMALS.

WE shall begin with the bite of a mad dog, as it is both the most common and dangerous animalpoifon in this country.

THE creatures naturally liable to contract this difeafe are, as far as we yet know, all of the dog kind, viz. foxes, dogs, and wolves. Hence it is called the rabies

rabies canina, or dog madnefs. Of the laft we have none in this ifland; and it fo feldom happens that any perfon is bit by the first, that they fearce deferve to be taken notice of. If such a thing should happen, the method of treatment is precifely the same as for the bite of a mad dog.

THE fymptoms of madnefs in a dog are as follow: At first he looks dull, shews an aversion to food and company: He does not bark as ufual, but feems to murmur, is peevifh, and apt to bite ftrangers: His ears and tail droop more than ufual, and he appears drowfy: Afterwards he begins to loll out his tongue, and froth at the mouth, his eyes feeming heavy and watery: He now, if not confined, takes off, runs panting along with a kind of dejected air, and endeavours to bite every one he meets. Other dogs are faid to fly from him. Some think this a certain fign of madnefs, fuppofing that they know him by the fmell; but it is not to be depended on. If he escapes being killed; he feldom runs above two or three days, till he dies exhaufted with heat, hunger, and fatigue.

THIS difeafe is most frequent after long dry, hot feafons; and fuch dogs as live upon putrid stinking carrion, without having enough of fresh water, are most liable to it.

WHEN any perfon has been bit by a dog, the ftricteft inquiry ought to be made, whether the animal was really mad. Many difagreeable confequences arife from neglecting to afcertain this point. Some people have lived in continual anxiety for many years, becaufe they had been bit by a dog which they believed to be mad; but, as he had been killed on the fpot,

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it was impossible to afcertain the fact. This should induce us, instead of killing a dog the moment he has bit any perfon, to do all in our power to keep him alive, at least till we can be certain whether he be mad or not.

MANY circumftances may contribute to make people imagine a dog mad. He lofes his mafter, runs a about in queft of him, is fet upon by other dogs, and perhaps by men. The creature, thus frightened, beat, and abufed, looks wild, and lolls out his tongue as he runs along. Immediately a crowd is after him; while he, finding himfelf clofely purfued, and taking every one he meets for an enemy, naturally attempts to bite him in felf-defence. He foon gets knocked on the head, and it paffes currently that he was mad, as it is then impoffible to prove the contrary.

This being the true hiftory of, by far, the greater part of those dogs which pass for mad, is it any wonder that numberlefs whimfical medicines have been extolled for preventing the effects of their bite? This readily accounts for the great variety of infallible remedies for the bite of a mad dog, which are to be met with in almost every family. Though not cone in a thousand has any claim to merit, yet they are all supported by numberless vouchers. No wonder that imaginary difeafes should be cured by imaginary remedies. In this way, credulous people first impose upon themselves, and then deceive others. The fame medicine which was fupposed to prevent the effects of the bite; when the dog was not mad; is recommended to a perfon who has had the misfor-M m tune

tune to be bit by a dog that was really mad. He takes it, trufts to it, and is undone.

To thefe miftakes we must impute the frequent ill fuccefs of the medicines used for preventing the effects of the bite of a mad dog. It is not owing fo much to a defect in medicine, as to wrong applications. I am perfuaded, if proper medicines were administered immediately after the bite is received, and continued for a fufficient length of time, we should not lose one in a thousand of those who have the misfortune to be bit by a mad dog.

THIS poifon is generally communicated by a wound, which, neverthelefs, heals as foon as a common wound: But afterwards it begins to feel painful, and as the pain fpreads towards the neighbouring parts, the perfon becomes heavy and liftlefs. His fleep is unquiet with frightful dreams; he fighs, looks dull, and loves folitude. Thefe are the forerunners, or rather the firft fymptoms of that dreadful difeafe occafioned by the bite of a mad dog. But as we do not propofe to treat of the difeafe itfelf, but to point out the method of preventing it, we fhall not take up time in fhewing its progrefs from the firft invafion to its commonly fatal end.

THE common notion, that this poifon may lie in the body for many years, and afterwards prove fatal, is both hurtful and ridiculous. It must render fuch perfons as have had the misfortune to be bit very unhappy, and can have no good effects. If the perfon takes proper medicines for forty days after the time of his being bit, and feels no fymptoms of the difeafe, there is reafon to believe him out of danger.

THE medicines recommended for preventing the effects of the bite of a mad dog, are chiefly fuch as promote the different fecretions, and antifpafmodics.

DR. MEAD recommends a preventive medicine, which he fays he never knew fail, though in the fpace of thirty years he had used it a thoufand times.

THE Doctor's prescription is as follows :

" TAKE alh-coloured ground liver-wort, cleaned, dried, and powdered, half an ounce; of black pepper powdered, a quarter of an ounce. Mix thefe well together, and divide the powder into four dofes; cone of which must be taken every morning fasting, for four mornings fucceffively, in half an English spint of cows milk warm.

AFTER these four doses are taken, the patient must go into the cold bath, or a cold spring or river every morning fasting, for a month; he must be dipped call over, but not stay in (with his head above water) llonger than half a minute, if the water be very cold. After this he must go in three times a-week for a fortnight longer.

" THE perfon must be bled before he begins to use the medicine \*."

WE shall next mention the famous East India specific, as it is called. This medicine is composed

\* Though we give this prefcription on the credit of Dr. Mead, yet we would not advife any perfon, who has reafon to believe that he has been bit by a dog which was really mad, to truft to it alone. Mead was an able phyfician, but he feems to have been no great philosopher, and was sometimes the dupe of his own credulity.

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of cinnabar and musk. It is effected a great antifpasmodic; and, by many, extolled as an infallible remedy for preventing the effects of the bite of a mad dog.

"TAKE native and factitious cinnabar, of each twenty-four grains, musch fixteen grains. Let these be made into a fine powder, and taken in a glass of arrack or brandy."

THIS fingle dofe is faid to fecure the perfon for thirty days, at the end of which it must be repeated; but if he has any fymptoms of the difease, it must be repeated in three hours.

THE following is likewife reckoned a good antifpafmodic medicine:

" TAKE of Virginian fnake-root in powder, half a drachm, gum afafætida twelve grains, gum camphire feven grains; make thefe into a bolus with a little fyrup of faffron."

CAMPHIRE may also be given in the following manner:

TAKE purified nitre half an ounce, Virginian frake-root in powder two drachms, camphire one drachm; rub them together in a mortar, and divide the whole into ten dofes."

MERCURY is likewife recommended as of great efficacy, both in the prevention and cure of this kind of madnefs. When ufed as a preventive, it will be fufficient to rub daily a drachm of the ointment into the parts about the wound.

VINEGAR is likewife of confiderable fervice, and fhould be taken freely, either in the patient's food or drink.

THESE

THESE are the principal medicines recommended for preventing the effects of the bite of a mad dog. We would not however advife people to truft to any one of them; but from a proper combination of their different powers, there is the greatest reason to hope for fucces.

THE great error in the use of these medicines lies, in not taking them for a sufficient length of time. They are used more like charms, than medicines intended to produce any change in the body. To this, and not to the insufficiency of the medicines, we must impute their frequent want of success.

DR. MEAD fays, that the virtue of his medicine confifts in promoting urine. But how a poifon fhould be expelled by urine, with only three or four doles of any medicine, however powerful, is not eafy to conceive. More time is certainly neceffary ; even though the medicine were more powerful than that which the Doctor preferibes.

THE East-India specific is still more exceptionable on this account.

As these and most other medicines, taken fingly, have frequently been found to fail, we shall recommend the following course:

Ir a perfon be bit in a fiefhy part, where there is no hazard of hurting any large blood-veffel, the parts adjacent to the wound may be cut away. But if this be not done foon after the bite has been received, it will be better to omit it.

THE wound may be washed with falt and water, or a pickle made of vinegar and falt, and afterwards dreffed twice a-day with yellow basilicon mixed with the red precipitate of mercury.

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THE patient fhould begin to use either Dr. Mead's medicine, or fome of the others mentioned above. If he takes Mead's medicine, he may use it as the Doctor directs for four days successively. Let him then omit it for two or three days, and again repeat the fame number of doses as before.

DURING this course, he must rub into the parts about the wound, daily, one drachm of the mercurial ointment. This may be done for ten or twelve days at least.

WHEN this courfe is over, he may take a purge or two, and wait a few days till the effect of the mercury be gone off. He must then begin to use the cold bath, into which he may go every morning for five or fix weeks. If he should feel cold and chilly for a long time after coming out of the cold bath, it will be better to use a tepid one, or to have the water a little warmed.

In the mean time, we would advife him not to leave off all internal medicines, but to take either one of the bolufes of fnake-root, afafœtida, and camphire; or one of the powders of nitre, camphire, and fnake-root, twice a-day. Thefe may be ufed during the whole time he is bathing.

DURING the use of the mercurial ointment, the patient must keep within doors, and take nothing cold.

A PROPER regimen must be observed throughout the whole course. The patient should abitain from shefth, and all falted and high seasoned provisions. He must avoid strong liquors, and live mostly upon a light and rather space diet. His mind should be kept as easy and cheerful as possible, and all excessive heat

BITES OF POISONOUS ANIMALS. 535

heat and violent passions avoided with the utmost care.

I HAVE never feen this courfe of medicine, with proper regimen, fail to prevent the hydrophobia, and cannot help again obferving, that the want of fuccefs must generally be owing either to the application of improper medicines, or not using proper ones for a fufficient length of time.

MANKIND are extremely fond of every thing that promifes a fudden or miraculous cure. By trufting to thefe they often lofe their lives, when a regular courfe of medicine would have rendered them abfolutely fafe. This holds remarkably in the prefent cafe: Numbers of people, for example, believe if they or their cattle be once dipped in the fea, it is fufficient; as if the falt water were a charm againft the effects of the bite. This, and fuch like whims, have proved fatal to many.

It is a common notion, if a perfon be bit by a dog which is not mad, that, if he fhould go mad afterwards, the perfon would be affected with the diforder at the fame time; but this notion is too ridiculous to deferve a ferious confideration. It is a good rule, however, to avoid dogs as much as poffible, as. the difeafe is often upon them for fome time before its violent symptoms appear. The hydrophobia has been occafioned by the bite of a dog which fhewed no other fymptoms of the difeafe but liftleffnefs and a fullen difpofition \*.

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• It is fomewhat furprifing, that no proper enquiry has ever been made into the truth of the common opinion, that a dog which has been wormed cannot bite after he goes mad. If the M m 4 fast

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THOUGH we do not mean to treat fully of the cure of the hydrophobia, yet we are far from reckoning it incurable. The notion that this difeafe could not be cured, has been productive of the most horrid confequences. It was usual either to abandon the unhappy perfons, as foon as they were feized with the difeafe, to their fate, to bleed them to death, or to fuffocate them between matraffes or feather-beds, &c. This conduct certainly deferved the feverest punishment ! We hope, for the honour of human nature, it will never again be heard of.

I HAVE never had an opportunity of treating this difeafe, and therefore can fay nothing of it from my own experience; but the learned Dr. Tiffot fays, it may be cured in the following manner;

**THE** patient must be bled to a confiderable quantity; and this may be repeated twice, or thrice, or even a fourth time, if circumstances require it.

2. THE patient should be put, if possible, into a warm bath; and this should be used twice a-day.

3. HE should every day receive two, or even three emollient clysters.

4. THE wound, and the parts adjoining to it, fhould be rubbed with the mercurial ointment twice a-day.

5. THE whole limb which contains the wound fhould be rubbed with oil, and be wrapped up in an oily flannel.

6. EVERY three hours, a dose of Cob's powder should be taken in a cup of the infusion of lime-tree

fact could be afcertained, and the practice rendered general, it would fave both the lives and properties of many.

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#### BITES OF POISONOUS ANIMALS. 537.

and elder-flowers. This powder is made, by rubbing together in a mortar, to a very fine powder, of native and factitious cinnabar, each twenty-four grains; of musch, fixteen grains \*.

7. THE following bolus is to be given every night, and to be repeated in the morning, if the patient is not eafy, washing it down with the infusion mentioned above: Take one drachm of Virginian snake-root in powder; of camphire and asafcetida, ten grains each; of opium, one grain; and, with a sufficient quantity of conferve, or rob of elder, make a bolus.

8. Is there be a great naufea at the ftomach, with a bitternefs in the mouth, thirty-five or forty grains of ipecacuanha, in powder, may be taken for a vomit.

9. The patient's food, if he takes any, must be light; as panado, foups made of farinaceous or mealy vegetables, &c.

10. If the patient fhould long continue weak, and fubject to terrors, he may take half a drachm of the Peruvian bark thrice a-day.

THE next poifonous animal which we shall mention is the VIPER. The grease of this animal rubbed into the wound is faid to cure the bite. Though that is all the viper-catchers generally do when bit, we should not think it sufficient for the bite of an enraged viper. It would furely be more fase to have the

\* The Ormskirk medicine, as it is called, seems to me to confish chiefly of cinnabar. Though it is faid to be infallible, as a preventive; yet I would not advise any one to trush to it alone. Indeed it is ordered to be taken in a manner which gives it more the appearance of a charm than of a medicine. Surely if a medicine is to produce any change in the body, it must be taken for fome confiderable time, and in fufficient quantity.

wound

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wound well fucked \*, and afterwards rubbed with warm falad-oil. A poultice of bread and milk, foftened with falad-oil, fhould likewife be applied to the wound; and the patient ought to drink freely of vinegar-whey, or water-gruel with vinegar in it, to make him fweat. Vinegar is one of the beft medicines which can be ufed in any kind of poifon, and ought to be taken very liberally. If the patient be fick, he may take a vomit. This courfe will be fufficient to cure the bite of any of the poifonous animals of this country.

WITH regard to poifonous infects, as the bee, the wafp, the hornet, &c. their ftings are feldom attended with danger, unlefs when a perfon happens to be ftung by a great number of them at the fame time; in which cafe fomething fhould be done to abate the inflammation and fwelling. Some, for this purpofe, apply honey; others lay pounded parfley to the part. A mixture of vinegar and Venice-treacle is likewife recommended; but I have always found rubbing the part with warm falad-oil fucceed very well. Indeed, when the ftings are fo numerous as to endanger the patient's life, which is fometimes the cafe, he muft

\* The practice of fucking out poifons is very ancient; and indeed nothing can be more rational. Where the bite cannot be cut out, this is the moft likely way for extracting the poifon. There can be no danger in performing this office, as the poifon does no-harm unlefs it be taken into the body by a wound. The perfon who fucks the wound ought however to wafth his mouth frequently with falad-oil, which will fecure him from even the leaft inconveniency. The *Bfylli* in Africa, and the *Merfi* in Italy, were famed for curing the bites of poifonous animals by fucking the wound; and we are told, that the Indians in North America practife the fame at this day.

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### BITES OF POISONOUS ANIMALS. 539

not only have oily poultices applied to the part, but must likewise be bled, and take some cooling medicines, as nitre, or cream of tartar, and should drink plentifully of diluting liquors.

It is the happinefs of this ifland to have very few poifonous animals, and those which we have are by no means of the most virulent kind. Nine-tenths of the effects attributed to poifon or venom in this country, are really other difeases, and proceed from quite different causes.

WE cannot however make the fame obfervation with regard to poifonous vegetables. These abound every where, and prove often fatal to the ignorant and unwary. This indeed is chiefly owing to careleffness. Children ought early to be cautioned against eating any kind of fruit, roots, or berries, which they do not know, and all poisonous plants to which they can have access, ought, as far as posfible, to be destroyed. This would not be fo difficult a task as some people imagine.

Poisonous plants have no doubt their ufe, and they ought to be propagated in proper places; but, as they prove often deftructive to cattle, they fhould be rooted out of all pafture-grounds. They ought likewife, for the fafety of the human fpecies, to be deftroyed in the neighbourhood of all towns and villages; which, by the bye, are the places where they most commonly abound. I have feen the poifonous hemlock, henbane, wolfsbane, and deadly night-fhade, all growing within the *environs* of a fmall town, where, though feveral perfons, within the memory of those. living in it, had lost their lives by one or other of these plants; yet no method, that I could hear of, had ever

# 540 BITTES OF POISONOUS ANIMALS.

ever been taken to root them out; though this might be done at a very trifling expence.

SELDOM a year paffes but we have accounts of feveral perfons poiloned by eating hemlock-roots inflead of parfnips, or fome kinds of fungus which they had gathered for mufhrooms. Thefe examples ought to put people upon their guard with refpect to the former, and to put the latter entirely out of ufe. Mufhrooms may be a delicate difh, but they are a dangerous one, as they are generally gathered by perfons who do not know one kind of fungus from another, and take every thing for a mufhroom which has that appearance.

WE might here mention many other plants and animals of a poifonous nature which are found in foreign countries; but, as our observations are chiefly intended for this island, we shall pass these over. It may not however be amifs to observe, for the behoof. of fuch of our countrymen as go to America, that an effectual remedy is now faid to be found for the bite, of the rattle-Inake.-The prefcription is as follows ; Take of the roots of plantain and horehound, in fum-. mer, roots and branches together, a sufficient quantity; bruife them in a mortar, and fqueeze out the juice, of which give, as foon as possible, one large spoonful; if the patient be swelled, you must force it down his throat. This generally will cure; but, if he finds no relief in an hour after, you may give another spoonful, which never fails .- If the roots are dried, they must be moistened with a little water. To the wound may be applied a leaf of good tobacco moistened with rum. WE

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#### OF THE VENEREAL DISEASE. 541

WE give this upon the faith of Dr. Brookes, who's fays it was the invention of a negro; for the difcovery of which he had his freedom purchased, and a hundred pounds *per annum* settled upon him during life, by the General Assembly of Carolina.

It is poffible there may be in nature specific remedies for every kind of poifon; but as we have very little faith in any of those which have yet been pretended to be discovered, we shall beg leave again to recommend the most strict attention to the following rules, viz. That when any poisonous substance has been taken into the stomach, it ought, as soon as posfible, to be discharged by vomits, clysters, and purges; and, when poison has been received into the body by a wound, that it be expelled by medicines which promote the different secretions, especially those of sweat, urine, and infensible perspiration; to which may be joined antispass or such medicines as take off tension, and irritation; the chief of which are opium, musc, camphire, and as afacetida.

## C H A P. XLVII. OF THE VENEREAL DISEASE.

IN a former edition of this book the venereal difeafe was omitted. The reafons however which at that time induced me to leave it out, have upon more mature confideration vanished. Bad confequences, no doubt, may arise from ignorant perfons tampering with medicine in this diforder; but the danger

# 542 OF THE VENEREAL DISEASE.

danger from that quarter feems to be more than balanced by the great and folid advantages, which must arise to the patient from an early knowledge of his cafe, and an attention to a plan of regimen, which, if it does not cure the difease, will be sure to render it more mild, and less hurtful to the constitution.

IT is peculiarly unfortunate for the unhappy perfons who contract this difeafe, that it lies under a fort of difgrace. This renders difguife neceffary, and makes the patient either conceal his diforder altogether, or apply to those who promise a fudden and fecret cure; but who in fact only remove the symptoms for a time, while they fix the difease deeper in the habit. By this means a flight infection, which might have been easily removed, is often converted into an obstinate, and fometimes incurable malady.

ANOTHER unfavourable circumftance attending this difeafe is, that it assumes a variety of different fhapes, and may with more propriety be called an affemblage of difeafes, than a fingle one. No two difeafes can require a more different method of treatment than this does in its different ftages. Hence the folly and danger of trufting to any particular noftrum for the cure of it. Such noftrums are however generally administered in the fame manner to all who apply for them, without the least regard to the state of the difeafe, the constitution of the patient, the degree of infection, and a thousand other circumstances of the utmost importance.

THOUGH the venereal difeafe is generally the fruit of unlawful embraces, yet it may be communicated to the innocent as well as the guilty. Infants, nurfes,

# OF THE VIRULENT GONORRHOEA. 543

nurfes, midwives, and married women whofe hufbands lead diffolute lives, are often affected with it, and frequently lofe their lives by not being aware of their danger in due time. The unhappy condition of fuch perfons will certainly plead our excufe, if any excufe be neceffary, for endeavouring to pointout the fymptoms and cure of this too common difeafe.

To enumerate all its different fymptoms, however, and to trace the difeafe minutely through its various ftages, would require a much larger fpace than falls to this part of my fubject; I fhall therefore confinemy obfervations chiefly to circumftances of importance, omitting fuch as are either trifling, or which occur but feldom. I fhall likewife pafs over the hiftory of the difeafe, with the different methods of treatment which it has undergone fince it was first introduced into Europe, and many other circumftances of a fimilar nature; all of which, though they might tend to amufe the reader, yet could afford him little or no ufeful knowledge.

# OF THE VIRULENT GONORRHOEA.

THE virulent gonorrhœa is an involuntary difcharge of infectious matter from the parts of generation in either fex. It generally makes its appearance within eight or ten days after the infection has been received; fometimes indeed it appears in two or three days, and at other times not before the end of four or five weeks. Previous to the difcharge, the patient feels an itching with a finall degree of pain in the genitals. Afterwards a thin glary matter begins ...

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## 544 OF THE VIRULENT GONORRHEEA.

to diftil from the urinary paffage, which ftains the linen, and occafions a finall degree of titillation; particularly in the time of making water; this gradually increasing, arifes at length to a degree of heat and pain, which are chiefly perceived about the extremity of the urinary paffage, where a flight degree of redness and inflammation likewise begin to appear.

As the diforder advances, the pain, heat of urine, and running, increafe, while frefh fymptons daily enfue. In men the erections become painful and involuntary, and are more frequent and lafting than when natural. This fymptom is most troublefome when the patient is warm in bed. The pain which was at first only perceived towards the extremity, now begins to reach all up the urinary passage, and is most intense just after the patient is done making water. The running gradually recedes from the colour of feed, grows yellow, and at length puts on the appearance of matter.

WHEN the diforder has arrived at its height, all the fymptoms are more intenfe; the heat of urine is fo great, that the patient dreads the making water, and though he feels a conftant inclination this way, yet it is rendered with the greateft difficulty, and often only by drops: the involuntary erections now become extremely painful and frequent; there is alfo a pain, heat, and fenfe of fulnefs about the feat, and the running is plentiful and fharp, of a brown, greenifh, and fometimes of a bloody colour.

By a proper treatment the violence of the fymptoms gradually abates; the heat of urine goes off; the involuntary and painful erections; and the heat and

# OF THE VIRULENT GONORRHOA. 545

and pain about the feat become eafier; the running alfo gradually decreafes, grows whiter and thicker, till at laft it entirely difappears.

By attending to these fymptoms, the gonorrhœa may be generally diftinguished from any other difease. There are however some few disorders for which it may be mistaken, as an ulcer in the kidnies or bladder, the *fluor albus* or whites in women, &c. But in the former of these, the matter comes away only with the urine, or when the sphincter of the bladder is open; whereas in a gonorrhœa, the difcharge is constant. The latter is more difficult to distinguish, and must be known chiefly from its effects, as pain, communicating the infection, &c.

REGIMEN. When a perfon has reason to fuspect that he has caught the venereal infection, he ought most strictly to observe a cooling regimen, to avoid every thing of a heating nature, as wines, spirituous liquors, rich fauces, spiced, falted, highfeafoned, and fmoke-dried provisions, &c. as also all aromatic and ftimulating vegetables, as onions, garlic, shallot, nutmeg, mustard, cinnamon, mace, ginger, and fuch like. His food ought chiefly to confift of mild vegetables, milk, broths, light puddings, panado, gruels, &c. His drink may be barleywater, milk and water, decoctions of marsh-mallows and liquorice, linseed-tea, or clear whey. Of these he ought to drink plentifully. Violent exercife of all kinds, especially riding on horseback, and venereal pleasures, are to be avoided. The patient must beware of cold, and when the inflammation is violent, he ought to keep his bed.

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### 546 OF THE VIRULENT GONORRHOEA.

MEDICINE.—A virulent gonorrhœa cannot always be cured fpeedily and effectually at the fame time. The patient ought therefore not to expect, nor the phylician to promife it. It will often continue for two or three weeks, and fometimes for five or fix, even where the treatment has been very proper.

SOMETIMES indeed a flight infection may be carried off in a few days, by bathing the parts in warm milk and water, and injecting frequently up the urethra a little fweet oil or linfeed-tea about the warmth of new milk. Should thefe not fucceed in carrying off the infection, they will at leaft have a tendency to leffen its virulence.

To effect a cure, however, aftringent injections will generally be found neceffary. These may be various ways prepared, but I think those made with the white vitriol are both most fase and efficacious. They can be made stronger or weaker as circumstances may require, but it is best to begin with the more gentle, and increase their power if necessary. I generally order a drachm of white vitriol to be diffolved in eight or nine ounces of common, or rose-water, and an ordinary fyringe full of it to be thrown up three or four times a-day. If this quantity does not perform a cure, it may be repeated, and the dose increased\*.

WHETHER

\* Although it is now very common to cure the gonorrhæa by aftringent injections, there are flill many practitioners who do not approve this mode of practice. I can however, from much experience, aftert, that it is both the moft eafy, elegant, and efficacious method of cure; and that any bad confequences arifing from it must be owing to the ignorance or mifconduct of the practitioner

# OF THE VIRULENT GONORRHOEA. 547.

WHETHER injections be used or not, cooling purges are always proper in the gonorrhœa. They ought not however to be of the ftrong or draftic kind. Whatever raises a violent commotion in the body increases the danger, and tends to drive the difease deeper into the habit. Procuring two or three stops every second or third day for the first fortnight, and the same number every fourth or fifth day for the second, will generally be fufficient to remove the inflammatory symptoms, to diminish the running, and to change the colour and consistence of the matter, which gradually becomes more clear and ropy as the virulence abates \*.

WHEN

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titioner himfelf, and not to the remedy. Many, for example, use firong preparations of lead, all of which are dangerous when applied to the internal furfaces of the body; others use escharotics, which inflame and injure the parts. I have known a gonorrhœa actually cured by an injection made of green-tea, and would always recommend gentle methods where they will fucceed.

\* If the patient can fwallow a folution of falts and manna, he may take fix drachms, or, if his conflitution requires it, an ounce of the former, with half an ounce of the latter. Thefe may be diffolved in an English pint of boiling water, whey, or thin water-gruel, and taken early in the morning.

If an infusion of senna and tamarinds be more agreeable, two drachms of the former, and an ounce of the latter, may be infused all night in an English pint of boiling water. The infusion may be straight next morning, and half an ounce of Glauber's falts diffolved in it. A tea-cupful of this infusion may be taken every half-hour till it operates.

Should the patient prefer an electuary, the following will befound to anfwer very well. Take of the lenitive electuary four ounces, cream of tartar two ounces, jalap in powder two drachms, rhubarb one drachm, and as much of the fyrup of pale rofes as will ferve to make up the whole into a foft electuary. Two or

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# 548 OF THE VIRULENT GONORRHOA.

WHEN the inflammatory fymptoms run high, bleeding is always neceffary at the beginning. This operation, as in other topical inflammations, must be repeated according to the strength and constitution of the patient, and the vehemence and urgency of the fymptoms.

MEDICINES which promote the fecretion of urine, are likewife proper in this ftage of the diforder. For this purpofe, an ounce of nitre and two ounces of gum arabic, pounded together, may be divided into twenty-four dofes, one of which may be taken frequently, in a cup of the patient's drink. If thefe fhould make him pafs his urine fo often as to become troublefome to him, he may either take them lefs frequently, or leave out the nitre altogether, and take equal parts of gum arabic, and cream of tartar. Thefe may be pounded together, and a tea-fpoonful taken in a cup of the patient's drink four or five times a-day. I have generally found this anfwer extremely well both as a diuretic, and for keeping the body gently open.

WHEN the pain and inflammation are feated high towards the neck of the bladder, it will be proper frequently to throw up an emollient clyfter, which, befides the benefit of procuring ftools, will ferve as a fomentation to the inflamed parts.

three tea-fpoonfuls of this may be taken over-night, and about the fame quantity next morning, every day that the patient chufes to take a purge.

The dofes of the above medicines may be increafed or diminifhed according as the patient finds it neceffary. We have ordered the falts to be diffolved in a large quantity of water, becaufe it renders their operation more mild.

SOFT

### OF THE VIRULENT GONORRHCEA. 549

Soft poultices, when they can conveniently be applied to the parts, are of great fervice. They may be made of the flour of linseed, or of wheat-bread and milk, foftened with fresh butter or fweet oil. When poultices cannot be conveniently ufed, cloths wrung out of warm water, or bladders filled with warm milk and water, may be applied. I have often known the most excruciating pains, during the inflammatory flate of the gonorrhœa, relieved by one or other of these applications.

Frw things tend more to keep off inflammation in the spermatic vessels, than a proper truss for the scrotum. It ought to'be fo contrived as to fupport the tefticles, and fhould be worn from the first appearance of the difease till it has ceased some weeks.

THE above treatment will fometimes remove the gonorrhæa fo quickly, that the perfon will be in doubt whether he really laboured under that disease. This, however, is too favourable a turn to be often expected. It more frequently happens, that we are able only to procure an abatement or remiffion of the inflammatory fymptoms, fo far as to make it fafe to have recourse to the great antidote mercury.

MANY people, on the first appearance of a gonor-1rhœa, fly to the use of mercury. This is a bad plan. Mercury is often not at all neceffary in a gonorrhœa; and when taken too early, it does mischief. It may be neceffary to complete the cure, but can never be proper at the commencement of it.

WHEN bleeding, purging, fomentations, and the cother things recommended above have eafed the pain, foftened the pulse, relieved the heat of urine, and rendered the involuntary erections less frequent, the patient

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patient may begin to use mercury in any form that is least difagreeable to him.

IF he takes the common mercurial pill, two at night and one in the morning will be a fufficient dofe at firft. Should they affect the mouth too much, the dofe muft be leffened; if not at all, it may be gradually increafed to five or fix pills in the day. If calomel be thought preferable, two or three grains of it, formed into a bolus with a little of the conferve of hips, may be taken at bed-time, and the dofe gradually increafed to eight or ten grains. One of the moft common preparations of mercury now in ufe is the corrofive fublimate. This may be taken in the manner afterwards recommended under the confirmed lues or pox. I have always found it one of the moft fafe and efficacious medicines when properly ufed.

THE above medicines may either be taken every day, or every other day, as the patient is able to bear them. They ought never to be taken in fuch quantity as to raife a falivation, unlefs in a very flight degree. The difeafe may be more fafely, and as certainly, cured without a falivation as with it. When the mercury runs off by the mouth, it is not fo fuccefsful in carrying off the difeafe, as when it continues longer in the body, and is difcharged gradually.

SHOULD' the patient be purged or griped in the night by the mercury, he must take an infusion of fenna, or fome other purgative, and drink freely of water-gruel to prevent bloody stools, which are very apt to happen should the patient catch cold, or if the mercury has not been duly prepared. When the bowels are weak, and the mercury is apt to gripe or 8 purge,

## OF THE VIRULENT GONORRHCEA. 551

purge, these disagreeable consequences may be prevented by taking, with the above pills or bolus, half a drachm or two scruples of diascordium, or of the Japonic confection.

To prevent the difagreeable circumftance of the mercury's affecting the mouth too much, or bringing on a falivation, it may be combined with purgatives. With this view the laxative mercurial pill has been contrived, the ufual dofe of which is half a drachm, or three pills, night and morning, to be repeated every other day; but the fafer way is for the patient to begin with two, or even with one pill, gradually increasing the dofe.

To fuch perfons as can neither fwallow a bolus nor a pill, mercury may be given in a liquid form, as it can be fufpended even in a watery vehicle, by means of gum-arabic; which not only ferves this purpole, lbut likewife prevents the mercury from affecting the mouth, and renders it in many refpects a better imedicine \*.

IT happens very fortunately for those who cannot be brought to take mercury inwardly, and likewise for perfons whose bowels are too tender to bear it, that an external application of it will answer equally well, and, in some respects, better. It must be ac-

\* Take quickfilver one drachm, gum-arabic reduced to a mucilage two drachms; let the quickfilver be rubbed with the mucilage, in a marble mortar, until the globules of mercury entirelydifappear: afterwards add gradually, ftill continuing the trituration, half an ounce of balfamic fyrup, and eight ounces of fimple cinnamon-water. Two table-fpoonfuls of this folution may be taken night and morning. Some reckon this the beft form in which quickfilver can be exhibited for the cure of a gonorrhœa.

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knowledged,

## 552 OF THE VIRULENT GONORRHOEA.

knowledged, that mercury, taken inwardly for any length of time, greatly weakens and diforders the bowels; for which reason, when a plentiful use of it becomes neceffary, we would prefer rubbing to the mercurial pills. The common mercurial, or blue ointment, will answer very well. Of that which is made by rubbing together equal quantities of hog'slard and quickfilver, about a drachm may be used. at a time. The beft time for rubbing it on is at: night, and the most proper place the inner fide of the thighs. The patient should stand before the: fire when he rubs, and fhould wear flannel drawers; next his fkin at the time he is using the ointment. If ointment of a weaker or ftronger kind be used, the quantity must be increased or diminished in. proportion.

Ir, during the use of the ointment, the inflammation of the genital parts, together with the heat and feverishness, should return, or if the mouth should grow fore, the gums tender, and the breathbecome offensive, a dose or two of Glauber's salts, or some other cooling purge, may be taken, and the rubbing intermitted for a few days. As soon, however, as the signs of spitting are gone off, if the virulency be not quite corrected, the ointment mult be repeated, but in smaller quantities, and at longer intervals than before. Whatever way mercury is administered, its use mult be persisted in as long as any virulency is sufpected to remain.

DURING this, which may be called the fecond flage of the diforder, though fo ftrict a regimen is not neceffary as in the first or inflammatory flate, yet intemperance of every kind must be avoided. The food

### OF GLEETS.

food muft be light, plain, and of eafy digeftion; and the greateft indulgence that may be allowed with refpect to drink is, a little wine diluted with a fufficient quantity of water. Spirituous liquors are to be avoided in every fhape. I have often known the inflammatory fymptoms renewed and heightened, the running increased, and the cure rendered extremely difficult and tedious, by one fit of exceffive drinking.

WHEN the above treatment has removed the heat of urine, and forenefs of the genital parts; when the quantity of running is confiderably leffened, without any pain or fwelling in the groin or tefficle fupervening; when the patient is free from involuntary erections; and laftly, when the running becomes pale, whitifh, thick, void of ill fmell, and tenacious or ropy; when all or moft of thefe fymptoms appear, the gonorrhœa is arrived at its laft ftage, and we may gradually proceed to treat it as a gleet with aftringent and agglutinating medicines.

#### OF GLEETS.

A GONORRHOEA frequently repeated, or improperly treated, often ends in a gleet, which may either proceed from relaxation, or from fome remains of the difeafe. It is, however, of the greateft importance in the cure of the gleet, to know from which of thefe caufes it proceeds. When the difcharge proves very obftinate, and receives little or no check from aftringent remedies, there is ground to fufpect that it is owing to the latter; but if the drain is inconftant, and is chiefly obfervable when the patient is ftimulated lated by lascivious ideas, or upon straining to go to stool, we may reasonably conclude that it is chiefly owing to the former.

In the cure of a gleet proceeding from relaxation, the principal defign is to brace, and reftore a proper degree of tenfion to the debilitated and relaxed veffels. For this purpofe, befides the medicines recommended in the gonorrhœa, the patient may have recourfe to ftronger and more powerful aftringents, as the Peruvian bark \*, alum, vitriol, galls, tormentil, biftort, balauftines, tincture of gum kino, &c. The injections may be rendered more aftringent by the addition of a few grains of alum, or increafing the quantity of vitriol as far as the parts are able to bear it.

THE laft remedy which we fhall mention in this cafe is the cold bath, than which there is not perhaps a more powerful bracer in the whole compafs of medicine. It ought never to be omitted in this fpecies of gleet, unlefs there be fomething in the conftitution of the patient which renders the ufe of it unfafe. The chief objections to the ufe of the cold bath are, a full habit, and an unfound ftate of the vifcera. The danger from the former may always be leffened, if not removed, by purging and bleeding; but the

• The Peruvian bark may be combined with other aftringents, and prepared in the following manner:

Take of Peruvian bark bruifed fix drachms, of fresh galls bruifed two drachms; boil them in a pound and a half of water to a pound : to the strained liquor add three ounces of the simple tincture of the bark. A small tea-cupful of this may be taken three times a-day, adding to each cup sisteen or twenty drops of the acid elixir of vitriol.

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latter is an infurmountable obstacle, as the preffure of the water, and the fudden contraction of the external vessels, by throwing the blood with too much force upon the internal parts, are apt to occasion ruptures of the vessels, or a flux of humours upon the diseased organs. But where no objection of this kind prevails, the patient ought to plunge over head in water every morning fasting, for three or four weeks together. He should not, however, stay long in the water, and should take care to have his skin dried as soon as he comes out.

THE regimen proper in this cafe is the fame as was mentioned in the laft ftage of the gonorrhœa: the diet must be drying and aftringent, and the drink Spa, Pyrmont, or Bristol waters, with which a little claret or red wine may fometimes be mixed. Any perfon may now afford to drink these waters, as they can be every where prepared at almost no expence, by a mixture of common chalk and oil of vitriol.

WHEN the gleet does not in the finalleft degree yield to these medicines, there is reason to suspect that it proceeds from ulcers. In this case, recours must be had to mercury, and such medicines as tend to correct any predominant acrimony with which the juices may be affected, as the decoction of china, farfaparilla, fass, or the like.

MR. FORDYCE fays, he has feen many obftinate gleets of two, three, or four years ftanding, effectually cured by a mercurial inunction, when almost every other medicine has been tried in vain. Dr. Chapman feems to be of the fame opinion; but fays, he has always found the mercury fucceed best in this cafe when joined with terebinthinate and other agglutinating

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glutinating medicines. For which reafon the Doctor recommends pills made of calomel and Venice turpentine\*; and defires that their use may be accompanied with a decoction of guaiacum or farfaparilla.

THE laft kind of remedy which we fhall mention for the cure of ulcers in the urinary paffage, are the fuppurating candles or bougies; as thefe are prepared various ways, and are generally to be bought ready made, it is needlefs to fpend time in enumerating the different ingredients of which they are compofed, or teaching the manner of preparing them: Before a bougie be introduced into the urethra, however, it fhould be fmeared all over with fweet oil, to prevent it from ftimulating too fuddenly; it may be fuffered to continue in from one to feven or eight hours, according as the patient can bear it. Obftinate ulcers are not only often healed, but tumours and excrefcences in the urinary paffages taken away, and an obftruction of urine removed, by means of bougies.

#### OF THE SWELLED TESTICLE.

THE fwelled tefficle may either proceed from infection lately contracted, or from the venereal poifon lurking in the blood: the latter indeed is not very common, but the former frequently happens both in .

\* Take Venice turpentine, boiled to a fufficient degree of hardnefs, half an ounce, calomel half a drachm. Let thefe be mixed and formed into fixty pills, of which five or fix may be taken night and morning. If, during the use of these pills, the mouth should grow fore, or the breath become offensive, they must be discontinued till these symptoms disappear.

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## OF THE SWELLED TESTICLE. 557

the first and second stages of a gonorrhœa; particularly when the running is unseasonably checked, by cold, hard drinking, strong drastic purges, violent exercise, the too early use of astringent medicines, or the like.

In the inflammatory ftage bleeding is neceffary, which muft be repeated according to the urgency of the fymptoms \*. The food muft be light, and the drink diluting. High-feafoned food, flefh, wines, and every thing of a heating nature, are to be avoided. Fomentations are of fingular fervice. Poultices of bread and milk, foftened with frefh butter or oil, are likewife very proper, and ought conftantly to be applied when the patient is in bed: when he is up, the tefficie fhould be kept warm, and fupported by a bag or trufs, which may eafily be contrived in fuch a manner as to prevent the weight of the tefficie from having any effect.

IF it fhould be found impracticable to clear the tefficle by the cooling regimen now pointed out, and extended according to circumftances, it will be neceffary to lead the patient through fuch a complete antivenereal courfe as shall enfure him against any future uneasines. For this purpose, besides rubbing the mercurial ointment on the part, if free from pain, or on the thighs, as directed in the gonorrhœa, the patient must be confined to bed, if necessary, for five or fix weeks, sufpending the testicle all the while with a bag or truss, and plying him inwardly with strong decoctions of farfaparilla.

\* I have been of use, for some time past, to apply leeches to inflamed testicles, which practice has always been followed with the most happy effects.

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WHEN these means do not fucceed, and there is reason to suspect a scrophulous or cancerous habit, either of which may support a scirrhous induration, after the venereal poison is corrected, the parts should be fomented daily with a decoction of hemlock, the bruised leaves of which may likewise be added to the poultice, and the extract at the same time taken inwardly\*. This practice is strongly recommended by Dr. Stork in scirrhous and cancerous cafes; and Mr. Fordyce affures us, that by this method he has cured difeased testicles of two or three years standing, even when ulcerated, and when the fcirrhus had begun to be affected with pricking and lancing pains.

#### OF BUBOES.

VENEREAL buboes are hard tumours feated in the groin, occafioned by the venereal poifon lodged in this part. They are of two kinds, viz. fuch as proceed from a recent infection, and fuch as accompany a confirmed lues.

THE cure of recent buboes, that is, fuch as appear foon after impure coition, may be first attempted by *difperfion*, and, if that should not fucceed, by *fuppuration*. To promote the dispersion of a buboe, the fame regimen must be observed as was directed in the first stage of a gonorrhœa. The patient must likewise be bled, and take some cooling purges, as the decostion of tamarinds and fenna, Glauber's falts, and the like. If, by this course, the fwelling and other inflammatory symptoms abate, we may fafely

\* The extract of hemlock may be made into pills, and taken in the manner directed under the article Cancer.

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#### OF CHANCRES.

proceed to the use of mercury, which must be continued till the venereal virus is quite fubdued \*.

But if the bubo fhould, from the beginning, be attended with great heat, pain, and pulfation, it will be proper to promote its fuppuration. For this purpofe the patient may be allowed to ufe his ordinary diet, and to take now and then a glafs of wine. Emollient cataplafms, confifting of bread and milk foftened with oil or fresh butter, may be applied to the part; and, in cold conftitutions, where the tumour advances flowly, white-lily-roots boiled, or fliced onions raw, and a fufficient quantity of yellow bafilicon, may be added to the poultice.

WHEN the tumour is ripe, which may be known by its conical figure, the foftnefs of the fkin, and a fluctuation of matter plainly to be felt under the finger, it may be opened either by cauftic or a lancet, and afterwards dreffed with digeflive ointment.

It fometimes, however, happens that buboes can neither be difperfed nor brought to a fuppuration, but remain hard, indolent tumours. In this cafe the indurated glands must be confumed by caustic; if they should become fcirrhous, they must be diffolved by the application of hemlock both externally and internally, as directed in the fcirrhous testicle.

## OF CHANCRES.

CHANCRES are fuperficial, callous, eating ulcers; which may happen either with or without a gonor-

\* For the difpersion of a bubo, a number of leeches applied to the part affected will be found equally efficacious as in the inflamed testicle.

