The natural method of cureing the diseases of the body and the disorders of the mind depending on the body. In three parts. Part. I, Reflections on the nature and cure of particular chronical distempers / By Geo. Cheyne, M.D.R.C.Ed. and R.S.S.

#### Contributors

Cheyne, George, 1671 or 1672-1743.

#### **Publication/Creation**

London: Printed for Geo. Strahan, at the Golden Ball in Cornhill, and John and Paul Knapton, at the Crown in Ludgate-Street, 1742.

#### **Persistent URL**

https://wellcomecollection.org/works/s8hdtf5z

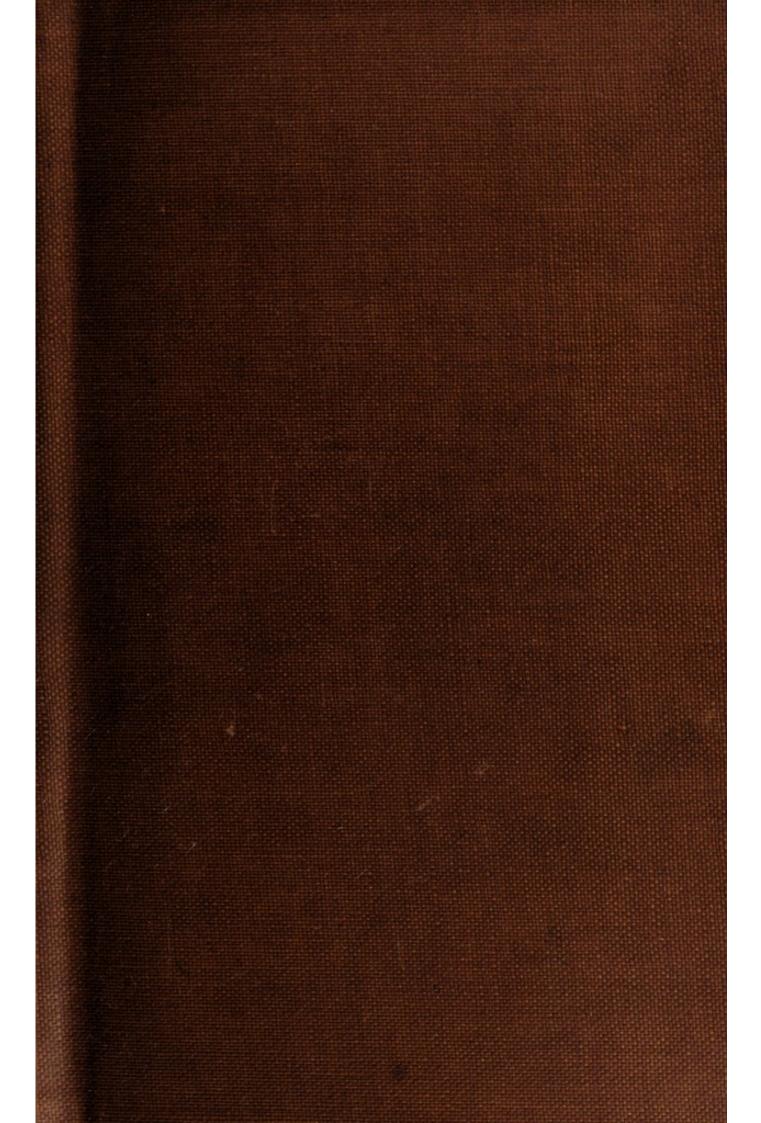
#### License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org



17649/B/2 A.xxxIII.q Digitized by the Internet Archive in 2018 with funding from Wellcome Library



Difference of the Latest THE LOSS BRAL REPORTED TO SE For B. The Waxas and Market and Market preferring Lafe and Pareltick - and and Care of particular Chryslad Piffernous,



Ser I. Boardman

THE

# NATURAL METHOD

Of CUREING the

# Diseases of the BODY,

ANDTHE

# Disorders of the MIND

Depending on the BODY.

In THREE PARTS.

Part I. GENERAL REFLECTIONS on the Oeconomy of NATURE in Animal Life.

Part II. The MEANS and METHODS for preserving Life and Faculties; and also concerning the Nature and Cure of Acute, Contagious, and Cephalic Disorders.

Part III. REFLECTIONS on the Nature and Cure of particular Chronical Distempers.

By GEO. CHEYNE, M.D. R. C. Ed. and R.S.S.

-Extremam banc oro veniam-

VIRG.

#### LONDON:

Printed for GEO. STRAHAN, at the Golden Ball in Cornhill, and JOHN and PAUL KNAPTON, at the Crown in Ludgate-street. M.DCC.XLII.

HHT

# NATURAL METHOD

OF CUREING the

# Discases of the BODY.

AND THE

# Disorders of the MIND Depending on the BODY.

In Tunne Paners.

Pur I. General Result of today of significant and Admed Link.

Part II. The Mrans and Mfrances for preferring Life and Faculties and Cure of Acade Concerning the Name and Cure of Acade Contents and Contents and

Part III. REFLECTIONS on the Name and

By Cao, Cherries, M. D. R. C. Ed. and R. E. E.

#### TONDON:

Pinnel Cr Gro. Strang and an incident Sulf-a Creation and I pays and Party Apparatus to al, mais Crown in Langua Party Managan

#### TOTHE

# Right HONOURABLE

THE

# Earl of Chesterfield, &c.

FROM a Zeal for the Preservation of his Lordship's Health, and in Honour of his eminent and shineing Endowments, these, probably his last Labours in Medicin, are humbly inscribed by

His Lordship's

Most faithful humble Servant,

GEO. CHEYNE.

аллоноП-жу eri in Madicin, are beineby inforited

In my Essay on Regimen, I promised the World my Thoughts concerning, The natural Method of cureing the Diseases of the Body, and the Disorders of the Mind resulting from such Diseases, on the Principles of Philosophy laid down in that Essay, which, by a Course of sifty Years Study, I have discover'd to be the most Rational, and in forty Years Practice of Physic, have found them to be the most Essay.

This Promise I have in the following Sheets endeavour'd to perform,
whether to the Satisfaction and Benefit
of the Public, Time and Experience

A must

must shew. To a Delicacy of Sentiments and Correctness of Style, I have small Pretensions; to convey my own Thoughts to others, with as much Plainness and Perspicuity as my Subject would admit of, has been my principal View; and if the serious attentive Reader sinds himself instructed, the Intention of the Writer is answered, and his Credit, as a Pen-man, is of small Import.

NATURE and her Laws, a competent Knowledge of the animal Oeconomy, and the best Observations which I have been capable of makeing on my own Success in Practice, or on that of the ablest of my Profession, are the Foundation of every thing by me advanced. Theory I have given into as far only as seemed necessary to reconcile the Method and Medicins by

d' Maring

me recommended, to the truest Idea which I could frame of the Distemper to be cured: For the rest, the Reader is referred to the Essay above-mentioned, and its Appendages.

In a Design extensive as this, it will not be expected that I should descend either into Forms of Medicins, or the particular Circumstances of every Distemper under Consideration; this will be the necessary Duty of the Physician in ordinary, who, if he approves the general Directions by me given, will readily adapt them to any particular Case, its Degrees and Symptoms.

It cannot, I should hope, give any reasonable Offence, if in a Work of this Kind, many particular Things should occur, which probably I may have A 2 alroady

already advanced in some former Treatises; my Apology for which is, that in all I know of Physic, I have but one general System; Nature being ever one and the same, and proceeding in all animal Functions and Operations by the same, or at least by analogous Laws.

WHAT I learned from Books, Speculation and Philosophy, by Trial and Experience I have found to be greatly defective, as well in many Distempers, whereof I myself have felt the Weight, as in the Cases of my Patients; and this Experience has led me to throw off all unsuccessful Methods and Medicins, and to confine myself to such only, by which I had Reason to think the principal Point in View, viz. a lasting Cure, might be obtained. This Method of proceeding reduces the Practice

Practice of Physic into a narrow Compass, viz. 1°. To proper Evacuations of the several proper Kinds. 2°. To attenuating and deobstruent Medicins, of which I find the mild ponderose to be generally the best; and after a due Use of these, 3°. The gentle Astringents and Strengtheners of the Solids, 4°. A proper and specific Diet, with Air and Exercise.

This is my general System: This, if just and solid, brings all that can be pertinently said on the Cure of Distempers, into an easy and intelligible View, and makes many of the same Methods and Medicins common to different Cases and Patients. Whatever exceeds this, is calculated either for the easy Death, or to keep up the Courage and Hopes, of the Patient.

IT

It would not become me to fay, that the Method here laid down, how judiciously soever applied, will in every Case absolutely cure or save: This, however, I venture to affirm, viz. that the Continuance of this Method for a due Time, has done, in very bad Cases, and, by GOD's Blessing, will do more than any other which has yet been so strongly and clearly enforced and explained, or is commonly used.

I MAY be deceived myself, but, if I know my own Heart, have not a single Temptation to deceive others. My Age is little short of seventy Years, at which Time in Life, a Thought of adding to my Reputation, or to my Purse, would be extreme Folly: The first is now at the Disposal of the Public,

Public, the latter will foon be in the Hands of my Executors.

THESE Rules have I followed for twenty Years, first and last; and, by the Mercy of Heaven, am at this Time happy, in the Enjoyment of my Senses, and the Faculties of my Mind, in their full Vigour.

But after all, though I should convince the World, I must not expect to convert it: Lessons of Abstinence and Self-denial loose their Weight, when offered to strong Passions, and bigh Spirits; and the greatest Part of my Disciples will probably always be such, as have labour'd through the tedious Courses of Physic without Success, whose Sufferings have sourced the false Pleasures resulting from sensual Appetites, and who are at length willing to A 4 renounce

misery. To these I seriously affirm, that this Method, strictly and for Time sufficient pursued, will afford all the Ease which human Art can give, or human Nature receive; and as the Time is hourly stealing on, when Art can do no more, an Observance of these Rules will be the calmest and easiest way of lying down in Death.

LET this single Consideration then recommend the System proposed, viz. That it has a necessary Tendency to alleviat the Pains of Life, and to soften the Terrors of Death.

another side deponds bimodel wash as

Constant Phys. Without Success, palete

#### THE

# CONTENTS.

REFLECTIONS on the Oeconomy of Nature in Animal Life.

THE probable Reasons, why the Spiritual Principle of the Human Race has been so long confined to so narrow and dark a Prison as the Seminal Corpuscle, before it arrives at its Maturity

Page 5.

How Nature has provided, as it were, an Infinity of divinely organis'd Particles, endowed with a kind of brutal Life, in every Animal, to prevent the Extinction of any one Species, ariseing from the Nature of gross Matter, and the other infinit Accidents against any one's comeing to Maturity

Probable Conjectures about the Magnitude of a single Animal Fibre 12.

The difti	net Natu	re ar	id true Di	Herence be-
		-	Vegetable	10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (
for Foo	od		all active sate	20.

The Manner how Animal Secretion is performed 25.

The Cause of Sleep and Dreaming 39.

The Manner how Medicins act on Animal Bodies 43.

The Conduct of Nature in prepareing the vifcous Water, which is the Substance proper for the Vegetation and Growth of Plants, whereby they become Food for Animals 51.

Experiments to shew the true Proportion of Nourishment, in the several kinds of Materials for Food 53.

### PART II.

The MEANS and METHODS for preferving Life, Health and Serenity.

#### CHAP. I.

Eneral Reflections on the Natural Effi-I cacy and Necessity of Temperance or Abstinence respectively, in the Cure of Chronical Distempers

57.

That

That fermented Liquors destroy the Digestibility of all Foods, and are the general Cause of all acute and severe Distempers 71.

### CHAP. II.

Of the Nature, Cause and Cure of the Disorders of the Mind, so far as they depend on the Body 78.

#### CHAP. III.

General Reflections on the Nature, Cause and Cure of acute, epidemical and contagious Distempers 96.

#### CHAP. IV.

Of the Nature, and the good or bad Qualities of the Blood

#### CHAP. V.

Of Mercury, its Nature and sensible Effects and Qualities, and of the best and safest Preparations of it

#### CHAP. VI.

Of Milk, its Nature, and several Kinds, and of its Virtues and Effects on Animal Bodies 126.

### PART III.

#### CHAP. I.

Eneral Reflections on the several Kinds
of Evacuations previous to or intermix'd in the Cure of Chronical Distempers

#### CHAP. II.

Observations on the natural Method of Cure in particular Chronical Distempers.

Of Hypocondriacism and Hystericism 153.

Of Fætids and Volatils, the Manner of their Operation 154.

Of a Rheumatism and its Cure 156.

Of the Cure of Scorbutic Blotches and Leprosy 157.

Of the Nature and Cure of Intermittent Fevers 159.

Of the Nature and Cure of a Scrophula 165.

Of the Nature and Cure of the King's-Evil

166.

Of the Nature and Cure of the Asthma 168.

Of the Nature and Cure of the Dropfy 170.

Of the Nature and Cure of an Anafarca	172.
Of the Nature and Cure of a Diabetes	173.
Of the Cause and Cure of Inflammation general, and in particular in the Eyes Hæmorrhoids	ns in and 176.
Of the Cause and Cure of the Gout	177.
Of the Cause and Cure of the Sciatica	180.
Of the Cause and Cure of Menstrual	Ob-
Of the Cause and Cure of Floodings	182.
Of the Cause and Cure of the Fluor	Albus 182.
Of the Cause and Cure of a Consum	ption
Of the Cause and Cure of a Jaundice	185.
Of the Cause and Cure of the Scurvy	191.
Of the Cause and Cure of the Colic	195.
Of Venereal Distempers, their Nature	e and 197.
Of the Cause and Cure of the Stone Gravel	and 201.
Of the Seminium or Elements of the se	veral
bodily Distempers	205.
C	HAP.

#### CHAP. III.

An Answer to the most material Objections against the Efficacy of a low, and of a vegetable Diet, directed for the Preservation of Health and Cure of Distempers 207.

#### CHAP. IV.

Reflections on the general Method of Cure of hereditary or acquired Tenderness, Thinness, Wasteing, or Valetudinariness of Constitution, from whatever Causes 243.

#### CHAP. V.

Of the different Powers of Diet, and of the Diseases each Kind respectively is capable to cure or eradicat 263.

#### CHAP. VI.

Rules for preventing Infertility in both Sexes, and Miscarriages in the Female Sex 276.

#### CHAP. VII.

Rules for obtaining and preserving Health in the Decline of Life; or for secureing a Green Old Age 293.

. C. L. P.

The Nature and Cure of a simple, uncomplicated Diarrhoea or Looseness 310.

explained. To which is credited, an Effer concernate the

which is to bolded and the beauty sent of the will and we

Touch English . The Sepond Part spiriting the Parties of Re-

inhired Principles of Religion, Wateral and Revealed:

tion of the court and a large and observable, and a formation of the

The Conclusion

312.

THE

The following Books, by the same Aurhor, are fold by Geo. Strahan, at the Golden Ball in Cornhill.

A New Theory of acute and flow continued Fevers: Wherein besides their Appearances, and the Manner of their Cure, occasionally the Structure of the Glands, and the Manner and Laws of Secretion, the Operation of purgative, vomitive, and Mercurial Medicines, are Mechanically explained. To which is prefixed, an Essay concerning the Improvement of the Theory of Medicine. The Fourth Edition, corrected.

An Essay of the true Nature and due Method of treating the Gout: Together with an Account of the Nature and Quality of Bath-Waters, the Manner of using them, and the Diseases in which they are proper: As also of the Nature and Cure of most Chronical Distempers. The fifth Edition, enlarged to more than double the former.

Philosophical Principles of Religion, Natural and Revealed: In Two Parts. The first containing the Elements of Natural Philosophy, and the Proofs of Natural Religion. The Third Edition. The Second Part containing the Nature of Infinites, together with the Philosophic Principles of Revealed Religion.

An Essay of Health and Long Life. The Seventh Edition.

The English Malady: or, a Treatise of nervous Diseases of all Kinds, as Spleen, Vapours, Lowness of Spirits, Hypochondriacal and Histerical Distempers, &c. In Three Parts.

Georgii Cheynæi, M. D. Coll. Reg. Med. Edinb. & Soc. Reg. Lond. Socii. Tractatus de Infirmorum Sanitate Tuenda, Vitaque Producenda, Libro ejusdem Argumenti Anglice Edito longe Auctior & Limatior, huic Accessit de Natura Fibræ ejusque laxæ sive resolutæ Morbis Tractatus nunc primum editus.

#### THE

# Natural Method of Cure

In the

# DISEASES of the BODY,

And the

DISTEMPERS of the MIND Depending thereon.

#### PART I.

REFLEXIONS on the Oeconomy of Nature in Animal Life.

that is, the Basis, of either material or spiritual Qualities; we know only their Being, and reason of their Nature from their Qualities, and their sensible Effects. It is certain that the self-motive and self-active Principle, or spiritual Substance, that actuates or animates organised Matter, must have essentially and actually inherent in it, all those natural Qualities, Faculties and Endowments, in the highest Perfection, that it ever exerts or B

attains to in any time of its Duration. To augment or increase in essential Qualities, is an Abfurdity; and to augment or increase naturally, is only the Property of Body and Matter: But spiritual Substance being indivisible and immortal, if it could admit of More or Less in natural or effential Qualities, it might cease to be, I mean as to its natural Qualities of Living, Perceiving and Willing, i. e. of Cogitation or Thinking: for as to its moral Qualities of Juflice, Goodness and Truth, they may increase or decrease to any Degree, since they intirely depend on the Free-will: and therefore the natural Faculties of Living, Perceiving and Willing, and their several Degrees and Modifications of Activity, Sagacity and Desire, are esfentially and uniformly permanent in it, in their Order and Degree respectively, whatever kind of Body it animates; and when it does not exerttheseinnate and esential Qualities, it is because it is limited and restrained by the Nature of gross Matter, and the Laws of the Body which it animates, which is a foreign Impediment infuperable to its Degree of Self-activity and Selfmobility. For an Angel is as truly an Angel, as to its spiritual Nature and Faculties, informing the Body of a Serpent, or any other organis'd Body, as informing the Body of a Man: And an Angel animating a human Body, wou'd be only a more perfect Man; and by its natural and essential Qualities cou'd then only more perfectly exert human Functions and Operations: And

And on an unorganical Body it cou'd produce no vital Functions, it cou'd only put it into particular Motions.

2. THE Body of an Animal is as perfect and complete in its lumbaginous and spermatic, as in its adult State, from the first original Pair, down to this present Time. In its lumbaginous State, with respect to its Body, it is, as it were, a mere Plant; in its spermatic State, it is but a Brute Animal; and it is only and properly a Man in its adult State, when its spiritual Faculties can act on its material Organs with the least Resistance, and when its material Organs are complete, develop'd, and cloathed with proper Incrustation and Teguments, in which it continues but a stated Time. The Skeleton, Hulk and Rudiments of its Solids and Fluids, with all its vital and animal Organs, are fimilar and analogous in all these several Stages of Being: It has the Miniature, infinitesimal Solids, Fluids, and animal Organs and Functions, as real and perfect in its lumbaginous and spermatic State, as in its adult State, allowing for Circumstances; for then its Solids are only infinitely smaller, more slender and delicate, roll'd up and folded together; and its Fluids infinitely more rare, thin and subtile; its Functions infinitely weaker and flower; and their Extension, Progress, and Increase, is infinitely small in the Beginning, and for Ages may be infenfible, like a flow diverging infinite Series, beginning from

from infinitely Little; but diverging it must be, and always growing, living, and verging to its State, in a certain Progression, and by stated Laws. For the Soul, or Spiritual Substance, can only animate or actuate divinely organis'd Matter; and if in any Instant of Time the infinitesimal Functions should stop, the Corpusite wou'd soon putrify, or become an inorganical Particle of dead Matter, so as, without the Power and Activity of the first Mover and Creator, it could not be again made capable of Animation; which may be one Reason of the infinite Waste of organis'd Seeds, or Beginnings of Life, conspicuous in the World, from the unprecise Nature of gross Matter, and the infinite possible Chances against the Precision necessary to living in this present State of Things.

3. The first Man, or the original and mediate Cause of the human Race, must either virtually or actually, either explicitly or implicitly, have had inherent in him, all those natural Qualifications, Properties or Virtues both of Body and Soul, that ever were found in any of his Posterity: Or before the Lapse (to suppose it only here for Illustration) Adam, or the first of the human Species, before the Division of the Sexes, (for it is plain from the Nature of Things, that the placing two equal human Souls, in only differently figur'd Bodies, must have been posterior to the first original Design

Design of their Creation, if final Causes have any Evidence; for this Division of Sexes supposes a Want or Deficiency, and a begun Lapse, and could be no other than a Prop or Buttress to support a ruinous Fabric; for it is highly probable, and conformable to the best Natural Philosophy, that the Principle of Generation is only in the Male) I fay, Adam must have had inherent in his original Frame, at least the Meekness of Moses, the Patience of Job, the Beauty of Absalom, the Wisdom of Solomon, the Spirituality and Resignation of penitent David, and all the Perfections and Excellencies of the Philosophers, Lawgivers, and Heroes of Antiquity, without their Blemishes; in a word, the first Man must have had existent in him, either actually or virtually, all the natural and moral Accomplishments and Endowments, that ever were existent or conspicuous in any of his Posterity; with due Regard to their intended different Uses and Ends in God's universal Monarchy; for the Effett can never rise higher than the Cause, or the Fruit than the Seed, or the River than its Source. I think this must be very plain to a true Philosopher, and is at the same time a Demonstration of the Laple and Degeneracy of the present human Race.

4. For what wife Purpose the Creator of both Body and Soul, has confin'd the actuating immaterial Substance, for so long a time, to so dark and strait a Prison as is this seminal B 3 Corpuscle,

Corpufele, viz. all the time of its Duration from the Creation of the immaterial Spirit, and Formation of the organis'd Body, till it arrive at its utmost Extension and Maturity, is not readily conjecturable. We feel that in Sleep, the Spirit acts but imperfectly and partially in Proportion to its wakeing Action; in Debauches, very inconfistently and ansteadily; and in Syncope's and fuch-like nervous Paroxy sms, scarce at all; and yet the Essence and real Energy or Capacity of the spiritual Substance is equally and uniformly the same, only the organical Machine is disorder'd, and will not play. We can only therefore conclude, that possibly the spiritual Substance may be so long imprison'd in its Miniature, organical Corpufcle, for some moral End in the Occonomy of Providence, either of Purification or Punishment; perhaps to limit and concentre the natural Powers to a Level with the laps'd and impair'd moral ones. that they may both rife and grow up together equally. I mention all this but as Philosophical Conjecture only.

5. ALL that the most perfect Analysis Art can reach, is able to discover in the intimate Composition of Bodies, is, that they are composed, I. Of Sulphur, Oil or Spirit, or the Matter of Fire. 2. Of Salt, or hard Particles, dissolvible by Water only. 3. Air, or a thin elastic dry Fluid, 4. Water, or a more dense, unclastic moistening Fluid, 5. Earth, a gross unalterable

terable permanent Substance, the Basis and Cement of the other Four. From the Mixture and Combination of these in different Quantities and Proportions, all the Varieties of Bodies and their Appearances may proceed.

- 6. The great Principles of Action in Bodies, small and great, may be, either, 1. Attraction or Repulsion, and its several Laws. 2. Elasticity or Reaction. 3. Fermentation. 4. Heat, Fire, or its Matter and Cause. From what primary Causes these proceed, I do not here inquire; but that these are probably the secondary Causes of Action in all Bodies, there is no room for doubting.
- 7. It is then highly probable, that an animal Body divinely organis'd, and fitted with Instruments to be actuated and animated by a spiritual Substance, the Moment after this spiritual Substance is breathed into it, or is united to this Body, becomes a living Animal, and not before; and then receives Nourishment, and performs the Functions of Circulation, Perspiration, and the Secretions analogically, and by its proper Laws, in its lumbaginous and spermatic Condition, as really as it does afterwards in its adult State; and as it can have no Nourishment in the two first of these States, but from a Tincture or Zest of the Juices of the Parents, good, bad or indifferent, as they may be, and must fare accordingly; so it will

be nourist'd, perspire, respire, and secrete in its adult State, according to the Nature and Qualities of what it takes in from the Juices and Fluids about it, and next to it, whatever they be, and however convey'd into its Habit and Substance.

- 8. In order to be nourish'd for some time, and perform the animal Functions, that is, to live, there feems to be no other Condition absolutely necessary, but that the Size of the nourishing Particles be no greater than what will easily enter and pass from the receiving Orifices to the excretory Orifices; or that the nourishing Particles be no bigger than the Mouths of the vasa inhalantia & exhalantia; for were they bigger, it wou'd necessarily creat Obstructions, Pain, and at last Death, or the Destruction of the Machin; it may be less, n any given Proportion; but it must not be greater; else it can neither readily enter, nor prompt the animal Functions without Violence and Pain.
- 9. To prevent Inconveniencies that may often happen from the finite and divisible Nature of gross Matter, from infinite Accidents, from the Unfuitableness of the nearest Fluid, to perform the necessary Functions of living in Animalcules for any time, we see what an Infinitude of organis'd Particles of Matte:, fitted for living in proper Circumstances, the Author

of Nature has provided in the Seeds of Animals and Vegetables, of which scarce One in many Millions can have all the favourable Circumstances to bring it to Maturity. In Plants and Vegetables, these organis'd Particles are thereby fitted to become proper Nourishment for Animals, that there may be no real Waste or Loss in Nature, but all may tend to some infinitely wise End or Purpose. For God and Nature do nothing in vain; and when from the imperfect and limited Nature of gross and porous Matter, and Deficiency of Circumstances, they attain not the chief Design, they chime into a Second or a Third, or some one in the infinite Chain of Effects. And this Consideration seems to me an evident Proof of Pre-existence; because every created spiritual Being, or individual Spirit, must at last find our a proper and peculiar material groß Prison to do Penitence in for a Time.

the primary linear Stamina, is intended to enable them to bear without Pain or Violence their future States, to sheath, defend, and cover their Delicacy, extreme Sensibility and Minuteness, from the Coarseness, Roughness, and Injuries of the Bodies that now surround us, in this ruinous, broken, coarse State of our present Habitation. They are designed only for the Time of our Duration on this ruinous Globe; for finite Spirits have Vehicles of one Kind or other

Sother to limit their Powers, and by whose Resistance and solid Obstacle, they may exert their self-active and self-motive, now imprisoned corporeal Faculties; no Spirit but the supreme, the Father and Creator of Spirit and Matter, being capable, it seems, of acting at a Distance, or without the Mediation of some organis'd Matter.

11. THE Wisdom and Contrivance of the Author of Nature, has by general Laws so order'd the present State of Things, that the external Superficies of the Viscera are not only cover'd with special and particular Coats and Membranes, (which are the great Organs of their Activity) which defend them from the Injuries of the coarse Solids or Fluids, or the Element we must live in, in this State; but each particular Fibril, each infinitesimal Hair of an ætherial, or, as it were, spiritual Solid, has a particular Coat of its own, to defend the linear Twig, and convey Action and Impression backward and forward; and the Whole is involved with a Coat or Tunicle of such a Nature, that the coarfer and more compressing the furrounding Fluids are, the thicker, and more close and compact this Cover or Cuticle mechanically grows, as we find by the Palms of the Hands and Soles of the Feet of Day-Labourers, and the Cuticle of the Poor and Naked; each perspiratory Gland, each secretory Duct, sending out a Drop of viscous Matter, which the Air compresses, flattens and hardens into a Scale, to cover the Mouths of the subjacent perspiratory Gland; which Scale, by a wonderful Mechanism, leaves its Mouth open, and yet defends it from the Injury of grosses and sharper Air, (like the Tiles of a House) the Element of Land-Animals; and of these Scales, thick ning according to Necessity, the human Cuticula is intirely composed. A Mechanism analogous to this is prepared for Aquatics, by a kind of mineral harder Scales, to defend the tender Fibres from the Injury of the denser and heavier Fluid of Water, their Element.

12. THE same analogous Contrivance is provided for the Covering of the internal Superficies of the Bowels of Animals, (and besides that, every original linear Solid has a Case or Sheath) where an infinite Number of Glands, by the Force of the animal Functions, are continually spewing out a more viscous or crasser Fluid, which becomes a Slime or Mucus to sheath and defend them from the internal Aura, and their Frictions upon one another, and by its Lubricity to keep them (the Membranes) moist and elastic. And as this internal Aura is more delicate and lefs deleterious, than the external Element, this Cuticle or Mucus is fofter and thinner; but there is an absolute Necesfity for fuch a Mucus and Cuticle, to moisten and sheath their Delicacy and Sensibility, and therefore this Cutis is thinner: For one fo coarfe

coarse and gross as the external Cuticle, would offend and hurt these tender Parts.