#### rhœa.

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rhœa. They are commonly feated about the glans, and make their appearance in the following manner: Firft a little red pimple arifes, which foon becomes pointed at top, and is filled with a whitifh matter inclining to yellow. This pimple is hot, and itches generally before it breaks: afterwards it degenerates into an obftinate ulcer, the bottom of which is ufually covered with a vifcid mucus, and whofe edges gradually become hard and callous. Sometimes the firft appearance refembles a fimple excoriation of the cuticle; which, however, if the caufe be venereal, foon becomes a true chancre.

A CHANCRE is fometimes a primary affection, but it is much oftener fymptomatic, and is the mark of a confirmed lues. Primary chancres difcover themfelves foon after impure coition, and are generally feated in parts covered with a thin cuticle, as the lips, the nipples of women, the glans penis of men, &c \*.

WHEN a chancre appears foon after impure coition, its treatment is nearly fimilar to that of the virulent gonorrhosa. The patient must observe the cooling regimen, lose a little blood, and take fome gentle doses of falts and manna. The parts affected ought frequently to be bathed, or rather

\* When venereal ulcers are feated in the lips, the infection may be communicated by kiffing. I have feen very obfinate venereal ulcers in the lips, which I had all the reafon in the world to believe were communicated in this manner.

Nurfes ought to beware of fuckling infected children, or having their breafts drawn by perfons tainted with the venereal difeafe. This caution is peculiarly neceffary for nurfes who refide in the neighbourheod of great towns.

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foaked, in warm milk and water, and, if the inflammation be great, an emollient poultice or cataplasm may be applied to them. This course will, in most cases, be sufficient to abate the inflammation, and prepare the patient for the use of mercury.

SYMPTOMATIC chancres are commonly accompanied with ulcers in the throat, nocturnal pains, fcurfy eruptions about the roots of the hair, and other fymptoms of a confirmed lues. Though they may be feated in any of the parts mentioned above, they commonly appear upon the private parts, or the infide of the thigh. They are alfo lefs painful, but frequently much larger and harder than primary chancres. As their cure must depend upon that of the pox, of which they are only a fymptom, we fhall take no further notice of them, till we come to treat of a confirmed lues \*.

THUS we have related most of the fymptoms which accompany or fucceed a virulent gonorrhœa, and have also given a short view of their proper treatment; there are, however, feveral others which stend this difease, as a *strangury* or obthruction of urine, a *phymosis*, *paraphymosis*, &c.

A STRANGURY may be occasioned either by a spafmodic constriction, or an inflammation of the urethra and parts about the neck of the bladder. In the former cafe, the patient begins to void his urine with tolerable eafe; but, as foon as it touches the

\* I have found it answer extremely well to sprinkle chancres twice a-day with calomel. This will often perform a cure without any other application whatever. If the chancres are upon the glans, they may be washed with milk and water, a little warm, and afterwards the calomel may be applied as above.

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galled or inflamed urethra, a fudden confriction takes place, and the urine is voided by fpurts, and fometimes by drops only. When the ftrangury is owing to an inflammation about the neck of the bladder, there is a conftant heat and uncafinefs of the part, a perpetual defire to make water, while the patient can only render a few drops, and a troublefome *tenefmus*, or conftant inclination to go to ftool.

WHEN the ftrangury is owing to fpafm, fuch medicines as tend to dilute and blunt the falts of the urine will be proper. For this purpofe, befides the common diluting liquors, foft and cooling emulfions, fweetened with the fyrup of poppies, may be ufed. Should thefe not have the defired effect, bleeding, and emollient fomentations, will be neceffary.

WHEN the complaint is evidently owing to an inflammation about the neck of the bladder, bleeding must be more liberally performed, and repeated according to the urgency of the fymptoms. After bleeding, if the ftrangury still continues, fost clysters, with a proper quantity of laudanum in them, may be administered, and emollient fomentations applied to the region of the bladder. At the fame time, the patient may take every four hours a tea-cupful of barley-water, to an English pint of which six ounces of the fyrup of marsh-mallows, four ounces of the oil of fweet almonds, and half an ounce of nitre, may be added. If these remedies should not relieve the complaint, and a total fuppreffion of urine should come on, bleeding must be repeated, and the patient fet in a warm bath up to the middle. It will be proper, in this cafe, to discontinue the diuretics, and to draw

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draw off the water with a catheter; but as the patient is feldom able to bear its being introduced, we would rather recommend the use of mild bougies. These often lubricate the passage, and greatly facilitate the discharge of urine. Whenever they begin to stimulate or give any uneasines, they may be withdrawn.

THE phymofis is fuch a confriction of the prepuce over the glans, as hinders it from being drawn backwards; the paraphymofis, on the contrary, is fuch a confriction of the prepuce behind the glans, as hinders it from being brought forward.

THE treatment of these fymptoms is so nearly the fame with that of the virulent gonorrhœa, that we have no occasion to enlarge upon it. In general, bleeding, purging, poultices, and emollient fomentations are sufficient. Should these, however, fail of removing the stricture, and the parts be threatened with a mortification, twenty or thirty grains of ipecacuanha, and one grain of emetic tartar, may be given for a vomit, and may be worked off with warm water or thin gruel.

IT fometimes happens, that, in fpite of all endeavours to the contrary, the inflammation goes on, and fymptoms of a beginning mortification appear. When this is the cafe, the prepuce must be fearified with a lancet, and if neceffary, divided, in order to prevent a strangulation, and fet the imprisoned glans at liberty. We shall not deferibe the manner of performing this operation, as it ought always to be done by a surgeon. When a mortification has actually taken place, it will be neceffary, besides performing the above operations, to foment the parts Oo2 frequently

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frequently with cloths wrung out of a ftrong decoction of camomile flowers and bark, and to give the patient a drachm of the bark in powder every two or three hours.

WITH regard to the *priapifm*, *chordee*, and other diffortions of the *penis*, their treatment is no way different from that of the gonorrhœa. When they prove very troublefome, the patient may take a few drops of laudanum at night, especially after the operation of a purgative through the day.

### OF A CONFIRMED LUES.

WE have hitherto treated of those affections in which the venereal poison is supposed to be confined chiefly to the particular part by which it was received, and shall next take a view of the lues in its confirmed state, that is, when the poison is actually received into the blood, and, circulating with it through every part of the body, mixes with the feveral fecretions, and renders the whole habit tainted.

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THE fymptoms of a confirmed lues are, buboes in the groin, pains of the head and joints, which are peculiarly troublefome in the night, or when the patient is warm in bed; feabs and feurfs in various parts of the body, efpecially on the head, of a yellowifh colour, refembling a honey-comb; corroding ulcers in various parts of the body, which generally begin about the throat, from whence they creep gradually, by the palate, towards the cartilage of the nofe, which they deftroy; excrefeences or exoftofes arife in the middle of the bones, and their fpongy ends

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ends become brittle, and break upon the leaft accident; at other times, they are foft, and bend like wax; the conglobate glands become hard and callous, and form in the neck, armpits, groin, and mesentery, hard moveable tumours, like the king's evil; tumours of different kinds are likewise formed in the lymphatic vessels, tendons, ligaments, and nerves, as the gummata, ganglia, nodes, tophs, &c. the eyes are affected with itching, pain, rednefs, and fometimes with total blindnefs, and the ears with a finging noife, pain, and deafnefs, whilft their internal substance is exulcerated and rendered carious; at length all the animal, vital, and natural functions are depraved; the face becomes pale and livid; the body emaciated and unfit for motion, and the miferable patient falls into an atrophy or wasting confumption.

WOMEN have fymptoms peculiar to the fex; as cancers of the breaft; a fuppreffion or overflowing of the menfes; the whites; hyfteric affections; an inflammation, abfcefs, fcirrhus, gangrene, cancer, or ulcer of the womb; they are generally either barren or fubject to abortion; or, if they bring children into the world, they have an univerfal eryfipelas, are half rotten, and covered with ulcers.

SUCH is the catalogue of fymptoms attending this dreadful-difeafe in its confirmed flate. Indeed they are feldom all to be met with in the fame perfon, or at the fame time; fo many of them, however, are generally prefent as are fufficient to alarm the patient; and if he has reafon to fufpect the infection is lurking in his body, he ought immediately to fet  $O \circ 3$  about

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about the expulsion of it, otherwise the most tragical consequences will ensue.

The only certain remedy hitherto known in Europe, for the cure of this difeafe, is mercury, which may be ufed in a great variety of forms, with nearly the fame fuccefs. Some time ago it was reckoned impoffible to cure a confirmed lues without a falivation; this method is now, however, pretty generally laid afide, and mercury is found to be as efficacious, or rather more fo, in expelling the venereal poifon, when adminiftered in fuch a manner as not to run off by the falivary glands.

Though many are of opinion, that the mercurial ointment is as efficacious as any other preparation of that mineral; yet experience has taught me to think otherwife. I have often feen the most obstinate venereal cases, where great quantities of mercurial ointment had been used in vain, yield to the faline preparations of mercury. Nor am I fingular in this opinion. My ingenious friend, Mr. Clare, an eminent furgeon of this city, affures me, that for some time past he has employed, in venereal cases, a faline preparation of mercury with most happy fuccefs. This preparation, rubbed with a fufficient quantity of any mild powder, he applies, in small portions to the tongue, where, with a gentle degree of friction, it is immediately abforbed, and produces its full effect upon the fystem, without doing the least injury to the flomach or bowels; a matter of the greatest importance in the application of this most active and powerful remedy.

It is impossible to afcertain either the exact quantity of medicines that must be taken, or the time they

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they oright to be continued, in order to perform a cure. Thefe will ever vary according to the confitution of the patient, the feafon of the year, the degree of infection, the time it has lodged in the body, &c. But though it is difficult, as Aftruc obferves, to determine, à priori, what quantity of mercury will, in the whole, be neceffary to cure this diffemper completely; yet it may be judged of, à pofteriori, from the abatement and ceafing of the fymptoms. The fame author adds, That commonly not lefs than two ounces of the firong mercurial ointment is fufficient, and not more than three or four ounces neceffary.

THE only chemical preparation of mercury which we fhall take notice of, is the corrofive fublimate. This was fome time ago brought into ufe for the venereal difeafe, in Germany, by the illuftrious Baron Van Swieten; and was foon after introduced into Britain by the learned Sir John Pringle, at that time phyfician to the army. The method of giving it is as follows: One grain of corrofive fublimate is diffolved in two ounces of French brandy or malt fpirits; and of this folution, an ordinary table-fpoonful, or the quantity of half an ounce, is to be taken twice a-day, and to be continued as long as any fymptoms of the diforder remain. To thofe whofe ftomach cannot bear the folution, the fublimate may be given in form of pill \*.

SEVERAL

\* The fublimate may be given in diffilled water, or any other liquor that the patient chufes. I commonly order ten grains to be diffolved in an ounce of the fpirit of wine, for the conveniency of carriage, and let the patient take twenty or thirty drops of it 004

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SEVERAL roots, woods, and barks, have been recommended for curing the venereal difeafe; but none of them have been found, upon experience, to anfwer the high encomiums which had been befrowed upon them. Though no one of thefe is to be depended upon alone, yet, when joined with mercury, fome of them are found to be very beneficial in promoting a cure. One of the beft we know yet is farfaparilla, which may be prepared and taken according to the directions in the Appendix \*.

THE mezereon-root is likewife found to be a powerful affiftant to the fublimate, or any other mercurial. It may either be used along with the farfaparilla, as directed in the Appendix, or by itself. Those who chuse to use the mezereon by itself, may boil an ounce of the fresh bark, taken from the root, in twelve English pints of water to eight, adding towards the end an ounce of liquorice. The dose of this is the fame as of the decoction of farfaparilla.

WE have been told that the natives of America cure the venereal difeafe, in every ftage, by a decoction of the root of a plant called the Lobelia. It is ufed either fresh or dried; but we have no certain accounts with regard to the proportion. Sometimes they mix other roots with it, as those of the ranunculus, the ceanothus, &c. but whether these are designed to disguise or affiss it, is doubtful. The patient takes a large draught of the decoction early

night and morning in half a glass of brandy or other spirits. Mr. Debraw, an ingenious chymist of this place, informs me, that he prepares a salt of mercury much more mild and gentle in its operation than the sublimate, though equally efficacious.

\* See Appendix, Dccottion of Sarfaparilla.

in

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in the morning, and continues to use it for his ordinary drink through the day \*.

MANY other roots and woods might be mentioned which have been extolled for curing the venereal difeafe, as the china-root, the roots of foap-wort, burdock, &c. as alfo the wood of guaiacum and faffafras; but as none of thefe have been found to poffefs virtues fuperior to thofe already mentioned, we shall, for the fake of brevity, pass them over, and shall conclude our observations on this difease with a few general remarks concerning the proper management of the patient, and the nature of the infection.

# GENERAL OBSERVATIONS.

THE condition of the patient ought always to be confidered previous to his entering upon a course of mercury in any form. It would be equally rash and

\* Though we are still very much in the dark with regard to the method of curing this difeafe among the natives of America, yet it is generally affirmed, that they do cure it with fpeed, fafety, and fuccefs, and that without the leaft knowledge of mercury. Hence it becomes an object of confiderable importance to difcover their method of cure. This might furely be done by making trials of the various plants which are found in those parts, and particularly of fuch as the natives are known to make use of. All people in a rude flate take their medicines chiefly from the vegetable kingdom, and are often poffessed of valuable fecrets with regard to the virtues of plants, of which more enlightened nations are ignorant. Indeed we make no doubt but fome plants of our own growth, were proper pains taken to difcover them, would be found as efficacious in curing the venereal difease as those of America. It must however be remembered, that what will cure the venereal difeafe in one country, will not always be found to have equal fuccess in another,

danger-

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dangerous to administer mercury to a person labouring under any violent acute disease, as a putrid fever, pleurify, peripneumony, or the like. It would likewise be dangerous in some chronic cases; as a flow hectic fever, or the last stage of a consumption. Sometimes, however, these diseases proceed from a confirmed lues; in which case it will be necessary to give mercury. In chronic diseases of a less dangerous nature, as the asthma, the gravel, and such like, mercury, if necessary, may be safely administered. If the patient's strength has been greatly exhausted by sickness, labour, abstinence, or any other cause, the use of mercury must be postponed, till by time, rest, and nouriss direct, it can be sufficiently restored.

MERCURY ought not to be administered to women during the menstrual flux, or when the period is near at hand. Neither should it be given in the last stage of pregnancy. If, however, the woman be not near the time of her delivery, and circumstances render it necessary, mercury may be given, but in smaller doses, and at greater intervals than usual : with these precautions, both the mother and child may be cured at the fame time; if not, the disorder will at least be kept from growing worse, till the woman be brought to bed, and sufficiently recovered, when a more effectual method may be purfued, which, if she suckles her child, will in all probability be sufficient for the cure of both.

MERCURY ought always to be administered to infants with the greatest caution. Their tender condition unfits them for supporting a falivation, and makes it necessfary to administer even the mildest preparations

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parations of mercury to them with a fparing hand. A fimilar conduct is recommended in the treatment of old perfons, who have the misfortune to labour under a confirmed lues. No doubt the infirmities of age muft render people lefs able to undergo the fatigues of a falivation; but this, as was formerly obferved, is never neceffary; befides, we have generally found, that mercury had much lefs effect upon very old perfons than on those who were younger.

HYSTERIC and hypochondriac perfons, and fuch as are fubject to an habitual diarrhœa or dyfentery, or to frequent and violent attacks of the epilepfy, or who are afflicted with the fcrophula, or the fcurvy, ought to be cautious in the ufe of mercury. Where any one of thefe diforders prevails, it ought either, if poffible, to be cured, or at leaft palliated, before the patient enters upon a courfe of mercury. When this cannot be done, the mercury muft be adminiftered in fmaller dofes, and at longer intervals than ufual.

THE most proper seasons for entering upon a course of mercury, are the spring and autumn, when the air is of a moderate warmth; if the circumstances of the case, however, will not admit of delay, we must not defer the cure on account of the season, but must administer the mercury; taking care, at the same time, to keep the patient's chamber warmer or cooler, according as the season of the year requires.

THE next thing to be confidered is the preparation neceffary to be observed before we proceed to administer a course of mercury. Some lay great stress upon

upon this circumftance, obferving, that by previoufly relaxing the veffels, and correcting any diforder which may happen to prevail in the blood, not only the mercury will be difpofed to act more kindly, but many other inconveniencies will be prevented.

WE have always recommended bleeding and gentle purges, previous to the administration of mercury, and shall only now add, that these are always to be repeated according to the age, strength, constitution, and other circumstances of the patient. Afterwards, if it can be conveniently done, the patient ought to bathe once or twice a-day, for a few days, in lukewarm water. His diet in the mean time must be light, moist, and cooling. Wine, and all heating liquors, also violent bodily exercise, and all great exertions of the mind, are carefully to be avoided.

A PROPER regimen is likewife to be obferved by, fuch as are under a courfe of mercury. Inattention to this not only endangers the patient's life, but often alfo difappoints him of a cure. A much finaller quantity of mercury will be fufficient for the cure of a perfon who lives low, keeps warm, and avoids all manner of excefs, than of one who cannot endure to put the finalleft reftraint upon his appetites: indeed it but rarely happens that fuch are thoroughly cured.

THERE is hardly any thing of more importance, either for preventing or removing venereal infection, than cleanlinefs. By an early attention to this, the infection might often be prevented from entering the body; and, where it has already taken place, its effects may be greatly mitigated. The moment any perfor

perfon has reafon to fuspect that he has received the infection, he ought to wash the parts with water and spirits, sweet oil, or milk and water; a small quantity of the last may likewise be injected up the urethra, if it can be conveniently done. Whether this disease at first took its rise from dirtines is hard to fay; but wherever that prevails, the infection is found in its greatest degree of virulence, which gives ground to believe that a strict attention to cleanlines would go far towards extirpating it altogether \*.

\* I have not only often feen a recent infection carried off in a few days by means of cleanlinefs, viz. bathing, fomentations, injections, &c. but have likewise found it of the greatest advantage in the more advanced flages of the difeafe. Of this I had lately a very remarkable instance, in a man whose penis was almost wholly confumed by venereal ulcers: the matter had been allowed to continue on the fores, without any care having been taken to clean them, till, notwithstanding the use of mercury and other medicines, it had produced the effects above mentioned, I ordered warm milk and water to be injected three or four times a-day into all the finuous ulcers, in order to wash out the matter; after which they were fluffed with dry lint to abforb the fresh matter as it was generated. The patient at the fame time took every day half a grain of the corrofive fublimate of mercury, disfolved in an ounce of brandy, and drank an English quart of the decoction of farfaparilla. By this treatment, in about fix weeks, he was perfectly cured; and, what was very remarkable, a part of the penis was actually regenerated.

Doctor Gilchrift has given an account of a fpecies of the *lues* wenerea which prevails in the work of Scotland, to which the natives give the name of Sibbins or Sivains. The Doctor observes, that the fpreading of this discase is chiefly owing to a neglect of cleanlines, and seems to think, that by due attention to that wirtue, it might be extirpated. The treatment of this discase is fimilar to that of a confirmed lues or pox. The yaws, a discase which is now very common both in America and the West India islands, may also be cured in the fame manner.

WHEN

WHEN the venereal difeafe has been neglected, or improperly treated, it often becomes a diforder of the habit. In this cafe the cure muft be attempted by reftoratives, as a milk diet, the decoction of farfaparilla, and fuch like, to which mercury may be occafionally added. It is a common practice in North Britain to fend fuch patients to drink goatwhey. This is a very proper plan, provided the infection has been totally eradicated before-hand; but when that is not the cafe, and the patient trufts to the whey for finifhing his cure, he will often be difappointed. I have frequently known the difeafe return with all its virulence after a courfe of goatwhey, even when that courfe had been thought quite fufficient for completing the cure.

ONE of the most unfortunate circumstances attending patients in this difeafe, is the necessity they are often laid under of being foon well. This induces them to take medicine too fast, and to leave it off too foon. A few grains more of medicine, or a few days longer confinement, would often be fufficient to perfect the cure; whereas, by neglect of these, a finall degree of virulence is still less in the humours, which gradually vitiates, and at length contaminates the whole mass. To avoid this, we would advise, that the patient should never leave off taking medicine immediately upon the disappearing of the symptoms, but continue it for some time after, gradually less the disease is entirely eradicated.

IT is not only difficult, but abfolutely impoffible, to afcertain the exact degree of virulence that may attend the difease; for which reason it will always be a much

a much fafer rule to continue the ufe of medicine too long, than to leave it off too foon. This feems to be the leading maxim of a modern practitioner of fome note for the venereal difeafe, who always orders his patient to perform a quarantine of at leaft forty days, during which time he takes forty bottles of, I fuppofe, a ftrong decoction of farfaparilla, or fome other anti-venereal fimple. Whoever takes this method, and adds a fufficient quantity of corrofive fublimate, or fome other active preparation of mercury to the decoction, will feldom fail to cure a confirmed lues.

IT is peculiarly unfortunate for the cure of this difease, that not one in ten of those who contract it, are either able or willing to fubmit to a proper plan of regimen. The patient is willing to take medicine; but he must follow his business, and, to prevent fulpicions, must eat and drink like the rest of the family. This is the true fource of nine-tenths of all the mischief arising from the venereal disease. I never knew the cure attended with any great difficulty or danger where the patient strictly followed the phyfician's advice : but a volume would not be fufficient to point out the dreadful confequences which proceed from an oppofite conduct. Scirrhous tefticles, ulcerous fore throats, madnefs, confumptions, carious bones, and a rotten progeny, are a few of the bleffings derived from this fource.

THERE is a species of false reasoning, with regard to this difease, which proves satal to many. A perfon of a found constitution contracts a slight degree of the diforder. He gets well without taking any great care, or using much medicine, and hence concludes that this will always be the case. The next time

time the difeafe occurs, though ten times more virulent, he purfues the fame courfe, and his conftitution is ruined. Indeed, the different degrees of virulence in the fmall-pox are not greater than in this difeafe, though, as the learned Sydenham obferves, in fome cafes the moft fkilful phyficians cannot cure, and in others, the moft ignorant old woman cannot kill the patient in that diforder. Though a good conftitution is always in favour of the patient, yet too great ftrefs may be laid upon it. It does not appear from obfervation, that the moft robuft conftitution is able to overcome the virulence of the venereal contagion, after it has got into the habit. In this cafe a proper courfe of medicine is always indifpenfably neceffary.

ALTHOUGH it is impossible, on account of the different degrees of virulence, &c. to lay down fixed and certain rules for the cure of this difease, yet the following general plan will always be found safe, and often fuccessful, viz. to bleed and administer gentle purges with diuretics during the inflammatory state, and as soon as the symptoms of inflammation are abated, to administer mercury, in any form that may be most agreeable to the patient. The same inedicine, assisted by the decoction of sarsaparilla, and a proper regimen, will not only secure the constitution against the further progress of a confirmed pox, but will generally perform a complete cure.

CHAP.

## [ 577 ]

#### CHAP. XLVIII.

#### DISEASES OF WOMEN.

XYOMEN, in all civilized nations, have the management of domeftic affairs; and it is very proper they should, as Nature has made them less fit for the more active and laborious employments. This indulgence, however, is generally carried too far; and females, instead of being benefited by it, are, greatly injured, from the want of exercise and free air. To be fatisfied of this, one need only compare the fresh and ruddy looks of a milk-maid with the pale complexion of those females whose whole time is fpent within doors. Though Nature has made anevident distincton between the male and female with regard to bodily strength and vigour, yet she certainly never meant, either that the one should be always without, or the other always within doors.

THE confinement of females, belides hurting their figure and complexion, relaxes their folids, weakens their minds, and diforders all the functions of the body. Hence proceed obstructions, indigestion, fla-. stulence, abortions, and the whole train of nervous diforders. These not only unfit women for being mothers and nurses, but often render them whimfical and ridiculous. A found mind depends fo much upon a healthy body, that where the latter is wanting, the former is rarely to be found.

I HAVE always observed that women who were chiefly employed without doors, in the different branches of husbandry, gardening, and the like, were almost as hardy as their husbands, and that their P p children

children were likewife ftrong and healthy. But as the bad effects of confinement and inactivity upon both fexes have been already fhewn, we fhall proceed to point out these circumstances in the ftructure and defign of females, which subject them to peculiar difeases; the chief of which are, their monthly evacuations, pregnancy, and child-bearing. These indeed cannot properly be called diseases, but from the delicacy of the fex, and their being often improperly managed in such fituations, they become the fource of numerous calamities.

## OF THE MENSTRUAL DISCHARGE.

FEMALES generally begin to menftruate about the age of fifteen, and leave it off about fifty, which renders thefe two periods the moft critical of their lives. About the first appearance of this discharge, the conftitution undergoes a very confiderable change, generally indeed for the better, though sometimes for the worse. The greatest care is now necessary, as the future health and happiness of the semale depends, in a great measure, upon her conduct at this period \*.

\* It is the duty of mothers, and those who are intrusted with the education of girls, to instruct them early in the conduct and management of themselves at this critical period of their lives. Falfe modely, inattention, and ignorance of what is beneficial or hurtful at this time, are the fources of many diseafes and misfortunes in life, which a few sensible lessons from an experienced matron might have prevented. Nor is care less necessary in the subsequent returns of this discharge. Taking improper food, violent affections of the mind, or catching cold at this period, is often fufficient to ruin the health, or to render the female ever after incapable of procreation.

IF

IF a girl about this time of life be confined to the houfe, kept conftantly fitting, and neither allowed to romp about, nor employed in any active bufinefs, which gives exercife to the whole body, fhe becomes weak, relaxed, and puny; her blood not being duly prepared, fhe looks pale and wan; her health, fpirits, and vigour decline, and fhe finks into a valetudinary for life. Such is the fate of numbers of thofe unhappy females, who, either from too much indulgence, or their own narrow circumftances, are, at this critical period, denied the benefit of exercife and free air.

A LAZY indolent difpolition proves likewife very lhurtful to girls at this period. One feldom meets with complaints from obfructions amongft the more active and induftrious part of the fex; whereas the indolent and lazy are feldom free from them. Thefe are, in a manner, eat up by the *chlorofis*, or greenlficknefs, and other difeafes of this nature. We would therefore recommend it to all who wifh to efcape thefe calamities, to avoid indolence and inactivity, as their greateft enemies, and to be as much abroad in the open air as poffible.

ANOTHER thing which proves very hurtful to girls about this period of life, is unwholefome food. Fond of all manner of trafh, they often indulge in it, till their whole humours are quite vitiated. Hence enfue indigeftions, want of appetite; and a numerous train tof evils. If the fluids be not duly prepared, it is utterly impoffible that the fecretions fhould go properly on: Accordingly we find, that fuch girls as lead an indolent life, and eat great quantities of trafh, are not tonly fubject to obftructions of the menfes, but like-P p 2 wife

wife to glandular obstructions; as the fcrophula or king's evil, &c.

A DULL difpolition is alfo very hurtful to girls at this period. It is a rare thing to fee a fprightly girl who does not enjoy good health, while the grave, moping, melancholy creature, proves the very prey of vapours and hyfterics. Youth is the feafon for mirth and cheerfulnels. Let it therefore be indulged. It is an abfolute duty. To lay in a flock of health in time of youth, is as neceffary a piece of prudence as to make provision against the decays of old age. While therefore wife Nature prompts the happy youth to join in fprightly amufements, let not the fevere dictates of hoary age forbid the useful impulfe, nor damp, with ferious gloom, the feafon deftined to mirth and innocent festivity.

ANOTHER thing very hurtful to females about this period of life is ftrait clothes. They are fond of a fine fhape, and foolifhly imagine, that this can be acquired by lacing themfelves tight. Hence, by fqueezing the ftomach and bowels, they hurt the digeftion, and occafion many incurable maladies. This error is not indeed fo common as it has been; but, as fafhions change, it may come about again : we therefore think it not improper to mention it. I know many females who, to this day, feel the direful effects of that wretched cuftom which prevailed fome years ago, of fqueezing every girl into as fmall a fize in the middle as poffible. Human invention could not poffibly have devifed a practice more deflructive to health.

AFTER a female has arrived at that period of life when the menses usually begin to flow, and they do

not

not appear, but, on the contrary, her health and fpirits begin to decline, we would advife, inftead of fhutting the poor girl up in the houfe, and dofing her with fteel, afafætida, and other naufeous drugs, to place her in a fituation where fhe can enjoy the benefit of free air and agreeable company. There let her eat wholefome food, take fufficient exercife, and amufe herfelf in the most agreeable manner; and we have little reafon to fear, but Nature, thus affisted, will do her proper work. Indeed the feldom fails, unlefs where the fault is on our fide.

THIS difcharge in the beginning is feldom foinftantaneous as to furprife females unawares. It is generally preceded by fymptoms which foretel its approach; as a fenfe of heat, weight, and dull pain in the loins; diftenfion and hardnefs of the breafts; head-ach; lofs of appetite; laffitude; palenefs of the countenance; and fometimes a flight degree of fever. When thefe fymptoms appear about the age at which the menftrual flux ufually begins, every thing fhould be carefully avoided which may obftruct that neceffary and falutary evacuation; and all means ufed to promote it; as fitting frequently over the fteams of warm water, drinking warm diluting liquors, &c.

AFTER the menfes have once begun to flow, the greateft care fhould be taken to avoid every thing that may tend to obftruct them. Females ought to be exceeding cautious of what they eat or drink at the time they are out of order. Every thing that is cold, or apt to four on the ftomach, ought to be avoided; as fruit, butter-milk, and fuch like. Fifh, and all kinds of food that are hard of digeftion, are alfo to be avoided. As it is impossible to mention P p 3 every

every thing that may difagree with individuals at this time, we would recommend it to every female to be very attentive to what difagrees with herfelf, and carefully to avoid it.

COLD is extremely hurtful at this particular period. More of the fex date their diforders from colds, caught while they are out of order, than from all other caufes. This ought furely to put them upon their guard, and to make them very circumfpect in their conduct at fuch times. A degree of cold that will not in the leaft hurt them at another time, will, at this period, be fufficient entirely to ruin their health and conftituion.

THE greatest attention ought likewife to be paid to the mind, which should be kept as easy and cheerful as possible. Every part of the animal economy is influenced by the passions, but none more so than this. Anger, fear, grief, and other affections of the mind, often occasion obstructions of the menstrual flux, which prove absolutely incurable.

FROM whatever cause this flux is obstructed, except in the state of pregnancy, proper means should be used to restore it. For this purpose we would recommend sufficient exercise, in a dry, open, and rather cool air; wholesome diet, and, if the body be weak and languid, generous liquors; also cheerful company, and all manner of amusements. If these fail, recourse must be had to medicine.

WHEN obstructions proceed from a weak relaxed flate of the folids, fuch medicines as tend to promote digestion, to brace the folids, and affist the body in preparing good blood, ought to be used. The principal of these are iron and the Peruvian bark, with other

other bitter and aftringent medicines. Filings of iron may be infufed in wine or ale, two or three ounces to an English quart, and after it has stood for two or three weeks it may be filtered, and about half a wineglass of it taken twice a-day: or prepared steel may be taken in the dose of half a drachm, mixed with a little honey or treacle, three or four times a-day. The bark and other bitters may either be taken in substance, or infusion, as is most agreeable to the patient.

WHEN obftructions proceed from a vifcid ftate of the blood; or for women of a groß or full habit, evacuations, and fuch medicines as attenuate the humours, are neceffary. The patient in this cafe ought to be bled, to bathe her feet frequently in warm water, to take now and then a cooling purge, and to live upon a fpare thin diet. Her drink fhould be whey, water, or fmall beer, and fhe ought to take fufficient exercife. A teasfpoonful of the tincture of black hellebore may alfo be taken twice a-day in a cup of warm water.

WHEN obstructions proceed from affections of the mind, as grief, fear, anger, &c. every method should be taken to amuse and divert the patient. And that she may the more readily forget the cause of her affliction, she ought, if possible, to be removed from the place where it happened. A change of place, by prefenting the mind with a variety of new objects, has often a very happy influence in relieving it from the deepest distress. A foothing, kind, and affable behaviour to females in this situation is also of the last importance.

An obstruction of the menses is often the effect of other maladies. When this is the case, instead of P D 4 giving

giving medicines to force that difcharge, which might be dangerous, we ought, by all means, to endeavour to reftore the patient's health and firength. When that is effected, the other will return of courfe.

But the menfitual flux may be too great as well as too finall. When this happens, the patient becomes weak, the colour pale, the appetite and digeftion are bad, and œdematous fwellings of the feet, dropfies, and confumptions often enfue. This frequently happens to women about the age of forty-five or fifty, and is very difficult to cure. It may proceed from a fedentary life; a full diet, confifting chiefly of falted, high-feafoned, or acrid food; the ufe of fpirituous liquors; exceffive fatigue; relaxation; a diffolved ftate of the blood; violent paffions of the mind, &c.

THE treatment of this difeafe must be varied according to its cause. When it is occasioned by any error in the patient's regimen, an opposite course to that which induced the diforder must be pursued, and such medicines taken as have a tendency to restrain the flux, and counteract the morbid affections of the system from whence it proceeds.

To reftrain the flux, the patient fhould be kept quiet and eafy both in body and mind. If it be very violent, fhe ought to lie in bed with her head low; to live upon a cool and flender diet, as veal or chicken broths with bread; and to drink decoctions of nettleroots, or the greater comfrey. If thefe be not fufficient to ftop the flux, ftronger aftringents may be 3 ufed,

ufed, as Japan earth, allum, elixir of vitriol, the Peruvian bark, &c\*.

THE uterine flux may offend in quality as well as in quantity. What is ufually called the *fluor albus*, or whites, is a very common difeafe, and proves extremely hurtful to delicate women. This difcharge, however, is not always white, but fometimes pale; yellow, green, or of a blackifh colour; fometimes it is fharp and corrofive, fometimes foul and fortid, &cc. It is attended with a pale complexion, pain in the back, lofs of appetite, fwelling of the feet, and other figns of debility. It generally proceeds from a relaxed ftate of the body, arifing from indolence, the exceffive use of tea, coffee, or other weak and watery diet.

To remove this difeafe, the patient must take as much exercise as she can bear without fatigue. Her food should be folid and nourishing, but of easy digestion; and her drink rather generous, as red port or claret, mixed with Pyrmont, Bristol, or lime-water. Tea and coffee are to be avoided. I have often known strong broths have an exceeding good effect; and fometimes a milk diet alone will perform a cure. The patient ought not to lie too long a-bed. When me-

• Two drachms of allum and one of Japan earth may be pounded together, and divided into eight or nine dofes, one of which may be taken three times a-day.

Perfons whofe stomachs cannot bear the allum, may take two table-fpoonfuls of the tinclure of roses three or four times a-day, to each dose of which ten drops of laudanum may be added.

If these should fail, half a drachm of the Peruvian bark, in powder, with ten drops of the elixir of vitriol, may be taken, in a glass of red wine, four times a-day.

dicine

dicine is neceffary, we know none preferable to the Peruvian bark, which, in this cafe, ought always to be taken in fubstance. In warm weather, the cold bath will be of confiderable fervice.

THAT period of life at which the *menfes* ceafe to flow, is likewife very critical to the fex. The ftoppage of any cuftomary evacuation, however fmall, is fufficient to diforder the whole frame, and often to deftroy life itfelf. Hence it comes to pafs, that fo many women either fall into chronic diforders, or die about this time. Such of them, however, as furvive it, without contracting any chronic difeafe, often become more healthy and hardy than they were before, and enjoy ftrength and vigour to a very great age.

IF the menfes ceafe all of a fudden, in women of a full habit, they ought to abate fomewhat of their ufual quantity of food, efpecially of the more nourifhing kind, as flefh, eggs, &c. They ought likewife to take fufficient exercife, and to keep the body open. This may be done by taking, once or twice a-week, a little rhubarb, or an infufion of hiera picra in wine or brandy.

It often happens that women of a groß habit, at this period of life, have ulcerous fores break out about their ancles, or in other parts of the body. Such ulcers ought to be confidered as critical, and fhould either be fuffered to continue open, or have artificial drains fubfituted in their ftead. Women who will have fuch fores dried up, are often foon after carried off by acute difeafes, or fall into those of a chronic nature.

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OF

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## OF PREGNANCY.

THOUGH pregnancy is not a difeafe, yet that flate is often attended with a variety of complaints which merit attention, and which fometimes require the affiftance of medicine. Some women indeed are more healthy during their pregnancy than at any other time; but this is by no means the general cafe: moft of them *breed in forrow*, and are frequently indifpofed during the whole time of pregnancy. Few fatal difeafes, however, happen during that period; and hardly any, except abortion, that can be called dangerous. We fhall therefore pay particular attention to it, as it proves generally fatal to the child, and fometimes fo to the mother.

PREGNANT women are often afflicted with the heart-burn. The method of treating this complaint has been already pointed out. They are likewife, in the more early periods of pregnancy, often haraffed with fickness and vomiting, especially in the morning. The method of relieving these complaints has also been shewn. Both the head-ach and toothach are very troublefome fymptoms of pregnancy. The former may generally be removed by keeping the body gently open, by the ule of prunes; figs, roafted apples, and fuch like. When the pain is very violent, bleeding may be neceffary. For the treatment of the latter, we must refer to that article. Several other complaints incident to pregnant women might be mentioned, as a cough and difficulty of breathing, suppression and incontinency of urine, &c. but as all of these have been taken notice of before, it is needless to repeat them.

EVERY

EVERY pregnant woman is more or lefs in danger of abortion. This fhould be guarded againft with the greateft care, as it not only weakens the conftitution, but renders the woman liable to the fame misfortune afterwards\*. Abortion may happen at any period of pregnancy, but it is most common in the fecond or third month. Sometimes, however, it happens in the fourth or fifth. If it happens within the first month, it is usually called a false conception; if after the feventh month, the child may often be kept alive by proper care.

THE common caufes of abortion are, the death of the child; weaknefs or relaxation of the mother; great evacuations; violent exercife; raifing great weights; reaching too high; jumping, or ftepping from an eminence; vomiting; coughing; convulfion-fits; ftroke's on the belly; falls; fevers; difagreeable finells; excefs of blood; indolence; high living; or the contrary; violent paffions or affections of the mind, as fear, grief, &c.

THE figns of approaching abortion are, pain in the loins, or about the bottom of the belly; a dúll heavy pain in the infide of the thighs; a flight degree of coldnefs, or fhivering; ficknefs; palpitation of the heart; the breafts become flat and foft; the belly

\* Every mother who procures an abortion does it at the hazard of her life; yet there are not a few who run this rifk merely to prevent the trouble of bearing and bringing up children. It is furely a most unnatural crime, and cannot, even in the most abandoned, be viewed without horror; but in the decent matron, it is still more unpardonable.— Those wretches who daily advertife their affistance to women in this business, deferve, in my opinion, the most fevere of all human punishments.

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### OF PREGNANCY.

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falls; and there is a difcharge of blood or watery humours from the womb.

To prevent abortion, we would advife women of a weak or relaxed habit to use folid food, avoiding great quantities of tea, and other weak and watery liquors; to rife early, and go foon to bed; to shun damp houses; to take frequent exercise in the open air, but to avoid fatigue; and never to go abroad in damp foggy weather, if they can shun it.

WOMEN of a full habit ought to use a spare diet, avoiding strong liquors, and every thing that may tend to heat the body, or increase the quantity of blood. Their diet should be of an opening nature, confisting principally of vegetable substances. Every woman with child ought to be kept cheerful and easy in her mind. Her appetites, even though depraved, ought to be indulged as far as prudence will permit.

WHEN any figns of abortion appear, the woman ought to be laid in bed on a mattrafs, with her head low. She fhould be kept quiet, and her mind foothed and comforted. She ought not to be kept too hot, nor to take any thing of a heathing nature. Her food fhould confift of broths, rice and milk, jellies, gruels made of oat-meal, and the like, all of which ought to be taken cold.

IF the be able to bear it, the thould lofe, at leaft, half a pound of blood from the arm. Her drink ought to be barley-water tharpened with juice of lemon; or the may take half a drachm of powdered nitre, in a cup of water-gruel, every five or the hours. If the woman be feized with a violent loofenets, the ought to drink the decoction of calcined hartfhorn prepared.

### OF CHÍLD-BÍRTH.

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prepared. If the be affected with vomiting, let her take frequently two table-fpoonfuls of the faline mixture. In general, opiates are of fervice; but they thould always be given with caution.

SANGUINE robust women, who are liable to miscarry at a certain time of pregnancy, ought always to be bled a few days before that period arrives. By this means, and observing the regimen above prescribed, they might often escape that misfortune.

THOUGH we recommend due care for preventing abortion, we would not be underftood as reftraining pregnant women from their ufual exercifes. This would generally operate the quite contrary way. Want of exercife not only relaxes the body, but induces a plethora, or too great a fulnefs of the veffels, which are the two principal caufes of abortion. There are, however, fome women of fo delicate a texture, that it is neceffary for them to avoid almost every kind of exercife during the whole period of pregnancy.

#### OF CHILD-BIRTH.

MANY difeafes proceed from the want of due care in child-bed; and the more hardy part of the fex are most apt to despise the necessary precautions in this state. This is peculiarly the case with young wives. They think, when the labour-pains are ended, the danger is over; but in truth it may only then be faid to be begun. Nature, if left to herfelf, will feldom fail to expel the *fatus*; but proper care and management are certainly necessary for the recovery of the mother. No doubt, mischief may be done by too much

much as well as by too little care. Hence females who have the greateft number of attendants in childbed generally recover worft. But this is not peculiar to the ftate of child-bed. Exceffive care always defeats its own intention, and is generally more dangerous than none at all \*.

DURING actual labour, nothing of a heating nature must be given. The woman may, now and then, take a little panado, and her drink ought to be toast and water, or thin groat gruel. Spirits, wines, eordial-waters, and other things which are given with a view to strengthen the mother, and promote the birth, for the most part tend only to increase the fever, inflame the womb, and retard the labour. Besides, they endanger the woman afterwards, as they often occasion violent and mortal hæmorrhages, or dispose her to eruptive and other fevers.

. \* Though the management of women in child-bed has been practifed as an employment fince the earliest accounts of time; vet it is still, in most countries, on a very bad footing. Few women think of following this employment till they be reduced to the necessity of doing it for bread. Hence not one in a hundred of them have any education, or proper knowledge of their bufinefs. It is true, that Nature, if left to herfelf, will generally expel the fatus; but it is equally true, that most women in childbed require to be managed with skill and attention, and that they are often hurt by the superstitious prejudices of ignorant and officious midwives. The mischief done in this way is much greater than is generally imagined; most of which, might be prevented by allowing no women to practife midwifery but fuch as are properly qualified. Were due attention paid to this, it would not only be the means of faving many lives, but would prevent the necessity of employing men in this indelicate and disagreeable branch of medicine, which is, on many accounts, more proper for the other fex.

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WHEN the labour proves tedious and difficult, to prevent inflammations, it will be proper to bleed. An emollient clyfter ought likewife frequently to be administered; and the patient should fit over the steams of warm water. The passage ought to be gently rubbed with a little fost *pomatum* or fresh butter, and cloths wrung out of warm water applied over the belly. If nature seems to fink, and the woman is greatly exhausted with fatigue, a draught of generous wine, or some other cordial, may be given, but not otherwise. These directions are sufficient in natural labours; and in all preternatural cafes, a skilful furgeon, or man-midwise, ought to be called as soon as possible.