13. LEWENHOECK found Tubes in an animal Body fo small and delicate, that putting a common Hair, and one of these Tubes together, before the Object Glass of a Microscope, he computed it would require 600 such Tubes to be as big as the Hair. We know that every Point of an Animalcul is sensible, and that to Sensation there must concur an Artery, a Vein, and a Nerve. Every Point of our Cuticle throws off a Steam or an Air in a found State; the same Lewenhoeck found 125000 such organis'd Orifices under a Space that a Grain of Sand would cover. All the Membranes confift of Meshes like Net-work, of different Forms and Figures: The Substance of the Fibres that compose the Solids we find to be cellular, or vesicular, like the Substance of a Sponge, or the Pith of a Rush, which Cells or Vesicles therefore must communicate or be patent one into another. \* The learned Dr. Porterfeild very justly concludes from Dr. Hooke's determining the Minimum visibile under an Angle of one Minute, that the Magnitude of a fingle nervous Fibre cannot exceed the 3600th Part of a common Hair. All the Tubes, Glands, and Cells of the Solids are filled with a thin glutinous Water, and these make the solid

<sup>\*</sup> Vide Medical Essays, Vol. iv. p. 252.

Substance of the whole Matter of an Animal. Water and Mercury are the only sensible Fluids that can circulate, and enter in such Tubes, tho' the last will do so but transiently, and only as a Cleanser or Rammer to the Tubes.

14. THE Organs, the Glands, Tubes and Fibres, but especially the Membranes, and other folid Parts of Animals, are the most elastic and ductile of any known Substance. They may be drawn and spun out to an inconceivable Length, even to a Length almost beyond Gold itself; which yet we know may be extended on the Surface of Silver-Wire, from a fingle Grain to many Leagues in Length. Yet the Ductility and Elasticity of animal Substances seems much superior, and more delicate and fine than that of any Metal or Vegetable, as is evident in both these Qualities, from the Threads of a Silkworm and Spider, and from the Vibrations of Cat-gut in Music. Impostumes, Schirrous Glands, Aneurisms and Wens, thew how much a small Globule of animal Substance. especially the membranous and fibrous, may be stretch'd before it burst or break. All this shews at least, that they are extremely fine, ductile, and elastic. But this Elasticity lies in the Coat or Membrane, not in the folid Content.

golden Mean, between the extreme Minuteness of some Particles of Matter, and the too great

great Coarfeness and Largeness of others, that is most proper for the Nourishment of animal Bodies, and best suited to our present Situation, and the Nature of the Fluids and Solids that furround us. For Instance, Alcalious Salts, which are only porous Earths (whether form'd and figured by chymical, folar, or central Heat, is not material) like a dry Sponge, being the Nests, as it were, of acid Water, driven out of their Pores by great Heat, whence they are again render'd capable of receiving more of this Acid into their Pores, whither it is drawn and solicited by the remaining Acid; These Salts, I fay, wou'd be improper Food for any Animal: And here it may be observed by the by, the Fermentation with these Acids arises from their rushing with Velocity and Violence into these empty Pores, to fill their Vacuities. And the Volatility of those Salts arises solely from a light Oil of Sulphur being added to them: So that Alcali's may be really nothing but dry'd porous Earths, with fome remaining acid Salt in their Pores; which by its Attraction draws more Acid, to fill these Pores, when it comes within their Sphere; and Salts are made volatile by the Addition of light Oil. Both acid and alcali Salts are improper Nourishment, as well as improper Medicine for Animals, but where they are design'd to destroy one another. This may be the true Theory of Salts, and is conformable to the Experiments of the greatest and best Chymists, Newton, Boyle, and Geoffry.

If then the Particles of our Food were refolv'd into their primary indivisible Atoms, such as these, they wou'd not fit the Ruptures and Chasms made in our Bodies by Action, and Living, and the constant Abrasion of the Fluids that furround us: And besides, by their Solidity, and greater Degree of Attraction, when divided into their least and last Particles, they would run into Clusters, crystalize, or separate into their feveral elementary Orders, by this then prevalent Degree of Attraction, and form Bodies of a Composition different from Flesh and Blood. So that the very best nourishing Particles for animal Bodies, are those of the Third Order, of a middling Compo. fition and Size, of a rare, porous, and spongy Texture, or a Medium between Particles made of Salts and Sulphurs, and those that partake more of the other Elements, of Air, Water, and Earth; or the smallest integral Particles of animal and vegetable Substances. And hence arises one Reason, why fermented Liquors, Spirits, and distill'd Fluids of all Kinds, are so unfriendly and destructive to animal Bodies.

16. For Distinction's sake, we may consider three Degrees of the Size of Particles in Bodies. First, Those which may be reckon'd the first and least, which must necessarily be solid, compact, and indivisible, at least by any finite or natural Force or Art. And these seem to be the Particles that make the primitive

Elements (first intended by the Author of Nature) already nam'd; viz. original Salt, Sulphur, Air, Water and Earth; and may be consider'd as unalterable, and always the same. Perhaps their Figure may be triangular Prisms, Spheres, and Cubes, and their Combinations; those being the most simple Solids, and God and Nature never do any thing in vain, or in a perplex'd manner. Secondly, Those of the simplest Composition and Combination of these elementary Particles, such as may be all our Elements produc'd by Art, wherein there is always a Mixture of all the other Elements, and which no Art can produce absolutely pure and simple; of this Kind are our now chymical depurated and rectify'd Salts, Sulphurs, Water, Air, and Earth. Thirdly, The common Mixture or Product of the least integral Particles, as we find them in Nature, and without Art, in animal and vegetable Substances, where these Elements are combin'd in different Proportions. It is of fuch Particles that the Author of Nature feems to have made the Choice and Peculium for the Nourishment and Increase of animal Bodies, when divided into their smallest integral Parts, that our Bodies may thereby become homogeneous, and in some kind similar to the Bodies and Fluids that furround us. For tho' Chymistry be a noble Art, and logical Instrument for natural Philosophy, yet I can never think its Productions, of what Kind foever, or any of its analysed Fluids or Solids impregimpregnated with the Substance and Matter of Fire, fit for animal Bodies, but likely to tear and destroy them sooner; else, in all Probability, the Author of Nature would have provided them ready for us: We call these respectively Particles of the First, Second and Third Composition.

17. NATURE'S Laws are general, uniform and simple; and if they produce various Effects, and shew different Appearances, it is from different Circumstances and Situations only. The highest Degree (for Example) of Heat our Bodies can bear without Pain or Hurt, is the same used for Vegetation, and not higher: greater Degrees of Heat, actual or potential, would rend and destroy them. The same Heat which ripens Grapes, and later Fruits, continuing to act on them when compress'd and confin'd, makes them ferment; whereby the Particles being disengag'd and separated, go into Action, and verge towards their feveral Classes and Orders, by their proper Attraction and Gravity; a great Part of the earthy, airy, and watery Particles being flung off, the Juices become vinous, and have a greater Proportion of inflammable Spirit thereby collected and united in them, and, in any great Quantities taken into animal Bodies, by their greater Proportion of Salt and Sulphur, and consequent greater Attraction, (these Particles being now unsheath'd, and in an active State) must necessarily rend and tear them. The same Law of Heat,

Heat, Attraction and Gravity still continuing to act, if the vinous Juice be left open and at freedom, the sulphureous Particles, which are the most volatile and light, will fly off, and leave the Water and effential Salt, which will thus become acetous; and this acetous Liquor, treated by the Tortures of chymical Fires, will still throw off the few Remains of Sulphur, and a great part of the Water, and retain the material Particles of Fire and essential Salts, and so become Spirit of Vinegar, which in a great Quantity forced into animal Bodies, will act as a strong Caustic or rank Poison, by burning up the tender Fibres, and coagulating the Fluids, as all proper Poisons do by the same Laws and Energy.

18. WHETHER Fire, or the productive Cause of Heat, be a real specifically distinct and unalterable Kind of subtile Fluid, in itself inconvertible into any other Nature, but lodg'd in the Pores of other Bodies; or if it be only, which is most probable, the last and smallest elastic Particles of all Kinds of Matter, indifferently thrown off and excited into Action by violent Motion, is as yet undetermin'd, and of no great Confequence to ascertain, since on both Hypotheses its real Effects are the same. That it is the grand Agent in Body and dead Matter, and acts always in the subduplicate Proportion of its Distance, is certain. For the same Vegetables compress'd and closely confin'd, so that their Sulphur

Sulphur and Oil cannot be carried off, when this Oil and Sulphur, by being bruis'd and concenter'd, or kept within a narrow Bound, is brought into an active State, by the Action of Heat alone, putrify, turn mucilaginous and fætid, and have all the Appearances of animal Substances; which happens not when the Vegetables are expos'd to the Air, for then the oleaginous Particles would be carried off by it, and a Solution of the effential Salts remaining, they would turn only acetous. The cadaverous Smell, in the former Case, shews the Confinement of the Sulphurs; for it is well known, fuch Smells (and indeed all Smells) are owing to Sulphur. And thus we fee Nature's Law in Heat, from Vegetation to Maturation, from Maturation to Fermentation, Acetation and Putrefaction down to Incineration, is the same Action of Heat exerted only in different Degrees and Circumstances; and that local Motion and Division, is the only Action on Matter.

differ chiefly in the Proportions of the elementary Principles of Salt, Sulphur, Air, Water and Earth, contain'd in them. In animal Substances, the two first (Salt and Sulphur) are predominant; in Vegetables, the three last. Not but that there are vegetable Substances, in which the two first are more predominant than in some animal Substances,

as in Aromatics, oily Seeds, latter Fruits, Eastern Gums, and the like; in which Salt and Sulphur predominate much more than in Chicken, Veal, Lamb and young white animal Substances; for in Animals, the Salts and Sulphurs abound most, as they verge towards Maturity, and enter upon the Age of Generation; and to the Abundance of them in length of Time, this State, or Passion, is in a great measure owing. But, generally speaking, the Matter is as I have stated it, both in Animals and Vegetables; only Vegetables, in general, have more of the unactive, innocuous Principles of Air, Water and Earth in them; and animal Substances more of the active and deleterious Principles of Salt and Sulphur. Add to these this other material Difference, that the Strainers, Glands and capillary Tubes in Animals, are infinitely more in Number, and more fine and complicated than in Vegetables; and that, besides the external Heat common to both, Animals have an internal Principle of Heat and Action, to divide, digest and attenuate the Particles of Aliment to a greater Degree of Subtilty and Minuteness, and confequently to unite and combine animal Substances with greater Force; for Fire, like all violent Motion, divides first, and then their attractive Virtue classes and combines the homogeneous Particles.

20. FROM this Account of the Laws and Operations of Nature, and of the animal Oeconomy, it will not be difficult for a thinking Person, to chuse the Foods most proper for Health, long Life, and the clearest Use of his Senses and intellectual Faculties. It is most certain, the human Race has been, with infinite Wisdom and Foresight, fitted both for Animal and Vegetable Food, both of which will answer the mention'd Conditions, if not equally, yet sufficiently and fully, when properly chosen. The Rule to go by in this Case, is, to chuse in these two different kinds of Food, those which are most easily dissolvible into their integral Parts, that are least tenacious and coherent, that are lightest in Weight, and most porous and crumbling, and that have the fewest Salts and Sulphurs in their Composition, and abound most in the other Principles, whose Parts are less attractive, and will not fo readily, when analys'd by the animal Functions, run into greater Clusters so as to crystallise: and this will do all towards Life, Health and clear Faculties, that the Nature of gross Matter, the Laws of Mortality, and the Ends of Providence, in our present Situation will admit.

21. THE Strainers, Analysers and digestive or secretive Organs in Animals, are not the Glands only, properly so call'd, but the

converging Arteries, with their muscular Coats and Ramifications, the Lymphatics, the Values and Inosculations of the several Tubes, with the infinite Curvatures and Convolutions of all these, which insensibly divide, segregate and class the several Juices and constituent Particles: But the most sensible and perceptible Secretions and Analyses, are chiefly perform'd by the Glands; and to conceive their Nature and Structure, we need only consider the primary great and visible one of the first Digestion, viz. that contain'd under the Stomach, Intestines and Lacteals; \* for analogous to this visible and intelligible Gland, are all the other smaller and imperceptible ones, with due regard to their Situation and Use; all form'd by different Complications and Convolutions of the evanescent Arteries, with proper fecretory Tubes from containing Basons, attended with Veins and Nerves, which being infinite in Number, and various in Curvatures and Convolutions, have yet one general analogous and similar Nature, which nothing less than infinite Wisdom and Sagacity could have contrived and executed, as must be evident to a thinking Person.

22. WHAT more may be necessary for the perfect Concoction and Digestion of the Food, to convert it into animal Substance by the

<sup>\*</sup> Vide Bellini Opera.

great Gland of the Stomach, and the other lesser Glands, together with the muscular Action of the Coats of the Arteries and Veins, than gentle Heat and gentle Motion, I will not take upon me to fay. Some are of Opinion, that the lumbaginous and spermatic Animalcul may have an original and created Tincture or Zest, from some specific or subtile Fluid, infus'd at its first Creation, which may serve to maturate and perfect the specific Secretions and Concoctions in these Glands, in all future times of its Duration here. And this Opinion may appear fomewhat probable, by confidering the Nature of Runnet made of a Calf's Stomach, and its Use in turning of Milk; by observing, that the younger the Calf is, the fooner the Milk in its Stomach is turn'd into Curds and Whey; and that the sweet Whey, or aqueous part of the Milk only, enters the Latteals, the Curd mostly turning into Excrement, and being carried out of the Body by the Intestines. For the Mouths of the Lacteals in an Animal, in a natural State, are at all times, and much more in its first Stages of living, so fine and strait, that no Milk, no not even Asses Milk, can enter them in its integral and unbroken State; nothing but the very thinnest, most aqueous and lightest Particles of Food, in a Vapour, can, without Violence and Pain, enter the Mouths of the Lacteals at any time of Life, which are invisible to the finest Eyes, and scarce perceptible by the finest Glasses; so that C 4 fome

fome great Philosophers and Physicians have concluded them intirely of the Nature of a Filtre or very fine Search. A Down, Velvet, or Tomentum, being discover'd in all the secretory Ducts of the Glands, and an original Zest, being visible by its Colour in the Liver, even in the Fætus. The specific Juice in the Stomach of all the Young that feed on Milk, turn it into a gentle Curd; the Bone in a Dy that a Child had fwallow'd, having been confum'd and wasted, when the Wood that made its black Spots and Points, was not touch'd. These, and many more Observations, make it more than probable, that in Digestion there is something beside Trituration, and in the Glands an original specifically attractive Zest. We know, that the Steams of Mercury will falivate and pervade all the Parts of an animal Substance, whose parenchymatous Matter, when drain'd of its Juices, becomes entirely spongeous and cellular; so that any subtile Fluid may pervade it, after sufficient Hunger has drain'd it. But this original Zest in the Glands, gentle Heat, and gentle Triture from multiplied muscular Motion, are sufficient to explain all the Appearances of Concoction and Nutrition. And I should, without Hesitation, define Chyle, in a natural and healthy State, an Emulsion made on Water of the integral Particles of animal or vegetable Substances by gentle Heat and Motion; which Particles by further Heat, and the respective Action

Action of the Capillaries and Glands, are first more minutely divided, and after associated by the several Glands respectively.

23. SECRETION is perform'd by a very simple, though very wonderful Apparatus, both in the greater perceptible Gland of Concoction, and the lesser imperceptible ones, conglobate and conglomerate, to derive particular Juices for appropriated Uses. For, 1. The aqueous Part of the arterial mixt Fluid is drawn off by the Lymphatics, each Artery having one or more Lymphatics constantly attending it for that Purpose. 2. The many Convolutions in different Curvatures and Inclinations of the Artery in the Gland, by retarding the Circulation, afford Time for the several specific Particles to approach and act upon one another, by their own innate Laws of Gravity, Attraction and Repulsion; for which further Purpose each Gland is furnish'd with a proper Reservoir or Bason, where the Particles are left entirely to act by their own innate Qualities; and with Veins, to carry off that Part of the mixt Blood that is now drain'd of its specific Particles. But, 3. The most wonderful Part of this Apparatus has been lately discover'd and made manifest by Winslow, where he tells, that after innumerable Trials and Observations, he constantly found the fecretory Duct of every Gland cover'd all over in its Inside with a Velvet Tow or Plush-coat,

as a Filtre to it; and always, in Young and Old, tinged with a Liquor analogous and homogeneous to the Liquor secreted by the respective Gland: Which is a wonderful Confirmation of Sir Isaac Newton's Theory of Secretion, which ascribes it to a specific Attraction from the particular Nature and Matter in the secretory Gland. And, 4. From this Bason or Enlargement of the Tubes, there goes a fecretory Duct, to carry the now secreted and class'd Particles for the intended Uses and Purposes of Nature. Just as in a Mixture of Grain or Shot of various Sizes and Magnitudes, feveral Searches may be contriv'd of different Degrees of Fineness, to separate each of them distinctly; so in the animal Glands, the Lymphatics separate first the thin Water or Lymph of the Chyle and Blood; the Emunctories and parotid Glands, the thicker and more glutinous Serum, to lubricate the Stomach, Guts and Membranes; the Liver, (a more operose and complicated Gland) the Gall, to promote the peristaltic Motion, to stimulate and open the Mouths of the Lacteals, and to unite and homogenize the Particles of the Chyle; the Kidnies, the Urine; the Testicles, the Sperm; the cutaneous Glands, the Air: and each Gland is more complicated, as the Substance it secretes is more viscid; the finer Parts being first carried off, leave the groffer more at rest, and at Liberty to act upon one another by their specific Laws of Attraction and Gravity; for we must

must necessarily suppose the Materia Primato have been simular in its Nature, and that Division alone makes all the Difference of Particles, together with Figure and Gravity; and for the Exertion of this last Quality on the Particles, some Degree of Rest and Approximation is absolutely necessary, that they may come near, which the infinite Complication and Convolution of the capillary Arteries, and the Subtraction of the more sluid and thin Part of the Mixture, naturally procures in this Case.

24. WE may have some gross and general Notion of the Conduct of Nature in its Operation of Secretion, from what we observe of making of Salt of Sea water. It is boil'd fo long till a great part of the aqueous Particles is evaporated, the faline Particles, by reason of their greater Size and Gravity, not being able to rise so fast, and in so great Quantities; and by this Evaporation of the Water, the saline Particles are brought nearer and more crowded, and, being highly attractive, they unite in greater Clusters; and when set to cool, being lighter than Water when thus united, they form a Film or Cuticle on its Top; and this Film or Cuticle skim'd off, and expos'd to a gentle Heat, to evaporate the remaining Water, hardens and crystalises, and assumes the form of Salt. So it is in Nature's Operation of the specific glandular Secretions of Chyle, Fat, Sperm, Choler, Wind and Flegm. In such Glands there is a Bason, or Receptaculume

lum commune, where the specific Particles being at rest, after most of the Lymph, and the less saturated arterial Blood, are carried off by the Veins, they become more crowded, and are brought within one another's Spheres of Attraction, whence they coalesce and unite into Clusters, and in this Form are carried out for the Uses of Nature, by a secretory Duct proper for that Purpose: Though even these Secretions are never absolutely homogeneous and pure, but mixt with integral Particles. The healthier the Animal is, the more homogeneous and pure is the secreted Matter; but in a marbid State, they are heterogeneous and impure.

25. THE several Sets or Orders of Glands or Searches, in the healthy State of an Animal, separate respectively and in a regular Progression, all the superfluous and redundant Particles of the Chyle, and leave only the pure, nourishing and springifying (if I may so speak) Particles in the Serum. The emun-Etory Glands deprive it of the gross, earthy and watery Parts for their Purpose: The Liver separates the groffer and effential (or rather Sea) Salt, together with the thicker and less pure Sulphur, both which chiefly constitute the Bile: The Lymphatics take off the more watery Parts: The adipose Glands and Bladders, the purer Oil and Sulphur: The Spermatic Glands, the more volatile and finer animal Salts, Sulphurs and Earths; and the cuticular

ticular Glands, the permanent or artificial Air, as it is fet free or generated. The intestinal Tube, like a Common-shore, carries off all the Nastiness, Superfluity and Resuse of the Aliment. Thus wife Nature has provided Means to keep the internal Parts of the animal Machine clean and fweet, fo long as may be its Duration in this State, if we do not clog or obstruct her Operations.

26. THE Milk of Animals fed on Vegetables is nothing but an Emulsion made on Water, impregnated with the integral Particles of Vegetables, dissolved by animal Heat, and the muscular Action of the Stomachs of the Animals, passing through the Latteals, and going directly to the mammilary Glands, or at least before it has often pass'd through the Lungs; for then, by the Nitre of the Air, and grinding in the Lungs, it must necessarily change its Colour, as we see in the first Milk of Animals that have just parted with the Fætus. And therefore Milk is very little different from weak Soups, Broths or Emulsions, strongly bruis'd in a Mortar, and digested with a moderate Heat, and often strain'd through a fine Search. Such an Emulsion, artificially prepar'd, will equally nourish tender young Animals as Milk itself; as we see by Children bred up by the Hand, and Animals taken from their Dams: and a small Portion of an oleaginous Alcali will homogenife and

and unite such an *Emulsion*, and keep its Parts from separating, as it is in Milk; such as *Sugar*, *Honey*, and the like: and thus may be made an *artificial Milk*, of the same Effect to nourish a tender *Animal* with natural *Milk* itself.

- 27. ANIMAL Substances and fermented Liquors, when taken for Food, by the Action of the digestive Powers in the Prima Via, are turn'd into an Emulsion (in the Manner has been describ'd) consisting of their integral Parts: By the muscular Action of these Organs, and of the abdominal Muscles in Respiration, but especially by the reciprocal Action of the peristaltic Motion, the finer and more subtile Parts only of this Chyle, or Emulsion, are propell'd through the fine lacteal Searches, and in repeated Circulations, being mix'd with the Blood, and passing through the Lungs, there acquire, by the Nitre of the Air and the Compression of the pneumatic Mill, (by which the integral Parts are further bruis'd) that precife Magnitude of Parts which gives them a scarlet Colour, (for this is known to depend on a certain Magnitude of Superficial Particles) and are thus turned into pure arterial Blood, to be further elabour'd in the particular Glands for the future Uses of Nature.
- 28. The Globules of Blood are form'd in the larger Trunks of the Arteries and Veins, and even in the Intestines and Receptaculum commune

commune Chyli, by the innate Attraction of their Parts; a central Particle, either perhaps of finer Air, Salt or Sulphur, drawing towards it all those within the Sphere of its Attraction, there necessarily and mechanically forms itself into a Globule; for this wife End and Purpose, that being porous, globular and elastic, it may accommodate itself, by turning into a flat or oblong Spheroid, according to the Necessity and Figure of the Tube through which it is to pass, and so to keep the Sides of the finer Tubes from coalescing or being obstructed. Those red Globules make the grumous part of the Blood. And in the Serum itself also there are many of these to be found of a whiter Colour, which probably make the true nutritive Globules, to stop Crannies, and incrassate the primary Fibrils. But when the Serum becomes groß or lixivial, the greatest part of these fine scarlet Globules are compress'd, and burst or flatten'd, and thereby the Grume becomes duskish and black, and the original Beauty, Colour and Magnitude, and Shape of these Globules are chang'd. We have an obvious Model of this Operation of Nature, in the Globules of Oil and Vinegar, when mix'd with a quick Motion.

29. As to muscular Motion, it is very ingeniously, and with great Probability, accounted for by Dr. Bryan Robinson, from Sir Isaac Newton's Principles of an infinitely

which is the Theory of some other Mathematicians. Now nothing can be more elegant, mechanical, natural and adequate to all this Appearance, than this Account of muscular Motion, if this elastic Fluid could be proved. But surely the Elasticity of the Fibres, especially of their membranous Coats of the infinitesimal nervous Fibrils, which they have from the Meninges, which every one allows to be extremely elastic, must have the far greater Share in all the animal Functions, and in muscular Motion. But of this more hereafter.

30. WHAT are the true primitive material Organs employ'd in Thinking and Cogitation, what their Nature and Figure, is absolutely unknown, and, I fear, unknowable by us. That this immaterial Principle, in its present State of Union, necessarily requires some organis'd Instruments in its intellectual Operations, as well as the Senses do, I think, is past all doubt. Debauches, Diseases and Accidents, hurt and spoil many of our intellectual and spiritual Functions, and Medicine and Art will restore and recover them; and to be perfectly perform'd, they require an entire Sanity in the great primary Organs. That the Nerves (which are certainly slender, cellular and, perhaps, unelastic Filaments, at least in their Pith) are absolutely necessary to muscular Motion, is most certain; and whether they

they require to be inflated by a Materia Subtilis, or Liquidum Nervosum; yet none doubts, that the first Impulse proceeds from the immaterial Substance; and the same Impulse and Energy may be communicated directly to fitly fram'd and duly organiz'd Filaments, at least to their membranous Coats, without the Intermediation of any fubtile Fluid: and whether that Fluid be real and necessary or not, can never be ascertain'd; in this Point all can be but probable Conjecture only here. Some subtile Fluid may be requir'd towards Hearing and Seeing, because nothing but the First Cause can act at a Distance without a Medium; but the sentient Principle has the Nerves between it and Objects, to act and be acted reciprocally on: Forthat all Bodies whose Particles are continuous, must be repellent and reactive, is necessary from the Nature of Matter; and though this subtile Fluid may be, perhaps, convenient to account for the Appearances of inanimated Matter, yet it seems here multiplying Causes and Qualities without Necessity.

31. We find that the Brain of all Animals is guarded more strongly, and with greater Care and Industry, than any other Organ of the Body. No living Animal has ever been found without a Brain, or something analogous to it: they have all pretty much the same general Structure and Texture. Wounds and Bruises in it, if they are deep, constantly put an End to living, at least to rational Life and

and Thinking. Concussions, Strokes, Fissures and Contusions, generally disorder Life, and always some kinds of Thinking; small Strokes on some particular Parts, affect Thinking and Living more than greater on others. We cannot but imagin, that it is somewhere in, with and by our Brain, that we think and confider: Choler, Wind, and Crudity, render Thinking painful and irregular. To have an uniform clear Head, the Prime Vie must be clean, and all the Functions regular and easy. Want of due natural Rest, i.e. necessary Repair, will, at last, greatly disorder Thinking in the most Healthy; and the Passions, rais'd to any Height, (especially the dark and painful ones) wonderfully difcompose easy and pleasant Thinking. From all which it is highly probable, that the Organs and material Instruments of Thinking are the nervous Glands, and Fibres, and the infinite Convolutions and Combinations of these Nerves in the Brain; and that the Conduits of muscular Motion are the same Nerves, spread over and branch'd out in every the minutest Part of the Body. I fay, the Organs of Cogitation are, at least, in their Origin, in the Brain and its Appendages, whose Texture, Nature, Uses and Manner of Operation, are hitherto very imperfectly described or understood, and, I fear, are above finite Comprehension; Generals being all we shall ever know in the Works of the God of Nature.