AFTER delivery, the woman ought to be kept as quiet and eafy as poffible\*. Her food fhould be light and thin, as gruel, panado, &c. and her drink weak and diluting. To this rule, however, there are many exceptions. I have known feveral women, whofe fpirits could not be fupported in child-bed without folid food and generous liquors; to fuch, a glafs of wine and a bit of chicken muft be allowed.

SOMETIMES an exceffive hæmorrhage or flooding happens after delivery. In this cafe, the patient fhould be laid with her head low, kept cool, and be in all respects teated as for an exceffive flux of the

\* We cannot help taking notice of that ridiculous cuftom which ftill prevails in fome parts of the country, of collecting a number of women together upon fuch occasions. These, instead of being useful, serve only to crowd the house, and obstruct the neceffary attendants. Besides, they hurt the patient with their noise; and often, by their untimely and impertinent advice, do much mischief.

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menfes. If the flooding proves violent, linen cloths, which have been wrung out of a mixture of equal parts of vinegar and water, or red wine, fhould be applied to the belly, the loins, and the thighs: Thefe must be changed as they grow dry; and may be difcontinued as foon as the flooding abates \*.

IF there be violent pains after delivery, the patient ought to drink plentifully of warm diluting liquors, as groat-gruel, or tea with a little faffron in it; and to take fmall broths, with carraway-feeds, or a bit of orange-peel in them; an ounce of the cil of fweet almonds may likewife be frequently taken in a cup of any of the above liquors; and if the patient be reftlefs, a fpoonful of the fyrup of poppies may now and then be mixed with a cup of her drink. If fhe be hot or feverifh, one of the following powders may be taken in a cup of her ufual drink, every five or fix hours †.

An inflammation of the womb is a dangerous and not unfrequent difeafe after delivery. It is known by pains in the lower part of the belly, which are greatly increafed upon touching; by the tenfion or trightnefs of the parts; great weaknefs; change of

• In a violent flooding after delivery, I have feen very good effects from the following mixture: Take of penny-royal water, fimple cinnamon-water, and fyrup of poppies, each two ounces, acid elixir of vitriol a drachm. Mix, and take two table-fpoonfuls every two hours, or oftener, if neceffary.

+ Take of crabs claws prepared half an ounce, purified nitre two drachms, faffron powdered half a drachm; rub them together in a mortar, and divide the whole into eight or nine dofes.

When the patient is low-fpirited, or troubled with hyfterical complaints, fhe ought to take frequently twelve or fifteen drops of the tincture of afafætida in a cup of penny-royal tea.

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countenance; a conftant fever, with a weak and hard pulle; a flight *delirium* or raving; fometimes inceffant vomiting; a hiccup; a difcharge of reddifh, flinking, fharp water from the womb; an inclination to go frequently to ftool; a heat, and fometimes total fuppreffion of urine.

THIS must be treated like other inflammatory diforders, by bleeding and plentiful dilution. The drink may be thin gruel or bariey-water; in a cup of which half a drachm of nitre may be diffolved, and taken three or four times a-day. Clysters of warm milk and water must be frequently administered; and the belly should be fomented by cloths wrung out of warm water, or by applying bladders filled with warm milk and water to it.

A SUPPRESSION of the *lochia*, or ufual difcharges after delivery, and the milk-fever, muft be treated nearly in the fame manner as an inflammation of the womb. In all thefe cafes, the fafeft courfe is plentiful dilution, gentle evacuations, and fomentations of the parts affected. In the milk-fever, the breafts may be embrocated with a little warm linfeed-oil, or the leaves of red cabbage may be applied to them. The child fhould be often put to the breaft, or it. fhould be drawn by fome other perfon.

NOTHING would tend more to prevent the milkfever, than putting the child early to the breaft. The cuftom of not allowing children to fuck for the first two or three days, is contrary to Nature and common fense, and is very hurtful both to the mother and child.

Every mother who has milk in her breafts, ought either to fuckle her own child, or to have her breafts

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frequently drawn, at least for the first month. This would prevent many of the diseases which prove fatal to women in child-bed.

WHEN an inflammation happens in the breaft, attended with rednets, hardnets, and other fymptoms of suppuration, the fafest application is a poultice of bread and milk, softened with oil or fresh butter. This may be renewed twice a-day, till the tumour be either discussed or brought to suppuration. The use of repellents, in this case, is very dangerous; they often occasion fevers, and sometimes cancers; whereas a suppuration is feldom attended with any danger, and has often the most falutary effects.

WHEN the nipples are fretted or chapt, they may be anointed with a mixture of oil and bees-wax, or a little powdered gum-arabic may be fprinkled on them. I have feen Hungary-water applied to the nipples have a very good effect. Should the complaint prove obftinate, a cooling purge may be given, which generally removes it.

THE miliary fever is a difeafe incident to women in child-bed: but as it has been treated of already, we fhall take no further notice of it. The celebrated lHoffman obferves, That this fever of child-bed wotmen might generally be prevented, if they, during their pregnancy, were regular in their diet, ufed moderate exercife, took now and then a gentle laxative of manna, rhubarb, or cream of tartar; not forgetting to bleed in the first months, and avoid all sharp air. When the labour is coming on, it is not to be hastened with forcing medicines, which inflame the blood and humours, or put them into unnatural commotions. Care should be taken, after the birth, that

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the natural excretions proceed regularly; and if the pulfe be quick, a little nitrous powder, or fome other cooling medicines, fnould be administered.

The most fatal diforder confequent upon delivery is the *puerperal*, or child-bed fever. It generally makes its attack upon the fecond or third day after delivery. Sometimes indeed it comes on fooner, and at other times, though rarely, it does not appear before the fifth or fixth day.

IT begins, like most other fevers,-with a cold or shivering fit, which is fucceeded by reftlefiness, pain of the head, great fickness at ftomach, and bilious vomiting. The pulse is generally quick, the tongue dry, and there is a remarkable depression of spirits and loss of strength. A great pain is usually felt in the back, hips, and region of the womb; a fudden change in the quantity or quality of the lochia alfo takes place; and the patient is frequently troubled with a tenesmus, or constant inclination to go to flool. The urine, which is very high-coloured, is discharged in small quantity, and generally with pain. The belly fometimes fwells to a confiderable bulk, and becomes fusceptible of pain from the Aightest touch. When the fever has continued for a few days, the fymptoms of inflammation ufually fublide, and the disease acquires a more putrid form. At this period, if not fooner, a bilious or putrid loofenefs, of an obflinate and dangerous nature, comes on, and accompanies the difeafe through all its future progrefs.

THERE is not any difeafe that requires to be treated with more fkill and attention than this; confequently the beft affiftance ought always to be obtained as foon

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as poffible. In women of plethoric conftitutions, bleeding will generally be proper at the beginning; it ought however to be ufed with caution, and not to be repeated unlefs where the figns of inflammation rife high; in which cafe it will also be neceffary to apply a bliftering-plaster to the region of the womb.

DURING the rigour, or cold fit, proper means fhould be ufed to abate its violence, and fhorten its duration. For this purpofe the patient may drink freely of warm diluting liquors, and, if low, may take now and then a cup of wine-whey; warm applications to the extremities, as heated bricks, bottles or bladders filled with warm water, and fuch like, may alfo be ufed with advantage.

EMOLLIENT clyfters of milk and 'water, or of chicken water, ought to be frequently administered through the course of the disease. These prove beneficial by promoting a discharge from the intestines, and also by acting as a kindly fomentation to the womb and parts adjacent. Great care however is requisite in giving them, on account of the tenderness of the parts in the *pelvis* at this time.

To evacuate the offending bile from the flomach, a vomit is generally given. But as this is apt to increafe the irritability of the flomach, already too great, it will be fafer to omit it, and to give in its flead a gentle laxative, which will both tend to cool the body, and to procure a free difcharge of the bile \*.

\* Midwives ought to be very cautious in administering vomits or purges to women in child-bed. I have known a woman, who was recovering extremely well, thrown into the most imminent danger, by a strong purge which was given her by an officious midwife.

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THE medicine which I have always found to fucceed beft in this difeafe is the faline draught. This, if frequently repeated, will often put a ftop to the vomiting, and at the fame time leffen the violence of the fever. If it runs off by ftool, or if the patient be reflefs, a few drops of laudanum, or fome fyrup of poppies, may occafionally be added.

IF the ftools fhould prove fo frequent as to weaken and exhauft the patient, a ftarch clyfter, with thirty or forty drops of laudanum in it, may be administered as occasion shall require; and the drink may be rice-water, in every English pint of which half an ounce of gum-arabic has been diffolved. Should these fail, recourse must be had to Columbo-root, or fome other strong astringent.

THOUGH in general the food ought to be light, and the drink diluting, yet when the difeafe has been long protracted, and the patient is greatly fpent by evacuations, it will be neceffary to fupport her with nourifhing diet and generous cordials.

It was observed that this fever, after continuing for fome time, often acquires a putrid form. In this cafe the Peruvian bark must be given, either by itself, or joined with cordials, as circumstances may require. As the bark in substance will be apt to purge, it may be given in decoction or infusion, mixed with the tincture of roses, or other gentle aftringents: or, a feruple of the extract of bark with half an ounce of spirituous cinnamon-water, two ounces of common water, and ten drops of laudanum, may be made into a draught, and given every second, third, or fourth hour, as shall be found necessary.

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WHEN the ftomach will not bear any kind of nourifhment, the patient may be supported for some time by clysters of beef-tea, or chicken-water.

To avoid this fever, every woman in child-bed ought to be kept perfectly eafy; her food fhould be light and fimple, and her bed-chamber cool, and properly ventilated. There is not any thing more hurtful to a woman in this fituation than being kept too warm. She ought not to have her body bound too tight, nor to rife too foon from bed, after delivery; catching cold is alfo to be avoided; and a proper attention fhould be paid to cleanlinefs.

To prevent the milk-fever, the breafts ought to be frequently drawn; and if they are filled previous to the onfet of a fever, they fhould, upon its first appearance, be drawn, to prevent the milk from becoming acrid, and its being absorbed in this state. Costiveness is likewise to be avoided. This will be best effected by the use of mild clysters and a laxative diet.

WE shall conclude our observations on child-bed women by recommending it to them, above all things, to beware of cold. Poor women, whose circumstances oblige them to quit their bed too foon, often contract diseases from cold, of which they never recover. It is pity the poor are not better taken care of in this situation.

But the better fort of women run the greatest hazard from too much heat. They are generally kept in a fort of a bagnio for the first eight or ten days, and then dreffed out to see company. The danger of this conduct must be obvious to every one.

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The fuperfitious cuftom of obliging women to keep the house till they go to church, is likewise a very common cause of catching cold. All churches are damp, and most of them cold; consequently they are the very worst places to which a woman can go to make her first visit, after having been confined in a warm room for a month.

#### OF BARRENNESS.

BARRENNESS may be very properly reckoned among the difeafes of females, as few married women who have not children enjoy a good ftate of health. It may proceed from various caufes, as high living, grief, relaxation, &c. but it is chiefly owing to an obftruction or irregularity of the menftrual flux.

IT is very certain that high living vitiates the humours, and prevents fecundity. We feldom find a barren woman among the labouring poor, while nothing is more common among the rich and affluent. The inhabitants of every country are prolific in proportion to their poverty; and it would be an eafy matter to adduce many inftances of women, who, by being reduced to live entirely upon a milk and vegetable diet, have conceived and brought forth children, though they never had any before. Would the rich use the fame fort of food and exercise as the better fort of peafants, they would feldom have caufe to envy their poor vaffals and dependants the bleffing of a numerous and healthy offspring, while they pine in forrow for the want of even a fingle heir to their extensive domains.

AFFLUENCE begets indolence, which not only vitiates the humours, but induces a general relaxation of

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of the folids; a ftate highly unfavourable to procreation. To remove this, we would recommend the following courfe: Firft, fufficient exercise in the open air; fecondly, a diet confisting chiefly of milk and vegetables \*; thirdly, the use of aftringent medicines, as steel, allum, dragon's blood, elixir of vitriol, the Spaw or Tunbridge waters, Peruvian bark, &c. and lastly, above all, the cold bath.

BARRENNESS is often the confequence of grief, fudden fear, anxiety, or any of the paffions which tend to obftruct the menftrual flux. When barrennefs is fulpected to proceed from affections of the mind, the perfon ought to be kept as eafy and cheerful as poffible; all difagreeable objects are to be avoided, and every method taken to amufe and entertain the fancy.

#### CHAP. XLIX.

#### DISEASES OF CHILDREN.

MISERABLE indeed is the lot of man in-the ftate of infancy. He comes into the world more helplefs than any other animal, and ftands

\* Dr. Cheyne avers, that want of children is oftener the fault of the male than of the female, and ftrongly recommends a milk and vegetable diet to the former as well as the latter; adding, that his friend Dr. Taylor, whom he calls the Milk-doctor of Croydon, had brought fundry opulent families in his neighbourhood, who had continued fome years after marriage without progeny, to have feveral fine children, by keeping both parents, for a confiderable time, to a milk and vegetable diet.

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much longer in need of the protection and care of his parents; but, alas! this care is not always beftowed upon him; and when it is, he often fuffers as much from improper management as he would have done from neglect. Hence the officious care of parents, nurfes, and midwives, becomes one of the most fruitful fources of the diforders of infants \*.

It must be obvious to every attentive perfon, that the first difeases of infants arise chiefly from their bowels. Nor is this in the least to be wondered at, as they are in a manner poisoned with indigestible drugs and improper diet as soon as they come into the world. Every thing that the stomach cannot digest may be confidered as a poison; and unless it can be thrown up, or voided by stool, it must occastion fickness, gripes, spassmodic affections of the bowels, or what the good women call inward fits, and at last convulsions and death.

As these fymptoms evidently arise from somewhat that irritates the intestines, doubtless the proper method of cure must be to expel it as soon as possible.

\* Of the officious and ill-judged care of midwives we shall adduce only one inflance, viz. the common practice of torturing infants by squeezing their breasts, to draw off the milk, as they call it. Though a small quantity of moisture is generally found in the breasts of infants, yet, as they are certainly not intended to give suck, this ought never to be drawn off. I have seen this cruel operation bring on hardness, inflammation, and suppuration of the breasts; but never knew any ill confequences from its being omitted. When the breasts are hard, the only application that we would recommend is a soft poultice, or a little of the diachylon plaster, spread thin upon a bit of soft leather, about the fize of half a crown, and applied over each nipple. These may be suffered to continue till the hardness disappears.

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#### DISEASES OF CHILDREN.

The most fafe and effectual method of doing this is by gentle vomits. Five or fix grains of the powder of ipecacuanha may be mixed in two table-fpoonfuls of water, and fweetened with a little fugar. A teafpoonful of this may be given to the infant every quarter of an hour, till it operates; or, what will more certainly answer the purpose, a grain of emetic tartar may be diffolved in three ounces of water, fweetened with a little fyrup, and given as above. Those who are not fond of using the emetic tartar, may give fix or feven drops of the antimonial wine, in a tea-fpoonful of water or thin gruel.

THESE medicines will not only cleanfe the ftomach, but will; generally, likewife open the body; fhould this, however, not happen, and if the child be coftive, fome gentle purge will be neceffary: for this purpofe fome manna and pulp of caffia may be diffolved in boiling water, and given in fmall quantities till it operates; or, what will anfwer rather better, a few grains of *magnefia alba* may be mixed in any kind of food that is given to the child, and continued till it has the defired effect. If thefe medicines be properly adminiftered, and the child's belly and limbs frequently rubbed with a warm hand before the fire, they will feldom fail to relieve thofe affections of the ftomach and bowels from which infants fuffer fo much.

THESE general directions include most of what can be done for relieving the internal diforders of infants. They will likewife go a confiderable way in alleviating those which appear externally, as the rash, gum, or fellon, &cc. These, as was formerly observed, are principally owing to too hot a regimen, and confequently

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quently will be most commonly relieved by gentle evacuations. Indeed, evacuations of one kind or other, constitute a principal part of the medicine of infants, and will feldom, if administered with prudence, in any of their difeafes, fail to give relief.

#### OF THE MECONIUM.

THE ftomach and bowels of a new-born infant are filled with a blackifh-coloured matter of the confiftence of fyrup, commonly called the meconium. This is generally paffed foon after the birth, by the mere effort of Nature; in which cafe it is not neceffary to give the infant any kind of medicine. But if it should be retained, or not fufficiently carried off, a little manna or magnefia alba may be given, as mentioned above; or, if these should not be at hand, a common fpoonful of whey, fweetened with a little honey, or raw fugar, will answer the purpose.

THE most proper medicine for expelling the mecomium is the mother's milk, which is always, at first, of a purgative quality. Were children allowed to fuck as foon as they shew an inclination for the breast, they would feldom have occasion for medicines to discharge the meconium; but even where this is not allowed, they ought never to have daubs of fyrup, oils, and other indigestible stuff, crammed down their throats.

#### THE APHTHÆ OR THRUSH.

THE aphthæ are little whitish ulcers affecting the whole infide of the mouth, tongue, throat, and ftomach of infants. Sometimes they reach through eho

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the whole inteftinal canal; in which cafe they are very dangerous, and often put an end to the infant's life.

IF the aphthæ are of a pale colour, pellucid, few in number, foft, fuperficial, and fall eafily off, they are not dangerous; but if opake, yellow, brown, black, thick, or running together, they ought to be dreaded.

It is generally thought that the aphthæ ówe their origin to acid humours; we have reafon however to believe, they are more frequently owing to too hot a regimen both of the mother and child. It is a rare thing to find a child who is not dofed with wine, punch, cinnamon-waters, or fome other hot and inflaming liquors, almost as foon as it is born. It is well known that thefe will occasion inflammatory diforders even in adults; is it any wonder then that they should heat and inflame the tender bodies of infants, and fet, as it were, the whole conftitution on a blaze ?

THE most proper medicines for the aphthæ are vomits; fuch as have been already recommended, and gentle laxatives. Five grains of rhubarb and half a drachm of magnefia alba may be rubbed together, and divided into fix doses, one of which may be given to the infant every four or five hours till they operate. These powders may either be given in the child's food, or a little of the fyrup of pale roses, and may be repeated as often as is found neceffary to keep the body open. It is common in this case to administer calomel; but as that medicine soccasions gripes, it ought always to be given to infants with caution.

MANY

MANY things have been recommended for gargling the mouth and throat in this difeafe; but it is not eafy to apply thefe in very young infants; we would therefore recommend it to the nurfe to rub the child's mouth frequently with a little borax and honey; or with the following mixture: Take fine honey an ounce, borax a drachm, burnt alum half a drachm, rofe-water two drachms; mix them together. A very proper application in this cafe, is a folution of ten or twelve grains of white vitriol in eight ounces of barley-water. Thefe may be applied with the finger, or by means of a bit of foft rag tied to the end of a probe.

#### OF ACIDITIES.

THE food of children being, for the most part, of an acefcent nature, it readily turns four upon the ftomach, especially if the body be any way difordered. Hence most difeases of children are accompanied with evident figns of acidity, as greens stools, gripes, &c. These appearances have induced many to believe, that all the difeases of children were owing to an acid abounding in the stomach and bowels; but whoever confiders the matter attentively, will find, that these symptoms of acidity are oftener the effect than the cause of their difeases.

NATURE evidently intended, that the food of children fhould be acefcent; and unlefs the body be difordered, or the digeftion hurt, from fome other caufe, we will venture to fay, that the acefcent quality of their food is feldom injurious to them. Acidity, however, is often a fymptom of diforders in children,

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### OF ACIDITIES.

dren, and, as it is fometimes a troublefome one, we fhall point out the method of relieving it.

WHEN green ftools, gripes, purgings, four finells, &c. fhew that the bowels abound with an acid, the child fhould have a little fmall broth, with light white bread in it; and fhould have fufficient exercise in order to promote the digeftion. It has been cuftomary in this case to give the pearl-julep, chalk, crabs eyes, and other testaceous powders. These, indeed, by their absorbent quality, may correct the acidity; but they are attended with this inconvenience, that they are apt to lodge in the bowels, and occasion costiveness, which may prove very hurtful to the infant. For this reason they should never be given unless mixed with purgative medicines; as rhubarb, manna, or such like.

THE best medicine which we know, in all cases of acidity, is that fine infipid powder called *magnefia alba*. It purges, and at the fame time corrects the acidity: by which means it not only removes the difease, but carries off its cause. It may be given in any kind of food, or in a mixture, as recommended in the Appendix \*.

WHEN an infant is troubled with gripes, it ought not at firft to be dofed with brandy, fpiceries, and other hot things, but fhould have its body opened with an emollient clyfter, or the medicine mentioned above; and at the fame time a little brandy may be rubbed on its belly with a warm hand before the fire. I have feldom feen this fail to eafe the gripes of infants. If it fhould happen, however, not to fuc-

\* See Appendix, Laxative absorbent Mixture.

ceed,

# 508 GALLING AND EXCORIATION.

ceed, a little brandy or other fpirits may be mixed with thrice the quantity of warm water, and a teafpoonful of it given frequently till the infant be eafier. Sometimes a little peppermint-water will anfwer this purpofe very well.

# GALLING AND EXCORIATION.

THESE are very troublefome to children. They happen chiefly about the groin and wrinkles of the neck, under the arms, behind the ears, and in other parts that are moiflened by the fweat or urine.

As these complaints are, in a great measure, owing to want of cleanlinefs, the most effectual means of preventing them are, to wash the parts frequently with cold water, to change the linen often, and, in a word, to keep the child, in all respects, thoroughly clean. When this is not fufficient, the excoriated parts may be fprinkled with abforbent or drying powders; as burnt hartshorn, tutty, chalk, crabs claws prepared, and the like. When the parts affected are very fore, and tend to a real ulceration, it will be proper to add a little fugar of lead to the powders; or to anoint the place with the camphorated ointment. If the parts be washed with fpring-water, in which a little white vitriol has been diffolved, it will dry and heal them very powerfully. One of the best applications for this purpose, is to diffolve some suller's earth in a sufficient quantity of hot water; and after it has flood till it is cold, to rub it gently upon the galled parts once or twice a-day.

STOP-

#### STOPPAGE OF THE NOSE.

THE noftrils of infants are often plugged up with a grofs *mucus*, which prevents their breathing freely, .and likewife renders it difficult for them to fuck or !fwallow.

Some, in this cafe, order, after a fuitable purge, itwo or three grains of white vitriol diffolved in half an ounce of marjoram-water, and filtered, to be applied now and then to the noftrils with a linen rag. Wedelius fays, If two grains of white vitriol, and the fame quantity of *elaterium*, be diffolved in half an ounce of marjoram-water, and applied to the inofe, as above directed, that it brings away the *mucus* without fneezing.

In obltinate cafes these things may be tried; but II have never found any thing necessary; besides rub-Ibing the nose at bed-time with a little sweet oil, or Ifresh butter. This resolves the filth, and renders the Ibreathing more free \*.

### OF VOMITING.

FROM the delicate ftate of children, and the great fenfibility of their organs, a vomiting or loofenefs may be induced by any thing that irritates the nerves tof the ftomach or inteftines. Hence these diforders are much more common in childhood than in the more advanced periods of life. They are feldom

\* Some nurses remove this complaint by fucking the child's nose. This is by no means a cleanly operation; but when norses have the resolution to do it, I am far from discouraging the practice.

how-

# OF VOMITING.

however dangerous, and ought never to be confidered as difeafes, unlefs when they are violent, or continue fo long as to exhauft the ftrength of the patient.

VOMITING may be excited by an over-quantity of food; by food that is of fuch a nature as to irritate the nerves of the flomach too much; or by the fenfibility of the nerves being fo much increased as to render them unable to bear the flimulus of even the mildeft aliment.

WHEN vomiting is occasioned by too much food, it ought to be promoted, as the cure will depend upon cleaning the ftomach. This may be done either by a few grains of ipecacuanha, or a weak folution of emetic tartar, as mentioned before. When it is owing to food of an acrid or irritating quality, the diet ought to be changed, and aliment of a milder nature fubfituted in its ftead.

WHEN vomiting proceeds from an increased degree of fensibility, or too great an irritability of the nerves of the ftomach, such medicines as have'a tendency to brace- and strengthen that organ, and to abate its fensibility, must be used. The first of these intentions may be answered by a flight infusion of the Peruvian bark, with the addition of a little rhubarb and orange-peel; and the second by the faline draughts, to which a few drops of liquid laudanum may be occasionally added.

In obstinate vomitings the operation of internal medicines may be affisted by aromatic fomentations made with wine, applied warm to the pit of the stomach; or the use of the stomach-plaster, with the addition of a little *Theriaca*.

OF

#### 610,

# OF A LOOSENESS.

A LOOSENESS may generally be reckoned falutary when the ftools are four, flimy, green, or curdled. It is not the difcharge, but the production of fuch ftools, which ought to be remedied. Even where the purging is thin and watery, it ought not to be checkted too fuddenly, as it often proves critical, efpecially when the child has caught cold, or an eruption on the fkin has difappeared. Sometimes an evacuation of this kind fucceeds a humid ftate of the atmosphere, in which cafe it may also prove of advantage, by carrying off a quantity of watery humours, which would otherwife tend to relax the habit.

As the principal intention in the cure of a loofenels lis to evacuate the offending matter, it is cuftomary to give the patient a gentle vomit of ipecacuanha, and afterwards to exhibit fmall and frequent doles of rhulbarb; interpoling abforbent medicines, to mitigate the acrimony of the humours. The beft purge how-, tever, in this cafe, is *magnefia alba*. It is at the fame time abforbent and laxative, and operates without exciting gripes.

THE antimonial wine, which acts both as an emetic and purge, is alfo an excellent medicine in this cafe. IBy being diluted with water, it may be proportioned to the weakeft conflictution; and, not being difagreetable to the palate, it may be repeated as often as occafion requires. Even one dofe will frequently mitiigate the difeafe, and pave the way for the use of abforbents. If, however, the patient's strength will permit, the medicine ought to be repeated every fix

OT

## 612 OF ERUPTIONS.

or eight hours; till the ftools begin to affume a more natural appearance; afterwards a longer fpace may be allowed to intervene between the dofes. When it is neceffary to repeat the medicine frequently, the dofe ought always to be a little increased, as its efficacy is generally diminished by use.

Some, upon the first appearance of a loofenefs, fly immediately to the use of absorbent medicines and aftringents. If these be administered before the acrid humours are discharged, though the disease may appear to be mitigated for a little time, it foon afterwards breaks forth with greater violence, and often proves fatal. After proper evacuations, however, these medicines may be administered with considerable advantage.

SHOULD any gripings or reftleffnefs remain after the flomach and bowels have been cleanfed, a teafpoonful of the fyrup of poppies may be given in a little fimple cinnamon-water three or four times a-day till thefe fymptoms have ceafed.

#### OF ERUPTIONS.

CHILDREN, while on the breaft, are feldom free from eruptions of one kind or other. Thefe, however, are not often dangerous, and ought never to be dried up but with the greateft caution. They tend to free the bodies of infants from hot and acrid humours, which, if retained, might produce fatal diforders.

THE eruptions of children are chiefly owing to improper food, and neglect of cleanlinefs. If a child be stuffed at all hours with food that its stomach is

not

#### OF ERUPTIONS.

not able to digeft, fuch food, not being properly affimilated, inftead of nourifhing the body, fills it with grofs humours. Thefe muft either break out in form of eruptions upon the fkin, or remain in the body, and occafion fevers and other internal diforders. That neglect of cleanlinefs is a very general caufe of eruptive diforders, muft be obvious to every one. The children of the poor, and of all who defpife cleanlinefs, are almost constantly found to fwarm with vermin, and are generally covered with the fcab, itch,' and other eruptions.

WHEN eruptions are the effect of improper food, or want of cleanlinefs, a proper attention to thefe alone will generally be fufficient to remove them. If this fhould not be the cafe, fome drying medicines will be neceffary. When they are applied, the body ought at the fame time to be kept open, and cold is carefully to be avoided. We know no medicine that is more fafe for drying up cutaneous eruptions than fulphur, provided it be prudently ufed. A little of the flour of fulphur may be mixed with fresh butter, oil, or hog's lard, and the parts affected frequently touched with it.

The most obstinate of all the eruptions incident to children are, the *tinea capitis*, or fcabbed head, and chilblains. The fcabbed head is often exceeding difficult to cure, and fometimes indeed the cure proves worse than the disease. I have frequently known children seized with internal disorders, of which they died son after their scabbed heads had been healed by the application of drying medicines \*. The cure ought

• I fometime ago faw a very ftriking inftance of the danger of fubfituting drying medicines in the place of cleanliness and R r 3 whole-

#### OF ERUPTIONS.

aught always first to be attempted by keeping the head very clean; cutting off the hair, combing and brufhing away the fcabs, &c. If this is not fufficient, let the head be fhaved once a-week, washed daily with foap fuds, and gently anointed with a liniment made of train oil eight ounces, red precipitate, in fine powder, one drachm. And if there be proud flefh, it fhould be touched with a bit of blue vitriol, sprinkled with a little burnt allum. While these things are doing, the patient must be confined to a regular light diet, the body should be kept gently open; and cold, as far as poffible, ought to be avoided. To prevent any bad confequences from ftopping this difcharge, it will be proper, especially in children of a grofs habit, to make an iffue in the neck or arm, which may be kept open till the patient becomes more ftrong, and the conflicution be fomewhat mended.

CHILBLAINS commonly. attack children in cold weather. They are generally occasioned by the feet or hands being kept long wet or cold, and after-

wholcfome food, in the Foundling Hofpital at Ackworth, where the children were grievoufly afflicted with fcabbed heads, and other cutaneous diforders. Upon inquiry it was found, that very little attention was paid either to the propriety or foundnefs of their provifions, and that cleanlinefs was totally ncglected; accordingly it was advifed that they fhould have more wholefome food, and be kept thoroughly clean. This advice, however, was not followed. It was too troublefome to the fervants, fuperintendants, &c. The bufinefs was to be done by medicine; which was accordingly ustempted, but had near proved fatal to the whole houfe. Fevers and other internal diforders immediately appeared, and, at length, a putrid dyfentery, which proved fo infectious, that it carried off a great many of the children, and fpread over a confiderable part of the neighbouring country.

wards

### OF THE CROUP. 615

wards fuddenly heated. When children are cold, inftead of taking exercise to warm themselves gradually, they run to the fire. This occasions a fudden rarefaction of the humours, and an infarction of the veffels; which being often repeated, the veffels are, at last, over-distended, and forced to give way.

To prevent it, violent cold and fudden heat must be equally avoided. When the parts begin to look red and fwell, the patient ought to be purged, and to have the affected parts frequently rubbed with muftard and brandy, or fomething of a warming nature. They ought likewife to be covered with flannel, and kept warm and dry. Some apply warm ashes betwixt cloths to the swelled parts, which frequently help to reduce them. When there is a fore, it must be dreffed with Turner's cerate, the ointment of tutty, the plaster of cerus, or some other drying ointment. These fores are indeed troublesome, but feldom dangerous. They generally heal as foon as the warm weather fets in.

### OF THE CROUP.

CHILDREN are often feized very fuddenly with this diseafe, which, if not quickly relieved, proves mortal. It is known by various names in different parts of Britain. On the east coast of Scotland it is called the croup. On the West they call it the chock or stuffing. In some parts of England, where I have obferved it, the good women call it the rifing of the lights. It feems to be a species of asthma, attended with very acute and violent catarrhal fymptoms.

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This difeafe generally prevails in cold and wet feafons. It is most common upon the fea-coast, and in low marshy countries. Children of a gross and lax habit are most liable to it. I have fometimes known it hereditary. It generally attacks children in the night, after having been much exposed to damp cold easterly winds through the day. Damp houses, wet feet, thin shoes, wet clothes, or any thing that obstructs the perspiration, may occasion the croup.

It is attended with a frequent pulfe, quick and laborious breathing, which is performed with a peculiar kind of croaking noife, that may be heard at a confiderable diffance. The voice is fharp and fhrill, and the face is generally much flufhed, though fometimes it is of a livid colour.

WHEN a child is feized with the above fymptoms, his feet fhould immediately be put into warm water. He ought likewife to be bled \*, and to have a laxative clyfter administered as soon as possible. He should be made to breathe over the steams of warm water and vinegar; or an emollient decoction, and emollient cataplass or somentations may be applied round his neck. If the symptoms do not abate, a bliftering plaster must be applied round the neck, or betwixt the shoulders, and the child may take frequently a table-spoonful of the following julep: Take penny-royal water three ounces, syrup of althea and balfamic syrup, each one ounce, mix them together.

ASAFOETIDA is found to have a good effect in this cafe. It may both be given in form of clyfter, and

\* In this difease bleeding is not always proper; but in very full habits it must certainly be of use.

taken

### OF THE CROUP.

taken by the mouth. Two drachms of afafætida may be diffolved in one ounce of Mindererus's fpirit, and three ounces of penny-royal water. A table-fpoonful of this mixture may be given every hour, or oftener, if the patient's ftomach be able to bear it. If the child cannot be brought to take this medicine, two drachms of the afafætida may be diffolved in a common clyfter, and administered every fix or eight hours, till the violence of the difease abates \*.

To prevent a return of the diforder, all those things which occasion it must be carefully avoided; as wet feet, cold, damp, easterly winds, &c. Children who have had frequent returns of this difease, or whose constitutions seem to dispose them to it, ought to have their diet properly regulated; all food that is viscid or hard of digestion, and all crude, raw, trashy fruits, are to be avoided. They ought likewise to have a drain constantly kept open in some part of their

\* I was lately favoured with a letter from Dr. William Turnbu'l in London, a phyfician of great experience, and who, from his former fituation on the north-east coaft of England, had many opportunities of observing the symptoms and progress of this dangerous difease. I am forry the letter came too late to be inserted at length; but as the Doctor's fentiments differ very little from my own, this misfortune is the lefs to be regretted. The Doctor indeed observes, that he never found blistering of any service ; but. recommends cataplasms of garlic, camphor, and Venice treacle, to be applied both to the throat and foles of the feet. He likewife recommends boluses of camphor, castor, valerian root, salt of hartshorn, and musk, adapted to the age; strength, &c. of the patient; after which he advifes two spoonfuls of the following decoction :- Take of garlic and distilled vinegar each an ounce, hyfop-water eight ounces ; beat up the ingredients together, gradually mixing the water, and adding three ounces of honey. Let the whole be fimmered over a gentle fire, and afterwards ftrained for use.

body,

body, by means of a feton or iffue. I have fometimes known a Burgundy-pitch plafter, worn continually betwixt the fhoulders for feveral years, have a very happy effect in preventing the return of this dreadful diforder.

# OF TEETHING.

DR. ARBUTHNOT observes, that above a tenth part of infants die in teething, by fymptoms proceeding from the irritation of the tender nervous parts of the jaws, occasioning inflammations, fevers, convulsions, gangrenes, &c. These fymptoms are, in a great measure, owing to the great delicacy and exquisite fensibility of the nervous system at this time of life, which is too often increased by an effeminate education. Hence it comes to pass, that children who are delicately brought up, always suffer most in teething, and often fall by convulsive diforders.

ABOUT the fixth or feventh month the teeth generally begin to make their appearance; first the *incifores*, or fore-teeth; next the *canini*, or dog-teeth; and, lastly, the *molares*, or grinders. About the feventh year, there comes a new set; and about the twentieth, the two inner grinders, called *dentes fapientiæ*, the teeth of wisdom.

CHILDREN, about the time of cutting their teeth, flaver much, and have generally a loofenefs. When the teething is difficult, especially when the dog-teeth begin to make their way through the gums, the child has flartings in his fleep, tumours of the gums, watchings, gripes, green flools, the thrush, fever, difficult breathing, and convulsions.

DIFFICULT

### OF TEETHING.

DIFFICULT teething requires nearly the fame treatment as an inflammatory difeafe. If the body be bound, it must be opened either by emollient clysters or gentle purgatives; as manna, *magnefia alba*, rhubarb, fenna, or the like. The food should be light, and in small quantity; the drink plentiful, but weak and diluting, as infusions of balm, or of the lime-tree flowers; to which about a third or fourth part of milk may be added.

IF the fever be high, bleeding will be neceffary; but this, in very young children, ought always to be fparingly performed. It is an evacuation which they bear the worft of any. Purging, vomiting, or fweating, agree much better with them, and are generally more beneficial. Harris, however, obferves, that, when an inflammation appears, the phyfician will labour in vain, if the *cure* be not begun with applying a leech under each ear. 'If the child be feized with convultion fits, a bliftering plafter may be applied betwixt the fhoulders, or one behind each ear.

SYDENHAM fays, that in fevers occafioned by teething, he never found any remedy fo effectual as two, three, or four drops of fpirits of hartfhorn in a fpoonful of fimple water, or other convenient vehicle, given every four hours. The number of dofes may be four, five, or fix. I have often prefcribed this medicine with fuccefs, but always found a larger dofe neceffary. It may be given from five drops to fifteen or twenty, according to the age of the child, and, when coffiveness does not forbid it, three or four drops of laudanum may be added to each dose.

In Scotland, it is very common, when children are cutting their teeth, to put a finall Burgundy pitch plafter 620

plaster between their shoulders. This generally eases the tickling cough which attends teething, and is by no means an useless application. When the teeth are cut with difficulty, it ought to be kept on during the whole time of teething. It may be enlarged as occasion requires, and ought to be renewed, at least once a fortnight.

SEVERAL things have been recommended for rubbing the gums, as oils, mucilages, &c. but from thefe much is not to be expected. If any thing of this kind is to be ufed, we would recommend a little fine honey, which may be rubbed on with the finger three or four times a-day. Children are generally at this time difpofed to chew whatever they get into their hands. For this reafon they ought never to be without fornewhat that will yield a little to the preffure of their gums, as a cruft of bread, a wax candle, a bit of liquorice root, or fuch like.

WITH regard to cutting the gums, we have feldom known it of any great benefit. In obftinate cafes, however, it ought to be tried. It may be performed by the finger-nail, the edge of a fix-penny piece that is worn thin, or any fharp body which can be with fafety introduced into the mouth; but the lancet, in a fkilful hand, is certainly the most proper.

In order to render the teething lefs difficult, parents ought to take care that their children's food be light and wholefome, and that their nerves be braced by fufficient exercife without doors, the ufe of the cold bath, &c. Were thefe things duly regarded, they would have a much better effect than teetbing necklaces, or other nonfenfical amulets worn for that purpofe.

O F

# [ 621 ]

# OF THE RICKET'S.

THIS difeafe generally attacks children between the age of nine months and two years. It appeared first in England about the time when manufactures began to flourish, and still prevails most in towns where the inhabitants follow sedentary employments, by which means they neglect either to take proper exercise themselves, or to give it to their children.

CAUSES.—One caufe of the rickets is difeafed parents. Mothers of a weak relaxed habit, who neglect exercife, and live upon weak watery diet, can neither be expected to bring forth firong and healthy children, or to be able to nurfe them, after they are brought forth. Accordingly we find, that the children of fuch women generally die of the rickets, the fcrophula, confumptions, or fuch like difeafes. Children begotten by men in the decline of life, who are fubject to the gout, the gravel, or other chronic difeafes, or who have been often affected with the venereal difeafe in their youth, are likewife very liable to the rickets.

Any diforder that weakens the conftitution, or relaxes the habit of children, as the fmall-pox, measles, teething, the hooping-cough, &c. disposes them to this disease. It may likewise be occasioned by improper diet, as food that is either too weak and watery, or so viscid that the stomach cannot digest it.

BAD nurfing is the chief caufe of this difeafe. When the nurfe is either difeafed, or has not enough of milk to nourifh the child, it cannot thrive. But children fuffer oftener by want of care in nurfes than want of food.

### 622 OF THE RICKETS.

food. Allowing an infant to lie or fit too much, or not keeping it thoroughly clean in its clothes, has the most pernicious effects.

THE want of free air is likewife very hurtful to children in this refpect. When a nurfe lives in a clofe, fmall houfe, where the air is damp and confined, and is too indolent to carry her child abroad into the open air, it will hardly efcape this difeafe. A healthy child fhould always be in motion, unlefs when afleep; if it be fuffered to lie, or fit, inftead of being toffed and dandled about, it will not thrive.

SYMPTOMS.---- At the beginning of this difeafe the child's flesh grows foft and flabby; its ftrength is diminished; it loses its wonted cheerfulness, looks more grave and composed than is natural for its age, and does not chuse to be moved. The head and belly become too large in proportion to the other parts; the face appears full, and the complexion florid. Afterwards the bones begin to be affected, especially in the more foft and fpungy parts. Hence the wrifts and ancles become thicker than ufual; the fpine or back bone puts on an unnatural shape; the breast is likewife often deformed; and the bones of the arms and legs grow crooked. All those fymptoms vary according to the violence of the difease. The pulse is generally quick, but feeble; the appetite and digeftion, for the most part, bad; the teeth come flowly and with difficulty, and they often rot and fall out afterwards. Ricketty children generally have great acuteness of mind, and an understanding above their years. Whether this is owing to their being more in the company of adults than other children, or to the 7

# OF THE RICKETS.

the preternatural enlargement of the brain, is not material.

REGIMEN. ---- As this difeafe' is always attend-' ed with evident figns of weaknefs and relaxation, our chief aim in the cure must be to brace and ftrengthen the folids, and to promote digeftion and the due preparation of the fluids. Thefe important ends will be beft answered by wholesome nourishing diet, fuited to the age and ftrength of the patient, open dry air, and fufficient exercife. If the child has a bad nurse, who either neglects her duty, or does not understand it, she should be changed. If the feason be cold, the child ought to be kept warm; and when the weather is hot, it ought to be kept cool; as fweating is apt to weaken it; and too great a degree of cold has the fame effect. The limbs fhould be rubbed frequently with a warm hand, and the child kept as cheerful as poffible.

THE diet ought to be dry and nourifhing, as good bread, roafted flefh, &c. Bifcuit is generally reckoned the beft bread; and pigeons, pullets, veal, rabbits, or mutton roafted or minced, are the moft proper flefh. If the child be too young for flefhmeats, he may have rice, millet, or pearl-barley boiled with raifins, to which may be added a little wine and fpice. His drink may be good claret, mixed with an equal quantity of water. Those who cannot afford claret, may give the child now and then a wine-glafs of mild ale, or good porter.

MEDICINE. — Medicines are here of little avail. The difeafe may often be cured by the nurfe, but feldom by the phyfician. In children of a grofs habit, gentle vomits and repeated purges of rhubarb may

### OF CONVULSIONS.

may fometimes be of ufe, but they will feldom carry off the difeafe; that muft depend chiefly upon fuch things as brace and ftrengthen the fyftem : for which purpofe, befides the regimen mentioned above, we would recommend the cold bath, efpecially in the warm feafon. It muft, however, be ufed with prudence, as fome ricketty children cannot bear it. The beft time for ufing the cold bath is in the morning, and the child fhould be well rubbed with a dry cloth immediately after he comes out of it. If the child fhould be weakened by the cold bath, it muft be difcontinued.