32. I IMAGIN, the Spiritual Substance uses material Organs, of one kind of Matter or another, in its Operations; and it is highly probable, they are the nervous Glands, the Filaments, the Nerves, but especially the membranous Coats of the infinitesimal Nervuli, and their wonderful Texture and Mechanism, so little known or understood. Ideots have its Texture and common Figure unnatural: Thus their Forehead is sometimes too narrow, the Hindhead too long, or the Crown too high, by some unnatural Compression or Accident in the Womb, whereby the intellectual Functions of the Brain are disorder'd and render'd incapable of Action. An Hydrocephalus, an Impostume, an Excrescence, a harden'd or schirrous Gland, an InfeEt in the Brain, has been known to give intense Pain and Headach, and to have deaden'd or quite extinguish'd the spiritual Functions: Whether the Nerves and Glands of the Brain be only Elongations of the Arteries, or a distinct Substance of themselves, (the Brain having arterial Glands and Branches only to keep them in due Heat, Humidity, Tension and Nuttiture) is not material; but on their Integrity, Soundness and Pliancy, (which must be preserv'd and maintain'd by that of the whole Body)does regular, easy and deep Thinking depend. Astruc has, I think, offer'd strong and probable Conjectures about the Mechanism of the Brain, and the Manner of its communicating and receiving Impressions, and beginning Vibrations, from the,

the, and to the felf-moving and fentient Principle the Soul, from the Principles of Music and Harmony. Because the Brain is pulpy, and the Nerves lax, some have thought both unfit for receiving or communicating Vibrations or Undulations, not considering that the great Activity of both lies in their Membranes, that involve every the least Fibril or infinitesimal Nerve: they are all included and tied, as it were, in a membranous Bag, and fasten'd together by Threads of the same: And every one knows, Membranes are the most elastic, and fittest to transmit Vibrations of all Bodies whatfoever; their internal Substance is probably cellular, like the Pith of a Rush, design'd only to separate a milky Substance, (which the Ignorant call the Liquidum Nervosum) intended to preserve their Elasticity, Glibness, and the vibrating Powers of these Membranes, in which their mechanical Virtue alone confifts. The Pleasure, Facility and Elegance of Cogitation, confifts in the Supplenefs, Culture and habitual Exercise of those nervous Organs; just as much, as a graceful and easy Carriage and Manner of the Body is acquir'd by proper Exercise, and repeated Acts. We must use this fort of intellectual Exercise, and apply these nervous Glands in Thinking, in the same manner as we use the several Muscles, or widen, and direct the Pupil to a proper Distance in seeing: For Attention and Consideration, we must fix these material Organs of the intellectual Faculty, as we fix our Eyes to see or discern distinctly, and by repeated Acts

Acts acquire Facility and Perfection equally in both: They may be spoil'd, inflam'd, jaundic'd, made epileptic or paralytic, callous or clumsy, in the same Manner, and almost by the same Means, we bring our Eyes or other Senses to that State. We must think frequently and intensely, to be able to think justly and deeply.

33. THE Bodies of the brute Creation, with regard to Circumstances, are of the same analogous Nature with those of the human Race. The animal Functions of Digestion, Circulation, Perspiration, Respiration and Secretion, are perform'd in them, in the same analogous Manner as in us, with proper Regard to Circumstances; and they are actuated and animated by a spiritual Substance of some one Rank or Order, for some infinitely wise Purpose; for organiz'd Matter alone cannot account for their Functions. We see, by obferving the lightest and the least, that is, by living according to the general Laws and Order of Nature, excepting Accidents and epidemical Distempers, they live and die with few or no Distempers, and pass this Period of their Duration with tolerable Ease and Tranquillity; except the few that our Example, Management, or focial Influence debauch: and it is observable, that only those who are carnivorous, or are in Danger of over-cramming, by the Flavour of their Food, have Organs for vomiting, or, at least, do vomit, and none but those

those under our *Direction* and Government, or taught, or are fed and cultivated by us, have the Diseases analogous to, or the same with ours, which are constantly produc'd by over-much or improper feeding them, as is well known in natural History; and all their Distempers are constantly cur'd, if carnivorous, by being confin'd to a total vegetable or Milk Diet; if granivorous, by lessening or diluting their Food, as I have seen by Experience.

34. SLEEP I conceive to be caus'd by the Disability and Incapacity of the bodily Organs to continue and perpetuate the active rational and voluntary Functions. Without Repair, Nutrition and winding up, they grow languid and unelastic. When by Labour, or the common Expence of living, the Organs are relax'd and debilitated, there must be an alternate Cessation to repair and refit them, which is call'd Sleep; and accordingly we find the animal Body shorten'd and compress'd by its own Weight, by Action, and by the Loss of its Spring against Night, and lengthen'd and extended again in a Morning. What hinders Sleep, is the continual Action of an internal Fluid, Wind or Flatulence, acting on the internal Membranes, (of which the Bowels principally confift) pricking and stimulating them, and forcing them into Action; and by the Recoil or elastic Sharpness of this internal Aura or Flatus, producing wild Cogitation, or irregular intellectual Operations. Hence it is,

that the Body is reftless; and often there is an Endeavour to gulp, expel and throw up this Wind; that Medicines that force the Perspiration, as Opiates, Eastern Gums, animal Salts and Spirits, Aromatics, Cordials and Diaphoretics, procure Sleep; and a Dose of the Pilul. Gummos. with an Aloetic, will give a good Night, as it drives out the perspirable Matter every way; and Cyder, and any flatulent Food, (as green Pease) will hinder it. Dreaming is but partial Sleeping, for Sleep admits of all the Degrees of Quantity; there are between found undreaming Sleep and perfect healthy Wakeing, all the Degrees and Terms that are between a given Quantity and Nothing; and accordingly, Labour, Fatigue, light Food, gentle Evacuations of all kinds, will procure, in some Degree, undreaming Sleep; and the more rank, high and poignant the Aliment, the more painful and terrifying will be our Dreams; as on the other hand, the more mild, foft and light our Food is, the more pleasant and gentle will be our Dreams, if otherwise healthy. And old Persons, weak and fickly Constitutions, and People under acute or chronical Distempers, especially those that are call'd Nervous and Cephalic, have the wildest, most inconsistent and painful Dreams, and the most imperfect Sleep, and fometimes no Sleep at all, which is one of their greatest Miseries. And I should philosophically define Sleep, a Disability or Incapacity of the material Organs, from Exinanition,

D 4

tion, Use and Expence, to continue easily much longer the intellectual Functions and voluntary Motions, without a new Repair and winding up, in the same Manner as Hunger is caus'd; and Dreaming to be only partial and imperfect Wakeing, by a perpetual Irritation from Flatulence and obstructed Perspiration, on the internal Nerves and Membranes, or from Pain; and Wakeing to be the perfect and pleasant Pliancy of the intellectual and animal Organs, to obey the Impulse of the felf-motive, felf-active Spirit; and that in this immaterial Agent there is a lower, and more ordinary and weaker Effect and Energy, (or a contractile and expansive Energy) by which the animal Functions are perpetuated without Interruption; and a higher and more intense and voluntary Degree of Agency, by which Wakeing and the intellectual Operations are perform'd; and it is this that in found Sleep, and in a Deliquium, is suspended, and in Death both, without a new Vehicle.

Appetites, Specialitics, Sympathies and Antipathies in Foods, Persons or Things, in breeding Women, in Children, weakly Constitutions, or old Persons, and their uncommon
seeming supernatural and equivocal Appearances and Effects, I take them to proceed from
Accidents, morbid Humours, particular Distases, an ill or weak State of the Fluids and
Solids, a particular Distemperature of some

glandular Secretions, particular Usages in common Life, an improper Culture and Education in Youth, or a Mal-formation of the material Organs of the intellectual Faculties; and so to be no Exception against general Laws and Rules, or that of the lightest and the least in particular; no more than a double Apple or Nut from the same Stalk, or any monstrous vegetable or animal Production or Birth, is a solid Objection against the general Laws of Vegetation and Generation; or no more than the Dreams of a fick or nervese Person, are against the. Rules of common Sense; the natural and neceffary Imperfection and Unpreciseness of gross Matter, of the Element we live in, and the Fluids and Solids that furround us, makeing this Interruption and Deviation from Precision and the general Laws of Nature, necessary and unavoidable; perhaps they may be some of the Means and Instruments of God's moral Government of his World, wisely appointed by Him, and under his immediate Direction, to hurt the natural Liberty of the Soul the least possible. And I know not, if the Opinion of some may not be very folid and just, that in this laps'd and probatory State of our System, the infinitely wife Author of Nature may have on purpose left a Darkness, Imperfection and Deteriority on the Face of his Works, to keep his rational Creatures in this their expiatory State, bumble, dependent, and confideing on Him only, and so to prevent a second Laple;

Lapse; as wise Princes make Gaols and Correction-houses neither delightful nor commodious, on purpose to reclaim Felons. God gave the Jews Laws (i. e. the ceremonial Law) that were not good and perfect. And Cornaro's (for Example) particular Appetite for new Wines, and Aversion or Suffering from old Wine, (which is certainly preferable, and more salutary, by its having lost some of its siery, inflameing and deleterious Particles, and from the more perfect Mixture and Maturity of its Composition) was of this Nature; and no Argument can be drawn from it against the general Rule of the lightest and the least.

36. MEDICINES act principally by their most eminent and sensible Qualities; being mix'd Bodies, that Property that is most eminent in them, and those of the component Particles of fuch a Nature that are most numerous, have the principal Effect, and are most to be regarded in Medicine. I have already observ'd, that it is the integral Particles that are chiefly proper and useful both in the Nourishment of animal Bodies, and in the other animal Functions; they are indeed broken and divided, and class themselves in some degree afterwards in the capillary Arteries, in the Viscera, and in the Glands, for the several Uses of Nature: But still, even in these Secretions, they retain their chief and eminent Qualities, as we often find by the Talte, Taste, Colour and Smell of the Secretions. For we are so constituted, that the minutest and least Particles of the Composition of Bodies would be absolutely unfit to carry on the animal Functions; and were our Food to be divided into fuch Particles, they would, from their Smallness and consequent greater degree of Attraction, run into Combinations and Clusters; and form Obstructions; or at least would not assimilate with the Fluids that circulate in animal Bodies: And therefore Nutrition is better perform'd by the integral Particles of Animals and Vegetables, that are foft, porous, and abound most with Water, Air and Earth. And Physic and the Materia Medica being but an unnatural and temporary kind of Food, ought to be chosen of the same analogous Form and Nature; for Medicines will always act by their integral Particles, and their most eminent Qualities only, the rest being mostly lost, or of little Efficacy in their Operations. For Minuteness and Precision in our material or spiritual Operations, has little Use in our present Circumstances, mediocriter & quam proxime; and a Nisus being all that is attainable by a finite Creature: The Maximum and Minimum are never to be afcertain'd in bodily or spiritual Operations in our present State, but only in abstracted Speculations; for this will be sufficient for Health and Serenity, and all Intentions in our prefent Condition. All chymical Medicines, all Spi-

rits, Salts, Oils, every thing that has pass'd through the Tortures of the Fire, is so ignited, and the Matter and active Particles of Light or Fire are so transubstantiated into it, that it is ever afterwards unfit to be admitted into an animal Body, except as a Caustic is, to bring on present Pain; and its Fire is more hurtful, when taken as an Alterative, than its Substance can do Good, be that what it will. We see wise Nature surnishes no Matter of Food or Physic, that has pass'd any higher Degree of Heat, than Incubation, Vegetation, Infusion, Maceration, Digestion, and the like.

37. SINCE then all medical Effects on animal Bodies are perform'd chiefly by integral Particles, and their most eminent Qualities, it will follow, that Mercury (for Example) will ever act chiefly by the greater Gravity, Rotundity, and attractive Virtue of its Particles; Salts, by their pointed Stimulus, strong attractive Power and Solidity; Water, by its Moisture, Dilution, its want of Elasticity, and its Thinness, which makes it fit to convey folid integral Particles of equal Gravity with itself, through animal Tubes; Sulphurs, by their fiery Particles and Heat, and, if oily, by cementing and uniting earthy Particles; Earth, by giving a Solidity and Firmness, by imbibeing Moisture, and filling Chasms and Vacuities; Bark, by its vegetable Stypticity; and Steel, by its greater mineral Astringency;

Oils, by their Lubricity and Relaxation; Spirits, by their Inflammation and over-heating, carrying in them the material Substance of actual Fire. And the same Effect that Medicines have on the Mouth and Palate, they will also have in a greater Degree on the whole alimentary Tube, whose Nature is much the fame from its Orifice through its whole Continuity, only in some Places more sensible and delicate. And one of the best and most effectual Trials of the Virtues and Effects of Medicines, in some general Degree, is deliberately and often to examine them in small Trials by Taste, Smell, and their Effects on the Senses; which kind of Experiment would feem the most useful and necessary for the gross of Mankind, in things relating both to Food and Phylic.

38. EXPERIMENT and Observation are of great Use in the Practice of Physic, and absolutely necessary to the Cure of the actual, now common Distempers, not to be prevented, but remedy'd. But surely there must be a more general and more compendious Method intended by the Author of Nature for the generality of Mankind; else the Means of Health could only be perfected with the End of the World; and each Country and Climat which has little Communication with the rest of the World, must work it out by their own Means: and yet Health and Serenity seem so

necessary to every End and Purpose that an infinitely wife Being could have, in sending us here, that we may conclude they have some more simple and obvious Guard. Scarce one Individual is made entirely the same with another; there is in every one a Principle of Individuation; the Country, the Climat, the Age, the Food, the Usages of Life, vary the Constitutions and Diseases of Men in infinitum; the several Stages, Degrees and different Symptoms of Difeases distinguish them. Persons are qualify'd for making useful Observations in Physic; to this end a Man must be well acquainted with natural Philosophy, the Materia Medica, and the animal Oeconomy, have a Genius and penetrating Sagacity, to be able to distinguish Occasions, Coincidents and Circumstances from Causes, and Accidents from Effects: All these, and a great many more Qualifications, are requir'd in those who would make useful and decisive Observations; and how few such there are, I leave the World to judge: Few but such as a Bacon, Boyle and Newton. And yet we must not think the beneficent Author of Nature has left Men to Chance, Casualty or blind Fate, in the Conduct of their Life and Health. There are in Physic, as in the natural and moral World, general Laws, universal Propositions, and a perpetual Analogy, that runs through the whole of the Science for that End. Keep the Blood cool, fluid and balmy, use due Exercise, proper

proper Air, and a Regimen of the lightest and the least, and keep all the Non-naturals regular and guarded to preserve Life, Health and Serenity; use proper Evacuations of all the fit kinds in Distempers, and specific Alteratives, to dispose the morbid Matter for Elimination, under a Regimen of Diet directed by the Nature of the Distemper; and nicely observe how wife Nature cures a particular Distemper, when a Cure happens; and endeavour as near as possible to imitate her Means and Medicines, if she happen to use any. These, or such-like general Laws, indicated by natural Philosophy, and the Knowledge of the animal Oeconomy and Materia Medica, under well-guarded and exactly made Observations for one's own Use, will best serve the End of Health, especially when every one, after a certain Age, becomes his own Physician. I speak not here of particular Distempers: they are afterwards confidered.