SOMETIMES iffues have been found beneficial in this difeafe. They are peculiarly neceffary for children who abound with groß humours. An infufion of the Peruvian bark in wine or ale, would be of fervice, were it poffible to bring children to take it. We might here mention many other medicines which have been recommended for the rickets; but as there is far more danger in trufting to thefe than in neglecting them altogether, we chufe rather to pafs them over, and to recommend a proper regimen as the thing chiefly to be depended on.

### OF CONVULSIONS.

THOUGH more children are faid to die of convulfions than of any other difeafe, yet they are for the most part only a fymptom of fome other malady. Whatever greatly irritates or stimulates the nerves, may occasion convultions. Hence infants whose nerves are easily affected, are often thrown into convultions by any thing that irritates the alimentary canal;

### OF CONVULSIONS.

canal; likewife by teething; ftrait clothes; the approach of the fmall-pox, meafles, or other eruptive difeafes.

WHEN convultions proceed from an irritation of the ftomach or bowels, whatever clears them of their acrid contents, or renders thefe mild and inoffenfive, will generally perform a cure: wherefore, if the child be coftive, the beft way will be to begin with a clyfter, and afterwards to give a gentle vomit, which may be repeated occafionally, and the body in the mean time kept open by gentle dofes of magmefia alba, or fmall quantities of rhubarb mixed with the powder of crabs claws.

CONVULSIONS which precede the eruption of the fmall-pox or meafles, generally go off upon thefe making their appearance. The principal danger in this cafe arifes from the fears and apprehensions of those who have the care of the patient. Convultions are very alarming, and fomething must be done to appeale the affrighted parents, nurfes, &c. Hence the unhappy infant often undergoes bleeding, bliftering, and feveral other operations, to the great danger of its life, when a little time, bathing the lfeet, and throwing in a mild clyfter, would have fet all to rights.

WHEN convultion fits arife from the cutting of teeth, befides gentle evacuations, we would recommend bliftering, and the ufe of antifpafmodic medicines, as the tincture of foot, afafœtida, or caftor. A few drops of any of thefe may be mixed in a cup of white-wine whey, and given occafionally.

WHEN convultions proceed from any external caufe, as the preffure occasioned by strait clothes or band-S f ages,

### 626 OF WATER IN THE HEAD.

ages, &c. these ought immediately to be removed; though in this case taking away the cause will not always remove the effect, yet it ought to be done. It is not likely that the patient will recover, as long as the cause which first gave rise to the disorder continues to act.

WHEN a child is feized with convultions without having any complaint in the bowels, or fymptoms of teething; or any rash, or other discharge, which has been fuddenly dried up, we have reason to conclude that it is a primary difease and proceeds immediately from the brain. Cafes of this kind, however, happen but seldom, which is very fortunate, as little can be done to relieve the unhappy patient. When a difease proceeds from an original fault in the formation or ftructure of the brain itfelf, we cannot expect that it should yield to medicine. But, as this is not always the caufe, even of convultions which proceed immediately from the brain, fome attempts should be made to remove them. The chief intention to be purfued for this purpofe, is to make fome derivation from the head, by bliftering, purging, and the like. Should these fail, issues or setons may be put in the neck, or between the shoulders.

### . OF WATER IN THE HEAD.

THOUGH water in 'the head, or a dropfy of the brain, may affect adults as well as children, yet, as the latter are more peculiarly liable to it, we thought it would be most proper to place it among the difeases of infants.

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CAUSES.

### OF WATER IN THE HEAD.

CAUSES.—A dropfy of the brain may proceed from injuries done to the brain itielf by falls, blows, or the like; it may likewife proceed from an original laxity or weaknefs of the brain; from fcirrhous tumours or excrefcences within the fkull; a thin watery flate of the blood; a diminifhed fecretion of urine; and, laftly, from tedious and lingeringdifeafes, which wafte and confume the patient.

SYMPTOMS.——This difeafe has at first the appearance of a flow fever; the patient complains of a pain in the crown of his head, or over his eyes; he fhuns the light; is fick, and fometimes vomits; his pulse is irregular and generally low: though he feems heavy and dull, yet he does not fleep: he is fometimes delirious, and frequently fees objects double; towards the end of this commonly fatal difease, the pulse becomes more frequent, the pupils are generally dilated, the cheeks flushed, the patient becomes comatofe, and convulsions ensue.

MEDICINE.—No medicine has hitherto been found fufficient to carry off a dropfy of the brain. It is laudable, however, to make fome attempts, as time or chance may bring many things to light, of which at prefent we have no idea. The medicines generally ufed are, purges of rhubarb or jalap with calomel, and bliftering-plafters applied to the neck or back part of the head. To which we would beg leave to add diuretics, or medicines which promote the fecretion of urine, fuch as are recommended in the common dropfy. A difcharge from the nofe ought likewife to be promoted by caufing the patient to fnuff the powder of afarum, white hellebore, or the like.

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SOME

Some practitioners have of late pretended to cure this difeafe by the ule of mercury. I have not been fo happy as to fee any inftances of a cure being performed in a confirmed dropfy of the brain; but in fo defperate a malady every thing deferves a trial \*.

# CHAP. L.

### OF SURGERY.

TO defcribe all the operations of furgery, and to point out the different difeafes in which these operations are neceffary, would extend this article far beyond the limits set to it: We must therefore confine our observations to such cases as most generally occur, and in which proper affistance is either not asked, or not always to be obtained.

THOUGH an acquaintance with the ftructure of the human body is indifpenfably neceffary to qualify a man for being an expert furgeon; yet many things may be done to fave the lives of their fellow-men in emergencies by those who are no adepts in anatomy.

\* One reafon why this difeafe is feldom or never cured; may be, that it is feldom known till too far advanced to admit of a remedy. Did parents watch the first fymptoms, and call a physician in due time, I am inclined to think that fomething might be done. But these fymptoms are not yet fufficiently known, and are often mistaken, even by physicians themselves. Of this I lately faw a striking instance, in a patient attended by an eminent practitioner of this city, who had all along mistaken the difease for teething.

It is amazing with what facility the peafants daily perform operations upon brute animals, which are not of a lefs difficult nature than many of those performed on the human species; yet they feldom fail of success.

INDEED every man is in fome meafure a furgeon whether he will or not. He feels an inclination to affift his fellow-men in diftrefs, and accidents happen every hour which give occafion to exercife this feeling. The feelings of the heart, however, when not directed by the judgment, are apt to miflead. Thus one, by a rafh attempt to fave his friend, may fometimes deftroy him; while another, for fear of doing amifs, ftands ftill and fees his bofom-friend expire without fo much as attempting to relieve him; even when the means are in his power. As every good man would wifh to fteer a courfe different from either of thefe, it will no doubt be agreeable to him to know what ought to be done upon fuch emergencies.

# OF BLEEDING.

No operation of furgery is fo frequently neceffary as bleeding; it ought therefore to be very generally underftood. But though practifed by Midwives, Gardeners, Blackfmiths, &c. we have reafon to believe that very few know when it is proper. Even phyficians themfelves have been fo much the dupes of theory in this article, as to render it the fubject of ridicule. It is, however, an operation of great importance, and muft, when feafonably and pro-Sf 3 perly .630

perly performed, be of fingular service to those in distress.

BLEEDING is proper at the beginning of all inflammatory fevers, as pleurifies, peripneumonies, &c. It is likewise proper in all topical inflammations, as those of the intestines, womb, bladder, ftomach, kidnies, throat, eyes, &c. as also in the afihma, sciatic pains, coughs, head-achs, rheumatifms, the apoplexy, epilepfy, and bloody flux. After falls, blows, bruises, or any violent hurt received either externally or internally, bleeding is neceffary. It is likewife neceffary for perfons who have had the misfortune to be ftrangled, drowned, fuffocated with foul air, the fumes of metal, or the like. In a word, whenever the vital motions have been fuddenly ftopt from any caufe whatever; except in fwoonings, occasioned by mere weakness or hysteric affections, it is proper to open a vein. But in all diforders proceeding from a relaxation of the folids, and an impoverished state of the blood, as dropfies, cacochymies, &c. bleeding is improper.

BLEEDING for topical inflammations ought always to be performed as near the part affected as poffible. When this can be done with a lancet, it is to be preferred to any other method, but where a vein cannot be found, recourfe must be had to leeches or cupping.

THE quantity of blood to be let must always be regulated by the strength, age, constitution, manner of life, and other circumstances relating to the patient. It would be ridiculous to suppose that a child could bear to lose as much blood as a grown person,

OF BLEEDING.

or that a delicate lady fhould be bled to the fame extent as a robult man.

FROM whatever part of the body blood is to be let, a bandage muft be applied betwixt that part and the heart. As it is often neceffary, in order to raife the vein, to make the bandage pretty tight, it will be proper in fuch cafes, as foon as the blood begins to flow, to flacken it a little. The bandage ought to be applied at leaft an inch, or an inch and half, from the place where the wound is intended to be made.

PERSONS not fkilled in anatomy ought never to bleed in a vein that lies over an artery or a tendon, if they can avoid it. The former may eafily be known from its pulfation or beating, and the latter from its feeling hard or tight like a whip cord under the finger.

It was formerly a rule, even among those who had the character of being regular practitioners, to bleed their patients in certain difeases till they fainted. Surely a more ridiculous rule could not be proposed. One perfon will faint at the very fight of a lancet, while another will lose almost the whole blood of his body before he faints. Swooning depends more upon the state of the mind than of the body; besides, it may often be occasioned or prevented by the manner in which the operation is performed.

CHILDREN are generally bled with leeches. This, though fometimes neceffary, is a very troublefome and uncertain practice. It is impoffible to know what quantity of blood is taken away by leeches; belides, the bleeding is often very difficult to ftop, and the wounds are not eafily healed. Would those S f 4 who

#### OF BLEEDING.

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who practife bleeding take a little more pains, and accustom themselves to bleed children, they would not find it such a difficult operation as they imagine.

CERTAIN hurtful prejudices with regard to bleeding ftill prevail among the country people. They talk, for instance, of head-veins, heart-veins, breastveins, &c. and believe that bleeding in these will certainly cure all difeases of the parts from whence they are supposed to come, without confidering that all the blood-veffels arife from the heart, and return to it again; for which reason, unless in topical inflammations, it fignifies very little from what part of the body blood is taken. But this, though a foolifh prejudice, is not near fo hurtful as the vulgar notion that the first bleeding will perform wonders. This belief makes them often postpone the operation when neceffary, in order to referve it for some more important occasion, and when they think themselves in extreme danger they fly to it for relief, whether it be proper or not; bleeding at certain flated periods or seasons has likewise bad effects.

It is likewife a common notion that bleeding in the feet draws the humours downwards, and confequently cures difeafes of the head and other fuperior parts; but we have already obferved that, in all topical affections, the blood ought to be drawn as near the part as possible. When it is necessary, however, to bleed in the foot or hand, as the veins are small, and the bleeding is apt to stop too foon, the part ought to be immerfed in warm water, and kept there till a fufficient quantity of blood be let.

WE shall not spend time in describing the manner of performing this operation. That will be better learned

### Of INFLAMMATIONS and ABSCESSES: 633

learned by example than precept. Twenty pages of defcription would not convey fo juft an idea of the operation as feeing it once performed by an expert hand. Neither is it neceffary to point out the different parts of the body from whence blood may be let, as the arm, foot, forehead, temples, neck, &c. Thefe will readily occur to every intelligent perfon, and the foregoing obfervations will be fufficient for determining which of them is most proper upon any particular occasion. In all cases where the intention is only to leffen the general mass of blood, the arm is the most commodious part of the body in which the operation can be performed.

# OF INFLAMMATIONS AND ABSCESSES.

FROM whatever caufe an inflammation proceeds, it muft terminate either by difperfion, fuppuration, or gangrene. Though it is impoffible to foretel with certainty in which of thefe ways any particular inflammation will terminate, yet a probable conjecture may be formed with regard to the event, from a knowledge of the patient's age and conftitution. Inflammations happening in a flight degree upon colds, and without any previous indifpofition, will moft probably be difperfed; thofe which follow clofe upon a fever, or happen to perfons of a grofs habit of body, will generally fuppurate; and thofe which attack very old people, or perfons of a dropfical habit, will have a ftrong tendency to gangrene.

IF the inflammation be slight, and the constitution found, the dispersion ought always to be attempted. This

## 634 Of INFLAMMATIONS and ABSCESSES.

This will be beft promoted by a flender diluting diet, plentiful bleeding, and repeated purges. The part itfelf must be formented, and, if the skin be very tense, it may be embrocated with a mixture of threefourths of sweet oil, and one-fourth of vinegar, and afterwards covered with a piece of wax plaster.

Ir, notwithftanding thefe applications, the fymptomatic fever increases, and the tumour becomes larger, with violent pain and pulfation, it will be proper to promote the fuppuration. The best application for this purpose is a fost poultice, which may be renewed twice a-day. If the fuppuration proceeds but flowly, a raw onion cut small or bruifed may be spread upon the poultice. When the abscess is ripe or fit for opening, which may easily be known from the thinness of the skin in the most prominent part of it, a fluctuation of matter which may be felt under the finger, and, generally speaking, an abatement of the pain, it may be opened either with a lancet or by means of caustic.

THE laft way in which an inflammation terminates, is in a gangrene or mortification, the approach of which may be known by the following fymptoms: The inflammation lofes its rednefs, and becomes dufkifh or livid; the tenfion of the fkin goes off, and it feels flabby; little bladders filled with ichor of different colours fpread all over it; the tumour fubfides, and from a dufkifh complexion becomes black; a quick low pulfe, with cold clammy fweats, are the immediate forerunners of death.

WHEN these symptoms first appear, the part ought to be dreffed with London treacle, or a cataplasm made

### OF WOUNDS! 635

made of lixivium and bran; should the symptoms become worse, the part-must be scarified, and afterwards dreffed with bafilicum foftened with oil of turpentine. All the dreffings must be applied warm. With regard to internal medicines, the patient must be fupported with generous cordials, and the Peruvian bark exhibited in as large dofes as the flomach will bear it. If the mortified parts should separate, the wound will become a common ulcer, and muft be treated accordingly.

This article includes the treatment of all those difeases, which, in different parts of the country, go by the names of biles, imposthumes, whitloes, &c. They are all absceffes in confequence of a previous inflammation, which, if possible, ought to be difcuffed ; but when this cannot be done, the fuppuration fhould be promoted, and the matter difcharged by an incilion, if neceffary; afterwards the fore may be dreffed with yellow bafilicum, or fome other digestive ointment.

# OF WOUNDS.

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No part of medicine'has been more miltaken than. the treatment or cure of wounds. Mankind in general believe, that certain herbs, ointments, and plasters are possessed of wonderful healing powers, and imagine that no wound can be cured without the application of them. It is however a fact, that no external application whatever contributes towards the cure of a wound, any other way than by keeping the parts foft, clean, and defending them from the external air, which may be as effectually done by dry lint, 3

lint, as by the most pompous applications, while it is exempt from many of the bad confequences attending them.

THE fame obfervation holds with refpect to internal applications. These only promote the cure of wounds as far as they tend to prevent a fever, or to remove any cause that might obstruct or impede the operations of Nature. It is Nature alone that cures wounds; all that Art can do is to remove obstacles, and to put the parts in such a condition as is the most favourable to Nature's efforts.

• WITH this fimple view, we fhall confider the treatment of wounds, and endeavour to point out fuch steps as ought to be taken to facilitate their cure.

THE first thing to be done when a person has received a wound, is to examine whether any foreign body be lodged in it, as wood, stone, iron, lead, glass, dirt, bits of cloth, or the like. These, if possible, ought to be extracted, and the wound cleaned, before any dressings be applied. When that cannot be effected with fastery, on account of the patient's weakness, or loss of blood, they must be fuffered to remain in the wound, and asterwards extracted when he is more able to bear it.

WHEN a wound penetrates into any of the cavities of the body, as the breaft, the bowels, &c. or where any confiderable blood-veffel is cut, a fkilful furgeon ought immediately to be called, otherwife the patient may lofe his life. But fometimes the difcharge of blood is fo great, that if it be not ftopt, the patient may die even before a furgeon, though at no great diftance, can arrive. In this cafe, fomething muft be

OF WOUNDS.

be done by those who are present. If the wound be in any of the limbs, the bleeding may generally be ftopt by applying a tight ligature or bandage round the member a little above the wound. The best method of doing this is to put a ftrong broad garter round the part, but so flack as easily to admit a solution of flick to be put under it, which must be twisted, in the same manner as a countryman does a cart-rope to secure his loading, till the bleeding stops. Whenever this is the case, he must take care to twist it no longer, as straining it too much might occasion an inflammation of the parts, and endanger a gangrene.

In parts where this bandage cannot be applied, various other methods may be tried to ftop the bleeding, as the application of ftyptics, aftringents, &c. Cloths dipped in a folution of blue vitriol in water, or the *ftyptic water* of the Difpenfatories, may be applied to the wound. When these cannot be obtained, ftrong spirits of wine may be used. Some recommend the *Agaric* \* of the oak as preferable to

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\* Dr. Tiffot, in his Advice to the People, gives the following: directions for gathering, preparing, and applying the agaric. "Gather in autumn, fays he, while the fine weather lafts, the agaric of the oak, which is a kind of fungus or excrefeence iffuing from the wood of that tree. It confifts at first of four parts, which prefent themfelves fucceffively: 1. The outward rind or skin, which may be thrown away. 2. The part immediately under this trind, which is the best of all. This is to be beat well with a hammer, till it becomes foft and very pliable. This is the only preparation it requires, and a flice of it of a proper fize is to be applied directly over the burfling open blood-vessels. It constringes and brings them close together, stops the bleeding, and generally falls off at the end of two days. 3. The third part adhering to the fecond any of the other flyptics; and indeed it deferves confiderable encomiums. It is eafily obtained, and ought to be kept in every family, in cafe of accidents. A piece of it must be laid upon the wound, and covered with a good deal of lint, above which a bandage may be applied fo tight as to keep it firmly on.

THOUGH fpirits, tinctures, and hot balfams may be ufed, in order to ftop the bleeding when it is exceffive, they are improper at other times. They do not promote but retard the cure, and often change a fimple wound into an ulcer. People imagine, becaufe hot balfams congeal the blood, and feem, as it were, to folder up the wound, that they therefore heal it; but this is only a deception. They may indeed ftop the flowing blood, by fearing the mouths of the veffels; but, by rendering the parts callous, they obftruct the cure.

In flight wounds, which do not penetrate much deeper than the fkin, the belt application is a bit of the common black flicking plafter. This keeps the fides of the wound together, and prevents the air from hurting it, which is all that is neceffary. When a wound penetrates deep, it is not fafe to keep its lips quite clofe: this keeps in the matter, and is apt to make the wound fefter. In this cafe the beft way is to fill the wound with foft lint, commonly called *caddis*. It however muft not be fluffed in too hard,

fecond may ferve to flop the bleeding from the fmaller veffels; and the fourth and laft part may be reduced to powder as conducing to the fame purpofe.—Where the agaric cannot be had, fponge may be used in its flead. It must be applied in the fame manner, and has nearly the fame effects.

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otherwife it will do hurt. The *caddis* may be co- / vered with a cloth dipped in oil, or fpread with the common wax \* plafter; and the whole must be kept on by a proper bandage.

WE shall not spend time in describing the different bandages that may be proper for wounds in different parts of the body; common sense will generally suggest the most commodious method of applying a bandage; besides, descriptions of this kind are not easily understood or remembered.

THE first dreffing ought to continue on for at least two days; after which it may be removed, and fresh lint applied as before. If any part of the first dreffing flicks to close as not to be removed with ease or, fafety to the patient, it may be allowed to continue, and fresh lint dipped in fweet oil laid over it. This, will fosten it, fo as to make it come off easily at next, dreffing. Afterwards the wound may be dreffed twice a-day in the fame manner till it be quite healed. Those who are fond of falves or ointments, may, after the wound is become very superficial, drefs it with the yellow basilicum  $\dagger$ ; and if fungus, or what is called proud flesh, should rife in the wound, it may be checked, by mixing with the ointment, a little burnt alum or red precipitate of mercury.

WHEN a wound is greatly inflamed, the most proper application is a poultice of bread and milk, fostened with a little sweet oil or fresh butter. This must be applied instead of a plaster, and should be changed twice a-day.

> \* See Appendix, Wax plaster. † See Appendix, Tellow basilicum.

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IF the wound be large, and there is reafon to fear an inflammation, the patient fhould be kept on a very low diet. He muft abftain from flefh, ftrong liquors, and every thing that is of a heating nature. If he be of a full habit, and has loft but little blood from the wound, he muft-be bled: and, if the fymptoms be urgent, the operation may be repeated. But when the patient has been greatly weakened by lofs of blood from the wound, it will be dangerous to bleed him, even though a fever fhould enfue. Nature fhould never be too far exhaufted. It is always more fafe to allow her to ftruggle with the difeafe in her own way, than to fink the patient's ftrength by exceffive evacuations.

WOUNDED perfons ought to be kept perfectly quiet and eafy. Every thing that ruffles the mind, or moves the paffions, as love, anger, fear, exceffive joy, &c. are very hurtful. They ought, above all things, to abftain from venery. The body fhould be kept gently open, either by laxative clyfters, or by a cool vegetable diet, as roafted apples, ftewed prunes, boiled fpinnage, and fuch like.

#### OF BURNS.

In flight burns which do not break the fkin, it is cuftomary to hold the part near the fire for a competent time, to rub it with falt, or to lay a comprefs upon it dipped in fpirits of wine or brandy. But when the burn has penetrated fo deep as to blifter or break the fkin, it must be dreffed with fome of the liniment for burns mentioned in the Appendix, or with

with the emollient and gently drying ointment, commonly called *Turner's cerate* \*. This may be mixed with an equal quantity of fresh olive oil, and spread upon a fost rag, and applied to the part affected. When this ointment cannot be had, an egg may be beat up with about an equal quantity of the sweetest falad oil. This will ferve very well till a proper ointment can be prepared. When the burning is very deep, after the first two or three days, it should be dressed with equal parts of yellow *basilicum* and *Turner's cerate* mixed together.

WHEN the burn is violent, or has occalioned a high degree of inflammation, and there is reafon to fear a gangrene or mortification, the fame means muft be ufed to prevent it as are recommended in other violent inflammations. The patient, in this cafe, muft live low, and drink freely of weak diluting lliquors. He muft likewife be bled, and have his body kept open. But if the burnt parts fhould become livid or black, with other fymptoms of mortification, it will be neceffary to bathe them frequently with warm camphorated fpirits of wine, tincture of myrrh, or other antifeptics, mixed with a decoction of the bark. In this cafe the bark muft likewife be taken internally, and the patient's diet imuft be more generous.

As example teaches better than precept, I shall relate the treatment of the most dreadful case of this kind that has occurred in my practice. A middleaged man, of a good constitution, fell into a large wessel full of boiling water, and miserably scalded

\* See Appendix, Turner's cerate.

about

about one half of his body. As his clothes were on, the burning, in fome parts, was very deep before they could be got off. For the first two days the fcalded parts had been frequently anointed with a mixture of lime-water and oil, which is a very proper application for recent burnings. On the third day, when I first faw him, his fever was high and his body coffive, for which he was bled, and had an emollient clyster administered; poultices of bread and milk foftened with fresh butter, were likewife applied to the affected parts, to abate the heat and inflammation. His fever still continuing high, he was bled a fecond time, was kept ftrictly on the cooling regimen, took the faline mixture with finall dofes of nitre, and had an emollient clyfter adminiftered once a-day. When the inflammation began to abate, the parts were dreffed with a digeftive, compofed of brown cerate and yellow bafilicum; where any black spots appeared, they were flightly scarified, and touched with the tincture of myrrh; and, to prevent their fpreading, the Peruvian bark was adminiftered. By this courfe, the man was fo well in three weeks as to be able to attend his bufinefs.

#### OF BRUISES.

BRUISES are generaly productive of worfe confequences than wounds. The danger from them does not appear immediately, by which means it often happens that they are neglected. It is needlefs to give any definition of a difeafe fo univerfally known; we fhall therefore proceed to point out the method of treating it.

In flight bruises it will be fufficient to bathe the part with warm vinegar, to which a little brandy or rum may occafionally be added, and to keep cloths wet with this mixture conftantly applied to it. This is more proper than rubbing it with brandy, fpirits of wine, or other ardent spirits, which are commonly used in such cases.

In fome parts of the country the peafants apply to a recent bruise a cataplasm of fresh cow-dung. I have often feen this cataplasm applied to violent contufions occafioned by blows, falls, bruifes, and fuch like, and never knew it fail to have a good effect.

WHEN a bruise is very violent, the patient ought immediately to be bled, and put upon a proper regimen. His food fhould be light and cool, and his drink weak, and of an opening nature; as whey fweetened with honey, decoctions of tamarinds, barley, cream-tartar-whey, and fuch like. The bruifed part must be bathed with vinegar and water, as directed above; and a poultice made by boiling crumb of bread, elder-flowers, and camomile-flowers, in equal quantities of vinegar and water, applied to it. This poultice is peculiarly proper when a wound is joined to the bruife. It may be renewed two or three times a-day.

As the ftructure of the veffels is totally deftroyed by a violent bruife, there often enfues a great lofs of fubstance, which produces an ulcerous fore very difficult to cure. If the bone be affected, the fore will not heal before an exfoliation takes place; that is, lbefore the diseased part of the bone separates, and comes out through the wound. This is often a very flow operation, and may even require feveral years to be

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#### OF ULCERS.

be completed. Hence it happens, that there fores are frequently miftaken for the King's evil, and treated as fuch, though, in fact, they proceed folely from the injury which the folid parts received from the blow.

PATIENTS in this fituation are peftered with different advices. Every one who fees them propofes a new remedy, till the fore is fo much irritated with various and oppofite applications, that it is often at length rendered abfolutely incurable. The beft method of managing fuch fores is, to take care that the patient's conflictution does not fuffer by confinement, or improper medicine, and to apply nothing to them but fome fimple ointment fpread upon foft lint, over which a poultice of bread and milk, with boiled camomile-flowers, or the like, may be put, to nourifh the part, and keep it foft and warm. Nature, thus affifted, will generally in time operate a cure, by throwing off the difeafed parts of the bone, after which the fore foon heals.

#### OF ULCERS.

ULCERS may be the confequence of wounds, bruifes, or impofthumes improperly treated; they may likewife proceed from an ill state of the humours, or what may be called a bad habit of body.

In the latter cafe, they ought not to be haftily dried up, otherwife it may prove fatal to the patient. Ulcers happen most commonly in the decline of life; and perfons who neglect exercise, and live grossly, are most liable to them. They might often be prevented by retrenching fome part of the folid food, or by

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#### ULCERS. O.F

by opening artificial drains, as isfues, fetons, or the like.

An ulcer may be diffinguished from a wound by its discharging a thin watery humour, which is often fo acrid as to inflame and corrode the fkin; by the hardnefs and perpendicular fituation of its fides or redges, by the time of its duration, &c.

IT requires confiderable skill to be able to judge whether or not an ulcer ought to be dried up. In general, all ulcers which proceed from a bad habit of body, should be suffered to continue open, at least ttill the conftitution has been fo far changed by proper regimen, or the use of medicine, that they seem difposed to heal of their own accord. Ulcers which are the effect of malignant fevers, or other acute diseas, may generally be healed with fafety after the health ihas been reftored for fome time. The cure ought not, however, to be attempted too foon, nor at any time without the use of purging medicines and a proper regimen. When wounds or bruifes have, by wrong ttreatment, degenerated into ulcers, if the constitution be good, they may generally be healed with fafety. When ulcers either accompany chronical difeafes, or come in their stead, they must be cautiously healed. If an ulcer conduces to the patient's health, from whatever cause it proceeds, it ought not to be healed; but if, on the contrary, it wastes the strength, and confumes the patient by a flow fever, it should be healed as foon as poffible.

WE would earnestly recommend a strict attention tto these particulars, to all who have the misfortune to labour under this diforder, particularly perfons in the decline of life: as we have frequently known Tt<sub>2</sub> people

people throw away their lives by the want of it, while they were extolling and generoufly rewarding those whom they ought to have looked upon as their executioners.

THE most proper regimen for promoting the cure of ulcers, is to avoid all spices, falted and high-feafoned food, all strong liquors, and to lessen the usual quantity of sheft meat. The body ought to be kept gently open by a diet confissing chiefly of cooling laxative vegetables, and by drinking butter-milk, whey sweetened with honey, or the like. The patient ought to be kept cheerful, and should take as much exercise as he can easily bear.

WHEN the bottom and fides of an ulcer feem hard and callous, they may be fprinkled twice a-day with a little red precipitate of mercury, and afterwards dreffed with the yellow *bafilicum* ointment. Sometimes it will be neceffary to have the edges of the ulcer fcarified with the lancet.

LIME-WATER has frequently been known to have very happy effects in the cure of obstinate ulcers. It may be used in the same manner as directed for the stone and gravel.

My late learned and ingenious friend, Dr. Whytt, ftrongly recommends the ufe of the folution of corrofive fublimate of mercury in brandy, for the cure of obftinate ill-conditioned ulcers. I have frequently found this medicine, when given according to the Doctor's directions, prove very fuccefsful. The dofe is a table-fpoonful night and morning; at the fame time wafhing the fore twice or thrice a-day with it. In a letter which I had from the Doctor a little before his death, he informed me, "That he obferved wafhing

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#### OF DISLOCATIONS.

washing the fore thrice a-day with the folution of a triple ftrength was very beneficial \*."

A FISTULOUS ulcer can feldom be cured without an operation. It must either be laid open fo as to have its callous parts deftroyed by fome corrofive application, or they must be entirely cut away by the knife; but as this operation requires the hand of an ' expert furgeon, there is no occasion to describe it. Ulcers about the anus are most apt to become fiftullous, and are very difficult to cure. Some, indeed, pretend to have found Ward's Fiftula pafte very fuccessful in this complaint. It is not a dangerous medicine, and being eafily procured, it may deferve a trial; but as these ulcers generally proceed from an iill habit of body, they will feldom yield to any thing except a long course of regimen, affisted by medicines, which are calculated to correct that particular. habit, and to induce an almost total change in the constitution.

## CHAP. LI. OF DISLOCATIONS.

WHEN a bone is moved out of its place or articulation, fo as to impede its proper functions, it is faid to be *luxated* or *diflocated*. As this often happens to perfons in fituations where no medical affiftance can be obtained, by which means limbs, and even lives, are frequently loft, we fhall endeavour

<sup>35</sup> In ulcers of the lower limbs great benefit is often received from tight collers, or wearing a laced flocking, as this prevents the flux of humours to the fores, and difpofes them to heal.

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to point out the method of reducing the moft common luxations, and those which require immediate affistance. Any perfon of common fense and refolution, who is present when a diflocation happens, may often be of more fervice to the patient, than the most expert furgeon can after the swelling and inflammation have come on. When these are prefent, it is difficult to know the state of the joint, and dangerous to attempt a reduction; and by waiting till they are gone off, the muscles become fo relaxed, and the cavity filled up, that the bone can never afterwards be retained in its place.

A RECENT diflocation may generally be reduced by extension alone, which must always be greater or lefs according to the ftrength of the muscles which move the joint, the age, robustness, and other circumstances of the patient. When the bone has been out of its place for any confiderable time, and a fwelling or inflammation has come on, it will be neceffary to bleed the patient, and, after fomenting the part, to apply fost poultices with vinegar to it for fome time before the reduction is attempted.

ALL that is neceffary after the reduction, is to apply cloths dipt in vinegar or camphorated fpirits of wine to the part, and to keep it perfectly eafy. Many bad confequences proceed from the neglect of this rule. A diflocation feldom happens without the tendons and ligaments of the joint being ftretched and fometimes torn. When thefe are kept eafy till they recover their ftrength and tone, all goes on very well; but if the injury be increafed by too frequent an exertion of the parts, no wonder if they be found weak and difeafed ever after.

DIS-

### [ 649 ]

### DISLOCATION OF THE JAW.

THE lower jaw may be luxated by yawning, blows, falls, chewing hard fubftances, or the like. It is eafily known from the patient's being unable to flut his mouth, or to eat any thing, as the teeth of the under jaw do not correspond with those of the upper; besides, the chin either hangs down or is thrown toward one fide, and the patient is neither able to speak difficulty, nor to swallow without confiderable difficulty.

THE usual method of reducing a diflocated jaw, is to fet the patient upon a low ftool, fo as an affiftant may hold the head firm by preffing it against his breast. The operator is then to thrust his two thumbs, being first wrapped up with linen cloths that they may not flip, as far back into the patient's mouth as he can, while his fingers are applied to the jaw externally. After he has got firm hold of the jaw, he is to press it strongly downwards and backwards, by which means the elapsed heads of the jaw may be easily pushed into their former cavities.

THE peafants, in fome parts of the country, have a peculiar way of performing this operation. One of them puts a handkerchief under the patient's chin, then turning his back to that of the patient, pulls him up by the chin fo as to fufpend him from the ground. This method often fucceeds, but we think it a dangerous one, and therefore recommend the former.

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### DISLOCATION OF THE NECK.

THE neck may be diflocated by falls, violent blows, or the like. In this cafe, if the patient receives no affiftance, he foon dies, which makes people imagine the neck was broken: It is, however, for the most part, only partially diflocated, and may be reduced by almost any perfon who has refolution enough to attempt it. A complete diflocation of the neck is inftantaneous death.

WHEN the neck is diflocated, the patient is immediately deprived of all fenfe and motion; his neck fwells, his countenance appears bloated; his chin lies upon his breaft, and his face is generally turned towards one fide.

To reduce this diflocation, the unhappy perfon fhould immediately be laid upon his back on the ground, and the operator muft place himfelf behind him fo as to be able to lay hold of his head with both hands, while he makes a refiftance by placing his knees againft the patient's fhoulders. In this pofture he muft pull the head with confiderable force, gently twifting it at the fame time, if the face be turned to one fide, till he perceives that the joint is replaced, which may be known from the noife which the bones generally make when going in, the patient's beginning to breathe, and the head continuing in its natural pofture.

THIS is one of those operations which it is more easy to perform than describe. I have known inftances of its being happily performed even by 8 women,

### DISLOCATION OF THE RIBS. 651

women, and often by men of no medical education. After the neck is reduced, the patient ought to be bled, and should be suffered to rest for some days, till the parts recover their proper tone.

#### DISLOCATION OF THE RIBS.

As the articulation of the ribs with the back-bone is very ftrong, they are not often diflocated. It does however fometimes happen, which is a fufficient reafon for our taking notice of it. When a rib is diflocated either upwards or downwards, in order to replace it, the patient fhould be laid upon his belly on a table, and the operator must endeavour to push the head of the bone into its proper place. Should this method not fucceed, the arm of the difordered fide may be fuspended over a gate or ladder, and, while the ribs are thus ftretched afunder, the heads of fuch as are out of place may be thrust into their former fituation.

THOSE diflocations wherein the heads of the ribs are forced inwards, are both more dangerous and the most difficult to reduce, as neither the hand nor any inftrument can be applied internally to direct the luxated heads of the ribs. Almost the only thing that can be done is, to lay the patient upon his belly over a cass, or fome gibbous body, and to move the fore-part of the rib inward towards the back, fometimes shaking it; by this means the heads of the luxated ribs may flip into their former place.

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### [ 652 ]

# DISLOCATION OF THE SHOULDER.

THE humerus or upper bone of the arm may be diflocated in various directions: It happens however moft frequently downwards, but very feldom directly upwards. From the nature of its articulation, as well as from its expofure to external injuries, this bone is the moft fubject to diflocation of any in the body. A diflocation of the humerus may be known by a deprefision or cavity on the top of the fhoulder, and an inability to move the arm: When the diflocation is downward or forward, the arm is elongated, and a ball or lump is perceived under the arm-pit; but when it is backward, there appears a protuberance behind the fhoulder, and the arm is thrown forwards toward the breaft.

THE usual method of reducing diflocations of the shoulder is to feat the patient upon a low stool, and to caufe an affiftant to hold his body fo that it may not give way to the extension, while another lays hold of the arm a little above the elbow, and gradually extends it. The operator then puts a napkin under the patient's arm, and caufes it to be tied behind his own neck; by this, while a fufficient extenfion is made, he lifts up the head of the bone, and with his hands directs it into its proper place. There are various machines invented for facilitating this operation, but the hand of an expert furgeon is always more fafe. In young and delicate patients, I have generally found it a very eafy matter to reduce the shoulder by extending the arm with one hand, 6 . and

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## DISLOCATION OF THE THIGH. 653

and thrusting in the head of the bone with the other. In making the extension, the arm ought always to be a little bent.

#### DISLOCATION OF THE ELBOW.

THE bones of the fore-arm may be diflocated in any direction. When this is the cafe, a protuberance may be observed on that fide of the arm towards which the bone is pushed, from which, and the patient's inability to bend his arm, a diflocation of this joint may eafily be known.

Two affiftants are generally neceffary for reducing a diflocation of the elbow; one of them muft lay hold of the arm above, and the other below the joint, and make a pretty ftrong extension, while the operator returns the bones into their proper place. Afterwards the arm must be bent, and sufpended for fome time with a fling about the neck.

LUXATIONS of the wrift and fingers are to be reduced in the fame manner as those of the elbow, viz. by making an extension in different directions, and thrufting the head of the bone into its place.

### DISLOCATION OF THE THIGH.

WHEN the thigh-bone is diflocated forward and downward, the knee and foot are turned out, and the leg is longer than the other; but when it is difplaced backward, it is ufually pufhed upward at the fame time, by which means the limb is fhortened, and the foot is turned inwards.

WHEN the thigh-bone is difplaced forward and downward, the patient, in order to have it reduced, muft

#### 654 OF BROKEN BONES, &c.

must be laid upon his back, and made fast by bandages, or held by affistants, while by others an extension is made by means of street about the bottom of the thigh a little above the knee. While the extension is made, the operator must push the head of the bone outward, till it gets into the focket. If the diflocation be outward, the patient must be laid upon his face, and, during the extension, the head of the bone must be pushed inward.

DISLOCATIONS of the knees, ancles, and toes, are reduced much in the fame manner as those of the upper extremities, viz. by making an extension in opposite directions, while the operator replaces the bones. In many cases, however, the extension alone is fufficient, and the bone will flip into its place merely by pulling the limb with fufficient force. It is not hereby meant, that force alone is fufficient for the reduction of diflocations. Skill and address will often succeed better than force. I have known a diflocation of the thigh reduced by one man, after all the force that could be used by fix had proved ineffectual.

#### CHAP. LII.

#### OF BROKEN BONES, &c.

HERE is, in most country villages, some perfon who pretends to the art of reducing fractures. Though, in general, such persons are very ignorant,

#### OF BROKEN BONES, &c.

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norant, yet fome of them are very fuccefsful; which evidently proves, that a fmall degree of learning, with a fufficient fhare of common fenfe and a mechanical head, will enable a man to be ufeful in this way. We would, however, advife people never to employ fuch operators, when an expert and fkilful furgeon can be had; but when that is impracticable, they muft be employed: we fhall therefore recommend the following hints to their confideration:

WHEN a large bone is broken, the patient's diet ought, in all refpects, to be the fame as in an inflammatory fever. He fhould likewife be kept quiet and cool, and his body open by emollient clyfters, or, if thefe cannot be conveniently administered, by food that is of an opening quality; as stewed prunes, apples boiled in milk, boiled spinage, and the like. It ought however to be here remarked, that persons who have been accustomed to live high, are not all of a sudden to be reduced to a very low diet. This might have fatal effects. There is often a necessity for indulging even bad habits, in some measure, where the nature of the difease might require a different treatment.

It will generally be neceffary to bleed the patient immediately after a fracture, especially if he be young, of a full habit, or has, at the fame time, received any bruife or contustion. This operation should not only be performed soon after the accident happens, but if the patient be very feverish, it may be repeated next day. When several of the ribs are broken, bleeding is peculiarly necessary.

IF any of the large bones which fupport the body are broken, the patient must keep his bed for feveral weeks.

### 656 OF BROKEN BONES, St.

weeks. It is by no means neceffary, however, that he fhould lie all that time, as is cuftomary, upon his back. This fituation finks the fpirits, galls and frets the patient's fkin, and renders him very uneafy. After the fecond week he may be gently raifed up, and may fit feveral hours, fupported by a bed-chair, or the like, which will greatly relieve him. Great care, however, must be taken in raifing him up, and laying him down, that he make no exertions himfelf, otherwife the action of the muscles may pull the bone out of its place \*.

It is of great importance to keep the patient dry and clean while in this fituation. By neglecting this, he is often fo galled and excoriated, that he is forced to keep fhifting places for eafe. I have known a fractured thigh-bone, after ithad laid ftraight for above a fortnight, difplaced by this means, and continue. bent for life, in fpite of all that could be done.

IT has been customary when a bone was broken, to keep the limb for five or fix weeks continually upon the ftretch. But this is a bad posture. It is both uneafy to the patient, and unfavourable to the cure.

\* Various pieces of machinery have been contrived for counteracting the force of the mufcles, and retaining the fragments of broken bones; but as defcriptions of thefe without drawings would be of little ufe, I shall refer the reader to a cheap and ufeful performance on the nature and eure of fractures, lately published by my ingenious friend Mr. Aitken, furgeon in Edinburgh; wherein that gentleman has not only given an account of the machines recommended in fractures by former authors, but has likewife added feveral improvements of his own, which are peculiarly ufeful in compound fractures, and in cafes where patients with broken bones are obliged to be transported from one place to another.

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#### OF BROKEN BONES, &c. 657

The beft fituation is to keep the limb a little bent. This is the pofture into which every animal puts its limbs when it goes to reft, and in which feweft mufcles are upon the ftretch. It is eafily effected, by either laying the patient upon his fide, or making the bed fo as to favour this pofition of the limb.

BONE SETTERS ought carefully to examine, whether the bone be not fhattered or broken into a great imany pieces. In this cafe it will fometimes be neceffary to have the limb immediately taken off, otherwife a gangrene or mortification may enfue. The horror which attends the very idea of an amputation, coften occafions its being delayed in fuch cafes till too llate. I have known this principle operate fo ftrongly, that a limb, where the bones were fhattered into more than twenty pieces, was not amputated before the third day after the accident, when the gangrene had proceeded fo far as to render the operation ufelefs.

WHEN a fracture is accompanied with a wound,, it must be dreffed in all respects as a common wound.

ALL that art can do towards the cure of abroken bone, is to lay it perfectly ftraight, and to keep it quite eafy. All tight bandages do hurt. They had much better be wanting altogether. A great many of the bad confequences which fucceed to fractured bones are owing to tight bandages. This is one of the ways in which the excefs of art, or rather the abufe of it, does more mifchief than would be occafioned by the want of it. Some of the most fudden cures of broken bones which were ever known, happened where no bandages were applied at all. Some method however must be taken to keep the member

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fleady; but this may be done many ways without bracing it with a tight bandage.