39. Dr. Bryan Robinson, in the last Section of his Animal Oeconomy, has contrived a Method to determin, by Experiment, the Force of the several Liquors used either for Food or Physic on the animal Solids, which might give Light to the Practice of Physic; his Conclusions being just and luciferous, as far as the impersect Nature of gross Matter and Mechanism, and the unprecise State of the animal Oeconomy thereon depending, admit; to which one might add, for Caution, these following

lowing Confiderations; I. The Foods, i.e. Meats and Drinks, that brace and increase the Spring of the Fibres, may possibly equally thicken and incrassat the circulating Fluids 3 fo that the Benefit deriv'd on the Solids may be fometimes loft on the denfer Fluids, the Resistance in the Fluids being increas'd in Proportion, as the Force and Spring of the Fibres is strengthen'd; as we see in the Effects of Wine, strong fermented Liquors and Spirits; which, though they at first undeniably strengthen and increase the Spring of the Solids, yet by incraffating the Fluids, and increasing their Resistance, and likewise by alternately bracing and relaxing the Fibres themselves, must at last weaken and destroy their Tone, and so render them unfit to carry on the animal Functions \*. 2. May there not be an original innate Degree of Spring and Elasticity communicated to the linear Solids at their first Creation; which, when they are develop'd and drawn out to their utmost Extension, and fettled therein, can scarce ever be much augmented or increas'd, by all that Nutrition or Art can do, though they may be readily clogg'd and so weaken'd?--- If Elasticity consists in the Degree of Attraction of the primary or of the minutest Particles, which may be very great when they are at an infinitely small Distance from one another; and so make

<sup>\*</sup> Vide Dr. Hales's Vegetable Staticks, Vol. II.

them unite again with Force and Velocity; but is none at all at a finite Distance, or when they are the least without the Sphere of one another's Attraction; then the native, simple and true Elasticity of Fibres will consist principally in a String, Chain or Line of such Particles only; and the more these Particles are clogg'd, patch'd or interrupted by foreign Matter, the more clumfy and unspringy will this Line become; and the cleaner and more simple they are, the greater will be its Elasticity: so that the great End and Purpose of Physic, is only to remove Impediments and Incumbrances from original Elasticity and Health. The Patch and gross Case superinduc'd upon the linear Solids afterwards, seems only intended to defend their Delicacy, and enable them to bear the crass Element they are intended for: And accordingly, young tender Twigs are most elastic; young Animals, after a certain Age, are most agile; after too long Sleep Men are more lazy, after a Debauch quite heavy; and the smallest Fibres have the quickest and most de. licate Spring; and the elastic Force of Springs is in Proportion to the Power by which they are compress'd. Musical Springs, the finer they are, the quicker and sharper are their Vibrations and Notes, and the Base is the groffest and most obtuse of all. It would seem therefore, that the quickest and most active Spring is in the linear Union or smallest Fibrils made of these Particles; and that when many

many such Lines and Fibres are united, the Energy or Elasticity of the Spring is lessen'd, (though their Strength is increas'd) from the unprecise and gross Nature of Matter and Mechanism, and a Multitude of different Attractions; for the Particles, of which Bodies are compos'd, cannot be so put together or united, as perfectly to agree in an Unison or any harmonious Proportion.

40. I CONJECTURE the Matter to stand thus: The Author of Nature originally intended that the Mechanism and Condition, and particularly the original Spring and Elasticity of the Fibres of all human Bodies, should be much the same as they were in the first original Pair from whence they were deriv'd. Before the Lapse was compleated, and had its full Effect, the final End of such a radical Derivation, was that the Posterity might have all the Benefit and Advantage of the Experience, Culture and partial Restoration of the Parents: But in all free Beings, the Regress must of Necessity be as damnifying as the Progress would have been beneficial. When the Posterity of the first Pair came to multiply, some of the very first, by the Abuse of their Liberty, depray'd and vitiated both their spiritual Nature, and their bodily Machins, to a much greater Degree than others; some the first most, others the latter; and infinite Wisdom acting ever by general Laws, both in the

material, moral and spiritual Worlds, and intending to recover and restore his lapsed Creatures to Order, by all the Energy of his insinite Wisdom and Power, consistent with their original Powers and these general Laws, the Differences of these Tribes, Orders, Nations and Peoples' (from their special Corruptions, and from Sun, Soil and Culture) that now exist, became what we now see them, and no doubt are, with infinite Wisdom, sitted for this general End of universal Restoration, and the Recovery of each Individual, who continuing averse to Order, may retard their Restoration beyond any given Time.

41. THE Conduct of Nature is surprizingly beautiful, in preparing that viscous Water, which is the Instrument, Mother and Matter of Vegetation and Growth in Plants and Vegetables, to fit them to be Food for Animals. The proper Seat and Treasure-house of this Element is the Ocean, spread over at least one half, if not more, of this our Terraqueous Globe; which Water washing away, and continually dissolving the smallest and finest Particles of the Mountains and Rocks of Salt in its Bosom, becomes impregnated and faturated therewith, and so turns to a Brine. And this Salt thus diffolv'd, by its pointed Figure, and by the constant Flux and Reflux of this heavy Volum of Water produc'd by the Attraction of the Moon, is not only kept from coalescing and E 2

crystallising, and so from falling again to the Bottom, but likewise preserves the Sea from Stagnation and Putrefaction. This large Surface of Water, constantly expos'd to the Heat and Action of the Sun, by its rarefying and attractive Virtue, (as it were by a gentle natural Alembic) is drawn up constantly in a fine Vapour into the Atmosphere; and having a weaker more diluted Oil in its Texture, from the sulphurous Beds, and dead Fishes in it, retains by this sulphurous Mixture, some Particles of the Sun's Heat and Fire in its Composition, which preserves it from freezing and vitrifying into Ice. This briny Water, I fay, thus impregnated with Salt and Oil, and some of the Solar Rays and Particles of Fire, is toss'd up and down the Atmosphere by Winds, and is thereby also impregnated near the Surface of the Earth with more Heat and Fire, and the permanent Particles of Air, and with the Steams and Exhalations of Sulphurs, Metals and Minerals, that by the greater Heat of the Sun (being heavy and gross) cannot be so readily drawn up into the superior Regions; and thus impregnated with four of the Elements, and become, as it were, a Menstruum by these Mixtures, it is precipitated by the Cold of the Night Seasons towards the Surface of the Earth, where attracting those finer terrestrial Particles it meets with in its Way, it passes on to the gapeing Mouths of the Roots of Plants and Vegetables; and thus

gradually impregnated with more and more of the finer Particles of all the five Elements, in a greater or less Proportion to its intended final Uses, by the innate attractive Principle in the Tubes of the Roots, and the Action of the Sun in the feveral Climats, Seasons and Soils, and the alternate Succussions from different Seasons, and the various Changes of the Atmosphere, it is both fitted for the Aliment, and also forc'd up the Tubes of the Plants and Vegetables; and thus it develops, extends and incraffates the linear Fibres of Seeds, (that is, the miniature Plants) till they thus become naturally prepar'd, vivifying and fertilifing Food for Man and Beast. These gapeing Orifices of the Roots of miniature Plants, will attract, receive and be nourish'd by any Matter for a time, that is nearest them; but this is the general Conduct of Nature, for the common and best Nourishment and Accretion of Plants and Vegetables, to become the best and fittest Food or Medicine for Man and Beaft.

42. If the Elasticity of animal Fibres confists in the Degree of Attraction, and the Plainness of the Surfaces of their constituent Particles, as seems highly probable; which Particles being separated by Force to a Distance within the Sphere of their Attraction only, are, by their attractive Virtue, united together again with a Momentum compounded of

E 3

their

their Degree of Attraction, and the Quantity of their touching plain Surfaces; then may all the Solid of an animal Body be consider'd collectively as a Bundle of Twists, originally fram'd, weaven and shap'd into the Forms and Figures, which Anatomists sind in a Human or other Animal Body; far above the Power of the present known Laws of Motion and Mechanism to execute, or the Limits of sinite Understandings to plan or conceive.

43. In the Memoirs of the Royal Academy for the Year 1730, Mr. Geoffroy has given a Method for determining the Proportion of Nourishment, or true Matter of the Flesh and Blood, contain'd in any fort of Food. He took a Pound of Meat, that had been freed from the Fat, Bones and Cartilages, and boil'd it for a determin'd Time in a close Vessel with three Pints of Water; then pouring off the Liquor, he added the same Quantity of Water, boiling it again for the same Time; and this Operation he repeated fix several times, so that the last Liquor appear'd both in Smell, Trial and Taste, to be little different from common Water. Then putting all the Liquor together, and filtrating, to separate the too gross Particles, he evaporated it over a flow Fire, till it was brought to an Extract of a pretty moderat Confistence.

This Experiment was made upon several forts of Food, the Result of which may be seen in the following Table.

oconoMa Language Music Mark		Ou.	Dr.	Gr.
A Pound of Beef )		10	7	8
Veal		I	I	48
Mutton	17.50	1	3	16
Lamb	act	I	I	39
* Chicken .	of Extract	I	4	34
* Pigeon	H	) I	0	12
* Pheasant ,		I	2	8
* Partridge .	yielded	I	4	34
* Calves Feet	yie	I	2	26
Carp		I	0	8
Whey	110	I	I	3
Bread )	1	4	I	0

N. B. THOSE mark'd with Afterisks were not freed from the Fat and Bones.

ACCORDING to this Table, the Proportion of Nourishment contain'd in these Foods will be as follows:

Beef :		-	7	a modific
Veal ,			9	
Mutton			II	
Lamb.		9	9	
Chicken			12	
Pigeon	*		8	
E	4	-	-	Pheafant
	2.			

#### 56 The Method of Cure, &c:

Pheafant .	10
Partridge .	12
Calves Feet	10
Carp	8
Whey .	9
Bread .	33

From the foregoing decideing Experiments, it is evident, that white, young, tender animal Food, Bread, Milk and Vegetables, are the best and most effectual Substances for Nutrition, Accretion and sweetening bad Juices. They may not give fo strong and dureable mechanical Force, because being easily and readily digestible, and quickly passing all the animal Functions, so as to turn into good Blood and museular Flesh, they are more transitory, fugitive and of prompt Secretion: yet they will perform all the animal Functions more readily and pleasantly, with fewer Resistances and less Labour; and leave the Party to exercise the rational and intellectual Operations with Pleafure and Facility; they will leave Nature to its own original Powers, prevent and cure Difcases, and lengthen out Life.

THE

# General Method of Cure

In the

# DISEASES of the BODY,

And the

DISTEMPERS of the MIND Depending thereon.

#### PART II.

The MEANS and METHODS for preserving Life and Sevenity.

#### CHAP. I.

General REFLECTIONS on the Nature, Efficacy and Necessity of Temperance or Abstinence in the Cure of Chronical Distempers.

1. I OW it may be in other Countries and Religions, I will not say; but among us good freethinking Protestants of England, Abstinence, Temperance and Moderation, (at least in Eating) are so far from

from being thought a Virtue, or their Contrary a Vice, that it would feem, not eating the fattest and most delicious, and to the Top, were the only Vice and Disease known among us, against which our Parents, Relations, Friends and Physicians, exclaim with great Vehemence and Zeal; and yet, if we consider the Matter attentively, we shall find there is no such Danger in Abstinence, as we imagine; but, on the contrary, the greatest Abstinence and Moderation Nature and its eternal Laws will suffer us to go into and practise for any Time, will neither endanger our Health, nor weaken our just Thinking, be it ever so unlimited or unrestrain'd.

- 2. HE ALTH, Chearfulness and Activity, (as they are bodily Affections) consist in the easy, equable and regular Performance of what is commonly called the animal Functions, viz. those of Digestion, Circulation, Respiration, Perspiration and the Secretions.
- 3. FOOD (that is Meat and Drink) was design'd only to supply the Expences of Action and Living, or the Expences of those natural Functions now mention'd; that is, to repair the necessary Loss caus'd by the Action of the Fluids that surround us, or the internal Action of those within us, while they are performing these Functions. Before our Bodies arrive at perfect Maturity, and while our Solids and Organs

Organs are tending to their utmost Extenfion, this Supply may be more than the mention'd Expence, viz. what is necessary to stretch, extend and plump up these Solids and Organs: But after that, when come to Maturity, it needs only to be equal, if we desire to continue under the Order and Design of Nature.

- 4. For the pleasant and regular Performance of these Functions, it is necessary in the Order of Nature, not only that the whole System of Tubes be full of a warm, soft, balsamic Fluid, to maintain them in their due Extension and Elasticity; but that the internal and external Surfaces of the Solids be moisten'd and lubricated, to keep them pliant and flexible, (which feems to be one great Design of Food) and likewise to preserve them from the Friction of the internal and external furrounding Fluids, and their Friction on one another; and this must be secreted from the same Mass of Fluids in the Tubes.
- 5. HUNGER is a Sense of Pain, arising from the partial Exinanition, or emptying of these Tubes, by the Expences of Action or Living, or by the continued Performance of these necessary Functions; whereby the Tubes are in some measure emptied, and a sufficient Quantity not flowing into the Capillaries, and the perspiratory and emunctory Glands, of which

which they are form'd, that balmy Film or Cuticule which defends the most sensible Fibres, viz. the Sides and Orifices of the fecretory Vessels, and the Sides and Coats of the Nerves, that of the Stomach especially, (which is nothing but a Bag compos'd of fuch Nerves and secretory Glands) is gradually worn off; and a sharp, uneasy Sensation, Languor and Debility, is thereby produc'd and felt over the whole Solids of the Body, (but especially in the Stomach) till a sufficient Quantity of this balmy Fluid be supplied again, to sheath and defend these sensible Fibres from being scrap'd and worn. But if this milky Substance be long and obstinately denied, the Pain becomes so intolerable, that no kind of Torture can equal it.

evident, that Temperance, or, if you please, Abstinence, (contrary to the Nature of some other of the Virtues) seldom admits but of one Extreme, viz. the too-much, or too-high in Food: For upon any Attempt being made upon the too-little, habitually and for a Continuance, the Pain becomes so intolerable, that no Person at Liberty, and in his Senses, and having proper Materials for Food in his Power, can possibly bear it: As is well known to those who have seen, or read of, the Effects of Famine, or starving in Prisons, long Sea-Voyages, or Desarts; which is described by all

to be a Torture equal to that of being burnt alive by a flow Fire, or greater, if possible.