The beft method of retention is by two or more fplints made of leather or pafteboard. Thefe, if moiftened before they be applied, foon affume the fhape of the included member, and are fufficient, by the affiftance of a very flight bandage, for all the purpofes of retention. The bandage which we would recommend is that made with twelve or eighteen tails. It is much eafier applied and taken off than rollers, and anfwers all the purpofes of retention equally well. The fplints fhould always be as long as the limb, with holes cut for the ancles when the fracture is in the leg.

In fractures of the ribs, where a bandage cannot be properly ufed, an adhefive plafter may be applied over the part. The patient in this cafe ought to keep himfelf quite eafy, avoiding every thing that may occafion fneezing, laughing, coughing, or the like. He ought to keep his body in a flraight pofture, and fhould take care that his ftomach be conftantly diftended, by taking frequently fome light food, and drinking freely of weak watery liquors.

THE most proper external application for a fracture is *oxycrate*, or a mixture of vinegar and water. The bandages should be wet with this at every dressing.

#### OF STRAINS.

STRAINS are often attended with worfe confequences than broken bones. The reafon is obvious; they are generally neglected. When a bone is broken, the patient is obliged to keep the member cafy,

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#### OF RUPTURES.

eafy, becaufe he cannot make use of it; but when a joint is only strained, the perfon, finding he can still make a shift to move it, is forry to lose his time for fo trifling an ailment. In this way he deceives himfelf, and converts into an incurable malady, what might have been removed by only keeping the part eafy for a few days.

COUNTRY people generally immerfe a firained limb in cold water. This is very proper, provided it be done immediately, and not kept in too long. But the cuftom of keeping the part immerfed in cold water for a long time, is certainly dangerous. It relaxes inftead of bracing the part, and is more likely to produce a difeafe than remove one.

WRAPPING a garter, or fome other bandage, pretty tight about the ftrained part, is likewife of ufe. It helps to reftore the proper tone of the veffels, and prevents the action of the parts from increating the difeafe. It fhould not however be applied too tight. I have frequently known bleeding' near the affected part have a very good effect: But what we would recommend above all is *eafe*. It is more to be depended on than any medicine, and feldom fails to remove the complaint \*.

#### OF RUPTURES.

CHILDREN and very old people are most liable to this difease. In the former it is generally occasioned by

\* A great many external applications `are recommended for frains, fome of which do good, and others hurt. The following are fuch as may be used with the greatest fastety, viz. poultices made of stale beer or vinegar and oatmeal, camphorated spirits of U u z wine,

#### OF RUPTURES.

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by exceffive crying, coughing, vomiting, or the like. In the latter, it is commonly the effect of blows or violent exertions of the ftrength, as leaping, carrying great weights, &c. In both, a relaxed habit, indolence, and an oily or very moift diet, difpofe the body to this difeafe.

A RUPTURE fometimes proves fatal before it is difcovered. Whenever ficknefs, vomiting, and obftinate coffivenefs give reafon to fufpect an obftruction of the bowels, all those places where ruptures ufually happen ought carefully to be examined. The protrusion of a very fmall part of the gut will occafion all these fymptoms; and, if not returned in due time, will prove mortal.

ON the first appearance of a rupture in an infant, it ought to be laid upon its back, with its head very low. While in this posture, if the gut does not return of itself, it may easily be put up by gentle preffure. After it is returned, a piece of flickingplaster may be applied over the part, and a proper truss or bandage must be constantly worn for a confiderable time. The method of making and applying these rupture-bandages for children is pretty well known. The child must, as far as possible, be kept from crying, and from all violent motion, till the rupture is quite healed.

IN adults, when the gut has been forced down with great violence, or happens, from any caufe, to be inflamed, there is often great difficulty in returning it, and fometimes the thing is quite impracticable

wine, Mindererus's fpirit, volatile liniment, volatile aromatic fpirit diluted with a double quantity of water, and the common fomentation, with the addition of brandy or fpirit of wine.

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without an operation, a defcription of which is foreign to our purpofe. As I have been fortunate enough, however, always to fucceed in my attempts to return the gut, without having recourfe to any other means than what are in the power of every man, I fhall briefly mention the method which I generally purfue.

AFTER the patient has been bled, he must be laid upon his back, with his head very low, and his breech raifed high with pillows. In this fituation flannelcloths wrung out of a decoction of mallows and camomile-flowers, or, if these are not at hand, of warm water, must be applied for a confiderable time. A clyfter made of this decoction, with a large spoonful of butter and a little falt, may be afterwards thrown up. If these should not prove successful, recourse must be had to pressure. 'If the tumour be very hard, confiderable force will be neceffary; but it is not force alone which fucceeds here. The operator, at the fame time that he makes a preffure with the palms of his hand, must with his fingers artfully conduct the gut in by the fame aperture through which it came out. The manner of doing this, can bé much easier conceived than described. Should these endeavours prove ineffectual, clysters of the smoke of tobacco may be tried. These have been often known to fucceed where every other method failed.

THERE is reafon to believe that, by perfifting in the use of these, and such other means as the circumstances of the case may suggest, most *hernias* might be reduced without an operation. Cutting for the *hernia* is a nice and difficult matter. I would there-

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### 662 OF CASUALTIES.

fore advife furgeons to try every method of returning the gut before they have recourfe to the knife. I have once and again fucceeded by perfevering in my endeavours, after eminent furgeons had declared the reduction of the gut impracticable without an operation \*.

Àn adult, after the gut has been returned, muft wear a fteel bandage. It is needlefs to defcribe this, as it may always be had ready-made from the artifts. Such bandages are generally uneafy to the wearer for fome time, but by cuftom they become quite eafy. No perfon who has had a rupture after he arrived at man's eftate, fhould ever be without one of thefe bandages.

PERSONS who have a rupture ought carefully to avoid all violent exercise, carrying great weights, leaping, running, and the like. They should likewife avoid windy aliment and strong liquors; and should carefully guard against catching cold.

#### CHAP. LIII.

#### OF CASUALTIES.

I T is certain that life, when to all appearance loft, may often, by due care, be reftored. Accidents frequently prove fatal, merely because proper means are

\* I would here beg leave to recommend it to every practitioner, when his patient complains of pain in the belly, with obfinate eoftiveness, to examine the groins and every place where a rupture OF CASUALTIES.

are not used to counteract their effects. No perfon ought to be looked upon as killed by any accident, unless where the structure of the heart, brain, or fome organ necessary to life, is evidently destroyed. The action of these organs may be fo far impaired as even to be for fome time imperceptible, when life is by no means gone : In this cafe, however, if the fluids be fuffered to grow cold, it will be impoffible to put them again in motion, even though the folids should recover their power of acting. Thus, when the motion of the lungs has been ftopt by unwholefome vapour, the action of the heart by a ftroke on the breast, or the functions of the brain by a blow on the head, if the perfon be fuffered to grow cold, he will in all probability continue fo; but, if the body be kept warm, as foon as the injured part has recovered its power of acting, the fluids will again begin to move, and all the vital functions will be restored.

It is a horrid cuftom immediately to confign over to death every perfon who has the misfortune, by a fall, a blow, or the like, to be deprived of the appearance of life. The unhappy perfon, inftead of being carried into a warm houfe, and laid by the fire, or put to a warm bed, is generally hurried away to church, or a barn, or fome other cold damp houfe, where, after a fruitlefs attempt has been made to bleed him, perhaps by one who knew nothing of the matter, he is given over for dead, and no further

ture may happen, in order that it may be immediately reduced. By neglecting this, many perifh who were not fufpected to have had ruptures till after they were dead. I have known this happen where half a dozen of the faculty were in attendance.

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notice taken of him. This conduct feems to be the refult of ignorance, fupported by an ancient fuperflitious notion, which forbids the body of any perfon killed by accident to be laid in an houfe that is inhabited. What the ground of this fuperflition may be, we fhall not pretend to enquire; but furely the conduct founded upon it is contrary to all the principles of reafon, humanity, and common fenfe.

WHEN a perfon feems to be fuddenly deprived of life, our first business is to inquire into the cause. We ought carefully to obferve whether any fubftance be lodged in the windpipe or gullet; and, if that is the cafe, attempts must be made to remove it. When unwholesome air is the cause, the patient ought immediately to be removed out of it. If the circulation be fuddenly ftopped, from any caule whatever, except mere weaknefs, the patient should be bled. If the blood does not flow, he may be immerfed in warm water, or rubbed with warm cloths, &c. to promote the circulation. When the cause cannot be fuddenly removed, our great aim must be to keep up the vital warmth, by rubbing the patient with hot cloths, or falt, and covering his body with warm fand, ashes, or the like.

I SHOULD now proceed to treat more fully of those accidents, which, without immediate affiftance, would often prove fatal, and to point out the most likely means for relieving the unhappy fufferers; but as I have been happily anticipated in this part of my fubject by the learned and humane Dr. Tissot, I shall content myself with felecting such of his observations as seem to be the most important, and adding such of my own as have occurred in the course of practice.

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#### OF SUBSTANCES STOPT BETWEEN THE MOUTH AND STOMACH.

THOUGH accidents of this kind are very common, and extremely dangerous, yet they are generally the effect of careleffnels. Children fhould be taught to chew their food well, and to put nothing into their mouths which it would be dangerous for them to fwallow. But children are not the only perfons guilty of this piece of imprudence. I know many adults who put pins, nails, and other fharp-pointed fubftances in their mouths upon every occafion, and fome who even fleep with the former there all night. This conduct is exceedingly injudicious, as a fit of coughing, or twenty other accidents, may force over the fubftance before the perfon is aware \*.

WHEN any fubftance is detained in the gullet, there are two ways of removing it, viz. either by extracting it, or pufhing it down. The fafeft and moft certain way is to extract it; but this is not always the eafieft; it may therefore be more eligible fometimes to thruft it down, efpecially when the obftructing body is of fuch a nature, that there is no danger from its reception into the ftomach. The fubftances which may be pufhed down without danger are, all common nourifhing ones, as bread, flefh, fruits, and the like: All indigeftible bodies, as cork, wood, bones, pieces of metal, and fuch like, ought, if poffible, to be extracted, efpecially if thefe bodies

\* A woman in one of the hospitals of this city lately discharged a great number of pins, which she had swallowed in the course of her business, through an ulcer in her side.

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be fharp pointed, as pins, needles, fish-bones, bits of glass, &c.

WHEN fuch fubftances have not paffed in too deep, we fhould endeavour to extract them with our fingers, which method often fucceeds. When they are lower, we must make use of nippers, or a small pair of forceps, such as surgeons use. But this attempt to extract rarely succeeds, if the substance be of a statistic nature, and has descended far into the gullet.

Ir the fingers and nippers fail, or cannot be duly applied, crotchets, a kind of hooks, must be employed. Thefe may be made at once, by bending a piece of pretty ftrong iron wire at one end. It must be introduced in the flat way, and for the better conducting it, there should likewife be a curve or bending at the end it is held by, to ferve as a kind of . handle to it, which has this further use, that it may be fecured by a ftring tied to it, a circumftance not to be omitted in any inftrument employed on fuch occasions, to avoid fuch ill accidents as have fometimes enfued from thefe inftruments flipping out of the operator's hand. After the crotchet has paffed below the fubstance that obstructs the passage, it is drawn up again, and hooks up the body along with it. The crotchet is also very convenient, when a substance somewhat slexible, as a pin or fish-bone, flicks across the gullet, the hook, in fuch cases, feizing them about their middle part, crooks and thus difengages them; or, if they are very brittle fubftances, ferves to break them.

WHEN the obstructing bodies are finall, and only ftop up a part of the passage, and which may either casily elude the hook, or straiten it by their resistance, a kind

#### THE MOUTH AND STOMACH. 667.

a kind of rings, made either of wire, wool, or filk, may be uled. A piece of fine wire of a proper length may be bent into a circle, about the middle, of about an inch diameter, and the long unbent fides brought parallel, and near each other : thefe are to be held in the hand, and the circular part or ring introduced into the gullet, in order to be conducted about the obstructing body, and fo to extract it. More flexible rings may be made of wool, thread, filk, or fmall pack-thread, which may be waxed for their greater ftrength and confiftence. One of these is to be tied fast to a handle of iron wire, whale-bone, or any kind of flexible wood, and by this means introduced, in order to furround the obstructing substance, and to draw it out. Several of these rings passed through one another may be used, the more certainly to lay hold of the obstructing body, which may be involved by one, if another fhould mifs it. These rings have one advantage, which is, that when the fubstance to be extracted is once laid hold of, it may then, by turning the handle, be retained fo ftrongly in the ring thus twifted, as to be moved every way, which must in many cases be a confiderable advantage.

ANOTHER material employed on these unhappy occasions, is the sponge. Its property of swelling confiderably on being wet, is the principal foundation of its usefulness here. It any substance is stopt in the gullet, but without filling up the whole passage, a bit of sponge may be introduced into that part which is unstopt, and beyond the substance. The sponge foon dilates, and grows larger in this moiss fituation, and indeed the enlargement of it may be forwarded by making the patient swallow a few drops

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drops of water. Afterwards it is to be drawn back by the handle to which it is faftened, and as it is now too large to return through the fmall cavity by which it was conveyed in, it draws out the obftructing body along with it.

THE compreffibility of fponge is another foundation of its ulefulnels in fuch cases. A pretty large piece of sponge may be compressed or squeezed into a small fize, by winding a string of tape closely about it, which may be easily unwound, and withdrawn, after the sponge has been introduced. A bit of sponge may likewise be compressed by a piece of whale-bone split at one end, but this can hardly be introduced fuch a manner as not to hurt the patient.

I HAVE often known pins and other fharp bodies which had fluck in the throat, brought up by caufing the perfon to fwallow a bit of tough meat tied to a thread, and drawing it quickly up again. This is fafer than fwallowing fponge, and will often anfwer the purpofe equally well.

WHEN all these methods prove unfuccessful, there remains one more, which is, to take the patient vomit: but this can fearcely be of any fervice, unlefs when fuch obstructing bodies are fimply engaged in, and not hooked or fluck into the fides of the gullet, as in this case vomiting might fometimes occasion further mischief. If the patient can swallow, vomiting may be excited by taking half a drachm or two feruples of ipecacuanha in powder made into a draught. If he is not able to swallow, an attempt may be made to excite vomiting, by tickling his throat with a feather; and if that should not succeed, a clyster of tobacco may be administered.

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niflered. It is made by boiling an ounce of tobacco in a fufficient quantity of water; this has often been found to fucceed, when other attempts to excite vomiting had failed.

WHEN the obftructing body is of fuch a nature, that it may with fafety be pufhed downwards, this may be attempted by means of a wax-candle oiled, and a little heated, fo as to make it flexible; or a piece of whale-bone, wire, or flexible wood, with a fponge faftened to one end.

SHOULD it be impossible to extract even those bodies which it is dangerous to admit into the stomach, we must then prefer the least of two evils, and rather run the hazard of pussing them down, than suffer the patient to periss in a few minutes; and we ought to scruple this resolution the less, as a great many instances have happened, where the swallowing of such hurtful and indigestible substances has been followed by no diforder.

WHENEVER it is manifest, that all endeavours either to extract or push down the substance, must prove ineffectual, they should be discontinued; because the inflammation occasioned by persisting in them might be as dangerous as the obstruction itself. Some have died in consequence of the inflammation, even after the body which caused the obstruction had been entirely removed.

WHILE the means recommended above are making use of, the patient should often swallow, or if the cannot, he should frequently receive by injection, through a crooked tube or pipe that may reach down to the gullet, some emollient liquor, as warm milk and water, barley-water, or a decoction of mallows. Injections

#### 670 SUBSTANCES STOPT BETWEEN, &c.

jections of this kind not only foften and footh the irritated parts, but, when thrown in with force, are often more fuccefsful in loofening the obstruction, than all attempts with instruments.

WHEN, after all our endeavours, we are obliged to leave the obftructing body in the part, the patient must be treated as if he had an inflammatory difease. He should be bled, kept upon a low diet, and have his whole neck furrounded with emollient poultices. The like treatment must also be used, if there be any reason to suffect an inflammation of the passages, though the obstructing body be removed.

A PROPER degree of agitation has fometimes loofened the inhering body more effectually than inftruments. Thus, a blow on the back has often forced up a fubftance which fluck in the gullet; but this is ftill more proper and efficacious when the fubftance gets into the wind-pipe. In this cafe, vomiting and fneezing are-likewife to be excited. Pins, which fluck in the gullet, have been frequently difcharged by riding on horfeback, or in a carriage.

WHEN any indigeftible fubftance has been forced down into the ftomach, the patient fhould use a very mild and fmooth diet, confifting chiefly of fruits and farinacious fubftances, as puddings, pottage, and foups. He fhould avoid all heating and irritating things, as wine, punch, pepper, and fuch like; and his drink fhould be milk and water, barleywater, or whey.

WHEN the gullet is fo ftrengly and fully closed, that the patient can receive no food by the mouth, he must be nourished by clysters of soup, jelly, and the like.

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WHEN the patient is in danger of being immediately fuffocated, and all hope of freeing the paffage is vanifhed, fo that death feems at hand, if refpiration be not reftored; the operation of *bronchotomy*, or opening of the wind-pipe, muft be directly performed. As this operation is neither difficult to an expert furgeon, nor very painful to the patient, and is often the only method which can be taken to preferve life in these emergencies, we thought proper to mention it, though it should only be attempted by perfors skilled in furgery.

# OF DROWNED PERSONS,

WHEN a perfon has remained above a quarter of an hour under water there can be no confiderable hopes of his recovery. But as feveral circumftances may happen to have continued life, in fuch an unfortunate fituation, beyond the ordinary term, we fhould never too foon refign the unhappy object to his fate, but try every method for his relief, as there are many well attefted proofs of the recovery of perfons to life and health who had been taken out of the water apparently dead, and who remained a confiderable time without exhibiting any figns of life.

THE first thing to be done, after the body is taken out of the water, is to convey it, as foon as possible, to fome convenient place where the necessary operations for its recovery may be performed. In doing this, care must be taken not to bruise or injure the body by carrying it in any unnatural posture with the head downwards, or the like. If an adult body, it ought to be laid on a bed, or on straw, with the head.

head a little raifed, and carried on a cart or on men's fhoulders, and kept in as natural and eafy a position as possible. A finall body may be carried in the arms.

IN, attempting to recover perfons apparently drowned, the principal intention to be purfued is, to reftore the natural warmth, upon which all the vital functions depend; and to excite these functions by the application of stimulants, not only to the skin, but likewise to the lungs, intestines, &c.

THOUGH cold was by no means the caufe of the perfon's death, yet it will prove an effectual obftacle to his recovery. For this reafon, after ftripping him of his wet clothes, his body muft be ftrongly rubbed for a confiderable time with coarfe linen cloths as warm as they can be made; and, as foon as a well-heated bed can be got ready, he may be laid in it, and the rubbing fhould be continued. Warm cloths ought likewife to be frequently applied to the ftomach and bowels, and hot bricks, or bottles of warm water, to the foles of his feet, and to the palms of his hands.

STRONG volatile fpirits fhould be frequently applied to the nofe; and the fpine of the back and pit of the ftomach may be rubbed with warm brandy or fpirit of wine. The temples ought always to be chafed with volatile fpirits, and ftimulating powders, as that of tobacco or marjoram, may be blown up the noffrils.

To renew the breathing, a ftrong perfon may blow his own breath into the patient's mouth with all the force he can, holding his noftrils at the fame time. When it can be perceived by the rifing of the cheft

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or belly that the lungs are filled with air, the perfon ought to defift from blowing, and fhould prefs the breaft and belly fo as to expel the air again; and this operation may be repeated for fome time; alternately inflating and depreffing the lungs fo as to imitate natural refpiration.

IF the lungs cannot be inflated in this manner, it may be attempted by blowing through one of the noftrils, and at the fame time keeping the other clofe. Dr. Monro for this purpofe recommends a wooden pipe fitted at one end for filling the noftril, and at the other for being blown into by a perfon's mouth, or for receiving the pipe of a pair of bellows, to be employed for the fame purpofe; if neceffary.

WHEN air cannot be forced into the cheft by the mouth or nofe, it may be neceffary to make an opening into the wind-pipe for this purpofe. It is needlefs, however, to fpend time in defcribing this operation, as it fhould not be attempted unlefs by perlfons fkilled in furgery:

To ftimulate the inteftines, the fume of tobacco may be thrown up in form of clyfter. There are various pieces of apparatus contrived for this purpofe, which may be used when at hand; but where these cannot be obtained, the business may be done by a common tobacco-pipe. The bowl of the pipe must be filled with tobacco well kindled, and, after the small tube has been introduced into the fundament, the small be forced up by blowing, through a piece of paper full of holes wrapped round the mouth of the pipe, or by blowing through an empty pipe, the mouth of which is applied close to that of the other. This may also be done in the fol-X x lowing

lowing manner: A common clyfter-pipe with a bag mounted upon it may be introduced into the fundament, and the mouth of the bag may be applied round the fmall end of a tobacco-pipe, in the bowl of which tobacco is to be kindled, and the finoke blown up as directed above. Should it be found impracticable to throw up the smoke of tobacco, clysters of warm water, with the addition of a little falt and fome wine or fpirits, may be frequently administered. This may be done by a common clyster bag and pipe; but, as it ought to be thrown well up, a pretty large fyringe will answer the purpose better.

WHILE thefe things are doing, fome of the attendants ought to be preparing a warm bath, into which the perfon fhould be put, if the above endeavours prove ineffectual. Where there are no conveniencies for using the warm bath, the body may be covered with warm falt, fand, ashes, grains, or fuch like. Tiffot mentions an inftance of a girl who was reftord to life, after she had been taken out of the water, fwelled, bloated, and to all appearance dead, by laying her naked body upon hot ashes, covering her with others equally hot, putting a bonnet round her head, and a flocking round her neck fuffed with the fame, and heaping coverings over all. After ibe had remained half an hour in this ficuation, her pulfe returned, fhe recovered speech, and cried out, I freeze, I freeze; a little cherrybrandy was given her, and the remained buried as it were under the alles for eight hours; afterwards she was taken out, without any other complaint except that of lassitude or wearinels, which went off in a few

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few days. The Doctor mentions likewife an inftance of a man who was reftored to life, after he had remained fix hours under water, by the heat of a dunghill.

TILL the patient fhews fome figns of life, and is able to fwallow, it would be ufelefs and even dangerous to pour liquors into his mouth. His lips, however, and tongue, may be frequently wet with a feather dipt in warm brandy or other ftrong fpirits; and, as foon as he has recovered the power of fwallowing, a little warm wine, or fome other cordial, ought every now and then to be adminiftered.

Some recommend a vomit after the patient is a little re-animated; but if he can be made to puke without the fickening draught, it will be more fafe; this may generally be done by tickling the throat and fauces with an oiled feather, or fome other foft fubstance, which will not injure the parts. Tiffot in this cafe recommends the oxymel of fquills, a table-fpoonful of which, diluted with water, may be given every quarter of an hour, till the patient has taken five or fix doses. Where that medicine is not at hand, a strong infusion of fage, camomile flowers, or carduus ... benedictus, sweetened with honey, or some warm water, with the addition of a little falt, may, he fays, fupply its place. The Doctor does not intend that any of these things should be given in such quantity 2s to occasion vomiting. He thinks emetics in this. fituation are not expedient. • • • • • • •

We are by no means to difcontinue our affiltance as foon as the patients difcover fome tokens of life, fince they fometimes expire after these first appearances of recovering. The warm and stimulating ap-X x 2 plications

plications are ftill to be continued, and fmall quantities of fome cordial liquor ought frequently to be administered. Laftly, though the perfon should be manifestly re-animated, there sometimes remain an oppression, a cough, and severiss, which effectually constitute a disease. In this case it will be neceffary to bleed the patient in the arm, and to cause him to drink plentifully of barley-water, elder-flowertea, or any other fost pectoral infusions.

SUCH perfons as have the misfortune to be deprived of the appearances of life, by a fall, a blow, fuffocation, or the like, must be treated nearly in the fame manner as those who have been for fome time under water. I once attended a patient who was fo ftunned by a fall from a horfe, that for above fix hours he fcarcely exhibited any figns of life; yet this man, by being bled, and proper methods taken to keep up the vital warmth, recovered, and in a few days was perfectly well. Dr. Alexander gives an inftance to the fame purpofe, in the Edinburgh Physical and Literary Effays, of a man who was to all appearance killed by a blow on the breaft, but recovered upon being immerfed for fome time in warm water. These, and other instances of a fimilar nature, which might be adduced, amount to a full proof of this fact, that many of those unhappy perfons who lofe their lives by falls, blows, and other accidents, might be faved by the use of proper means duly persisted in.

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### OF NOXIOUS VAPOURS.

Are may be many ways rendered noxious, or even destructive to animals. This may either happen from its vivifying principle being destroyed, or from fubtle exhalations with which it is impregnated. Thus air that has paffed through burning fuel is neither capable of fupporting, fire nor the life of animals. Hence the danger of fleeping in clofe chambers with charcoal fires. Some indeed fuppofe the danger here proceeds from the fulphureous oil contained in the charcoal, which is fet at liberty and diffused all over the chamber; while others imagine it is owing to the air of the room being charged with phlogiston. Be this as it may, it is a situation carefully to be avoided. Indeed, it is dangerous to fleep in a fmall apartment with a fire of any kind. I lately faw four perfons who had been fuffocated by fleeping in an apartment where a fmall fire of coal had been left burning.

THE vapour which exhales from wine, cyder, beer, or other liquors, in the ftate of fermentation, contains fomething poifonous, which kills in the fame manner as the vapour of coal. Hence there is always danger in going into cellars where a large quantity of thefe liquors is in a ftate of fermentation, efpecially if they have been clofe flut up for fome time. There have been many inflances of perfons ftruck dead on entering fuch places, and of others who have with difficulty efcaped.

WHEN fubterraneous caves, that have been very long fhut, are opened, or when deep wells are X x 3 cleaned,

### 678 OF NOXIOUS VAPOURS.

cleaned, which have not been emptied for feveral years, the vapours arifing from them produce the fame effects as those mentioned above. For this reason, no person ought to venture into a well, pit, cellar, or any place that is damp, and has been long fhut up, till the air has been fufficiently purified, by burning gunpowder in it. It is easy to know, as has been observed in a former part of this work, when the air of fuch places is unwholesome, by letting down a lighted candle, throwing in burning fuel, or the like. If these continue to burn, people may fashed, no one ought to enter till the air has been first purified by fire.

THE offenfive ftink of lamps and of candles, efpecially when their flames are extinguished, operate like other vapours, though with lefs violence, and lefs fuddenly. There have, however, been instances of people killed by the fumes of lamps which had been extinguished in a close chamber, and perfons of weak delicate breasts generally find themselves quickly oppressed in apartments illuminated with many candles.

SUCH as are fenfible of their danger in thefe fituations, and retreat feafonably from it, are generally relieved as foon as they get into the open air; or, if they have any remaining uneafinefs, a little water and vinegar, or lemonade, drank hot, affords them relief. But when they are fo far poifoned, as to have loft their feeling and underftanding, the following means must be used for their recovery:

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THE patient fhould be exposed to a very pure, fresh, and open air; and volatile falts, or other stimulating

### OF NOXIOUS VAPOURS.

mulating fubftances, held to his nofe. He fhould next be bled in the arm, or, if that does not fucceed, in the neck. His legs ought to be put into warm water, and well rubbed. As foon as he can fwallow, fome lemonade, or water and vinegar, with the addition of a little nitre, may be given him.

Nor are fharp clyfters by any means to be neglected; thefe may be made, by adding to the common clyfter, fyrup of buckthorn and tincture of fenna, of each two ounces; or, in their ftéad, half an ounce of Venice turpentine diffolved in the yolk of an egg. Should thefe things not be at hand, two or three large fpoonfuls of common falt may be put into the clyfter. The fame means, if neceffary, which were recommended in the former part of this chapter, may be ufed to reftore the circulation, warmth, &c.

MR. TOSSACH, furgeon at Alloa, relates the cafe of a man fuffocated by the fteam of burning coal, whom he recovered by blowing his breath into the patient's mouth, bleeding him in the arm, and caufing him to be well rubbed and toffed about. And Dr. Frewen, of Suffex, mentions the cafe of a young man who was flupified by the fmoke of fea-coal, but was recovered by being plunged into cold water, and afterwards laid in a warm bed.

THE practice of plunging perfons fuffocated by noxious vapours in cold water, would feem to be fupported by the common experiment of fuffocating dogs in the grotto del cani, and afterwards recovering them, by throwing them into the neighbouring lake.

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EFFECTS

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### [ 680 ]

### EFFECTS OF EXTREME COLD.

WHEN cold is extremely fevere, and a perfon is exposed to it for a long time, it proves mortal, in confequence of its ftopping the circulation in the extremities, and forcing too great a proportion of blood towards the brain; fo that the patient dies of a kind of apoplexy, preceded by great fleepinefs. The traveller, in this fituation, who finds himfelf begin to grow drowfy, fhould redouble his efforts to extricate himfelf from the imminent danger he is exposed to. This fleep, which he might confider as fome alleviation of his fufferings, would, if indulged, prove his laft.

SUCH violent effects of cold are happily not very common in this country; it frequently happens, however, that the hands or feet of travellers are fo benumbed or frozen, as to be in danger of a mortification, if proper means are not ufed to prevent it. The chief danger in this fituation arifes from the fudden application of heat. It is very common, when the hands or feet are pinched with cold, to hold them to the fire; yet reafon and obfervation fhew, that this is a moft dangerous and imprudent practice.

EVERY peafant knows, if frozen meat, fruits, or roots of any kind, be brought near the fire, or put into warm water, they will be deftroyed, by rottennefs, or a kind of mortification; and that the only way to recover them, is to immerfe them for fome time in very cold water. The fame obfervation holds with regard to animals in this condition.

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### EFFECTS OF EXTREME COLD. 681

WHEN the hands or feet are greatly benumbed with cold, they ought either to be immerfed in cold water, or rubbed with fnow, till they recover their natural warmth and fenfibility: after which the perfon may be removed into an apartment a little warmer, and may drink fome cups of itea, or an infufion of elder flowers fweetened with honey. Every perfon muft have obferved, when his hands were even but flightly affected with cold, that the beft way to warm them was by wafhing them in cold water, and continuing to rub them well for fome time.

WHEN a perfon has been fo long exposed to the cold, that all appearances of life are gone, it will be neceffary to rub him all over with fnow or cold water; or, what will answer better, if it can be obtained, to immerfe him in a bath of the very coldest water. There is the greatest encouragement to perfiss in the use of these means, as we are assured that perfons who had remained in the fnow, or had been exposed to the freezing air during five or fix fuccessive days, and who had discovered no marks of life for several hours, have nevertheless been revived.

I HAVE always thought, that the whitloes, kibes, chilblains, and other inflammations of the extremities, which are fo common among the peafants in the cold feafon, were chiefly occafioned by their fudden transitions from cold to heat. After they have been exposed to an extreme degree of cold, they immediately apply their hands and feet to the fire, or, if they have occafion, plunge them into warm water, by which means, if a mortification does not happen,

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## 682 EFFECTS OF EXTREME HEAT.

an inflammation feldom fails to enfue. Most of the ill confequences from this quarter might be easily avoided, by only observing the precautions mentioned above.

### EFFECTS OF EXTREME HEAT.

THE effects of extreme heat, though not fo common in this country, are no lefs fatal, and much more fudden than those of cold. In hot countries people frequently drop down dead in the ftreets, exhausted with heat and fatigue. In this case, if any warm cordial can be poured into the mouth it ought to be done. If this cannot be effected, they may be thrown up in form of a clyster. Volatile spirits, and other things of a stimulating nature, may be applied to the skin, which should be well rubbed with coarse cloths, whipped with nettles, or other stimulating things. Some of the ancient physicians are faid to have restored to life perfons apparently dead, by beating them with rods.

### CHAP. LIV.

## OF FAINTING FITS, AND OTHER CASES WHICH REQUIRE IMMEDIATE ASSISTANCE.

STRONG and healthy perfons, who abound with blood, are often feized with fudden fainting fits, after violent exercife, drinking freely of warm or ftrong

### OF FAINTING FITS, &c.

ftrong liquors, exposure to great heat, intense application to ftudy, or the like.

In fuch cafes the patient fhould be made to fmell to fome vinegar. His temples, forehead, and wrifts ought at the fame time to be bathed with vinegar mixed with an equal quantity of warm water; and two or three fpoonfuls of vinegar, with four or five times as much water, may, if he can fwallow, be poured into his mouth.

IF the fainting proves obftinate, or degenerates into a *fyncope*, that is, an abolition of feeling and underftanding, the patient muft be bled. After the bleeding, a clyfter will be proper, and then he fhould be kept eafy and quiet, only giving him every half hour a cup or two of an infufion of any mild vegetable, with the addition of a little fugar and vinegar.

WHEN fwoonings, which arife from this caufe, occur frequently in the fame perfon, he fhould, in order to elcape them, confine himfelf to a light diet, confifting chiefly of bread, fruits, and other vegetables. His drink ought to be water, or fmall beer, and he fhould fleep but moderately, and take much exercife.

But fainting fits proceed much oftener from a defect, than an excels of blood. Hence they are very ready to happen after great evacuations of any kind, obftinate watching, want of appetite, or fuch like. In these an almost directly opposite course to that mentioned above must be purfued.

THE patient should be laid in bed, with his head low, and being covered, should have his legs, thighs, arms,

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# 684 FAINTING FITS, &c. WHICH REQUIRE

arms, and his whole body rubbed ftrongly with hot flannels. Hungary water, volatile falts, or ftrong fimelling herbs, as rue, mint, or rofemary, may be held to his nofe. His mouth may be wet with a little rum or brandy; and, if he can fwallow, fome hot wine, mixed with fugar and cinnamon, which is an excellent cordial, may be poured into his mouth. A compress of flannel dipt in hot wine or brandy must be applied to the pit of his ftomach, and warm bricks, or bottles filled with hot water, laid to the feet.

As foon as the patient is recovered a little, he fhould take fome ftrong foup or broth, or a little bread or bifcuit foaked in hot-fpiced wine. To prevent the return of the fits, he ought to take often, but in fmall quantities, fome light yet ftrengthening nourifhment, as panado made with foup inftead of water, new laid eggs lightly poached, chocolate, light roaft meats, jellies, and fuch like.

THESE fainting fits, which are the effect of bleeding, or of the violent operation of purges, belong to this clafs. Such as happen after artificial bleeding are feldom dangerous, generally terminating as foon as the patient is laid upon the bed; indeed perfons fubject to this kind fhould always be bled lying, in order to prevent it. Should the fainting, however, continue longer than ufual, volatile fpirits may be held to the nofe, and rubbed on the temples, &c.

WHEN fainting is the effect of too ftrong or acrid purges or vomits, the patient must be treated in all respects as if he had taken poison. He should be made

### IMMEDIATE ASSISTANCE. 685

made to drink plentifully of milk, warm water, and oil, barley-water, or fuch like; emollient clyfters will likewife be proper, and the patient's ftrength fhould afterwards be recruited, by giving him generous cordials, and anodyne medicines.

FAINTINGS are often occafioned by indigeftion. This may either proceed from the quantity or quality of the food. When the former of thefe is the caufe, the cure will be beft performed by vomiting, which may be promoted by caufing the patient to drink a weak infufion of camomile flowers, *carduus beneditfus*, or the like. When the diforder proceeds from the nature of the food, the patient, as in the cafe of weaknefs, muft be revived by ftrong fmells, &c. after which he fhould be 'made to fwallow a large quantity of light warm fluid, which may ferve to drown, as it were, the offending matter, to foften its acrimony, and either to effect a difcharge of it by vomiting, or force it down into the inteffines.

EVEN difagreeable fmells will fometimes occafion fwoonings, efpecially in people of weak nerves. When this happens, the patient fhould be carried into the open air, have ftimulating things held to his nofe, and those fubftances which are difagreeable to him ought immediately to be removed. But we have already taken notice of fwoonings which arife from nervous diforders, and shall therefore fay no more upon that head.

FAINTING FITS often happen in the progrefs of difeafes. In the beginning of putrid difeafes, they generally denote an oppreffion at ftomach, or a mafs of corrupted humours, and they ceafe after evacuations

## 686 FAINTING FITS, Ge. WHICH REQUIRE

tions either by vomit or ftool. When they occur at the beginning of malignant fevers, they indicate great danger. In each of thefe cafes, vinegar ufed both externally and internally is the beft remedy during the paroxyfm, and plenty of lemon-juice and water after it. Swoonings which happen in difeafes accompanied with great evacuations, muft be treated like thofe which are owing to weaknefs, and the evacuations ought to be reftrained. When they happen towards the end of a violent fit of an intermitting fever, or at that of each exacerbation of a continual fever, the patient muft be fupported by fmall draughts of wine and water.

DELICATE and hysteric women are very liable to fwooning or fainting fits after delivery. These might be often prevented by generous cordials, and the admiffion of fresh air. When they are occasioned by exceffive flooding, it ought by all means to be reftrained. They are generally the effect of mere weakness or exhaustion. Dr. Engleman relates the case of a woman " in childbed, who, after being hap-" pily delivered, fuddenly fainted, and lay upwards " of a quarter of an hour apparently dead. A phy-" fician was fent for; her own maid, in the mean " while, being out of patience at his delay, at-" tempted to affift her herfelf, and extending herfelf " upon her mistrefs, applied her mouth to her's, " blew in as much breath as fhe poffibly could, and " in a very fhort time the exhaufted woman awaked " as out of a profound fleep; when proper things " being given her, the foon recovered.

" THE maid being afked how fhe came to think " of this expedient, faid fhe had feen it practifed at " Altenburgh

### IMMEDIATE ASSISTANCE. 687

" Altenburgh, by midwives, upon children with " the happieft effect."

WE mention this cafe chiefly that other midwives may be induced to follow fo laudable an example. Many children are born without any figns of life, and others expire foon after the birth, who might, without all doubt, by proper care, be reftored to life.

FROM whatever caule fainting fits proceed, fresh air is always of the greatest importance to the patient. By not attending to this circumstance, people often kill their friends while they are endeavouring to fave them. Alarmed at the patient's fituation, they call in a crowd of people to his affiftance, or perhaps to witnefs his exit, whofe breathing exhaufts the air, and increases the danger. There is not the least doubt but this practice, which is very common among the lower fort of people, often proves fatal, especially to the delicate, and fuch perfons as fall into fainting fits from mere exhauftion, or the violence of some difease. No more persons ought ever to be admitted into the room where a patient lies in a fwoon than are absolutely necessary for his affistance, and the windows of the apartment should always be opened, at least as far as to admit a stream of fresh air.

PERSONS fubject to frequent fwoonings, or fainting fits, fhould neglect no means to remove the caufe of them, as their confequences are always injurious to the confliction. Every fainting fit leaves the perfon in dejection and weaknefs; the fecretions are thereby fufpended, the humours difpofed to fragnation, coagulations and obftructions are formed, and, if the motion of the blood be totally intercepted; or very confiderably

### 688 OF INTOXICATION.

confiderably checked, *polypufes* are fometimes formed in the heart or larger veffels. The only kind of fwoonings not to be dreaded are those which fometimes mark the *crifis* in fevers; yet even these ought, as foon as possible, to be removed.

## OF INTOXICATION.

THE effects of intoxication are often fatal. No kind of poifon kills more certainly than an overdofe of ardent fpirits. Sometimes by deftroying the nervous energy, they put an end to life at once; but in general their effects are more flow, and in many refpects fimilar to those of opium. Other kinds of intoxicating liquors may prove fatal when taken to excefs, as well as ardent spirits; but they may generally be discharged by vomiting, which ought always to be excited when the stomach is overcharged with liquor.

MORE of those unhappy perfons, who die intoxicated, lose their lives from an inability to conduct themselves, than from the deftructive quality of the liquor. Unable to walk, they tumble down, and lie in some awkward posture, which obstructs the circulation or breathing, and often continue in this fituation till they die. No drunk perfon should be left by himself, till his clothes have been loosened, and his body laid in such a posture as is most favourable for continuing the vital motions, discharging the contents of the store, &c. The best posture for discharging the contents of the store he may be laid on his fide, with his head a little raised, and particular

### OF INTOXICATION.

lar care must be taken that his neck be no way bent, twifted, or have any thing too tight about it.

The exceffive degree of thirft occafioned by drinking ftrong liquors, often induces people to quench it by taking what is hurtful. I have known fatal confequences even from drinking freely of milk after a debauch of wine or four punch; thefe acid liquors, together with the heat of the ftomach, having coagulated the milk in fuch a manner that it could never be digefted. The fafeft drink after a debauch is water with a toaft, tea, infufions of balm, fage, barleywater, and fuch like. If the perfon wants to vomit, he may drink a weak infufion of camomile flowers, or lukewarm water and oil; but in this condition vomiting may generally be excited by only tickling the throat with the finger or a feather.

INSTEAD of giving a detail of all the different fymptoms of intoxication which indicate danger, and proposing a general plan of treatment for perfons in this fituation, I shall briefly relate the history of a cafe which lately fell under my own observation, wherein most of those symptoms usually reckoned idangerous concurred, and where the treatment was fuec sful.

A YOUNG man, about fifteen years of age, had, for a hire, drank ten glaffes of ftrong brandy. He foon after fell faft afleep, and continued in that fituation for near twelve hours, till at length his uneafy manner of breathing, the coldnefs of the extremities, and other threatening fymptoms, alarmed his friends, and made them fend for me. I found him ftill fleeping, his countenance ghaftly, and his fkin covered with a cold clammy fweat. Almost the only figns of X y

life remaining, were, a deep laborious breathing, and a convultive motion or agitation of his bowels.

I TRIED to roufe him, but in vain, by pinching, Inaking, applying volatile spirits, and other stimulating things to his nofe, &c. A few ounces of blood were likewife let from his arm, and a mixture of vinegar and water was poured into his mouth; but, as he could not fwallow, very little of this got into the ftomach. None of thefe things having the leaft effect, and the danger feeming to increase, I ordered his legs to be put into warm water, and a sharp clyster to be immediately administered. This gave him a ftool, and was the first thing that relieved him. It was afterwards repeated with the fame happy effect, and feemed to be the chief caufe of his recovery. He then began to shew some figns of life, took drink when it was offered him, and came gradually to his senses. He continued, however, for several days weak and feverish, and complained much of a forenefs in his bowels, which gradually went off, by means of a slender diet, and cool mucilaginous liquors.

THIS young man would probably have been fuffered to die, without any affiftance being called, had not a neighbour, a few days before, who had been advifed to drink a bottle of fpirits to cure him of an ague, expired under very fimilar circumftances.

## OF SUFFOCATION AND STRANGLING.

THESE may fometimes proceed from an infarction of the lungs, produced by vifcid clammy humours, or a fpalmodic affection of the nerves of that organ. Perfons

Perfons who feed grofsly, and abound in rich blood are very liable to fuffocating fits from the former of thefe cautes. Such ought, as foon as they are attacked, to be bled, to receive an emollient clyfter, and to take frequently a cup of diluting liquor with a little nitre in it. They fhould likewife receive the fteams of hot vinegar into their lungs by breathing.

NERVOUS and affhmatic perfons are most fubject to fpafmodic affections of the lungs. In this cafe the patient's legs should be immerfed in warm water, and the steams of vinegar applied as above. Warm diluting liquors should likewife be drank; to a cup of which a tea-spoonful of the Paregoric elixir may occasionally be added. Burnt paper, feathers, or leather, may be held to the patient's nose, and fresh air should be freely admitted to him.

INFANTS are often fuffocated by the carelefnefs or inattention of their nurfes \*. An infant when in bed fhould always be laid fo, that it cannot tumble down with its head under the bed-clothes; and when in a cradle, its face ought never to be covered. A fmall degree of attention to thefe two fimple rules would fave the lives of many infants, and prevent others from being rendered weak and fickly all their days by the injuries done to their lungs.

INSTEAD of laying down a plan for the recovery of infants who are fuffocated, or over-laid, as it is

\* These accidents are not always the effects of carelesness. I have known an infant over-laid by its mother being seized in the night with an hysteric fit. This ought to serve as a caution against employing hysteric women as nurses; and should likewise teach such women never to lay an infant in the same bed with themselves, but in a small adjacent one.

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termed by their nurses, I shall give the history of 2 cafe related by Monfieur Janin, of the Royal College of Surgery at Paris, as it was attended with fuccefs, and contains almost every thing that can be done on fuch occasions.

A NURSE having had the misfortune to over-lay a child, he was called in, and found the infant without any figns of life; no pulsation in the arteries, no respiration, the face livid, the eyes open, dull, and tarnished, the nose full of snivel, the mouth gaping, in fhort it was almost cold. Whilst fome linen cloths and a parcel of ashes were warming, he had the boy unswathed, and laid him in a warm bed, and on the right fide. He then was rubbed all over with fine linen, for fear of fretting his tender and delicate skin. As foon as the afhes had received their due degree of heat, Mr. Janin buried him in them, except the face, placed him on the fide oppofite to that on which he had been at first laid, and covered him with a blanket. He had a bottle of eau de luce in his pocket, which he prefented to his nofe from time to time; and between whiles fome puffs of tobacco were blown up his noftrils; to thefe fucceeded the blowing into his mouth, and fqueezing tight his nofe. Animal heat began thus to be excited gradually; the pulfations of the temporal artery were foon felt, the breathing became more frequent and free, and the eyes clofed and opened alternately. At length the child fetched fome cries expressive of his want of the breast, which being applied to his mouth, he catched at it with avidity, and fucked as if nothing had happened to him. Though the pulfations of the arteries were by this time very well re-established, and it was hot weather,

weather, yet Mr. Janin thought it adviseable to leave his little patient three quarters of an hour longer under the assessment of the was afterwards taken out, cleaned, and dreffed as usual; to which a gentle steep fucceeded, and he continued perfectly well.

MR. JANIN mentions likewife an example of a young man who had hanged himfelf through defpair, to whom he administered help as effectually as in the preceding cafe.

MR. GLOVER, furgeon in Doctors Commons, London, relates the cafe of a perfon who was reftored to life after twenty-nine minutes hanging, and continued in good health for many years after.

THE principal means used to reftore this man to life were, opening the temporal artery and the external jugular; rubbing the back, mouth, and neck with a quantity of volatile fpirits and oil; administering the tobacco clyfter by means of lighted pipes, and ftrong frictions of the legs and arms. This course had been continued for about four hours, when an incifion was made into the wind-pipe, and air blown ftrongly through a canula into the lungs. About twenty minutes after this, the blood at the artery began to run down the face, and a flow pulfe was just perceptible at the wrift. The frictions were continued for fome time longer : his pulse became more frequent, and his mouth and nofe being irritated with fpirit of fal ammoniac, he opened his eyes. Warm cordials were then administered to him, and in two days he was fo well as to be able to walk eight miles.

THESE cales are fufficient to fhew what may be done for the recovery of those unhappy persons who ftrangle themselves in a fit of despair.

OF

### 694 PERSONS WHO EXPIRE

### OF PERSONS WHO EXPIRE IN CONVUL-SION FITS.

CONVULSION FITS often conffitute the laft scene of acute or chronic diforders. When this is the cafe, there can remain but small hopes of the patient's recovery after expiring in a fit. But when a perfon, who appears to be in perfect health, is fuddenly feized with a convultion fit, and feems to expire, fome attempts ought always to be made to reftore him to life. Infants are most liable to convulsions, and are often carried off very suddenly by one or more fits about the time of teething. There are many well-authenticated accounts of infants having been reftored to life, after they had to all appearance expired in convultions; but we fhall only relate the following inftance mentioned by Dr. Johnfon in his pamphlet on the prasticability of .recovering perfons visibly dead :

In the parifh of St. Clemens, at Colchefter, a child of fix months old, lying upon its mother's lap, having had the breaft, was feized with a ftrong convultion fit, which lafted to long, and ended with to total a privation of 'motion in the body, lungs, and pulfe, that it was deemed abfolutely dead. It was accordingly ftripped, laid out, the paffing-bell ordered to be tolled, and a coffin to be made; but a neighbouring gentlewoman who ufed to admire the child, hearing of its fudden death, haftened to the houfe, and upon examining the child found it not cold, its joints limber, and fancied that a glafs the held to its mouth and nofe was a little damped with the breath; upon

#### IN CONVULSION FITS. 695-

upon which she took the child in her lap, fat down before the fire, rubbed it, and kept it in gentle agitation. In a quarter of an hour fhe felt the heart begin to beat faintly; she then put a little of the mother's milk into its mouth, continued to rub its palms and foles, found the child begin to move, and the milk was fwallowed; and in another quarter of an hour fhe had the fatisfaction of reftoring to its disconsolate mother the babe quite recovered, eager to lay hold of the breaft, and able to fuck again. The child throve, had no more fits, is grown up, and at present alive.

THESE means, which are certainly in the power of every person, were sufficient to restore to life an infant to all appearance dead, and who, in all proba-, bility, but for the use of these simple endeavours, would have remained fo. There are, however, many other things which might be done, in cafe the above fhould not fucceed; as rubbing the body with ftrong spirits, covering it with warm ashes or falt, blowing air into the lungs, throwing up warm ftimulating clyfters, or the fmoke of tobacco, into the inteffines, and fuch like.

WHEN children are dead born, or expire foon after the birth, the fame means ought to be used for their recovery, as if they had expired in circumftances fimilar to those mentioned above.

THESE directions may likewife be extended to adults, attention being always paid to the age and other circumstances of the patient.

The foregoing cafes and observations afford fufficient proof of the fuccess which may attend the en-Yy4 deavours

deavours of perfons totally ignorant of medicine, in affifting those who are fuddenly deprived of life by any accident or difease. Many facts of a fimilar nature might be adduced, were it neceffary; but these, it is hoped, will be fufficient to call up the attention of the public, and to excite the humane and benevolent to exert their utmost endeavours for the prefervation of their fellow-men.

The fociety for the recovery of drowned perfons, in-, flituted at Amfterdam in the year 1767, had the fatisfaction to find that not fewer than 150 perfons, in the space of four years, had been faved by the means pointed out by them, many of whom owed their prefervation to peafants and people of no medical knowledge. But the means used with fo much efficacy in recovering drowned perfons are, with equal fuccefs, applicable to a number of cafes where the powers of life feem in reality to be only fufpended, and to remain capable of renewing all their functions, on being put into motion again. It is fhocking to reflect, that for want of this confideration many perfons have been committed to the grave, in whom the principles of life might have been revived.

THE cafes wherein fuch endeavours are most likely to be attended with fuccefs, are all those called fudden deaths from an invisible cause, as apoplexies, hysterics, faintings, and many other disorders wherein perfons in a moment fink down and expire. The various cafualties in which they may be tried are, fuffocations, from the fulphureous damps of mines, coal-pits, &c.; the unwholesome air of long unopened wells or caverns; the noxious vapours arising

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arifing from fermenting liquors; the fleams of burning charcoal; fulphureous mineral acids; arfenical effluvia, &c.

THE various accidents of drowning, ftrangling, and apparent deaths, by blows, falls, hunger, cold, &c. likewife furnish opportunities of trying such endeavours. Perhaps those who to appearance are killed by lightning, or by any violent agitation of the passions, as fear, joy, surprise, and such like, might also be frequently recovered by the use of proper means, as blowing strongly into their lungs, &c.

THE means to be used for the recovery of persons fuddenly deprived of life are nearly the fame in all cafes; they are practicable by every one who happens to be present at the accident, and require no great expence, and less skill. The great aim is to reftore the warmth and vital motions. This may in general be attempted by means of heat, frictions, bleeding, blowing air into the lungs, administering clyfters and generous cordials. These must be varied according to circumstances. Common fense, and the fituation of the patient, will fuggeft the proper manner of conducting them. Above all we would recommend perseverance. People ought never to despair on account of discouraging circumstances; or to leave off their endeavours as long as there is the leaft hope of fuccess. Where much good and no hurt can be done, no one ought to grudge his labour.

It were greatly to be wifhed, that an inftitution, fimilar to that of Amfterdam, was eftablished, upon a more extensive plan, in Great Britain; and that a reward was allowed to every one who should be instrumental

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inftrumental in reftoring to life a perfon feemingly dead \*. Men will do much for fame, but ftill more for money. Should no profit, however, be annexed to those benevolent offices, the heart-felt pleasure which a good man must enjoy, on reflecting that he has been the happy inftrument of faving one of his fellow-creatures from an untimely grave, is itfelf a fufficient reward.

\* The Author is happy to obferve, that, fince the first publication of this work, feveral focieties have been inflituted in Britain with the fame benevolent intention as that of Amsterdam, and that their endeavours have proved no lefs fuccessful. He is likewife happy to obferve, that premiums have been awarded to those who have been active in their endeavours to restore to life perfons who had been drowned, or fuddenly deprived of life by any accident. How much is this superior to the superstitutions inflitution, which allows any man a premium who brings a dead person out of the water, fo that he may receive Christian burial; but allows nothing to the person who brings him out alive, or who recovers him after he has been, to all appearance, dead.

CHAP.

### [ 699 ]

### CHAP. LV.

### CAUTIONS CONCERNING COLD. BATHING, AND DRINKING THE MINERAL WATERS.

A S it is now fashionable for perfons of all ranks to plunge into the fea, and drink the mineral waters, I was defirous of rendering this work still more extensively useful, by the addition of a few practical Observations on Sea Bathing, and drinking the Mineral Waters of this Country. Finding it impossible to bring these observations within so narrow a compass as not to swell the book, already too large, into an enormous fize, I resolved to confine myself to a few hints, or cautions; which may be of fervice to perfons who bathe, or drink the mineral waters, without being able to put themselves under the care of a physician.

No other part of the practice of medicine is of greater importance, or merits more the attention of the phyfician, as many lives are loft, and numbers ruin their healths, by cold bathing, and an imprudent use of the mineral waters. On some future occasion I may probably refume this subject, as I know not any work that contains a sufficient number of practical observations to regulate the patient's conduct in the use of these active and important medicines.

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## 700] ON COLD BATHING, AND

WE have indeed many books on the mineral waters, and fome of them are written with much ingenuity; but they are chiefly employed in afcertaining the contents of the waters by chymical analysis. This, no doubt, has its use, but is by no means of fuch importance as fome may imagine. A man may know the chymical analysis of all the articles in the materia medica, without being able properly to apply any one of them in the cure of difeases. One page of practical observations is worth a whole volume of chymical analysis. But where are fuch observations to be met with? Few phyficians are in a fituation to make them, and fewer still are qualified for such a task. It can only be accomplifhed by practitioners who refide at the fountains, and who, poffeffing minds fuperior to local prejudices, are capable of diffinguishing difeafes with accuracy, and of forming a found judgment respecting the genuine effects of medicines.

WITHOUT a proper diferimination with regard to the difeafe and the conflictution of the patient, the moft powerful medicine is more likely to do harm than good. Every one knows that the fame phyfician who, by cold bathing, cured Augustus, by an imprudent use of the fame medicine killed his heir. This induced the Roman fenate to make laws for regulating the baths, and preventing the numerous evils which arose from an imprudent and promiscuous use of those elegant and fashionable pieces of luxury. But as no such laws exist in this country, every one does that which is right in his own eyes, and of course many must do wrong.

PEOPLE

### DRINKING MINERAL WATERS. [701

PEOPLE are apt to imagine that the fimple element of water can do no hurt, and that they may plunge into it at any time with impunity. In this, however, they are much miftaken. I have known apoplexies occafioned by going into the cold bath, fevers excited by ftaying too long in it, and other maladies fo much aggravated by its continued ufe, that they could never be wholly eradicated. Nor are examples wanting, either in ancient or modern times, of the baneful confequences which have arifen alfo from an injudicious application of the warm bath; but as warm baths are not fo common in this country, and are feldom ufed but under the direction of a phyfician, I fhall not enlarge on that part of the fubject.

IMMERSION in cold water is a cuftom which lays claim to the most remote antiquity: indeed it must have been coëval with man himself. The necessity of water for the purposes of cleanlines, and the pleafure arifing from its application to the body in hot countries, must very early have recommended it to the human species. Even the example of other animals was fufficient to give the hint. By inftinct many of them are led to apply cold water in this manner; and fome, when deprived of its use, have been known to languish, and even to die. But whether the practice of cold bathing arofe from neceffity, reafoning, or imitation, is an inquiry of no importance; our business is to point out the advantages which may be derived from it, and to guard people against an improper use of it.

THE

### 702] ON COLD BATHING, AND

THE cold bath recommends itfelf in a vafiety of cafes; and is peculiarly beneficial to the inhabitants of populous cities, who indulge in idlenefs, and lead fedentary lives. In perfons of this description the action of the folids is always too weak, which induces a languid circulation, a crude indigested mass of humours, and obstructions in the capillary veffels and glandular fystem. Cold water, from its gravity as well as its tonic power, is well calculated either to obviate or remove thefe fymptoms. It accelerates the motion of the blood, promotes the different fecretions, and gives permanent vigour to the folids. But all thefe important purpofes will be more effentially answered by the application of falt water. This ought not only to be preferred on account of its fuperior gravity, but likewise for its greater power of ftimulating the fkin, which promotes the perfpiration, and prevents the patient from catching cold.

It is neceffary, however, to obferve, that cold bathing is more likely to prevent, than to remove obftructions of the glandular or lymphatic fyftem. Indeed, when thefe have arrived at a certain pitch, they are not to be removed by any means. In this cafe the cold bath will only aggravate the fymptoms, and hurry the unhappy patient into an untimely grave. It is therefore of the utmost importance, previous to the patient's entering upon the ufe of the cold bath, to determine whether or not he labours under any obstinate obstructions of the lungs or other *viscera*; and where this

is

DRINKING MINERAL WATERS.

is the cafe, cold bathing ought ftrictly to be prohibited \*.

In what is called a plethoric state, or too great a fulnefs of the body, it is likewife dangerous to use the cold bath, without due preparation. In this cafe there is great danger of burfting a bloodveffel, or occasioning an inflammation of the brain, or some of the viscera. This precaution is the more neceffary to citizens, as most of them live full, and are of a gross habit. Yet, what is very remarkable, these people refort in crowds every season to the fea-fide, and plunge in the water without the least confideration. No doubt they often escape with impunity, but does that give a fanction to the practice? Perfons of this description ought by no means to bathe, unless the body has been previoufly prepared by bleeding, purging, and a spare diet.

ANOTHER class of patients, who stand peculiarly in need of the bracing qualities of cold water, is the nervous. This includes a great number of the male, and almost all the semale inhabitants of great cities. Yet even those perfons ought to be cautious

\* The late celebrated Dr. Smollet has indeed faid, that if he were perfuaded he had an ulcer in the lungs, he would jump into the cold bath; but here the Doctor evidently fnews more courage than difcretion; and that he was more a man of wit than a phyfician, every one will allow. A nervous afthma, or an atrophy, may be miftaken for a pulmenary confumption; yet, in the two former, the cold bath proves often beneficial, though I never knew it fo in the latter. Indeed, all the phthifical patients I ever faw, who had tried the cold bath, were evidently the worfe for it.

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### 704] ON COLD BATHING, AND

in using the cold bath. Nervous people have often weak bowels, and may, as well as others, be fubject to congestions and obstructions of the viscera; and in this case they will not be able to bear the effects of the cold water. For them, therefore, and indeed for all delicate people, the best plan would be to accustom themselves to it by the most pleasing and gentle degrees. They ought to begin with the temperate bath, and gradually use it cooler, till at length the coldess proves quite agreeable. Nature revolts against all great transitions; and those who do violence to her dictates, have often cause to repent of their temerity.

WHEREVER cold bathing is practifed, there ought likewife to be tepid baths for the purpose mentioned above. Indeed it is the practice of fome countries to throw cold water over the patient as foon as he comes out of the warm bath; but though this may not injure a Russian peasant, we dare not recommend it to the inhabitants of this country. The ancient Greeks and Romans, we are told, when covered with fweat and dust, used to plunge into rivers, without receiving the fmalleft injury. But though they might often efcape danger from this imprudent act, yet their conduct was certainly contrary to all the rules of medicine; as I have known many robust men throw away their lives by fuch an attempt. I would not however advise patients to go into the cold water when the body is chilly; as much exercife, at leaft, ought to be taken, as may excite a gentle glow all over the body, but by no means fo as to overheat it.

To

## DRINKING MINERAL WATERS. [705

To young people, and particularly to children, cold bathing is of the last importance. Their lax fibres render its tonic powers peculiarly proper. It promotes their growth, increases their ftrength \*, and prevents a variety of difeafes incident to childhood. Were infants early accustomed to the cold bath, it would feldom difagree with them; and we should fee fewer instances of the scrofula, rickets, and other difeafes, which prove fatal to many, and make others miferable for life. Sometimes, in-, deed, these disorders render infants incapable of bearing the thock of cold water, but this is owing to their not having been early and regularly accultomed to it. It is however neceffary here to caution young men against too frequent bathing; as I have known many fatal consequences refule from the daily practice of plunging into rivers and continuing there too long.

THE most proper time of the day for using the cold bath is no doubt the morning, or immediately before dinner; and the best mode, that of immersion head foremost. As cold bathing has a constant tendency to propel the blood and other humours towards the head, it ought to be a rule always to wet that part first. By due attention to this

• The celebrated Galen fays, that immersion in cold water is only fit for the young of lions and bears; and recommends warm bathing, as conducive to the growth and strength of infants. How egregiously do the greatest men err whenever they lose fight of facts, and substitute reasoning in physic in, place of observation and experience!

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circumflance, there is reafon to believe, that violent headachs, and other complaints, which frequently proceed from cold bathing, might be often prevented.

THE cold bath, when continued too long, not only occasions too great a flux of humours towards the head, but chills the blood, cramps the muscles, relaxes the nerves, and wholly defeats the intention of bathing. Hence, by not adverting to this circumstance, expert fwimmers are often injured, and even fometimes lose their lives. All the beneficial purposes of cold bathing are answered by a dip or two. The patient ought to be rubbed dry the moment he comes out of the water, and should continue to take exercise for some time after.

WHEN cold bathing occasions chilnefs, loss of appetite, liftleffnefs, pain of the breast or bowels, a prostration of strength, or violent head-achs, it ought to be difcontinued.

THOUGH these hints are by no means intended to point out all the cases where cold bathing may be hurtful; nor to illustrate its extensive utility as a medicine; yet, it is hoped, they may ferve to guard people against some of those errors into which from mere inattention they are apt to fall; and thereby not only endanger their own lives, but bring an excellent medicine into diffepute.

THE internal use of water, as a medicine, is no lefs an object of the physician's attention than the external. Pure elementary water is indeed the most inoffensive of all liquors, and constitutes a principal.

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## DRINKING MINERAL WATERS. [707

principal part of the food of every animal. But this element is often impregnated with fubftances of a very active and penetrating nature; and of fuch an infidious quality, that, while they promote certain fecretions, and even alleviate fome difagreeable fymptoms, they weaken the powers of life, undermine the conftitution, and lay the foundation of worfe difeafes than those which they were employed to remove. Of this every practitioner must have feen inftances; and phyficians of eminence have more than once declared that they have known more difeafes occafioned than removed by the ufe of mineral waters. This, doubtlefs, has proceeded from the abufe of those powerful medicines, which evinces the neceffity of using them with caution.

By examining the contents of the mineral waters which are most used in this country, we shall be enabled to form an idea of the danger which may arise from an improper application of them either externally or internally, though it is to the latter of these that the present observations are chiefly confined.

THE waters most in use for medical purposes in Britain, are those impregnated with iron, falts, or fulphur, either separately, or variously combined. Of these the most powerful is the faline suphureous water of Harrowgate, of which I have had more soccasion to observe the pernicious consequences, when improperly used, than of any other. To this therefore the following remarks will more immediiately relate, though they will be found applicable to all the purging waters in the kingdom which are strong enough to merit attention.

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THE errors which so often defeat the intention of drinking the purgative mineral waters, and which fo frequently prove injurious to the patient, proceed from the manner of drinking, the quantity taken, the regimen pursued, or, using them in cafes where they are not proper.

A very hurtful prejudice still prevails in this country, that all difeases must be cured by medicines taken into the ftomach, and that the more violently these medicines operate, they are the more likely to have the defired effect. This opinion has proved fatal to thousands; and will, in all probability, deftroy many more before it can be wholly eradicated. Purging is often useful in acute difeafes, and in chronical cafes may pave the way for the operation of other medicines; but it will feldom perform a cure; and by exhausting the ftrength, of the patient, will often leave him in a worfe condition than it found him. That this is frequently the cafe with regard to the more active mineral waters, every perfon conversant in these matters will readily allow.

STRONG ftimulants applied to the stomach and bowels for a length of time, must tend to weaken and deftroy their energy; and what ftimulants are more active than falt and fulphur, especially when these substances are intimately combined, and carried through the fystem by the penetrating medium of water? Those bowels must be strong indeed, which can withftand the daily operation of fuch active principles for months together, and not be injured. This, however, is the plan purfued by most of thofe

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## DRINKING MINERAL WATERS. [709

those who drink the purging mineral waters, and 'whose circumstances will permit them to continue long enough at those fashionable places of refort.

MANY people imagine, that every thing depends on the quantity of water taken, and that the more they drink they will the fooner get well. This is an egregious error; for, while the unhappy patient thinks he is by this means eradicating his diforder, he is often, in fact, undermining the powers of life, and ruining his conftitution. Indeed nothing can do this fo effectually as weakening the powers of digeftion by the improper application of ftrong ftimulants. The very effence of health depends on the digeftive organs performing their due functions, and the moft tedious maladies are all connected with indigeftion.

DRINKING the water in too great quantity, not only injures the bowels and occasions indigestion, but generally defeats the intention for which it is taken. The difeases for the cure of which mineral waters are chiefly celebrated, are mostly of the chronic kind; and it is well known that such difeases can only be cured by the flow operation of alteratives, or such medicines as act by inducing a gradual change in the habit. This requires length of time, and never can be effected by medicines which run off by stool, and only operate on the first passages.

THOSE who wish for the cure of any obstinate imalady from the mineral waters, ought to take them in such a manner as hardly to produce any reffect whatever on the bowels. With this view a [Yy] 3 half-

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half-pint glafs may be drank at bed-time \*, and the fame quantity an hour before breakfaft, dinner, and fupper. The quantity, however, muft vary according to circumftances. Even the quantity mentioned above will purge fome perfons, while others will drink twice as much without being in the leaft moved by it. Its operation on the bowels is the only ftandard for ufing the water as an alterative. No more ought to be taken than barely to move the body, and it may always be carried to this length, provided it goes off by the other emunctories, and does not occafion a chilnefs, or flatulency in the ftomach or bowels. When the water is intended to purge, the quantity mentioned above may be all taken before breakfaft.

I WOULD not only caution patients who drink the purging mineral waters over-night, to avoid heavy fuppers, but alfo from eating heavy meals at any time. The ftimulus of water, impregnated with falts, feems to create a falfe appetite. I have feen a delicate perfon, after drinking the Harrowgate waters of a morning, eat a breakfaft fufficient to have ferved two ploughmen, devour a plentiful dinner of fifh and flefh, and to crown all, eat fuch a fupper as might have fatisfied a hungry porter. All this

\* When I fpeak of drinking a glafs of the water over-night, I muft beg leave to caution those who follow this plan against eating heavy suppers. 'The late Dr. Daltry of York, who was the first that brought the Harrowgate-waters into repute, used to advise his patients to drink a glass before they went to bed; the confequence of which was, that having eat a flesh supper, and the water operating in the night, they were often tormented with gripes, and obliged to call for medical affistance.

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indeed the ftomach feemed to crave, but this craving had better remain not quite fatisfied, than that the ftomach fhould be loaded with what exceeds its powers. To ftarve patients was never my plan, but I am clearly of opinion, that, in the ufe of all the purging mineral waters, a light and rather diluting diet is the most proper; and that no perfon, during fuch a course, ought to eat to the full extent of what his appetite craves.

To promote the operation of mineral waters, and to carry them through the fystem, exercise is indifpenfably neceffary. This may be taken in any manner that is most agreeable to the patient, but he ought never to carry it to excels. The best kinds of exercise are those connected with amusement. Every thing that tends to exhilarate the fpirits, not only promotes the operation of the waters, but acts as a medicine. All who refort to the mineral waters ought therefore to leave every care behind, to mix with the company, and to make themfelves as cheerful and happy as poffible. From this conduct, affifted by the free and wholefome air of those fashionable places of refort, and alfo the regular and early hours which are usually kept, the patient often receives-more benefit than from ufinge the waters.

But the greatest errors in drinking the purging mineral waters arise from their being used in cases where they are absolutely improper, and contrary to the nature of the disease. When people hear of a wonderful cure having been performed by some mineral water, they immediately  $[Yy]_4$ 

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conclude that it will cure every thing, and accordingly fwallow it down, when they might as well take poifon. Patients ought to be well informed, before they begin to drink the more active kinds of mineral waters, of the propriety of the courfe, and fhould never perfift in ufing them when they are found to aggravate the diforder.

In all cafes where purging is indicated, the faline mineral waters will be found to fulfil this intention better than any other medicine. Their operation, if taken in proper quantity, is generally mild; and they are neither found to irritate the nerves, nor debilitate the patient, fo much as the other purgatives.

As a purgative, thefe waters are chiefly recommended in difeafes of the firft paffages, accompanied with, or proceeding from, inactivity of the ftomach and bowels, acidity, indigeftion, vitiated bile, worms, putrid fordes, the piles, and jaundice. In most cafes of this kind, they are the best medicines that can be administered. But when used with this view, it is fufficient to take them twice, or at most three times a week, fo as to move the body three or four times; and it will be proper to continue this course for a few weeks.

But the operation of the more active mineral waters is not confined to the first passages. They often promote the discharge of urine, and not unfrequently increase the perspiration. This shews that they are capable of penetrating into every part of the body, and of stimulating the whole system. Hence arises their efficacy in removing the most obstinate

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obstinate of all diforders, obstructions of the glandular and lymphatic system. Under this class is comprehended the scrofula or King's evil, indolent tumours, obstructions of the liver, spleen, kidnies, and mesenteric glands. When these great purposes are to be effected, the waters must be used in the gradual manner mentioned above, and persisted in for a length of time. It will be proper, however, now and then to discontinue their use for a few days.

THE next great class of difeases where mineral waters are found to be beneficial, are those of the fkin, as the itch, fcab, tetters, ringworms, fcaly eruptions, leprofies, blotches, foul ulcers, &c. Though these may feem fuperficial, yet they are often the most obstinate which the physician has to encounter, and not unfrequently fet his skill at defiance: But they will fometimes yield to the application of mineral waters for a fufficient length of time, and in most cases at least these waters deferve a trial. The faline fulphureous waters, fuch as those of Moffat in Scotland, and Harrowgate in England, are the most likely to fucceed in difeases of the fkin; but for this purpofe it will be neceffary not only to drink the waters, but likewife to ufe them externally.

To enumerate more particularly the qualities of the different mineral waters, to fpecify those difeases in which they are respectively indicated, and to point out their proper modes of application, would be an useful, and by no means a disagreeable employment; but as the limits necessarily preferibed

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prefcribed to thefe remarks will not allow me to treat the fubject more at length, I shall conclude by observing, that whenever the mineral waters are found to exhaust the strength, depress the spirits, take away the appetite, excite severs, distend the bowels, occasion or increase a cough, or where there is reason to suspect an ulcer of the lungs, they ought to be discontinued.

\*\*\* Since the preceding Obfervations have been fent to the Prefs, a circumftance has occurred, which affords the ftrongeft proof that could be given, of the danger of plunging at random into cold water. When I heard of the celebrated Mr. Colman's illnefs, and that it had happened at Margate, I immediately fulpected the caufe, and mentioned my fulpicion to fome medical friends; but as none of them could inform me' concerning the real circumftances of his cafe, I fhould have taken no notice of it, had not the following Letter in the London Chronicle ftruck my attention.

To the PRINTER.

"SIR,

"Having feen in your own and other London papers, ferious accounts of Mr. Colman's illnefs, I, who have attended him during the whole time, think it but juffice to him and his many friends, to give you a plain and true account of his cafe and prefent fituation.

" Mr. Colman's diforder was a combination of the gout and palfy, the laft of which was occafioned by his unadvifedly bathing in the fea at an improper period, which ftruck in the gout; the confequences, as might be expected, foon became very ferious, and his fituation extremely dangerous, &c.

(Signed) JOHN SILVER, Surgeon."

MARGATE, Nov. 5, 1785.

# APPENDIX:

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#### CONTAINING

A Lift of Simples and of fuch Medicinal Preparations as ought to be kept in Readiness for private Practice.

The Method of preparing and compounding fuch Medicines as are recommended in the former Part of the Book, with the Addition of feveral others of a fimilar Nature.

Remarks on the Dofes, Ufes, and Manner of applying the different Preparations.

Medicamentorum varietas ignorantiæ filia est. BACON.

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# INTRODUCTION.

I GNORANCE and fuperstition have attributed extraordidinary medical virtues to almost every production of nature. That fuch virtues were often imaginary, time and experience have fufficiently shewn. Physicians, however, from a veneration for antiquity, still retain in their lists of medicine many things which owe their reputation entirely to the superstition and credulity of our ancestors.

THE inftruments of medicine will always be multiplied, in proportion to men's ignorance of the nature and caufe of difeafes: when these are sufficiently understood, the method of cure will be simple and obvious.

IGNORANCE of the real nature and permanent properties of those substances employed in the cure of diseases, is another reason why they have been so greatly multiplied. Phyficians thought they could effect by a number of ingredients, what could not be done by any one of them. Hence arose those amazing farragos which have so long disgraced the medical art, and which were esteemed powerful in proportion to the number of simples that entered their composition.

THE great variety of forms into which almost every article of medicine has been manufactured, affords another proof of the imperfection of the medical art. A drug which is perhaps most efficacious in the fimplest form in which it can be administered, has been nevertheless ferved up in so many different shapes, that one would be induced to think the whole art of physic lay in exhibiting medicine under as many various forms as possible.

DIFFERENT forms of medicine, no doubt, have their ufe; but they ought never to be wantonly increased. They are by no means fo necessary as is generally imagined. A few grains of powdered rhubarb, jalap, or ipecacuanha, will actually actually perform all that can be done by the different preparations of thefe roots, and may alfo be exhibited in as fafe and agreeable a manner. The fame obfervation holds with regard to the Peruvian bark, and many other fimples of which the preparations are very numerous.

MULTIPLYING the ingredients of a medicine, not only renders it more expensive, but also less certain, both in its dofe and operation. Nor is this all. The compound, when kept, is apt to spoil, or acquire qualities of a different nature. When a medicine is rendered more safe, efficacious, or agreeable, by the addition of another, they ought, no doubt, to be joined: in all other cases, they are better kept as funder. The combination of medicines embarrasses the physician, and retards the progress of medical knowledge. It is impoffible to ascertain the precise effect of any one medicine, as long as it is combined with others, either of a fimilar or diffimilar nature.

IN the exhibition of medicine, regard fhould not only be had to fimplicity, but likewife to elegance. Patients feldom reap much benefit from things that are highly difagreeable to their fenfes. To tafte or fmell like a drug, is become a proverb; and to fay truth, there is too much ground for it. Indeed no art can take away the difagreeable tafte and flavour of fome drugs, without entirely defiroying their efficacy: it is poffible, however, to render many medicines lefs difguftful, and others even agreeable; an object highly deferving the attention of all who adminifter medicine.

THE defign of the following pages is to exhibit fuch a lift of drugs and medicines as may be neceffary for private practice. They are confiderably more numerous indeed than those recommended in the former part of the Book, but are fill greatly within the number contained in the most reformed dispensatories. The same medicine is feldom exhibited under different forms; and where different medicines answer nearly the same intention, there is commonly no more than one of them retained. Multiplying forms of medicine

medicine for the fame intention tends rather to bewilder than affift the young practitioner, and the experienced phylician can never be at a lofs to vary his preferiptions as occafion requires.

THE chemical and other difficult preparations are for the moft part omitted. All of them that are used by any private practitioner are not worth preparing. He will buy them much cheaper than he can make them. Great care however is neceffary to obtain them genuine. They are often adulterated, and ought never to be purchased unless from persons of known veracity. Such of them as are in common use are inferted in the lift of drugs and medicines. Their proper doses, and manner of application, are mentioned in the practical part of the Book, wherever they are prescribed.

SUCH articles of medicine as are to be found in the houfe or garden of almost every peafant, as barley, eggs, onions, &c. are likewise, for the most part, omitted. It is needless to swell a list of medicines with such things as can be obtained whenever they are wanted, and which spoil by being kept.

THE preparations made and fold by diffillers and confectioners are also generally left out. These people, by operating upon a larger plan, generally make things better, while it is in their power to afford them much cheaper, than they can be prepared by any private hand.

THE quantity ordered of every medicine is as fmall as could well be prepared, both to prevent unneceffary expence, and that the medicine might not fpoil by keeping. Almost every medicine fuffers by being kept, and should be used as foon after it has been prepared as possible. Even simple drugs are apt to spoil, and should therefore be laid in in small quantities: they either rot, are confumed by infects, or evaporate so as to lose their peculiar taste or flavour, and often become quite infignificant.

In the preparation of medicines, I have generally followed the most improved dispensatories; but have taken the liberty to differ from them wherever my own observations, or those

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of other practical writers, on whole judgment I could depend, függefted an improvement.

In feveral compositions, the ingredient on which the efficacy of the medicine principally depends is increased, while the auxiliaries, which are generally ordered in such trifling quantities as to be of no importance, are left out, or only such of them retained as are necessary to give the medicine a proper confistence, or the like.

The colouring ingredients are likewife for the moft part omitted. They increafe the bulk and price of the medicine; without adding any thing to its value. It would be well if they were never ufed at all. Medicines are often adulterated for the fake of a colour. Acrid and even poifonous fubftances are, for this purpofe, fometimes introduced into thofe medicines which ought to be moft bland and emollient. Ointment of elder, for example, is often mixed with verdegrife to give it a fine green colour, which entirely fruftrates the intention of that mild ointment. Thofe who wifh to obtain genuine medicines fhould pay no regard to their colour.

SOME regard is likewife paid to expence. Such ingredients as greatly increafe the price of any composition, without adding confiderably to its virtue, are generally either omitted, or fomewhat lefs expensive fubstituted in their place. Medicines are by no means powerful in proportion to their price. The cheapest are often the best; besides, they are the least apt to be adulterated, and are always most readily obtained.

WITH regard to the method of compounding medicines, I have generally followed that which feemed to be the moft fimple and natural, mentioning the different fteps of the procefs in the fame order in which they ought to be taken, without paying an implicit regard to the method of other difpenfatories.

FOR many of the remarks concerning the preparation, &c. of medicines, I have been obliged to the author of the New Difpensatory. The other observations are either such

as

# INTRODUCTION.

as have occurred to myfelf in practice, or have been fuggefted in the course of reading, by authors whose names I am not able diffinctly to recollect.

I HAVE followed the alphabetical order, both with regard to the fimples and preparations. A more scientific method would have been agreeable to fome perfons, but lefs ufeful to the generality of readers. The different classes of medicine have no great dependance upon one another; and, where they have, it is hard to fay which should stand first or laft; no doubt the fimple preparations ought to precede the more compound. But all the advantages arifing from this method of arrangement do not appear equal to that fingle one, of being able, on the first opening of the book, to find out any article, which, by the alphabetical order, is rendered quite easy.

THE dole of every medicine is mentioned wherever it appeared necessary. When this is omitted, it is to be underflood that the medicine may be used at difcretion. The dole mentioned is always for an adult, unless when the contrary is expressed. It is not an easy matter to proportion the doles of medicine exactly to the different ages, conftitutions, &c. of patients; but, happily for mankind, mathematical exactness here is by no means necessary.

SEVERAL attempts have been made to afcertain the proportional doles for the different ages and conftitutions of patients; but, after all that can be faid upon this subject, a great deal must be left to the judgment and skill of the perfon who administers the medicine. The following general proportions may be observed; but they are by no means intended for exact rules. A patient betwixt twenty and fourteen may take two thirds of the dofe ordered for an adult; from fourteen to nine, one-half; from nine to fix, onethird; from fix to four, one-fourth; from four to two, one-fixth; from two to one, a tenth; and below one, a twelfth.

DISPENSATORIES are ufually written in the Latin language. Even authors who write in English, generally give their

their prefcriptions in Latin: and fome of them fhew fo great an attachment to that language, as first to write their recipes in it, and afterwards translate them; while others, to compromise the matter, write the one half in Latin and the other in English. What peculiar charm a medical prefcription, when written in Latin, may have, I shall not pretend to fay; but have ventured to make use of the plainess English I could, and hope my prescriptions will succeed no worse for it.

N. B. THE Apothecary's weights, and the English wine measures, are used throughout the whole book, the different denominations of which will appear from the following Table:

> A pound contains twelve ounces. An ounce - - eight drachms. A drachm - - three fcruples. A fcruple - - twenty grains. A gallon contains eight pints. A pint - - fixteen ounces. An ounce - - eight drachms.

A spoonful is the measure of half an ounce.

ALIST

A LIST of SIMPLES, and of fuch MEDICI-NAL PREPARATIONS, as ought to be kept in readiness for private Practice.

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GARIC Alum Antimony, crude . \_\_\_\_\_ cinnabar of \_\_\_\_\_ fulphur of Ballam of Capivi ----- of Peru ----- of Tolu Bark, cafcarilla ---- cinnamon - Mezerion ----- Peruvian ----- Winter's, or canella alba Borax Calamine stone, levigated Caftor, Ruffian Caustic, common ----- Lunař Earth, Fuller's Japan Armenian bole French ditto Extracts of gentian . of hellebore, black - \_\_\_\_ of hemlock of jalap of liquorice of Peruvian bark ----- of poppies \_\_\_\_\_ of wormwood Flowers of camomile colt's foot ----- elder · \_\_\_\_ rofemary damaik rofes lFruits, almonds ·---- bitter apple .---- caffia fiftularis · Curaffao oranges figs, dried ----- French prunes Jamaica pepper

Fruits, Juniper berries nutmegs ----- tamarinds Gums, aloes ----- ammoniac, in tears ----- arabic ----- alafœtida ----- camphor ----- galbanum ----- gamboge ----- guaiacum kino kino ----- myrrh opium Hartshorn, calcined fhavings of Herbs, leffer centaury ----- peppermint fpearmint ----- penny-royal ----- favin ------ trefoil ----- uva urfi wormwood Lead, Litharge ----- white - fugar of Lemon-peel Mace Magnefia alba Manna Mercury, crude Æthiops mineral calomel ----- corrolive fublimate ----- red precipitate white ditto Mulk Oil, essential, of amber ------ of anife of cinnamon ----- of juniper of lemon-peel of peppermint 12.2 Oil, APPENDIX.

Oil, expressed, of almonds ----- of linfeed Oil of olives, or Florence oil ----- of palms — of turpentine Orange-peel Oyster shells prepared Poppy-heads Refins, benzoin ------ flowers of ----- Burgundy pitch ----- dragon's blood ----- franckincense ----- liquid ftorax ----- white, or rofin fcammony Roots, birthwort ----- calamus aromaticus ----- contrayerva ----- garlic ----- gentian ----- ginger ----- hellebore, black, white ----- jalap ----- ipecacuanha ----- lily, white ----- liquorice ----- marshmallow ----- mezerion ----- rhubarb ----- farfaparilla ---- feneka ----- fquills ----- tormentil ----- turmeric ----- Virginian fnake ----- wild valerian \_\_\_\_ zedoary Saffron Sal ammoniac, crude volatile Salt, Epfom - of Glauber ----- of hartfhorn ----- nitre, purified, or prunel ----- Polychreft ----- Rochel ----- of tartar

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Seeds, anife ----- carraway ----- cardamom ---- coriander ---- cummin ----- multard ---- fweet fennel ----- wild carrot Senna Spanish flies Sperma ceti Spirits, æthereal, or æther of hartshorn of lavender, compound ----- of nitre ----- ditto dulcified ----- of fal ammoniac ----- of fea falt ----- of vinegar ----- of vitriol ----- of wine rectified ----- volatile aromatic Steel, filings of ----- ruft of, prepared ----- foluble falt of Sulphur vivum ----- ballam of ------ flowers of Tar - Barbadoes Tartar, cream of ----- emetic ----- foluble ----- vitriolated Tin prepared Tutty, levigated Turpentine, Venice Verdegrife Vitriol, green ----- blue white Wax, white yellow Woods, guaiacum ----- logwood \_\_\_\_\_ faffafras ------ faunders, red Zinc, flowers of

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# [ 709 ]

# MEDICINAL PREPARATIONS.

### BALSAMS.

THE subject of this section is not the natural balsams, but certain compositions, which, from their being supposed to posses balsamic qualities, generally go by that name.

This class of medicines was formerly very numerous, and held in great esteem: modern practice, however, has justly reduced it to a very narrow compass.

## Anodyne Balfam.

Take of white Spanish soap, one ounce; opium, unprepared, two drachms; rectified spirit of wine, nine ounces. Digest them together in a gentle heat for three days; then strain off the liquor, and add to it three drachms of camphor.

This balfam, as its title expresses, is intended to ease pain. It is of fervice in violent strains and rheumatic complaints, when not attended with inflammation. It must be rubbed with a warm hand on the part affected; or a linen rag moistened with it may be applied to the part, and renewed every third or fourth hour, till the pain abates. If the opium is left out, this will be the faponacious Balfam.

# Locatelli's Balfam

Take of olive oil, one pint; Strafburg turpentine and yellow wax, of each half a pound; red faunders, fix drachms. Melt the wax with fome part of the oil over a gentle fire; then adding the remaining part of the oil and the turpentine; afterwards mix in the faunders, previoufly reduced to a powder, and keep them flirring together till the balfam is cold.

This ba'fam is recommended in erofions of the inteffines, the dyfentery, hæmorrhages, internal bruifes, and in fome complaints of the breaft. Outwardly it is used for healing and cleanfing wounds and ulcers. The dose, when taken internally, is from two scruples to two drachms.

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#### The vulnerary Balfam.

Take of benzoin, powdered, three ounces; balfam of Peru, two ounces; hepatic aloes, in powder, half an ounce; rectified fpirit of wine, two pints. Digest them in a gentle heat for three days, and then strain the balfam.