- 7. If this Representation be just, it will be evident, that for Health, long Life and Serenity, the surest and most effectual Mean is a constant Endeavour and steady Practice of takeing down the least we can be easy under, or are equally agile, and capable of intellectual Exercises after, or a Trial to reach the toolittle, if possible. This I take to be the shortest, safest, and most effectual Rule, a wise Man can go by. In bodily Wildom, it is the one Thing necessary; all other Means are but Trifles in respect of this; and this alone is fufficient to keep a Man free from great or habitual Distempers, Lowness, and the Infirmities of Age; and to procure him a Dissolution without violent Pain, as far as the Laws of Mortality, and the Defigns of his Maker over him, will permit; for all Men are not made for one and the same End and Purpose, in the Designs of Providence, or God's moral Government of his Creatures.
- 8. Hence it will be evident, with how little Reason the guarded, the complaisant and the cautious Dealers in Physic, perplex, puzzle and terrify those, who by a low abstemious Regimen, are endeavouring to conquer their bodily Distempers or spiritual Vices, viz. by thundering over them, or sneering at them, that

that they are ruining their Constitutions, spoiling their Blood and Juices, creating Distempers, and shortening their Days, by this their whimsical, wrong-headed and unnatural Abstinence. But furely fuch have little studied Nature, and the animal Oeconomy; for it is as impossible that a free, sensible Person, under Plenty, should be long able obstinately to continue under the too-little, as it would be for him to stop the Sun in his Course. If there be Instances or Records of any fuch, they have been wrong-headed indeed, or lunatic, or under the Influence of some unnatural Passion, which is the same Thing: And Self-murder may with, as much Propriety, be instanced against the innate Principle of Self-preservation, as this is infinuated against Abstinence and Moderation in Diet; for such as I have now mention'd is the Law of Nature, and the Exceptions must be unnatural and monstrous. I have often tried, for a few Days, to approach the too-little, for the Cure of Lowness, Oppression and Watchfulness; but never could carry it above three or four Days, (when otherwise free from a form'd Distemper) after which my Symptoms were lessen'd, and Hunger became then my greatest Disease.

9. ONE constant Symptom of a beginning Distemper, of what Denomination soever, is at least some Degree of Inappetence, Nausea, Loathing or Heaviness after a full Meal, or an Aver-

Aversion to strong animal Food; the Cause of which, as far as I can conceive, is a Labour, Struggle, or Difficulty, in the Performance of the mention'd animal Functions; for the Cure and Relief of which (whatever else is advis'd) all honest and experienc'd Physicians, Ancient or Modern, advise an appropriated low Diet or Regimen. The Solution and Cure of all Diftempers by Nature, when folely left to her wife Conduct, is by this Inappetence, Loathing, or Abstinence, at first; and then by some one Evacuation or other, as Sweat, Stool, Spitting, Coughing, Hamorrhage, or throwing the morbid Matter on some distant Limb or Joint; which always happen after an intermediate Struggle and Labour of the whole animal Oeconomy, to concoct the peccant Humours, and fit them for Extermination. From whence it will be plain, to those who will observe and imitate Nature, that such Medicines as help Nature to concoct and fit the peccant Humours to be readily thrown off, with a Regimen and proper Evacuations, are the most material Indications in the Cure of Diftempers.

10. MEDICINE has two Branches, the Sanative and the Preservative: In the Sanative, by the Viscidity, Acrimony or inflammatory State of the Juices, the Inappetency, and the distemper'd Film or Cuticle, that covers the internal and external Surfaces

of the Stomach and Organs describ'd, may be fuch, that Nature's Laws, of Craveing and Hunger, may be suspended for a while, till she has thus prepar'd the morbid Juices for Elimination, by a Distemper and its Cure; and then Medicine and Experience must direct for her, with what Food she is to be best maintain'd and supported, till she be brought to her natural State again: and the Regimen, in fuch a Case, is allow'd by all Physicians, to be the lightest and the least, viz. of the appropriated Food, for obviating and antidoting such a particular Distemper. Here then there is no Controversy, Diseases being an unnatural State of an animal Body: 'Tis therefore of the preservative Branch of Physic, that what is here maintain'd is to be understood; about which I affirm, the most infallible and univerfal Mean of preserving Health, lengthening Life, and preventing Diseases, is, constantly to endeavour to take the lightest and the least Food (that is, Meat and Drink) a Man can be tolerably easy under, equally agile, and fit for intellectual Exercises after.

11. The Practice of Physic may be consider'd in three very different Lights. There is the Medicina Philosophica seu Rationalis, whereof true natural Philosophy is the Stem or Root, and practical Medicine but a Branch. From natural Philosophy, the Physicians must learn the Structure and Uses of the several Organs of

of the animal Body, and the Laws of the animal Oeconomy; and from the Symptoms and Appearances on that Foundation, draw out his Intentions in any given Case or Disease. From the same natural Philosophy, he must make himself acquainted with the Nature, Uses and Virtues of the Materia Medica, or the Materials commonly used in Medicine, and to the first adjust this last, in order to antidote the Causes of a given Distemper; and he who is the best natural Philosopher will, cæteris paribus, ever be the best Physician. Pharmacy is of a lower Order, and like Cookery in Diet. Then there is the Medicina Expectativa, which confifts in keeping up the Patient's Hopes, Expectations and Spirits, till Nature points out clearly the principal Caufes and great Symptoms in acute Diseases; and in chronical Cases, till Air, Exercise and Regimen have taken Place. And this Branch of Physic, in low and nervous Cases, and weak and wrongheaded Patients, is absolutely necessary, to keep them from Unconstancy and changing Hands; and so, at least, is a necessary Art for a Phyfician, towards those Patients who cannot distinguish between Surfaces and Solids. Many a gross Glutton has been cured by a Ring of Changes of Coral, Crabs-Eyes and Pearl, with Asses Milk, to damp his voracious Appetite, who could not have borne the word Abstinence. And, lastly, there is the Medicina ad Euthanasiam, which, when the Case is plainly F and

and absolutely Mortal, lays the Patient down in Death with the least Pain. But as this is feldom a certain Case, in chronical Illnesses at least, except in very tedious Diseases, and Patients worn out by Age and Distemper, it ought to be practised only like Extreme Un-Etion. These two last kinds of Knowledge in Physic, though foon learn'd, as being readily to be met with in every good Book of Pharmacy or Medicine, yet could never strike my Fancy; I always fought after a folid and durable Cure of Distempers; and was for striking at the Root of the Weed, leaving the picking of the Suckers and Leaves to others; though in acute Cases, that often turn on small Things, all Oars are to be plied, and every Art studied, and even the most trifling Mean, conducive to the End, attended with Diligence.

fophers and wife Men both of Antiquity and later Ages; those who have labour'd to cure the Diseases of the Mind, and those who have suggested effectual Means for the Cure or Relief of the Distempers of the Body; as well as for those who have discover'd the Wisdom and Beauty of the Works of the Author of Nature. The Christian Philosophy, represented in its true Light, is infinitely beyond any thing that ever was thought of, or could possibly enter into the Heart of Creatures to imagine, for extirpating the Diseases of the Mind, as

is allow'd even by its Adversaries themselves: For remedying the Distempers of the Body, to make a Man live as long as his original Frame was design'd to last, with the least Pain, fewest Diseases, or Loss of his Senses, I think Pythagoras and Cornaro (for suggesting a general and effectual Mean) by far the two greatest Men that ever were; the first, by vegetable Food, and unfermented Liquors; the latter, by the lightest and the least of animal Food, and naturally fermented Liquors. Both lived to a great Age: But what is chiefly to be regarded in their Conduct and Example, both preferv'd their Senses, Chearfulness and Serenity, to the last; and, which is still more to be regarded, both, at least the last, dissolv'd without Pain or Struggle; the first having lost his Life in a Tumult, as is faid by some, after a great Age of perfect Health.

13. THE lowest Diet, or one of a Milk, Seeds and Vegetables, seems only necessary and appropriated to those, who by their own, or by the Fault of their Parents, have extremely vicious Juices, either too hot, too falt or too viscous, and are consequently subject to the necessary Effects and Diseases of so distemper'd Fluids, which Milk, (being white Blood) Seeds and Vegetables, are more specifically qualified to antidote (for it is the Juices only fuch a Diet alters or mends). There is another Order of human Bodies, for which this Regi-

men seems also particularly proper, viz. those who have a sharp and large Appetite, or great and over-stretch'd Stomachs by their Frame, or by former Luxury, Intemperance and Laziness; and consequently lax and weak Solids and Organs of Digestion are utterly incapable to concoct, grind and perfectly digeft any Quantity of animal Food, or bear spirituous Liquors; this Diet to such is not unlike the Method commonly used by Jockies to cure their Horses, when their Corn passes through them undigested and entire, which is to mix it with Straw. For other Persons tolerably well and found, the lightest and the least of common Diet, is the more universal and safest Regimen, as Experience shews by its being common; for God and Nature do nothing in vain.

14. One great Advantage a vegetable Diet has over an animal one, is, that in the weakest Digestions, and the most dangerous and obstinate Distempers, the Patient may always fill his Belly, and satisfy his Hunger, without Fear, Remorse or Suffering; at least, he may do it to a great Degree, till he comes to be far advanced in Years: and if he should happen at any time to exceed, he feels none of those pungent and acute Symptoms, nor those durable Esseds and prosound Sinkings, he would feel from a full Meal of high Meats and strong Drinks. And this is no small Comfort to those who are under a dangerous Distemper, or have

a great Degree of Sensibility. The common and necessary Calls for Food returning so often, it would be a painful and intolerable Constraint to be confin'd to an everlasting Guard and Attention, and to eat and drink by Weight and Measure; to live thus medice is to live miserè indeed. But a vegetable Diet, in a great measure, frees the Patient from all those continually recurring Snares, Dreads, and consequent Sufferings; for not only the Temptation to Excess is much less, but the Effects of Excess are little or none in Comparison of those of high animal Food and rich Wine. Add to this, that the Secretions, and other animal Functions, are more regular and freely performed, under a full Diet of vegetable Food, than they can possibly be under that very spare and small Quantity of animal Food, and fermented Liquors, that is absolutely necessary to be observed in a great many Cases, as most Patients and all Physicians know; and thus being able to take down a much greater (for Instance, a quadruple) Quantity of vegetable Food, than would be fit for them to take of animal Food, and fermented Liquors, the now over-stretch'd and relax'd Bowels and Vessels may be kept fuller, the Secretions will be more plentiful, and all the Capillaries pervious and fill'd; which under the necessary spare Diet of very little animal Food and fermented Liquors, might, for want of proper Liquor, dry up and coalesce; and so the Animal be depriv'd

priv'd of many Glands and Arteriolæ, in which all the Delicacy of Life consists; besides that it puts a Drag on the Wheels of Life, to hinder it from running down too fast.

15. A PLAIN, natural, and philosophical Reason, why vegetable Food is preferable to all other Food, is, that abounding with few or no Salts, being foft and cool, and confifting of Parts that are easily divided and form'd into Chyle, without giving any Labour to the digestive Powers, it has not that Force to open the Mouths of the Lacteals, (if they really have any opening into the Intestines, which Leuwenhoeck and all accurate Anatomists deny) to diftend their Orifices, and excite them to an unnatural Activity, to let pass too great a Quantity of hot and rank Chyle into the Blood, and so overcharge and inflame the Lymphatics and Capillaries, which is the natural and ordinary Effect of animal Food, and therefore cannot fo readily produce Diseases. There is not a sufficient Stimulus in the Salts and Spirits of vegetable Food, to create an unnatural Appetite, or violent Cramming, at least not sufficient to force open and extend the Mouths of the Lacteals, more than naturally they are or ought to be. Such Food requires little or no Force of Digestion, a little gentle Heat and Motion being fufficient to dissolve it into its integral Particles, and into a thin watery Emulsion, such as is Chicken Water, Asses Milk, or thin Broth, which

which is all that is required for the Purpose of Nutrition, and all of the Food that can enter the Lacteals: So that in a vegetable Diet, tho' the sharp Humours in the Prima Via, an extended relax'd Stomach, and sometimes a delightful Piquancy in the Food, may tempt one to exceed in Quantity; yet rarely, if Spices and Sauces (as too much Butter, Oil, Salt and Sugar) are not join'd to Seeds and Vegetables, can the Mischief go further than the Primæ Viæ, or Stomach and Bowels, to create a prefent Load, Sickness, Vomiting or Purging, by its acquiring an Acrimony, from its not being receiv'd into the Lacteals; so that no more being admitted into the Blood, than the Expences of living require, Life and Health can never be endanger'd on a vegetable Diet. But all the contrary happens under an high animal Diet.

to me by no means an Institution of Nature and its Author, nor fitted for Health and long Life: But, on the contrary, if we may credit the Jewish Records and their Lawgiver, it is certain, that fermented Liquors (Wine especially) were unknown till the Deluge; and the first Experiments produced both Drunkenness and Incest, even on the venerable Heads of that Family, which was the only one thought worthy to be sav'd in the universal Deluge. It is well known, that fermented Liquors de-

F 4

ftroy

Aroy the Digestibility, i. e. the Putrefaction and Dissolution (for Digestion is nothing else) and easy Concoction of all animal Food; and common Sense will tell us, that the purest and thinnest Water is sittest to circulate through Tubes so infinitely small, as some of animal Bodies are; and even that it alone will nourish Plants, and bring them to Maturity and Perfection. And as to the common drunken Sneer, that fermented Liquors tann the Solids, and strengthen the digestive Organs, it is a mere unphilosophical and insipid Joke, contrary to the known Axiom in all just Reasoning, that if Equals be added to, or subtracted from Equals, the Sum or Remainder will be equal; and so, if it thickens the Juices, and hardens the Food, (as it necessarily must) as much as it tanns and strengthens the Solids, it can still produce nothing but the Diseases of sizy Blood and unelastic Solids at last. Fermented Liquors may be good Medicines and present Reliefs on Fatigues, Lowness, epidemical Distempers, and inclement Seasons, or in Extremities for a Filip or present Spur; but they can never be so proper to circulate through Tubes so small as the fix hundredth Part of an Hair, or to preserve them from Rupture and Corrosion for any considerable Time, as fair Sweet Water. As to Spirits and Liquors that have pass'd through the Tortures of the Fire, they are only of modern Invention \*, and Ottoman Extraction, as is known from History; and are of such Use as the blowing up of an House in an universal Conflagration, to save some Palace, viz. Life itself, when in Danger: Neither were they ever defign'd by Nature and its Author for an animal Body, as Nourishment, or common Drink, and scarce deserve a Place in the Apothecary's Shop; Spirits having made more Havock among Mankind, by far, than even Gun-powder.