This balfam, or rather tincture, is applied externally to heal recent wounds and bruifes. It is likewife employed internally to remove coughs, afthmas, and other complaints of the breaft. It is faid to eafe the colic, cleanfe the kidnies, and to heal internal ulcers, &c.

The dofe is from twenty to fixty drops.

This, though a medicine of fome value, does not deferve the extravagant encomiums which have been bestowed on it. It has been celebrated under the different names of The Commander's Balfam, Persian Balfam, Balfam of Berne, Wade's Balfam, Friar's Balfam, Jefuit's Drops, Turlington's Drops, &c.

### BOLUSES.

A S bolufes are intended for immediate ufe, volatile falts and other ingredients improper for being kept, are admitted into their composition. They are generally composed of powders, with a proper quantity of fyrup, conferve, or mucilage. The lighter powders are commonly made up with fyrup, and the more ponderous, as mercury, &c. with conferve; but those of the lighter kind would be more conveniently made up with mucilage, as it increases their bulk less than the other additions, and likewise occasions the medicine to pass down more eafily.

#### Astringent Bolus.

Take of alum, in powder, fifteen grains; gum kino, five grains; fyrup, a fufficient quantity to make a bolus.

In an exceffive flow of the *menses*, and other violent difcharges of blood, proceeding from relaxation, this bolus may be given every four or five hours, till the discharge abates.

Diaphoretic

#### BOLUSES.

#### Diaphoretic Bolus.

Take of gum guaiacum, in powder, ten grains; flowers of fulphur and cream of tartar, of each one fcruple; fimple fyrup, a fufficient quantity.

In rheumatic complaints, and diforders of the skin, this bolus may be taken twice a day. It will also be of service in the inflammatory quinsey.

#### Mercurial Bolus.

Take of calomel, fix grains; conferve of roles, half a drachm. Make a bolus.

Where mercury is neceffary, this bolus may be taken twice or thrice a week. It may be taken over night; and if it does not operate, a few grains of jalap will be proper next day to carry it off.

#### Bolus of Rhubarb and Mercury.

Take of the best rhubarb, in powder, from a scruple to half a drachm; of calomel, from four to fix grains; fimple fyrup, a sufficient quantity to make a bolus.

This is a proper purge in hypochondriac conflications; but its principal intention is to expel worms. Where a flronger purge is neceffary, jalap may be used instead of the rhubarb.

#### Pettoral Bolus.

Take of sperma ceti, a scruple; gum ammoniac, ten grains; salt of hartshorn, six grains; simple syrup, as much as will make them into a bolus.

This bolus is given in colds and coughs of long ftanding, afthmas, and beginning confumptions of the lungs. It is generally proper to bleed the patient before he begins to use it.

# · Purging Bolus.

Take of jalap in powder, a fcruple; cream of tartar, two fcruples. Let them be rubbed together, and formed into a bolus, with fimple fyrup.

Where a mild purge is wanted, this will answer the purpole very well. If a stronger dose is necessary, the jalap may be increased to half a drachm or upwards.

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CATA-

# CATAPLASMS AND SINAPISMS.

CATAPLASMS posses few or no virtues superior to a poultice, which may be so made, as, in most cases, to supply their place. They are chiefly intended either to act as discutients, or to promote suppuration; and as they may be of service in some cases, we shall give a specimen of each kind.

#### Discutient Cataplasm.

Take of barley-meal, fix ounces; fresh hemlock leaves bruised, two ounces; vinegar, a sufficient quantity. Boil the meal and hemlock in the vinegar for a little, and then add two drachms of the sugar of lead.

### Ripening Cataplasm.

Take of white lily root, four ounces; fat figs and raw onions, bruifed, of each one ounce; yellow bafilicum ointment, two ounces; gum galbanum, half an ounce; linfeed meal, as much as neceflary. Boil the roots along with the figs in a fufficient quantity of water; then bruife and add to them the other ingredients, fo as to form the whole into a foft cataplafm. The galbanum muft be previoufly diffolved with the yolk of an egg.

Where it is neceffary to promote fuppuration, this cataplasm may be used by those who chuse to be at the trouble and expence of making it. For my part, I have never found any application more proper for this purpose than a poultice of bread and milk, with a sufficient quantity of either boiled or raw onion in it, and softened with oil or fresh butter.

#### Sinapifms.

Sinapifms are employed to recal the blood and fpirits to a weak part, as in the palfy and atrophy. They are alfo of fervice in deep feated pains, as the fciatica, &c. When the gout feizes the head or the ftomach, they are applied to the feet to bring the diforder to thefe parts. They are likewife applied to the patient's folls in the low ftate of fevers. They

They fhould not be fuffered to lie on, however, till they have raifed blifters, but till the parts become red, and will continue fo when preffed with the finger.

The finapifm is only a poultice made with vinegar inftead of milk, and rendered warm and flimulating by the addition of muftard, horfe-radifh, or garlic.

The common finapism is made by taking crumb of bread and mustard-feed in powder, of each equal quantities; firong vinegar, as much as is fufficient, and mixing them fo as to make a poultice.

When finapifms of a more ftimulating nature are wanted, a little bruifed garlie may be added to the above.

#### CLYSTERS.

THIS class of medicines is of more importance than is generally imagined. Clysters ferve, not only to evacuate the contents of the belly, but alfo to convey very active medicines into the fystem. Opium, for example, may be administered in this way when it will not fit upon the stomach, and alfo in larger doses than at any time it can be taken by the mouth. The Peruvian bark may likewise be, with good effect, administered in form of clyster to perfons who cannot take it by the mouth.

A fimple clyfter can feldom do hurt, and there are many cafes where it may do much good. A clyfter even of warm water, by ferving as a fomentation to the parts, may be of confiderable fervice in inflammations of the bladder, and the lower inteffines, &c.

Some fubstances, as the fmoke of tobacco, may be thrown into the bowels in this way, which cannot, by any other means whatever. This may be eafily effected by means of a pair of hand-bellows, with an apparatus fitted to them for that purpofe.

Nor is the use of clysters confined to medicines. Aliment may also be conveyed in this way. Persons unable to swallow, have been, for a confiderable time, supported by clysters.

Emollient

#### Emollient Clyster.

• Take of linfeed tea and new milk, each fix ounces. Mix them.

If fifty or fixty drops of laudanum be added to this, it will fupply the place of the Anodyne Clyfler.

#### Laxative Clyster.

Take of milk and water, each fix ounces; fweet oil or fresh butter, and brown sugar, of each two ounces. Mix them.

If an ounce of Glauber's falt, or two table-fpoonfuls of common falt, be added to this, it will be the *Purging Clyfter*.

#### Carminative Clyster.

Take of camomile flowers, an ounce; anife-feeds, half an ounce. Boil in a pint and a half of water to one pint.

In hyfteric and hypochondriac complaints this may be administered instead of the *Fætid Clyster*, the smell of which is so difagreeable to most patients.

#### Oily Clyster.

To four ounces of the infusion of camomile flowers, add an equal quantity of Florence oil.

This clyfter is beneficial in bringing off the fmall worms lodged in the lower parts of the alimentary canal. When given to children the quantity muft be proportionably leffened.

#### Starch Clyster.

Take jelly of starch, four ounces; linseed oil, half an ounce. Liquify the jelly over a gentle fire, and then mix in the oil.

In the dyfentery or bloody flux, this clyfter may be adminiftered after every loofe ftool, to heal the ulcerated inteffines and blunt the fharpnefs of corroding humours. Forty or fifty drops of laudanum may be occafionally added; in which cafe, it will generally fupply the place of the Aftringent Clyfter.

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Turpentins

### Turpentine Clyster.

Take of common decoction, ten ounces; Venice turpentine, diffolved with the yolk of an egg, half an ounce; Florence oil, one ounce. Mix them.

This diuretic clyfter is proper in obftructions of the urinary paffages, and in cholicky complaints, proceeding from gravel.

#### Vinegar Clyster.

This clyfter is made by mixing three ounces of vinegar with five of water-gruel.

It anfwers all the purpofes of a common clyfler, with the peculiar advantage of being proper either in inflammatory or putrid diforders, especially in the latter.

We think it unneceffary to give more examples of this clafs of medicines, as ingredients adapted to any particular intention may be occafionally added to one or other of the above forms.

### COLLYRIA, or EYE-WATERS.

E YE-WATERS have been multiplied without number, almost every perfon pretending to be posseful of fome fecret preparation for the cure of fore eyes. I have examined many of them, and find that they are pretty much alike, the basis of most of them being either alum, vitriol, or lead. Their effects evidently are, to brace and reftore the tone of the parts; hence they are principally of fervice in shight inflammations, and in that relaxed state of the parts which is induced by obstinate ones.

Camphor is commonly added to these compositions; but as it feldom incorporates properly with the water, it can be of little use. Boles, and other earthy substances, as they do not diffolve in water, are likewise unfit for this purpose.

## Collyrium of Alum.

Take of alum, half a drachm; agitate it well together with the white of one egg.

This

This is the collyrium of Riverius. It is used in inflammation of the eyes, to allay heat, and refirain the flux of humours. It must be spread upon linen, and applied to the eyes; but should not be kept on above three or sour hours at a time.

#### Vitriolic Collyrium.

Take of white vitriol, half a drachm; rofe-water, fix ounces. Diffolve the vitriol in the water, and filter the liquor.

This, though fimple, is perhaps equal in virtue to most of the celebrated collyria. It is an useful application in weak, watery, and inflamed eyes. Though the flighter inflammations will generally yield to it, yet in those of a more obstinate nature the affistance of bleeding and bliftering will often be neceffary.

When a firong aftringent is judged proper, a double or triple quantity of the vitriol may be used. I have seen a forlution of four times the strength of the above used with manifest advantage.

#### Collyrium of Lead.

Take sugar of lead and crude sal ammoniac, of each four grains. Diffolve them in eight ounces of common water.

Forty or fifty drops of laudanum may be occafionally added to this collyrium.

Those who chuse may substitute instead of this the collyrium of lead recommended by Goulard; which is made by putting twenty-five drops of his *Extract of Saturn* to eight ounces of water, and adding a tea-spoonful of brandy.

Indeed, common water and brandy, without any other addition, will in many cafes anfwer very well as a collyrium. An ounce of the latter may be added to five or fix ounces of the former; and the eyes, if weak, bathed with it night and morning.

## CONFECTIONS.

ONFECTIONS containing above fixty ingredients are still to be found in fome of the most reformed dispensatories. As most of their intentions, however, may be more certainly,

# CONSERVES AND PRESERVES. 717

tainly, and as effectually anfwered by a few glaffes of wine or grains of opium, we fhall pafs over this clafs of medicines very flightly.

## Japonic Confection.

Take of Japan earth, three ounces; tormentil root, nutmeg, olibanum, of each two ounces; opium diffolved in a fufficient quantity of Lifbon wine, a drachm and a half; fimple fyrup and conferve of rofes, of each fourteen ounces. Mix and make them into an electuary.

This fupplics the place of the Diafcordium.

The dole of this electuary is from a fcruple to a drachm.

# CONSERVES AND PRESERVES.

**E** VERY Apothecary's fhop was formerly fo full of thefe preparations, that it might have paffed for a confectioner's warehoufe. They poffefs very few medicinal properties, and may rather be claffed among fweatmeats than medicines. They are fometimes, however, of ufe, for reducing into bolufes or pills fome of the more ponderous powders, as the preparations of iron, mercury, and tin.

Conferves are compositions of fresh vegetables and sugar, beaten together into an uniform mass. In making these preparations, the leaves of vegetables must be freed from their stalks; the flowers from their cups, and the yellow part of orange-peel taken off with a rasp. They are then to be pounded in a marble mortar, with a wooden pessel, into a smooth mass; after which, thrice their weight of fine fugar is commonly added by degrees, and the beating continued till they are uniformly mixed; but the conferve will be better if only twice its weight of fugar be added.

Those who prepare large quantities of conserve generally reduce the vegetables to a pulp by the means of a mill, and afterwards beat them up with the fugar.

# Conserve of Red Roses.

Take a pound of red role buds, cleared of their heels; beat them well in a mortar, and, adding by degrees two pounds

## APPENDIX.

pounds of double-refined sugar, in powder, make a conferve.

After the fame manner are prepared the conferves of orange-peel, rofemary flowers, fea-wormwood, of the leaves of wood-forrel, &c.

The conferve of rofes is one of the moft agreeable and ufeful preparations belonging to this clafs. A drachm or two of it, diffolved in warm milk, is ordered to be given as a gentle reftringent in weaknefs of the ftomach, and likewife in phthifical coughs, and fpitting of blood. To have any confiderable effects, however, it must be taken in larger quantities.

#### Conferve of Sloes.

This may be made by boiling the floes gently in water, being careful to take them out before they burft; afterwards expressing the juice, and beating it up with three times its weight of fine fugar.

In relaxations of the *uvula* and glands of the throat, this makes an excellent gargle, and may be used at difcretion.

Preferves are made by steeping or boiling fresh vegetables first in water, and afterwards in fyrup, or a solution of sugar. The subject is either preferved moist in the syrup, or taken out and dried, that the sugar may candy upon it. The last is the most usual method.

#### Candied Orange Peel.

Soak Seville orange-peel in feveral waters, till it lofes its bitternefs; then boil it in a folution of double-refined fugar in water, till it becomes tender and transparent.

Candied lemon-peel is prepared in the fame manner.

It is needless to add more of these preparations, as they belong rather to the art of the confectioner than that of the apothecary.

## DECOCTIONS.

WATER readily extracts the gummy and faline parts of vegetables; and though its action is chiefly confined to thefe, yet the refinous and oily being intimately blended

## DECOCTIONS.

blended with the gummy and faline, are in great part taken up along with them. Hence watery decoctions and infufions of vegetables conflitute a large, and not unufeful, clafs of medicines. Although moft vegetables yield their virtues to water, as well by infufion as decoction, yet the latter is often neceffary, as it faves time, and does in a few minutes what the other would require hours, and fometimes days, to effect.

The medicines of this class are all intended for immediate use.

### Decostion of Althæa.

Take of the roots of marsh-mallows, moderately dried, three ounces; raifins of the sun, one ounce; water, three pints.

Boil the ingredients in the water till one-third of it is confumed; afterwards firain the decoction and let it fland for fome time to fettle. If the roots be thoroughly dried, they must be boiled till one half the water be confumed.

In coughs and fharp defluctions upon the lungs, this decoction may be used for ordinary drink.

#### The Common Decostion.

Take of camomile flowers, one ounce; elder flowers, and fweet fennel feeds, of each half an ounce; water, two quarts. Boil them for a little, and then ftrain the decoction.

A medicine equally good may be prepared by infufing the ingredients for fome hours in boiling water.

This decoction is chiefly intended as the bafis of clyfters, to which other ingredients may be occafionally added. It will likewife ferve as a common fomentation, fpirit of wine or other things being added in fuch quantity as the cafe may require.

#### Decostion of Logwood.

Boil three ounces of the fhavings, or chips, of logwood, in four pits of water, till one half the liquor is wafted. Two or three ounces of fimple cinnamon-water may be added to this decoction. In fluxes of the belly, where the ftronger aftringents are improper, a tea-cupful of this decochion may be taken with advantage three or four times a-day.

#### Decoction of the Bark.

Boil an ounce of the Peruvian bark, grofsly powdered in a pint and a half of water to one pint; then firain the decoction. If a tea-fpoonful of the weak fpirit of vitriol be added to this medicine, it will render it both more agreeable and efficacious.

#### Compound Decostion of the Bark:

Take of Peruvian bark and Virginian inake-root, großly powdered, each three drachms. Boil them in a pint of water to one half. To the firained liquor add an ounce and a half of aromatic water.

Sir John Pringle recommends this as a proper medicine towards the decline of malignant fevers, when the pulse is low, the voice weak, and the head affected with a stupor but with little delirium.

The dole is four fpoonfuls every fourth or fixth hour.

### Decoction of Sarsaparilla.

Take of fresh farsaparilla root, fliced and bruised, two ounces; shavings of guaiacum wood, one ounce. Boil over a flow fire, in three quarts of water, to one; adding towards the end, half an ounce of safafras wood, and three drachms of liquorice. Strain the decoction.

This may either be employed as an affiftant to a courfe of mercurial alteratives, or taken after the mercury has been used for fome time. It ftrengthens the ftomach, and reftores flefh and vigour to habits emaciated by the venereal disease. It may also be taken in the rheumatism, and cutaneous disorders proceeding from foulness of the blood and juices. For all these intentions it is greatly preferable to the Decoclion of Woods.

This decoction may be taken, from a pint and a half to two quarts in the day.

The

# DECOCTIONS.

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The following decoclion is faid to be fimilar to that used by *Kennedy*, in the cure of the venereal disease, and may fupply the place of the Lisbon died drink:

Take of farfaparilla, two ounces; liquorice and mezerion root, of each half an ounce; fhavings of guaiacum and faffafras wood, of each one ounce; crude antimony, powdered, an ounce and a half. Infufe thefe ingredients in eight pints of boiling water for twenty-four hours, then boil them till one-half of the water is confumed; afterwards ftrain the decoction.

This decoction may be used in the fame manner as the preceding.

#### Decoction of Seneka.

Take of feneka ráttle-snzke roót, one ounce: water, a pint and a half. Boil to one pint, and strain.

This decoction is recommended in the pleurify, dropfy, rheumatifm, and fome obstinate diforders of the skin. The dose is two ounces, three or four times a-day, or oftener, if the stomach will bear it.

#### White Decoction.

Take of the purest chalk, in powder, two ounces; gum arabic, half an ounce; water, three pints. Boil to one quart, and strain the decoction.

This is a proper drink in acute difeafes attended with, or inclining to, a loofenels, and where acidities abound in the ftomach or bowels. It is peculiarly proper for children when afflicted with fournels of the ftomach, and for perfons who are fubject to the heartburn. It may be fweetened withfugar, as it is ufed, and two or three ounces of fimple cinnamon-water added to it.

An ounce of powdered chalk, mixed with two pints of water, will occafionally fupply the place of this decoction, and also of the chalk julep.

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### DRAUGHTS.

# DRAUGHTS.

THIS is a proper form for exhibiting fuch medicines as are intended to operate immediately, and which do not need to be frequently repeated; as purges, vomits, and a few others, which are to be taken at one dofe. Where a medicine requires to be used for any length of time, it is better to make up a larger quantity of it at once, which faves both trouble and expence.

#### Anodyne Draught.

Take of liquid laudanum, twenty-five drops; fimple cinnamon-water, an ounce; common fyrup, two drachms. Mix them.

In exceffive pain, where bleeding is not neceffary, and in great reftleffnefs, this composing draught may be taken and repeated occasionally.

#### Diuretic Draught.

Take of the diuretic falt, two fcruples; fyrup of poppies, two drachms; fimple cinnamon-water and common water, of each an ounce.

This draught is of fervice in an obstruction or deficiency of urine.

### Purging Draughts.

Take of manna, an ounce; soluble tartar, or Rochel falt, from three to four drachms. Diffolve in three ounces of boiling water; to which add Jamaica pepper-water, half an ounce.

As manna fometimes will not fit upon the flomach, an ounce or ten drachms of the bitter purging falts, diffolved in four ounces of water, may be taken inftead of the above.

Those who cannot take falts may use the following draught:

Take of jalap in powder, a fcruple; common water an ounce; aromatic tincture, fix drachms. Rub the jalap with twice its weight of fugar, and add to it the other ingredients.

Sweating

# Sweating Draught:

Take spirit of Mindererus, two ounces; falt of hartshorn, five grains; simple cinnamon-water; and syrup of poppies, of each half an ounce. Make them into a draught.

In recent colus, and rheumatic complaints, this draught is of fervice. To promote its effects, however, the patient ought to drink freely of warm water-gruel, or of fome other weak diluting liquor.

## Vomiting Draughts.

Take of ipecacuanha, in powder, a scruple; water, an ounce; simple syrup, a drachm. Mix them.

Perfons who require a stronger vomit may add to the above half a grain, or a grain, of emetic tartar.

Those who do not chuse the powder, may take ten drachms of the ipecacuanha wine; or half an ounce of the wine, and an equal quantity of the sytup of squills.

# ELECTUARIES:

E LECTUARIES are generally composed of the lighter powders, mixed with fyrup, honey, conferve, or mucilage, into fuch a confistence that the powders may neither separate by keeping, not the mass prove too stiff for swallowing. They receive chiefly the milder alterative medicines, and fuch as are not ungrateful to the palate.

Aftringent electuaries, and fuch as have pulps of fruit in them, fhould be prepared only in fmall quantities; as aftrinigent medicines lofe their virtues by being kept in this form; rand the pulps of fruits are apt to ferment.

For the extraction of pulps it will be neceffary to boil unripe fruits, and ripe ones if they are dried, in a fmall quantity of water till they become foft. The pulp is then to be preffed out through a flrong hair fieve, or thin cloth, and afterwards boiled to a due confiftence, in an earthen veffel, over a gentle fire, taking care to prevent the matter from burning by continually flirring it. The pulps of fruits that are both ripe and frefh may be preffed out without any previous boiling.

3 A 2

Lenitive

## Lenitive Electuary.

Take of fenna, in fine powder, eight ounces; coriander feed, also in powder, four ounces; pulp of tamarinds and of French prunes, each a pound. Mix the pulps and powders together, and with 'a fufficient quantity of fimple fyrup reduce the whole into an clectuary.

A tea-fpoonful of this electuary, taken two or three times a-day, generally proves an agreeable laxative. It likewife ferves as a convenient vehicle for exhibiting more active medicines, as jalaps, fcammony, and fuch like.

This may fupply the place of the electuary of Cassia.

# Electuary for the Dysentery.

Take of the Japonic confection, two ounces: Locatelli's balfam, one ounce; rhubarb in powder, half an ounce; fyrup of marshmallows, enough to make an electuary.

It is often dangerous in dyfenteries to give opiates and aftringents, without interpoling purgatives. The purgative is here joined with these ingredients, which renders this a very safe and useful medicine for the purposes expressed in the title.

About the bulk of a nutmeg fhould be taken twice or thrice a day, as the fymptoms and constitution may require.

# Electuary for the Epilepsy.

Take of Peruvian bark, in powder, an ounce; of powdered tin, and wild valerian root, each half an ounce; fimple fyrup, enough to make an electuary.

Dr. Mead directs a drachm of an electuary fimilar to this to be taken evening and morning, in the epilepfy, for the fpace of three months. It will be proper, however, to difcontinue the use of it for a few days every now and then. I have added the powdered tin, because the epilepsy often proceeds from worms.

# Electuary for the Gonorrbaa.

Take of lenitive electuary, three ounces; jalap and rhubarb, in powder, of each two drachms; nitre, half an ounce; fimple fyrup, enough to make an electuary.

During

## ELECTUARIES.

During the inflammation and tenfion of the urinary paffages, which accompany a virulent gonorrhœa, this cooling laxative may be used with advantage.

The dofe is a drachm, or about the bulk of a nutmeg, two or three times a-day; more or lefs, as may be necessary to keep the body gently open.

An electuary made of cream of tartar and fimple fyrup will occafionally fupply the place of this.

After the inflammation is gone off, the following electuary may be used:

Take of lenitive electuary, two ounces, balfam of capivi, one ounce; gum guaiacum and rhubarb, in powder, of each two drachms; fimple fyrup, enough to make an electuary. The dofe is the fame as of the preceding.

#### Electuary of the Bark.

Take of Peruvian bark, in powder, three ounces; cafcarilla, half an ounce; fyrup of ginger, enough to make an electuary.

In the cure of obflinate intermitting fevers, the bark is affifted by the cafcarilla. In hectic habits, however, it will be better to leave out the cafcarilla, and put three drachms of crude fal ammoniac in its flead.

## Electuary for the Piles.

Take flowers of fulphur, one punce; cream of tartar, half an ounce; treacle, a fufficient quantity to form an electuary.

A tea-fpoonful of this may be taken three or four times a-day.

#### Electuary for the Palfy.

Take of powdered mustard-seed, and conferve of roles, each an ounce; syrup of ginger, enough to make an electuary.

A tea-fpoonful of this may be taken three or four times a-day.

#### Electuary for the Rheumatism.

Take of conferve of rofes, two ounces; cinnabar of antimony, levigated, an ounce and a half; gum guaiacum, in 3 A 3 powder,

powder, an ounce; fyrup of ginger, a sufficient quantity to make an electuary.

In obstinate rheumatisms, which are not accompanied with a fever, a tea-spoonful of this electuary may be taken twice a-day with confiderable advantage,

#### EMULSIONS,

E MULSIONS, befide their use as medicines, are also proper vehicles for certain subfrances, which could not other. wife be conveniently taken in a liquid form. Thus camphor, triturated with almonds, readily unites with water into an emulsion. Pure oils, balfams, refins, and other similar subfrances, are likewise rendered miscible with water by the intervention of mucilages.

#### Common Emulsion.

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Take of fweet almonds, an ounce; bitter almonds, a drachm; water, two pints.

Let the almonds be blanched, and beat up in a marble mortar; adding the water by little and little, fo as to make an emulfion; afterwards let it be ftrained.

#### Arabic Emulsion.

This is made in the fame manner as the above, adding to the almonds, while beating, two ounces and a half of the mucilage of gum arabic.

Where foft cooling liquors are neceffary, these emultions may be used as ordinary drink.

#### Campborated Emulsion.

Take of camphor, half a drachm; fweet almonds, half a dozen; white fugar, half an ounce; mint water, eight ounces. Grind the camphor and almonds well together in a ftone mortar, and add by degrees the mint water; then ftrain the liquor, and diffolve in it the fugar.

In fevers, and other diforders which require the use of camphor, a table spoonful of this emulsion may be taken every two or three hours.

Emulsion

# EXTRACTS.

## Emulfion of Gum Ammoniac.

Take of gum ammoniac, two drachms; water, eight ounces. Grind the gum with the water poured upon it by little and little, till it is diffolved.

This emulfion is used for attenuating tough, viscid phlegm, and promoting expectoration. In obstinate coughs, two ounces of the syrup of poppies may be added to it. The dose is two table-spoonfuls three or four times a day.

#### Oily Emulfion.

Take of foft water, fix ounces; volatile aromatic fpirit, two drachms; Florence oil, an ounce; fhake them well together, and add, of fimple fyrup, half an ounce.

In recent colds and coughs, this emulfion is generally of fervice; but, if the cough proves obflinate, it will fucceed better when made with the paregoric elixir of the Edinburgh Difpenfatory, inflead of the volatile aromatic fpirit. A table fpoonful of it may be taken every two or three hours.

#### EXTRACTS.

E XTRACTS are prepared by boiling the fubject in water, and evaporating the firained decoction to a due confiftence. By this process fome of the more active parts of plants are freed from the useles, indiffoluble, earthy matter, which makes the larger share of their bulk. Water, howrever, is not the only menstruum used in the preparation of textracts; sometimes it is joined with spirits, and at other times rectified spirit alone is employed for that purpose.

Extracts are prepared from a variety of different drugs, as the bark, gentian, jalap, &c.; but as they require a troublefome and tedious operation, it will be more convenient for a private practitioner to purchafe what he needs of them from a profetted druggift, than to prepare them himfelf. Such of them as are generally ufed are inferted in our lift cof fuch drugs and medicines as are to be kept for private practice.

3A 4

FOMEN-

### APPENDIX.

## FOMENTATIONS.

**DMENTATIONS** are generally intended, either to eafe pain, by taking off tenfion and fpafm; or to brace and reftore the tone and vigour of those parts to which they are applied. The first of these intentions may generally be anfwered by warm water, and the second by cold. Certain substances, however, are usually added to water, with a view to heighten its effects, as anodynes, aromatics, aftringents, &c We shall therefore subjoin a few of the most useful medicated tomentations, that people may have it in their power to make use of them if they chuse.

#### Anodyne Fomentation.

Take of white poppy-heads, two ounces; elder flowers, half an ounce; water, three pints. Boil till one pint is evaporated, and firain out the liquor.

This fomentation, as its title expresses, is used for relieving acute pain.

#### Aromatic Fomentation.

Take of Jamaica pepper, half an ounce; red wine, a pint. Boil them for a little, and then firain the liquor.

This is intended, not only as a topical application for external complaints, but alfo for relieving the internal parts. Pains of the bowels, which accompany dyfenteries and diarrbœas, flatulent colics, uncafinefs of the ftomach, and reachings to vomit, are frequently abated by fomenting the abdomen and region of the ftomach with the warm liquor.

#### Common Fomentation.

Take tops of wormwood and camomile flowers, dried, of each two ounces; water, two quarts. After a flight boiling, pour off the liquor.

Brandy or fpirit of wine may be added to this fomentation, in fuch quantity as the particular circumftances of the cafe shall require; but these are not always necessary.

## Emollient Fomentation.

This is the fame as the common decoction.

Strengthening

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### GARGLES.

## Strengthening Fomentation.

Take of oak bark, one ounce; granate peel, half an ounce; alum, two drachms; fmith's forge water, three pints. Boil the water with the bark and peel to the confumption of one-third; then ftrain the remaining decoction, and diffolve it in alum.

This aftringent liquor is employed as an external fomentation to weak parts; it may also be used internally.

#### GARGLES.

**H**OWEVER triffing this clafs of medicines may appear, they are by no means without their ufe. They feldom indeed cure difeafes, but they often alleviate very difagreeable fymptoms; as parchednefs of the mouth, foulnefs of the tongue and fauces, &c. They are peculiarly ufeful in fevers and fore throats. In the latter, a gargle will fometimes remove the diforder; and in the former, few things are more refrefhing or agreeable to the patient, than to have his mouth frequently walked with fome foft detergent gargle.

One advantage of these medicines is, that they are easy prepared. A little barley-water and honey may be had any where: and if to these be added as much vinegar as will give them an agreeable sharpness, they will make a very useful gargle for fostening and cleansing the mouth.

Gargles have the best effect when injected with a fyringe.

#### Attenuating Gargle.

Take of water, fix ounces; honey, one ounce; nitre, a drachm and a half. Mix them.

This cooling gargle may be used either in the inflammatory quinfey, or in fevers, for cleaning the tongue and fauces.

#### Common Gargle.

Take of rofe-water, fix ounces; fyrup of clove, Julyflowers, half an ounce; fpirit of vitriol, a fufficient quantity to give it an agreeable fharpnefs. Mix them.

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This gargle, besides cleansing the tongue and fauces, 2013 as a gentle repellent, and will sometimes remove a slight quinfey.

# Detergent Gargle.

Take of the emollient gargle a pint; tinclure of myrth, an ounce; honey, two ounces. Mix them.

When exulcerations require to be cleansed, or the excretion of tough viscid faliva promoted, this gargle will be of fervice.

# Emollient Gargle.

Take an ounce of marshmallow roots, and two or three figs; boil them in a quart of water till near one half of it be confumed; then strain out the liquor.

If an ounce of honey, and half an ounce of fpirit of falammoniac, be added to the above, it will then be an exceeding good *attenuating gargle*.

This gargle is beneficial in fevers, where the tongue and fauces are rough and parched, to foften these parts, and promote the difcharge of faliva.

The learned and accurate Sir John Pringle obferves, that in the inflammatory quinfey, or ftrangulation of the fauces, little benefit arifes from the common gargles; that fuch as are of an acid nature do more harm than good, by contracting the emunctories of the faliva and mucus, and thickening those humours: that a decoction of figs in milk and water has a contrary effect, especially if some fal-ammoniac be added; by which the faliva is made thinner, and the glands brought to fecrete more freely; a circumftance always conducive to the cure.

#### INFUSIONS.

VEGETABLES yield nearly the fame properties to water by infufion as by decoction; and though they may require a longer time to give out their virtues in this way, yet it has feveral advantages over the other; fince boiling is found found to diffipate the finer parts of many bitter and aromatic fubftances, without more fully extracting their medicinal principles.

The author of the New Difpenfatory obferves, that even from those vegetables which are weak in virtue, rich infufions may be obtained, by returning the liquor upon fresh quantities of the subject, the water loading itself more and more with the active parts; and that these loaded infusions are applicable to valuable purposes in medicine, as they contain in a small compass the finer, more subtile, and active principles of vegetables, in a form readily miscible with the fluids of the human body.

### . Bitter Infusion.

Take tops of the leffer centaury and camomile flowers, of each half an ounce; yellow rind of lemon and orange peel, carefully freed from the inner white part, of each two drachms. Cut them in fmall pieces, and infuse them in a quart of boiling water.

For indigeftion, weaknefs of the flomach, or want of appetite, a tea-cupful of this infusion may be taken twice or thrice a day.

# Infusion of the Bark.

To an ounce of the bark, in powder, add four or five table fpoonfuls of brandy, and a pint of boiling water. Let them infuse for two or three days.

This is one of the beft preparations of the bark for weak ftomachs. In diforders where the corroborating virtues of that medicine are required, a tea cupful of it may be taken two or three times a-day.

# Infusion of Carduus.

Infuse an ounce of the dried leaves of carduus benedictus in a pint of common water, for fix hours, without heat; then filter the liquor through paper.

This light infusion may be given, with great benefit, in weakness of the stomach, where the common bitters do not

agree.

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agree. It may be flavoured at pleasure with cinnamon, or other aromatic materials.

#### Infusion of Linseed.

Take of linfeed, two spoonfuls; liquorice root, fliced, half an ounce; boiling water, three pints. Let them stand to infuse by the fire for some hours, and then strain off the liquor.

If an ounce of the leaves of colts-foot be added to these ingredients, it will then be the *pectoral infusion*. Both these are emollient mucilaginous liquors, and may be taken with advantage as ordinary drink in difficulty of making water; and in coughs and other complaints of the breaft.

#### Infusion of Roses.

Take of red roses, dried, half an ounce; boiling water, a quart; vitriolic acid, commonly called oil of vitriol, half a drachm; loaf, sugar, an ounce.

Infuse the roses in the water for sour hours, in an unglazed earthen vessel; afterwards pour in the acid, and having strained the liquor, add to it the sugar.

In an exceffive flow of the *menses*, vomiting of blood, and other hæmorrhages, a tea-cupful of this gently aftringent infusion may be taken every three or four hours. It likewife makes an exceeding good gargle.

As the quantity of rofes used here can have little or no effect, an equally valuable medicine may be prepared by mixing the acid and water without infusion.

# Infusion of Tamarinds and Senna.

Take of tamarinds, one ounce; fenna, and cryftals of tartar, each two drachms. Let these ingredients be infused four or five hours in a pint of boiling water; afterwards let the liquor be firained, and an ounce or two of the aromatic tincture added to it. Persons who are easily purged may leave out either the tamarinds or the cryftals of tartar.

This is an agreeable cooling purge. A tea-cupful may be given every half hour till it operates.

This supplies the place of the decostion of tamarinds and fenna. Spanifs

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## Spanish Infusion.

Take of Spanish juice, cut into small pieces, an ounce; falt of tartar, three drachms. Infuse in a quart of boiling water for a night. To the strained liquor add an ounce and a half of the syrup of poppies.

In recent colds, coughs, and obstructions of the breast, a tea-cupful of this infusion may be taken with advantage three or four times a day.

## Infusion for the Palfy.

Take of horfe-radifh root shaved, mustard feed bruifed, each four ounces; outer rind of orange-peel, one ounce. Infuse them in two quarts of boiling water, in a close vessel, for twenty-four hours.

In paralytic complaints, a tea-cupful of this warm ftimulating medicine may be taken three or four times a-day. It excites the action of the folids, proves diuretic, and, if the patient be kept warm, promotes performation.

If two or three ounces of the dried leaves of marsh-trefoil be used instead of the mustard, it will make the antifcorbutic infusion.

#### JULEPS.

T HE basis of juleps is generally common water, or fome fimple distilled water, with one-third or one-fourth its quantity of distilled spirituous water, and as much sugar or fyrup as is sufficient to render the mixture agreeable. This is sharpened with vegetable or mineral acids, or impregnated with other medicines suitable to the intention.

#### Campborated Julep.

Take of camphor, one drachm; gum arabic, half an ounce; double-refined fugar an ounce; vinegar, a pint. Grind the camphor with a few drops of rectified fpirit of wine, till it grows foft; then add the gum, previously reduced to a mucilage with equal its quantity of water, and rub them together till, they are perfectly united. To this mixture add, by little and little, the vinegar with the fugar diffolved in it, ftill continuing the trituration.

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In hyfferical and other complaints where camphor is proper, this julep may be taken in the dole of a fpoonful or two as often as the flomach will bear it.

## Cordial Julep.

Take of fimple cinnamon-water four ounces; Jamaica pepper-water, two ounces; volatile aromatic fpirit, and compound fpirit of lavender, of each two drachms; fyrup of orange-peel, an ounce. Mix them.

This is given in the dole of two fpoonfuls three or four times a-day, in diforders accompanied with great weaknefs and depression of spirits.

### Expectorating Julep.

Take of the emulfion of gum ammoniac, fix ounces; fyrup of fquills, two ounces. Mix them.

In coughs, afthmas, and obstructions of the breast, two table-spoonfuls of this julep may be taken every three or four hours.

# Musk Julep.

Rub half a drachm of musk well together with half an ounce of fugar, and add to it, gradually, of fimple cinnamon and pepper-mint water, each two ounces; of the volatile aromatic spirit, two drachms.

In the low state of nervous fevers, hiccuping, convulsions and other spasmodic affections, two table-spoonfuls of this julep may be taken every two or three hours.

### Saline Julep.

Diffolve two drachms of falt of tartar in three ounces of fresh lemon-juice, strained; when the effervescence is over, add, of mint-water, and common water, each two ounces; of fimple fyrup, one ounce.

This removes fickness at the flomach, relieves vomoting, promotes perspiration, and may be of some service in fevers, especially of the inflammatory kind.

Veniting

# Vomiting Julep.

Diffolve four grains of emetic tartar in eight ounces of water, and add to it half an ounce of the fyrup of clove July-flowers.

In the beginning of fevers, where there is no topical inflammation, this julep may be given in the dofe of one tablefpoonful every quarter of an hour till it operates. Antimonial vomits ferve not only to evacuate the contents of the flomach, but likewife to promote the different excretions. Hence they are found in fevers to have nearly the fame effects as Dr. James's Pewder.

# MIXTURES.

A MIXTURE differs from a julep in this respect, that it receives into its composition not only falts, extracts, and other substances diffoluble in water, but also earths, powders, and such substances as cannot be diffolved. A mixture is seldom either an elegant or agreeable medicine. It is nevertheless necessary. Many perfons can take a mixture, who are not able to swallow a bolus or an electuary: besides, there are medicines which act better in this than in any other form.

# Astringent Mixture.

Take fimple cinnamon-water and common water, of each three ounces; fpirituous cinnamon-water, an ounce and a half; Japonic confection, half an ounce. Mix them.

In dyfenteries which are not of long flanding, after the nec-flary evacuations, a spoonful or two of this mixture may be taken every four hours, interposing every second or third day a dose of rhubarb.

# Diuretic Mixture.

Take of mint-water, five ounces; vinegar of fquills, fix drachms; fweet spirit of nitre, half an ounce; fyrup of ginger, an ounce and a half. Mix them.

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# A P P E N D I X.

In obstructions of the urinary passages, two spoonfuls of this mixture may be taken twice or thrice a-day.

#### Laxative absorbent Mixture.

Rub one drachm of magnefia alba in a mortar with ten or twelve grains of the best Turkey rhubarb, and add to them three ounces of common water; fimple cinnamon-water, and fyrup of fugar, of each one ounce.

As most difeases of infants are accompanied with acidities, this mixture may either be given with a view to correct these, or to open the body. A table-spoonful may be taken for a dose, and repeated three times a-day. To a very young child half a spoonful will be sufficient.

When the mixture is intended to purge, the dole may either be increased, or the quantity of rhubarb doubled.

This is one of the most generally useful medicines for children with which I am acquainted.

#### Saline Mixture.

Diffolve a drachm of the falt of tartar in four ounces of boiling water; and when cold, drop into it fpirit of vitriol till the effervescence ceases; then add, of peppermint-water, two ounces, fimple fyrup, one ounce.

Where fresh lemons cannot be had, this mixture may occasionally supply the place of the faline julep.

#### Squill Mixture.

Take of fimple cinnamon-water, five ounces; vinegar of fquills, one ounce; fyrup of marshmallows, an ounce and a half. Mix them.

This mixture, by promoting expectoration, and the fecretion of urine, proves ferviceable in afthmatic and dropfical habits. A table-fpoonful of it may be taken frequently.

OINTMENTS, LINIMENTS, and CERATES. NOTWITHSTANDING the extravagant encomiums which have been beflowed on different preparations of this kind, with regard to their efficacy in the cure of wounds, fores, fores, &c. it is beyond a doubt, that the moft proper application to a green wound is dry lint. But though ointments do not heal wounds and fores, yet they ferve to defend them from the external air, and to retain fuch fubftances as may be neceflary for drying, deterging, deftroying proud flefh, and fuch like. For these purposes, however, it will be fufficient to infert only a few of the most fimple forms, as ingredients of a more active nature can occasionally be added to them.

# Yellow Basilicum Ointment.

Take of yellow wax, white refin, and frankincenfe, each a quarter of a pound; melt them together over a gentle fire; then add, of hogs' lard prepared, one pound. Strain the ointment while warm.

This ointment is employed for cleanfing and healing wounds and ulcers.

### Ointment of Calamine.

Take of olive oil a pint and a half; white wax, and calamine ftone, levigated, of each half a pound. Let the calamine ftone, reduced into a fine powder, be rubbed with fome part of the oil, and afterwards added to the reft of the oil and wax, previoufly melted together, continually ftirring them till quite cold.

This ointment, which is commonly known by the name of *Turner's Cerate*, is an exceeding good application in Iburns and exceriations, from whatever caufe.

# Emollient Ointment.

Take of palm oil, two pounds; olive oil, a pint and a half; yellow wax, half a pound; Venice turpentine a quarter of a pound. Melt the wax in the oils over a gentle fire; then mix in the turpentine, and firain the ointment.

This supplies the place of Althea Cintment. It may be used for anointing inflamed parts, &c.

Eye

#### Eye Ointments.

Take of hogs' lard prepared, four ounces; white wax, two drachms; tutty prepared one ounce; melt the wax with the lard over a gentle fire, and then fprinkle in the tutty, continually firring them till the ointment is cold.

This ointment will be more efficacious, and of a better confiftence, if two or three drachms of camphor be rubbed up with a little oil, and intimately mixed with it.

#### Another.

Take of camphor, and calamine ftone levigated, each fix drachms; verdegrife, well prepared, two drachms; hogs' lard, and mutton fuet prepared, of each two ounces. Rub the camphor well with the powder; afterwards mix in the lard and fuet, continuing the triture till they be perfectly united.

This ointment has been long in esteem for difeases of the eyes. It ought, however, to be used with caution, when the eyes are much inflamed, or very tender.

# Isuc Ointment.

Mix half an ounce of Spanish flies, finely powdered, in fix ounces of yellow basilicum ointment.

This ointment is chiefly intended for dreffing blifters, in order to keep them open during pleafure.

#### Ointment of Lead.

Take of olive oil, half a pint; white-wax, two ounces; fugar of lead, three drachms. Let the fugar of lead, reduced into a fine powder, be rubbed up with fome part of the oil, and afterwards added to the other ingredients, previoufly melted together, continually flirring them till quite cold.

This cooling and gently aftringent ointment may be used in all cases where the intention is to dry and skin over the part, as in scalding, &c.

#### Mercurial Ointment.

Take of quickfilver, two ounces; hogs' lard, three ounces; mutton fuet, one ounce. Rub the quickfilver with an ounce of

# OINTMENTS, &c.

of the hog's lard in a warm mortar, till the globules be perfeetly extinguished; then rub it up with the rest of the lard and suet, previously melted together.

The principal intention of this ointment is to convey mercury into the body by being rubbed upon the fkin.

## Ointment of Sulphur.

Take of hogs' lard prepared, four ounces; flowers of fulphur, anounce and a half; crude fal ammoniac, two drachms; effence of lemon, ten or twelve drops. Make them into an ointment.

This ointment, rubbed upon the parts affected, will generally cure the itch. It is both the fafeft and best application for that purpose, and, when made in this way, has no difagreeable smell.

## White Ointment.

Take of olive oil, one pint; white wax and spermaceti, of each three ounces. Melt them with a gentle heat, and keep them constantly and briskly stirring together, till quite cold.

If two drachms of camphor, previoufly rubbed with a fmall quantity of oil, be added to the above, it will make the White camphorated Ointment.

# Liniment for Burns.

Take equal parts of Florence oil, or of fresh drawn linsced oil, and lime water; shake them well together in a wide mouthed bottle, so as to form a liniment.

This is found to be an exceeding proper application for recent fealds or burns. It may either be fpread upon a cloth, or the parts affected may be anointed with it twice or thrice a-day.

#### White Limment.

. This is made in the fame manner as the white ointment, two-thirds of the wax being left out.

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This liniment may be applied in cafes of excoriation, where, on account of the largeness of the surface, the ointments with lead or calamine might be improper.

# Liniment for the Piles.

Take of emollient ointment, two ounces; liquid laudanum, half an ounce. Mix these ingredients with the yolk of an egg, and work them well together.

#### Volatile Liniment.

Take of Florence oil, an ounce; spirit of hartshorn, half an ounce. Shake them together.

This liniment, made with equal parts of the fpirit and oil, will be more efficacious, where the patient's fkin is able to bear it.

Sir John Pringle obferves, that in the inflammatory quinfey, a piece of flannel moiftened with this liniment, and applied to the throat, to be renewed every four or five hours, is one of the most efficacious remedies; and that it feldom fails, after bleeding, either to leffen or carry off the complaint. The truth of this obfervation I have often experienced.

# Camphorated Oil.

Rub an ounce of camphor, with two ounces of Florence oil, in a mortar, till the camphor be entirely diffolved.

This antifpafmodic liniment may be used in obstinate rheumatisms, and in some other cases accompanied with extreme pain and tension of the parts.

## PILLS.

**M**EDICINES which operate in a finall dofe, and whofe difagreeable tafte, or fmell, makes it neceffary that they fhould be concealed from the palate, are most commodiously exhibited in this form. No medicine, however, that is intended to operate quickly, ought to be made into pills, as they often lie for a confiderable time on the ftomach before they are diffolved, fo as to produce any effect.

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As the ingredients which enter the composition of pills are generally to contrived, that one pill of an ordinary fize may contain about five grains of the compound, in mentioning the dofe we thall only specify the number of pills to be taken; as, one, two, three, &c.

#### Composing Pill.

Take of purified opium, ten grains; Castile soap, half a drachm. Beat them together, and form the whole into . twenty pills.

When a quieting draught will not fit upon the ftomach, one, two, or three of these pills may be taken, as occasion requires.

#### Fætid Pill.

Take of afafætida, half an ounce; fimple fyrup, as much as is neceffary to form it into pills.

In hysteric complaints, four or five pills, of an ordinary fize, may be taken twice or thrice a-day. They may likewife be of fervice to perfons afflicted with the asthma.

When it is neceffary to keep the body open, a proper quantity of rhubarb, aloes, or jalap, may o'ccafionally be added to the above mass.

#### Hemlock Pill.

Take any quantity of the extract of hemlock, and adding to it about a fifth part its weight of the powder of the dried leaves, form it into pills.

The extract of hemlock may be taken from one grain to feveral drachms in the day. The beft method, however, of using these pills, is to begin with one or two, and to increase the dose gradually, as far as the patient can bear them, without any remarkable degree of stupor or giddiness.

#### Mercurial Pill.

Take of purified quickfilver and honey, each half an ounce. Rub them together in a mortar, till the globules of mercury are perfectly extinguished; then add, of Caffile 3 B 3 foap, foap, two drachms, powdered liquorice, or crumb of bread, a fufficient quantity to give the mals a proper confiftence for pills.

When ftronger mercurial pills are wanted, the quantity of quickfilver may be doubled.

The dofe of thefe pills is different according to the intention with which they are given. As an alterant, two or three may be taken daily. To raife a falivation, four or five will be neceffary.

Equal parts of the above pill and powdered rhubatb made into a mafs, with a fufficient quantity of fimple fyrup, will make a *Mercurial purging Pill*.

#### Mercurial Jublimate Pill.

Diffolve fifteen grains of the corrolive fublimate of mercury in two drachms of the faturated folution of crude fal ammoniac, and make it into a paste, in a glass mortar, with a fufficient quantity of the crumb of bread. This mass must be formed into one hundred and twenty pills.

This pill, which is the most agreeable form of exhibiting the fublimate, has been found efficacious, not only in curing the veneteal difease, but also in killing and expelling worms, after other powerful medicines had failed \*.

For the venereal difeafe, four of these pills may be taken twice a-day, as an alterant three, and for worms two.

# Plummer's Pill.

Take of calomel, or fweet mercury, and precipitated fulphur of antimony, each three drachms; extract of liquorice, two drachms. Rub the fulphur and mercury well together; afterwards add the extract, and, with a fufficient quantity of the mucilage of gum arabic, make them into pills.

This pill has been found a powerful, yet fafe, alterative in obstinate cutaneous diforders; and has completed a cure

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<sup>\*</sup> See a paper on this fubject in the Edinburgh Phyfical and Literary Effays, by the ingenious Dr. John Gardener.

after falivation had failed. In venereal cafes it has likewife produced excellent effects. Two or three pills of an ordinary fize may be taken night and morning, the patient keeping moderately warm, and drinking after each dole a draught of decoction of the woods, or of farfaparilla.

## Purging Pills.

Take of fuccotorine aloes, and Caffile'foap, each two drachms; of fimple fyrup, a fufficient quantity to make them into pills.

Four or five of these pills will generally prove a fufficient purge. For keeping the body gently open, one may be taken night and morning. They are reckoned both deobfiruent and stomachic, and will be found to answer all the purposes of Dr. Anderson's pills, the principal ingredient of which is aloes.

Where aloetic purges are improper, the following pills may be used:

Take extract of jalap, and vitriolated tartar, of each two drachms; fyrup of ginger, as much as will make them of a proper confiftence of pills.

These pills may be taken in the same quantity as the above.

## Pill for the Jaundice.

Take of Castile soap, fuccotorine aloes, and rhubarb, of each one drachm. Make them into pills with a sufficient quantity of syrup or mucilage.

These pills, as their title expresses, are chiefly intended for the jaundice, which, with the affistance of proper diet, they will often cure. Five or fix of them may be taken twice a-day, more or less, as is necessary to keep the body open. It will be proper, however, during their use, to interpose now and then a vomit of ipecacuanha or tartar emetic.

Stomachic

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#### Stomachic Pill.

Take extract of gentian, two drachms; powdered rhubarb and vitriolated tartar, of each one drachm; oil of mint, thirty drops; fimple fyrup, a fufficient quantity.

Three or four of these pills may be taken twice a day, for invigorating the stomach, and keeping the body gently open.

#### Squill Pills.

Take powder of dried squills, a drachm and a half; guns ammoniac, and cardamom feeds, in powder, of each three drachms; fimple syrup, a sufficient quantity.

In dropfical and althmatic complaints, two or three of these pills may be taken twice a-day, or oftener, if the ftomach will bear them.

#### Strengthening Fill.

Take foft extract of the bark, and falt of fteel, each half an ounce. Make into pills.

In diforders arifing from exceffive debility, or relaxation of the folids, as the *chlorofis*, or green fickness, two of these pills may be taken three times a-day.

#### PLASTERS.

**PLASTERS** ought to be of a different confiftence, according to the purpoles for which they are intended. Such as are to be applied to the breafts or flomach ought to be lof; and yielding; while those defigned for the limbs should be firm and adhesive.

It has been fupposed, that plasters might be impregnated with the virtues of different vegetables, by boiling the recent vegetable with the oil employed for the composition of the plaster; but this treatment does not communicate to the oils any valuable qualities.

The calces of lead boiled with oils unite with them into a plaster of a proper confistence, which make the basis of several other plasters. In boiling these compositions, a quantity quantity of hot water must be added from time to time, to prevent the plaster from burning or growing black. This, however, should be done with care, less it cause the matter to explode.

# Common Plaster.

Take of common olive oil, fix pints; litharge reduced to a fine powder, two pounds and a half. Boil the litharge and oil together over a gentle fire, continually ftirring them, and keeping always about half a gallon of water in the veffel: after they have boiled about three hours, a little of the plafter may be taken out and put into cold water, to try if it be of a proper confiftence: when that is the cafe, the whole may be fuffered to cool, and the water well preffed out of it with the hands.

This plafter is generally applied in flight wounds and excoriations of the fkin. It keeps the part foft and warm, and defends it from the air, which is all that is neceffary in fuch cafes. Its principal use, however, is to ferve as a basis for other plafters.

# Adhesive Plaster.

Take of common plaster, half a pound; of Burgundy pitch, a quarter of a pound. Melt them together.

This plaster is principally used for keeping on other dreffings.

# Anodyne Plaster.

Melt an ounce of adhefive plaster, and, when it is cooling, mix with it a drachm of powdered opium, and the fame quantity of camphor, previously rubbed up with a little gil.

This plaster generally gives ease in acute pains, especially of the nervous kind.

# Blistering Plaster.

Take of Venice turpentine, fix ounces; yellow wax, two punces; Spanish flies in fine powder, three ounces; powdered mustard, one ounce. Melt the wax, and while it is warm, warm, add to it the turpentine, taking care not to evaporate it by too much heat. After the turpentine and wax are fufficiently incorporated, fprinkle in the powders, continually firring the mafs till it be cold.

Though this plaster is made in a variety of ways, one feldom meets with it of a proper confistence. When compounded with oils and other greasly substances, its effects are blunted, and it is apt to run; while pitch and refin render it too hard and very inconvenient.

When the bliftering plafter is not at hand, its place may be fupplied by mixing with any foft ointment a fufficient quantity of powdered flies; or by forming them into a pafte with flour and vinegar.

#### Gum Plaster.

Take of the common plaster, four pounds; gum ammoniac and galbanum, strained, of each half a pound. Melt them together, and add, of Venice turpentine, fix ounces.

This plaster is used as a digestive, and likewise for difcuffing indolent tumours.

#### Mercurial Plaster.

Take of common plafter, one pound; of gum ammoniac, ftrained, half a pound. Melt them together, and, when cooling, add eight ounces of quick-filver, previoufly extinguifhed by triture with three ounces of hogs' lard.

This plaster is recommended in pains of the limbs arifing from a venereal caufe. Indurations of the glands, and other violent tumours, are likewife found fometimes to yield to it.

# Stomach Plaster.

Take of gum plaster, half a pound; camphorated oil, an ounce and a half; black pepper, or capficum, where it can be had, one ounce. Melt the plaster, and mix with it the oil; then fprinkle in the pepper, previously reduced to a fine powder.

An ounce or two of this plaster, fpread upon fost leather, and applied to the region of the stomach, will be of service in

in flatulencies arifing from hysteric and hypochondriac affections. A little of the expressed oil of mace, or a few drops of the effential oil of mint, may be rubbed upon it before it is applied.

This may supply the place of the Antehysteric Plaster.

# Warm Plaster.

Take of gum plaster, one ounce; blistering plaster, two drachms. Melt them together over a gentle fire.

This plaster is useful in the feiatica and other fixed pains of the rheumatic kind: it ought, however, to be worn for fome time, and to be renewed, at least, once a-week. If this is found to blifter the part, which is fometimes the case, it must be made with a smaller proportion of the bliftering plaster.

# Wax Plaster.

Take of yellow wax, one pound; white refin, half a pound; mutton fuet, three quarters of a pound. Melt them together.

This is generally used instead of the Melilot Plaster. It is a proper application after blifters, and in other cases where a gentle digestive is necessary.

# POWDERS.

THIS is one of the most fimple forms in which medicine is administered. Many medicinal substances, however, cannot be reduced into powder, and others are too difagreeable to be taken in this form.

The lighter powders may be mixed in any agreeable thin liquor, as tea or water-gruel. The more ponderous will require a more confiftent vehicle, as fyrup, jelly, or honey.

Gums, and other fubftances which are difficult to powder, fhould be pounded along with the drier ones; but those which are too dry, especially aromatics, ought to be sprinkled during their pulverization with a few drops of any proper water. Aromatic powders are to be prepared only in fmall quantities at a time, and kept in glafs veffels clofely flopped. Indeed, no powders ought to be exposed to the air, or kept too long, otherwife their virtues will be in great measure defroyed.

#### Astringent Powder.

Take of alum and Japan earth, each two drachms. Pound them together, and divide the whole into ten or twelve dofes.

In an immoderate flow of the *menses*, and other hæmorrhages, one of these powders may be taken every hour, or every half-hour, if the discharge be violent.

#### Powder of Bole.

Take of bole armenic, or French bole, two ounces; cinnamon, one ounce; tormentil root and gum arabic, of each fix drachms; long pepper, one drachm. Let all these ingredients be reduced into a powder.

This warm, glutinous, aftringent powder, is given in fluxes, and other diforders where medicines of that clafs are neceffary, in the dofe of a fcruple, or half a drachm.

If a drachm of opium be added, it will make the *Powder* of *Bole with Opium*, which is a medicine of confiderable efficacy. It may be taken in the fame quantity as the former, but not above twice or thrice a-day.

#### Carminative Powder.

Take of coriander-feed, half an ounce; ginger, one drachm; nutmegs, half a drachm; fine fugar, a drachm and a half. -Reduce them into powder for twelve dofes.

This powder is employed for expelling flatulencies arifing from indigeftion, particularly those to which hysteric and hypochondriac perfons are fo liable. It may likewise be given in small quantities to children in their food, when troubled with gripes.

Diuretic

#### Diuretic Powder.

Take of gum arabic, four ounces; purified nitre, one ounce. Pound them together, and divide the whole into twenty-four doles.

During the first stage of the venereal disease, one of these cooling powders may be taken three times a-day, with confiderable advantage.

#### Aromatic opening Powder.

Take of the best Turkey rhubarb, cinnamon, and fine fugar, each two drachms. Let the ingredients be pounded, and afterwards mixed well together.

Where flatulency is accompanied with coffiveness, a teafpoonful of this powder may be taken once or twice a-day, according to circumftances.

#### Saline laxative Powder.

Take of foluble tartar, and cream of tartar each one drachm; purified nitre, half a drachm. Make them into a powder.

In fevers, and other inflammatory diforders, where it is neceffary to keep the body gently open, one of these cooling laxative powders may be taken in a little gruel, and repeated occasionally.

#### Steel Powder.

Take filings of steel, and loaf-fugar, of each two ounces; ginger, two drachms. Pound them together.

In obstructions of the *menses*, and other cases where steel is proper, a tea-spoonful of this powder may be taken twice a-day, and washed down with a little wine or water.

#### Sudorific Powder.

Take purified nitre and vitriolated tartar, of each half an ounce; opium and ipecacuanha, of each one drachm. Mix the ingredients, and reduce them to a fine powder.

This is generally known by the name of *Dover's powder*. It is a powerful fudorific. In obstinate rheumatisms, and 9 other other cafes where it is neceffary to excite a copious fweat, this powder may be administered in the dofe of a fcruple or half a drachm. Some patients will require two fcruples. It ought to be accompanied with the plentiful use of fome warm diluting liquor.

#### Worm-Powders.

Take of tin reduced into a fine powder, an ounce; Æthiop's mineral, two drachms. Mix them well together, and divide the whole into fix dofes.

One of these powders may be taken in a little fyrup, honey, or treacle, twice a day. After they have been all used the following anthelmintic purge may be proper.

#### Purging Worm-Powder.

Take of powdered rhubarb, a fcruple; fcammony and calomel, of each five grains. Rub them together in a mortar for one dofe.

For children the above dofes must be lestened according to their age.

If the powder of tin be given alone, its dofe may be confiderably increased. The late Dr. Alfton gave it to the amount of two ounces in three days, and fays, when thus administered, that it proved an egregious anthelmintic. He purged his patients both before they took the powder and afterwards.

#### Powder for the Tape-worm.

Early in the morning the patient is to take in any liquid, two or three drachms, according to his age and conffitution, of the root of the male fern reduced into a fine powder. About two hours afterwards, he is to take of calomel and refin of fcammony, each ten grains; gum gamboge, fix grains. These ingredients must be finely powdered and given in a little fyrup, honey, treacle, or any thing that is most agreeable to the patient. He is then to walk gently about; now and then drinking a dish of weak green tea, till the worm is passed. If the powder of the

the fern produces naulea, or fickness, it may be removed by fucking the juice of an orange or lemon.

This medicine, which had been long kept a fecret abroad for the cure of the tape-worm, was fome time ago purchafed by the French King, and made public for the benefit of mankind. Not having had an opportunity of trying it, I can fay nothing from experience concerning its efficacy. It feems, however, from its ingredients, to be an active medicine, and ought to be taken with care. The dofe here preferibed is fufficient for the ftrongeft patient; it muft, therefore, be reduced according to the age and conflitution.

#### SYRUPS.

SYRUPS were fome time ago looked upon as medicines of confiderable value. They are at prefent, however, regarded chiefly as vehicles for medicines of greater efficacy, and are ufed for fweetening draughts, juleps, or mixtures; and for reducing the lighter powders into bolufes, pills, and electuaries. As all thefe purpofes may be anfwered by the fimple fyrup alone, there is little occafion for any other; efpecially as they are feldom found but in a flate of fermentation; and as the dofe of any medicine given in this form is very uncertain. Perfons who ferve the public muft keep whatever their cuftomers call for; but to the private practitioner nine tenths of the fyrups ufually kept in the fhops are unneceffary.

#### Simple Syrup

Is made by diffolving in water, either with or without heat, about double its weight of fine fugar.

If twenty-five drops of laudanum be added to an ounce of the fin-ple fyrup, it will fupply the place of diacodium, or the fyrup of poppies, and will be found a more fafe and certain medicine.

The lubricating virtues of the fyrup of marfhmallows may likewife be fupplied, by adding to the common fyrup a fufficient quantity of mucilage of gum arabic.

Thofe

Those who chuse to preferve the juice of lemons in sorm of syrup, may diffolve in it, by the heat of a warm bath, hearly double its weight of fine sugar. The juice ought to be previously strained, and suffered to stand till it settles.

The fyrup of ginger is fometimes of use as a warm vehicle for giving medicines to perfons afflicted with flatulency. It may be made by infusing two ounces of bruifed ginger in two pints of boiling water for twenty-four hours. After the liquor has been strained, and has stood to settle for fome time, it may be poured off, and a little more than double its weight of fine powdered sugar diffolved in it.

# TINCTURES, ËLIXIRS, Ec.

**R** ECTIFIED spirit is the direct menstruum of the refins and effential oils of vegetables, and totally extracts these active principles from sundry substances, which yield them to water, either not at all, or only in part.

It diffolves likewise those parts of animal substances in which their peculiar smells and tastes reside." Hence the tinctures prepared with rectified spirits form an useful and elegant class of medicines, possessing many of the most effential virtues of simples, without being clogged with their inert or useless parts.

Water, however, being the proper menstruum of the gummy, faline, and faccharine parts of medicinal substances, it will be neceffary, in the preparation of several tincures, to make use of a weak spirit, or a composition of rectified spirit and water.

#### Aromatic TinEture.

Infuse two ounces of Jamaica pepper in two pints of brandy, without heat, for a few days; then strain off the tincture.

This fimple tincture will fufficiently answer all the intentions of the more costly preparations of this kind. It is rather too hot to be taken by itself; but is very proper for mixing

# TINCTURES, &c.

mixing with fuch medicines as might otherwife prove too cold for the from the.

# Compound Tinsture of the Bark:

Take of Peruvian bark, two ounces; Seville orange-peel and cinnamon, of each half an ounce. Let the bark be powdered, and the other ingredients bruifed; then infufe the whole in a pint and a half of brandy, for five or fix days, in a clofe veflel; afterwards ftrain off the tincture.

This tincture is not only beneficial in intermitting fevers, but also in the flow, nervous, and putrid kinds, especially towards their decline.

The dole is from one drachm to three or four, every fifth or fixth hour. It may be given in any fuitable liquor, and occasionally sharpened with a few drops of the spirit of vitriol.

#### Volatile fætid Tinsture.

Infuse two ounces of affascetida in one pint of volatile aromatic spirit, for eight days, in a close bottle, frequently schaking it; then strain the tincture.

This medicine is beneficial in hyfteric diforders, especially when attended with lowness of spirits, and faintings. A tea-spoonful of it may be taken in a glass of wine, or a cup of penny-royal tea.

# Volatile Tincture of Gum Guaiacum.

Take of gum guaiacum, four ounces; volatile aromatic spirit, a pint. Infuse without heat, in a vessel well stopped, for a few days; then strain off the tincture \*.

In rheumatic complaints, a tea-spoonful of this tincture may be taken in a cup of the infusion of water-trefoil, twice or thrice a day.

# Tincture of Black Hellebore.

Infuse two ounces of the roots of black hellebore, bruised, in a pint of proof spirit, for seven or eight days; then filter

• A very good tincture of guaiacum, for domestic use, may be made by infusing three or four ounces of the gum in a bottle of rum or brandy.

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the tincture through paper. A feruple of cochineal may be infufed along with the roots', to give the tincture a colour.

In obstructions of the *menses*, a tea-spoonful of this tincture may be taken in a cup of camomile or penny-royal tea twice a-day.

## Astringent Tinsture.

Digest two ounces of gum kino, in a pint and a half of brandy, for eight days; afterwards strain it for use.

This tincture, though not generally known, is a good aftringent medicine. With this view, an ounce, or more, of it may be taken three or four times a day.

#### TinElure of Myrrb and Aloes.

Take of gum myrrh, an ounce and a half; hepatic aloes, one ounce. Let them be reduced to a powder, and infufed in two pints of rectified fpirits, for fix days, in a gentle heat; then firain the tincture.

This is principally used by furgeons for cleanfing foul ulcers, and reftraining the progress of gangrenes. It is also, by some, recommended as a proper application to green wounds.

# Tinsture of Opium, or Liquid Laudanum.

Take of crude opium, two ounces; fpirituous aromatic water, and mountain wine, of each ten ounces. Diffolve the opium, fliced, in the wine, with a gentle heat, frequently flirring it; afterwards add the fpirit, and frain off the tincture.

As twenty-five drops of this tincture contain about a grain of opium, the common dofe may be from twenty to thirty drops.

# Sacred Tinsture, or Tinsture of Hiera Picra.

Take of fuccotorine aloes in powder, one ounce; Virginian fnake-root and ginger, of each two drachms. Infufe in a pint of mountain wine, and half a pint of brandy, for a week, frequently fhaking the bottle; then strain off the tincture.

# TINCTURES, &c.

This is a fafe and uleful purge for perfons of a languid and phlegmatic habit; but is thought to have better effects, taken in fmall dofes as a laxative.

The dofe, as a purge, is from one to two ounces.

# Compound TinEture of Senna.

Take of fenna, one ounce; jalap, coriander feeds, and cream of tartar, of each half an ounce. Infuse them in a pint and a half of French brandy for a week; then strain the tincture, and add to it four ounces of fine fugar.

This is an agreeable purge, and answers all the purposes a of the Elizir falutis, and of Daffy's Elizir.

The dofe is from one to two or three ounces.

# Tineture of Spanish Flies.

Take of Spanish flies, reduced to a fine powder, two ounces; spirit of wine, one pint. Infuse for two or three days; then strain off the tincture.

This is intended as an acrid ftimulant for external use. Parts affected with the palfy or chronic rheumatilm may be frequently rubbed with it.

# Tinsture of the Balfam of Tolst.

Take of the balfam of Tolu, an ounce and a half; rectified fpirit of wine, a pint. Infuse in a gentle heat until the baliam is diffolved; then strain the tincture.

This tincture poffeffes all the virtues of the balfam: In coughs, and other complaints of the breaft, a tea fpoonful or two of it may be taken in a bit of loaf-fugar. But the beft way of using it is in fyrup. An ounce of the tincture, properly mixed with two pounds of simple fyrup, will make what is commonly called the *Balfamic Syrup*.

#### Tinclure of Rhubarb.

Take of rhubarb, two ounces and a half; leffer cardamom feeds, half an ounce; brandy, two pints. Digett tor a week, and firain the tincture.

Thofe

Those who chuse to have a vinous tincture of rhubarb may infuse the above ingredients in a bottle of Lisbon wine, adding to it about two ounces of proof spirits.

If half an ounce of gentian root, and a drachm of Virginian fnake-root be added to the above ingredients, it will make the bitter tincture of rhubarb.

All thefe tinclures are defigned as flomachics and corroborants as well as purgatives. In weaknefs of the flomach, indigeftion, laxity of the inteffines, fluxes, colicky and fuch like complaints, they are frequently of great fervice. The dofe is from half a fpoonful to three or four fpoonfuls or more, according to the circumflances of the patient, and the purpofes it is intended to anfwer.

#### Paregoric Elixir.

Take of flowers of benzoin, half an ounce; opium, two drachms. Infufe in one pound of the volatile aromatic fpirit, for four or five days, frequently flaking the bottle; afterwards firain the elixir.

This is an agreeable and fafe way of administering opium. It cafes pain, allays tickling coughs, relieves difficult breathing, and is ufeful in many diforders of children, particularly the hooping-cough.

The dole to an adult is from fifty to a hundred drops.

#### Sacred Elixir.

Take of rhubarb cut small, ten drachms; succotorine aloes, in powder, fix drachms; lesser cardamom seeds, half an ounce: French brandy, two pints. Insufe for two or three days, and then strain the elixir.

This ufeful flomachic purge may be taken from one ounce to an ounce and a half.

## Stomachic Elixir.

Take of gentian root, two ounces; Curaffao oranges; one ounce; Virginian fnake-root, half an ounce. Let the ingredicnts be bruifed, and infuted for three or four days, in two pints of French brandy; afterwards firain out the elixir.

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# TINCTURES, &c.

This is an elegant flomachic bitter. In flatulencies, indigeftion, want of appetite, and fuch like complaints, a fmall glass of it may be taken twice a-day. It likewise relieves the gout in the flomach, when taken in a large dole.

## Acid Elixir of Vitriol.

Take of the aromatic tincture, one pint; oil of vitriol, three ounces. Mix them gradually, and after the fæces have fubfided, filter the elixir through paper, in a glafs funnel.

This is one of the beft medicines which I know for hyfteric and hypochondriac patients, afflicted with flatulencies arifing from relaxation or debility of the flomach and inteftines. It will fucceed where the most celebrated flomachic bitters have no effect. The dose is from ten to forty drops, in a glass of wine or water, or a cup of any bitter infusion, twice or thrice a-day. It should be taken when the flomach is most empty.

## Campborated Spirit of Wine.

Diffolve an ounce of camphor in a pint of rectified spirits.

This folution is chiefly employed as an embrocation in bruifes, palfies, the chronic rheumatifm, and for preventing gangrenes.

The above quantity of camphor, diffolved in half a pound of the volatile aromatic spirit, makes Ward's Essence,

## - Spirit of Mindererus.

Take of volatile fal ammoniaç, any quantity. Pour on it gradually diffilled vinegar, till the effervescence ceases.

This medicine is uleful in promoting a difcharge both by the fkin and urinary paffages. It is also a good external application in ftrains and bruifes.

When intended to raife a fweat, half an ounce of it in a cup of warm gruel may be given to the patient in bed every hour till it has the defired effect.

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VINEGARS.

# VINEGARS.

**VINEGAR** is an acid produced from vinous liquors by a iecond fermentation. It is an ufeful medicine both in inflammatory and putrid diforders. Its effects are, to cool the blood, quench thirft, counteract a tendency to putrefaction, and allay inordinate motions of the fyffem. It likewite promotes the natural fecretions, and in fome cafes excites a copious fweat, where the warm medicines, called alexipharmic, tend rather to prevent that falutary evacuation.

Weaknefs, faintings, vomitings, and other hyfleric affections, are often relieved by vinegar applied to the mouth and nofe, or received into the ftomach. It is of excellent use also in correcting many poisonous subfrances, when taken into the ftomach; and in promoting their expulsion, by the different emunctories, when received into the blood.

Vinegar is not only an uleful medicine, but ferves likewife to extract, in tolerable perfection, the virtues of feveral other medicinal fubftances. Most of the odoriferous flowers impart to it their fragrance, together with a beautiful purplish or red colour. It also affists or coincides with the intention of fquills, garlic, gum ammoniac, and feveral other valuable medicines.

These effects, however, are not to be expected from every thing that is fold under the name of vinegar, but from such as is found and well prepared.

The beft vinegars are those prepared from French wines.

It is neceffary for fome purposes that the vinegar be diftilled; but as this operation requires a particular chemical apparatus, we shall not infert it.

# Vinegar of Litharge.

Take of litharge, half a pound; ftrong vinegar, two pints. Infute them together in a moderate heat for three days, frequently fhaking the veffel; then filter the liquor for use,

Thia

This medicine is little used, from a general notion of its being dangerous. There is reason, however, to believe, that the preparations of lead with 'vinegar are' posses fome valuable properties, and that they may be used in many cases with fastery and success.

A preparation of a fimilar nature with the above has of late been extolled by Goulard, a French furgeon, as a fafe and extensively useful medicine, which he calls the Extract of Saturn, and orders to be made in the following manner:

Take of litharge, one pound; vinegar made of French wine, two pints. Put them together into a glazed earthen pipkin, and let them boil, or rather fimmer, for an hour, or an hour and a quarter, taking care to flir them all the while with a wooden spatula. After the whole has flood to settle, pour off the liquor which is upon the top into bottles for use.

With this extract Goulard makes his vegeto-mineral-water\*, which he recommends in a great variety of external diforders, as inflammations, burns, bruifes, fprains, ulcers, &c.

He likewife prepares with it a number of other forms of medicine, as poultices, plafters, ointments, powders, &c.

# Vinegar of Roses.

Take of red roles, half a pound; ftrong vinegar, half a gallon. Infuse in a close vessel for several weeks, in a gentle heat; and then strain off the liquor.

This is principally used as an embrocation for head-achs, &c.

## Vinegar of Squills.

Take of dried squills, two ounces; diffilled vinegar, two pints. Infuse for ten days or a fortnight in a gentle degree of heat; afterwards strain off the liquor, and add to it about a twelfth part its quantity of proof spirits.

\* See Collyrium of Lead. 3C4

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This medicine has good effects in diforders of the breaft, occasioned by a load of viscid phlegm. It is also of use in hydropic cases for promoting a discharge of usinc.

The dose is from two drachms to two ounces, according to the intention for which it is given. When intended to act as a vomit, the dose ought to be large. In other cases, it must not only be exhibited in small doses, but also mixed with cinnamon-water, or some other agreeable aromatic liquor, to prevent the nausea it might otherwise occasion.

# WATERS BY INFUSION, &c.

#### Lime Water.

**P**OUR two gallons of water gradually upon a pound of fresh burnt quicklime; and when the ebullition ceases, ftir them well together; then fuffer the whole to fland at rest, that the lime may settle, and afterwards filter the liquor through paper, which is to be kept in vessels closely stopt.

The lime water, from calcined oyster-shells, is prepared in the same manner.

Lime-water is principally ufed for the gravel; in which cafe, from a pint to two or more of it may be drunk daily. Externally it is ufed for washing foul ulcers, and removing the itch, and other defecations of the skin.

#### Compound Lime-Water.

Take fhavings of guaiacum wood, half a pound; liquorice root, one ounce; faffafras bark, half an ounce; coriander feeds, three drachms; fimple lime-water, fix pints. Infufe without heat for two days, and then ftrain off the liquor.

In the fame manner may lime-water be impregnated with the virtues of other vegetable fubftances. Such impregnation not only renders the water more agreeable to the palate, but

# WATERS BY INFUSION, &c. 761

but also a more efficacious medicine, especially in cutaneous disorders, and foulness of the blood and juices.

It may be taken in the fame quantity as the fimple water.

#### Sublimate Water.

Diffolve eight grains of the corrofive fublimate in a pint of cinnamon water.

If a ftronger folution be wanted, a double or triple quantity of fublimate may be ufed.

The principal intention of this is to cleanfe foul ulcers, and confume proud flefh.

# Styptic Water.

Take of blue vitriol and alum, each an ounce and a half; water, one pint Boil them until the falts are diffolved, then filter the liquor, and add to it a drachm of the oil of vitriol.

This water is used for flopping a bleeding at the nose, and other hæmorrhages; for which purpose cloths or duffils dipt in it must be applied to the part.

#### Tar Water.

Pour a gallon of water on two pounds of Norway tar, and flir them ftrongly together with a wooden rod: after they have ftood to fettle for two days, pour off the water for use.

Though tar-water falls greatly fhort of the character which has been given of it, yet it posseful for medicinal virtues. It fensibly raises the pulse, increases the secretions, and sometimes opens the body, or occasions vomiting.

A pint of it may be drank daily, or more, if the ftomach can bear it. It is generally ordered to be taken on an empty ftomach, viz. four ounces morning and evening, and the fame quantity about two hours after breakfaft and dinner.

S

# SIMPLE DISTILLED WATERS.

**A** GREAT number of diffilled waters were formerly kept in the fhops, and are ftill retained in fome Difpenfatories. But we confider them chiefly in the light of grateful diluents, fuitable vehicles for medicines of greater efficacy, or for rendering difguftful ones more agreeable to the palate and ftomach. We fhall therefore infert only a few of thole which are beft adapted to thefe intentions.

The management of a still being now generally understood, it is needless to spend time in giving directions for that purpose.

#### Cinnamon Water.

Steep one pound of cinnamon bark, bruifed, in a gallon and a half of water, and one pint of brandy, for two days; and then diffil off one gallon.

This is an agreeable aromatic water, poffeffing in a high degree the fragrance and cordial virtues of the fpice.

#### Pennyroyal Water.

Take of pennyroyal leaves, dried, a pound and a half; water, from a gallon and a half to two gallons. Draw off by diffillation one gallon.

This water poffeffes, in a confiderable degree, the fmell, tafte, and virtues of the plant. It is given in mixtures and juleps to hyfteric patients.

An infusion of the herb in boiling water answers nearly the fame purposes.

# Peppermint Water.

This is made in the fame manner as the preceding.

#### Spearmint Water.

This may also be prepared in the same way as the penny. royal water.

Both these are useful ftomachic waters, and will sometimes relieve vomiting, especially when it proceeds from indigestion,

# SPIRITUOUS DISTILLED WATERS. 763

digeftion, or cold viscid phlegm. They are likewise useful in some colicky complaints, the gout in the stomach, &c. particularly the peppermint water.

An infusion of the fresh plant is frequently found to have the same effects as the distilled water.

#### Rose Water.

Take of roles fresh gathered, fix pounds; water, two gallons. Distil off one gallon.

This water is principally valued on account of its fine flavour.

## Jamaica Pepper Water.

Take of Jamaica pepper, half a pound; water, a gallon and a half Diftil off one gallon.

This is a very elegant diffilled water, and may in most cafes fupply the place of the more costly spice waters.

# SPIRITUOUS DISTILLED WATERS.

## Spirituous Cinnamon Water.

TAKE of cinnamon, one pound; proof spirit, and common water, of each one gallon. Steep the cinnamon in the liquor for two days; then distil off one gallon.

#### Spirituous Jamaica Pepper Water.

Take of Jamaica pepper half a pound; proof spirit, three gallons; water, two gallons. Distil off three gallons.

This is a fufficiently agreeable cordial, and may fupply the place of the Aromatic Water.

# WHEYS.

## Alum Whey.

BOIL two drachms of powdered alum in a pint of milk till it is curdled; then strain out the whey.

This whey is beneficial in an immoderate flow of the menses, and in a diabetes, or excessive discharge of urine.

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The dole is two, three, or four ounces, according as the ftomach will bear it, three times a day. If it fhould occafion vomiting, it may be diluted.

# Mustard Whey.

Take milk and water, of each a pint; bruifed muffardfeed, an sunce and a half. Boil them together till the curd is princefly feparated; afterwards ftrain the whey through a cloth.

This is the most elegant, and by no means the least efficacious method of exhibiting mustard. It warms and invigorates the habit, and promotes the different fecretions. Hence, in the low flate of nervous fevers, it will often fupply the place of wine. It is also of use in the chronic rheumatism, palfy, dropfy, &c. The addition of a little sugar will render it more agreeable.

The dofe is an ordinary tea-cupful four or five times a-day.

#### Scorbutic Whey.

This whey is made by boiling half a pint of the fcorbutic juices in a quart of cows' milk. More benefit, however, is to be expected from eating the plants, than from their expreffed juices.

The fcorbutic plants are, bitter oranges, brooklime, garden fcurvy-grafs, and water-creffes.

A number of other wheys may be prepared nearly in the fame manner as orange whey, cream of tartar whey, &c. Thefe are cooling pleafant drinks in fevers, and may be rendered cordial, when neceffary, by the addition of wine.

#### WINES.

T HE effects of wine are, to raife the pulle, promote perfpiration, warm the habit, and exhilarate the fpirits. The red wines, befides these effects, have an astringent quality, by which they strengthen the tone of the stomach and intestines, and by this means prove serviceable in restraining immoderate secretions.

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The thin fharp wines have a different tendency. They pass off freely by the different emunctories, and gently open the body. The effects of the full-bodied wines are, however, much more durable than those of the thinner.

All fweet wines contain a glutinous fubstance, and do not pass off freely. Hence they will heat the body more than an equal quantity of any other wine, though it should contain fully as much spirit.

From the obvious qualities of wine, it must appear to be an excellent cordial medicine. Indeed, to fay the truth, it is worth all the rest put together.

But to answer this character, it must be sound and good. No benefit is to be expected from the common trash that is often fold by the name of wine, without possessing one drop of the juice of the grape. Perhaps no medicine is more rarely obtained genuine than wine.

Wine is not only ufed as a medicine, but is alfo employed as a *menfiruum* for extracting the virtues of other medicinal fubftances; for which it is not ill adapted, being a compound of water, inflammable fpirit, and acid; by which means it is enabled to act upon vegetable and animal fubftances, and alfo to diffolve fome bodies of the metallic kind, fo as to impregnate itfelf with their virtues, as fteel, antimony, &c.

# Anthelminthic Wine.

Take of rhubarb, half an ounce; worm-feed, an ounce. Bruife them, and infuse without heat in two pints of red port wine for a few days; then strain off the wine.

As the flomachs of perfons afflicted with worms are always debilitated, red wine alone will often prove ferviceable: it muft, however, have ftill better effects when joined with bitter and purgative ingredients, as in the above form.

A glafs of this wine may be taken twice or thrice a-day.

# Antimonial Wine.

Take glass of antimony, reduced to a fine powder, half . an ounce; Lisbon winc, eight ounces. Digest, without heat, heat, for three or four days, now and then shaking the bottle; afterwards filter the wine through paper.

The dofe of this wine varies according to the intention. As an alterative and diaphoretic, it may be taken from ten to fifty or fixty drops. In a larger dofe it generally proves cathartic, or excites vomiting.

#### Bitter Wine.

Take of gentian root, yellow rind of lemon peel, fresh, each one ounce; long pepper, two drachms; mountain wine, two pints. Infuse without heat for a week, and strain out the wine for use.

In complaints arifing from weakness of the ftomach, or Indigeftion, a glass of this wine may be taken an hour before dinner and supper.

#### Ipecacuanha Wine.

Take of ipecacuanha, in powder, one ounce; mountain wine, a pint.' Infuse for three or four days; then filter the tincture.

This is a 'fafe vomit, and answers extremely well for such perfons as cannot swallow the powder, or whose stomachs are too irritable to bear it.

The dofe is from one ounce to an ounce and a half.

#### Chalybeate or Steel Wine.

Take filings of iron, two ounces; cinnamon and mace<sub>j</sub> of each two drachms; R henifh wine, two pints. Infufe for three or four weeks, frequently flaking the bottle; then pafs the wine through a filter.

In obstructions of the *menses*, this preparation of iron may be taken, in the dole of half a wine-glass twice or thrice a-day.

The medicine would probably be as good if made with Lifbon wine, fharpened with half an ounce of the cream of tartar, or a fmall quantity of the vitriolic acid.

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Stomachis

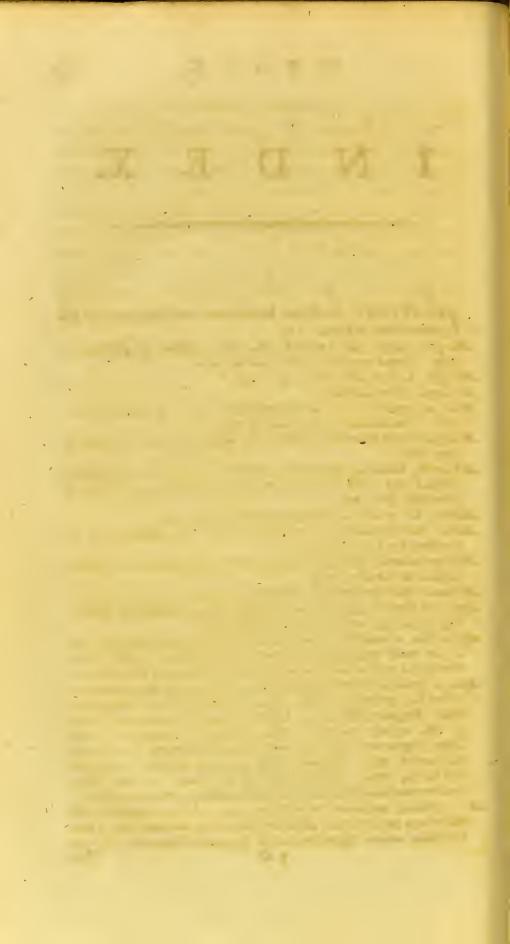
# WINES.

#### Stomachic Wine.

Take of Peruvian bark, großly powdered, an ounce; cardamom feeds, and orange peel, bruifed, of each two drachms. Infuse in a bottle of white port or Lisbon wine for five or fix days; then strain off the wine.

This wine is not only of fervice in laxity and debility of the flomach and inteffines, but may alfo be taken as a preventive, by perfons liable to the intermittent fever, or who refide in places where this difeafe prevails. It will be of ufe likewife to those who recover flowly after fevers of any kind, as it affifts digeftion, and helps to reffore the tone and vigour of the fystem.

A glass of it may be taken two or three times a-day.



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