17. If we attentively consider the last Scenes of most People, and how it is they die, and with what Symptoms they expire; we shall constantly find it to be of the toomuch, the too-high, or too-hot; and not of the too-little, or too-cool. They either go off in a Diarrhea or Hamorrhage, an acute or flow Fever, Fits or Convulsions, an Asthma or Difficulty of Breathing, a Syncope or fainting Fit, (from some great and incurable precedent Evacuation) I mean fuch as die before the Term of the natural Duration of Life is expir'd, and not of old Age, or natural Weakness: All these die violent and unnatural Deaths, as really as those who suffer by the Hand of Justice, as is evident from their Symptoms, the Nature and Cause of their mortal Distempers, and the Violence and Acuteness of their Pains and Sufferings, while they are wearing out and agonizing. Whereas those who study and constantly practise the lightest and'

and the least, ('bating Accidents and epidemical Distempers) generally die and dissolve gradually, their Senses, Faculties, Spirits and Serenity holding out to the last: They have seldom violent or acute Sufferings; they defcend out of Life as they ascended into it; the latter End of such is Peace, at least as to their bodily Machine, and in Comparison of the Agonies, Tortures and Wheel-breakings of the first : at the very least, this is the natural Consequence of fuch a Regimen; as is constantly seen in those who rigidly and strictly follow Nature and its Laws, which in Regimen is to descend into Water-gruel, Milk-porridge and Waterpap, as they ascended from it in common Life; or in practifing to the last the lightest and the least. Cornaro, in the last Part of his Life, liv'd 24 Hours on the Tolk of an Egg; many have done fo on a Dish of Milk, Chocolate, or Milk-Tea; and most of those who have run out to the natural Duration of Life, have thus departed, as is well attefted and confirm'd by History and Observation.

18. In a word, Nature, or, which is the fame Thing, God, the Author of Nature, cures every Distemper, acute or chronical, (for chronical Distempers are only diluted, weaken'd and lengthen'd acute ones, differing only in Degrees and Duration, and a quick and slow, a labouring and a free, an intermitting and continued, a simultaneous and a drawling Pulse,

Pulse, are the Criteria by which we denominate Distempers under this Division) which He, or ever it, cures, by a Nausea, Loathing, or Inappetency to Food of any Sort, but particularly to all animal or strong Meats or Drinks; then by the Symptoms of the specific Distemper, as Headach, Reaching, Heat, Thirst, Inflammation, Pains in all, or particular Parts, Difficulty in Breathing, Throws and Convulsions in the Bowels, Anxiety, Dread, panic Terror, Chillness, Loss of Senses, and the confistent Use of the Faculties; all (or fome) of these, according to their Nature, and Violence of the Distemper, respectively: And these either in a continued Series, or by Fits and Intervals of Ease, which is the Oeconomy of the Author of Nature, to labour, grind and concoct the morbid Matter and the material Cause of the Distemper, most universally produc'd by a Mal-regimen and improper Food; and when this Matter is fufficiently concocted by the Distemper, then comes the Crise, to throw it out of the Habit by some Evacuation or other, as Sweating, Vomiting, Purging, Hamorrhage, Urine, or Coughing and Spitting. This is the constant Oeconomy and Course of Nature in the Cure of Distempers, and ought to be a Pattern and Model for Physicians to go by in their artificial Cure of Difeases. And fince God and Nature do nothing in vain, it would feem as if infinite Wisdom had laid down these similar

lar Hieroglyphics, Pictures and Insmuations, to teach us how to manage in similar Cases; for the silent Language of the Deity to us in this our lapsed State, without Violence on our Liberties, can be no otherwise than by such natural Causes, general Laws, Hieroglyphics and Analogy, by which we may learn of and imitate Him, as near as we can, in all we do or think.

19. I AM of Opinion, if it could be possible to perfuade those who are tolerably well, and are oblig'd to follow a fedentary Occupation, and to use their Heads and intellectual Organs in their Professions, to give over all fermented Liquors, but on extraordinary Occasions; to abstain from animal Food in Spring and Autumn, but especially in the hot Months, when Fruits and Garden-stuff are in their Perfection, and to follow Nature in the Products of the animal and vegetable Kingdom, according to the Seasons of the Year; the Spring Animals and Vegetables being more aqueous, tender, and freer from Salts and Oils; the Autumn Foods being somewhat richer; but the Winter ones having attain'd their greatest Perfection of Concoction and Maturity; fuch Persons would go a great way to preserve their Health and Serenity, with few Discases, epidemical or acquir'd: For in the Spring, all Nature is under an universal Fermentation, to throw off Crudities and Morbofity: And it is a wife Providence

dence that Lent-time falls out at that Season, which, if kept according to its original Intention, in Seeds and Vegetables well dress'd, and not in rich high-dress'd Fish, infinitely more destructive of Health than plain-dress'd Flesh, would go a great way to preserve the Health of the People in general, as well as difpose them to Seriousness and Reflection: So true it is, that Godliness has the Promise of this Life, and that which is to come. And it is very observable, that in all civil and established religious Worships, hitherto known among policy'd Nations, Lents, Days of Abstinence, Seasons of fasting and bringing down the brutal Part of the rational Creature, have had a large Share, a strict Observance, and been reckon'd an indispensable Part of their Worship and Duty, except among a wrongheaded Part of our Reformation, where it has been despis'd and ridicul'd into a total Neglect; and yet it seems not only natural, and convenient for Health, but strongly commanded in the Old and New Testament, and might allow Time and proper Disposition for more ferious and weighty Purposes: And this Lent, or Times of Abstinence, is one Reason of the Chearfulness or Serenity of some Roman Catholic and Southern Countries, which would be still more healthy and longliv'd, were it not for their excessive Use of Aromatics and Opiates, (which are the worst kind of dry Drams) and is the Cause of their

# 78 The Method of Cure in Diseases unnatural and unbridled Leachery, and Shortness of Life.

#### CHAP. II.

Of the Nature and Cause of the Disorders of the MIND, so far as they depend upon the Body.

1. JPON the strictest Enquiry, and most anxious Examination, I could never find a natural and philosophical Cause for, or Account of, Ideotism, Stupidity, Loss of Senses, Memory, or Judgment, for Lunacy or Madness, or of any of those Distempers that are called Cephalic or Nervous, or which is attended with a Deviation from what is called common Sense, or just Thinking, but an Obstruction, Extinction, Relaxation, or Malformation of the proper Organs (which are commonly reckon'd the Nerves, or their Membranes; for they are membranous Tubuli, fill'd with a milky Liquor, like the Pith of a Rush, to keep them moist and elastic, and Membranes are the only true elastic Organs of an animal Body); by which the Mind acts uniformly or regularly: And therefore, in all Nature, I could never find so luciferous and expressive an Emblem, or analogous Similitude of the Operations of the Mind on the Body, in its intire

intire and perfect Health, as that of a skilful Musician playing on an harmonious and welltun'd musical Instrument.

2. I CANNOT see any essential or philosophical Difference between a Man and an Angel appearing to our Senses under an haman Form (as it is alledg'd that Angels and Spirits, of an Order superior to ours, have actually done); I fay, I can, in true Philosophy, conceive no Difference between an Angel appearing and acting in an human Form, and a real Man, either in Nature or Kind, but only in Degree: So that, to me, a Man is a diminutive Angel, shut up in a Flesh Prison or Vehicle; and an Angel appearing in an human Form, is a superior human Spirit, for that Time cloathed with some sensible Vehicle, and acting by and upon material Organs, divinely fram'd; and both are, in reality, no other than a Musician shut up in a fine Organ Case. In the same Manner, and from the same Causes, I see through a Microscope, a Telescope, or Spectacles, as through my own fleshly Eyes; by the same Laws likewise I hear and speak through a Trumpet, as with my Ears and Mouth, and feel through a fine Lawn or Membrane, as by my outward Skin, only more or less distinctly; and, if the artificial Organs be well contrived, and duly form'd, it is much in the same Manner, as to the sentient Principle; it is that alone, which is the Seat and Principle of all Sensation and Intelli-

gence. Material Organs, form'd by Art, are much the same as natural ones, only the last are more nicely and elegantly fram'd.

3. UNLESS a Man give up all Reason, Philosophy and Proportion, as well as Analogy, and run into downright Scepticism, blind Fate, Witchcraft and Inchantment, he must suppose that an infinitely wise and beneficent Being could not have created free and intelligent Creatures, but for some wise End and Purpose; and, to obtain this End, must have made them, at first, sound in Body and Mind. How Error, Diseases, Misery and Death commenc'd, may readily be accounted for, from the Abuse of Freedom and Liberty, spurious Self-love, and an inordinate Love of the Creatures: But this is at present foreign to my Design. But as to the Disorders of the Body, of the Senses, Imagination, Memory, and such as belong to the Faculties, and their Organs, they are naturally and philosophically to be accounted for, from Accidents only, Debauches, Excesses, and a Mal-regimen, gradually spoiling and destroying this musical Instrument, and its feveral Stops and Keys, either in the Parents or in the Posterity. I can readily conceive how such a Debauch spoil'd, obstructed, or relax'd fuch a Set of Glands, Nerves, or Capillaries: That an Excess in Punch, Spirits, Ham-pye or Venison-pasty, plaister'd up, or obstructed, one Set of fine Tubes; how

how excessive Leachery dissolv'd, broke or unbended so many Nerves, Fibres and Lymphatics; and how the crazy Parents, from vitiated Juices, and rotten or unform'd Solids, brought into the World deform'd ideotical Children; how want of Culture and Exercise of the material Organs, necessary to Spiritual Action or Thinking, render them callous, analeptic or tetanous, (just as want of bodily Exercise, and a Mal-regimen, produce a similar Effect on the Limbs and groffer Organs) and fo communicated the same Infirmities, and distemper'd Organs, in Miniature, to their wretched Posterity, and, in such an unnatural Climax, transmitted Monsters, unnatural Forms of Body, Disorder of Senses, Wrongheadedness, Ideotism, spurious Freethinking and Infidelity, down to us the last Link of the Chain. Thus the Appearances are natural, philosophical and rational; on any other Scheme, all is Darkness, Confusion, and Anarchy.

4. I HAVE been credibly inform'd, that Sir Isaac Newton, when he applied himself to what is esteem'd the greatest Stretch of human Invention and Penetration, (viz. the Study, Investigation and Analysis of the Theory of Light and Colours) to quicken his Faculties, and fix his Attention, confin'd himself to a small Quantity of Bread, dureing all the Time, with a little Sack and Water, of which, without any Regulation, he took as he found a Craving,

Craving, or Failure of Spirits. And the famous Mr. Law, Projector of the Miffisippi, to keep his Head clear, and Faculties acute, in order to obtain a Superiority of Skill in Game, liv'd many Years on half a Chicken a Day, with about a Pound of Bread, and drank nothing but Water or aqueous Liquors, and by that Means won great Sums on the Square. Many more Instances I could give of great Men in all Ages, and of all Profesfions, who maintain'd their Superiority of Parts, their Attention, Penetration, just and close Thinking, by extreme Temperance and Abstinence. But I chose these two, because they have been, and still are, much distinguish'd and known in their vastly different Ways; and that any one who thinks it worth his while, may be satisfied about the Truth of the Facts.

5. There are two Sorts of human Race, as different as the Sons of God, and the Children of Men, viz. those whose Eminence and Dignity consists chiefly in their Heads, Faculties and spiritual Nature, and those whose great Use and Design is to excel in the Exercise and Use of their Bodies, Limbs and material Organs; or, in one word, there are those who govern, and those who are govern'd, originally form'd and mark'd out by Nature, and their original Frame and indelible Signatures: The last may safely, at least for some Time, wallow

wallow in fenfual Pleasures, high and strong Meats and Drinks; but are all the Time in the State of the Mock-Tyrant of Sicily, who had a naked Sword hanging over his Head by a Hair at his Feasts; and all such pay an equivalent for their Luxury, in the comparative Shortness of their Lives; but they do not fear, because they do not think justly, having generally very blunt and obtuse intellectual Organs. The first have more delicate and elastic Organs of Thinking and Sensibility, and the Pleasures of that kind in them are beyond those of Sensuality in others: they are like fine Lancets or Razors, that coarse Usage will foon ruffle and spoil; and therefore must forego gross and rank sensual Pleasures, to preserve their Organs of Thinking sound and intire; otherwise their Sufferings will be intolerable, which is the Case of all nervous Hypochondriacal and Hysterical Persons; most of which were created Genii, Philosophers and Lawgivers. The Middle between both these Extremes, are indeed Mediocria Ingenia, and their Number great; and when fuch are strong in thinking and penetrating, their Success is owing to Chance, or rather Providence, to Coincidents and particular Circumstances, or some particular Set of nervous Glands and Fibres in the Brain, not quite spoil'd or relax'd by the Intemperance of their Parents. This last Sort may sometimes produce a false Hero, Conqueror, or admirable Mechanic or Tradesman;

but seldom an honest and able Minister, a wise Lawgiver, or deep Philosopher; and seldomer a Genius, or a deep contemplative Christian. But this admits of infinite Degrees, as all Things measur'd by Quantity do, and is more immediately under God's moral Government of his World, and nothing but the Event can ascertain who will be such.

6. How much Diseases, Debauches and Accidents, that disorder or destroy the Organs of Thinking, influence our Manner of Thinking, is so obvious, that not only Philosophers, and all the Tribes of Physicians, but even the Vulgar have observ'd it, and its Truth is almost an Axiom of Common Sense. When I see a gloomy, melancholy, heavy, stupid, thoughtless, joyless Creature, much more a whimsical, anomalous or libertine, free-liveing or freethinking Mortal, I conclude him in a bad State of Health, under a dangerous bodily Disease, or under a perpetual Mal-regimen, which will foon terminate in one, whatever Appearances be to the contrary; and sooner or later, I have been always confirm'd in the Justness of this Opinion, having always found a real, chronical or acute, specify'd Disease, to manifest itself at last, and become the Crisis of what these Oddities and Enormities were the remote and elementary Symptoms. For I am convinc'd, that Calmness, Serenity, Chearfulness and Common Sense, (at least in Things level

level to our natural Capacities and Education) and an Esteem and Love of Virtue, and what promotes it, are the constant Attendants, and only infallible Symptoms of perfect bodily, and intellectual, (or of sana Mens in Corpore sano) Health; and pretending to be wife out of Common Sense, or happy out of Common Life, is, with me, one of the Symptoms of a cephalic or nervous Distemper. In England alone, from Gluttony and Intemperance in fermented Liquors, and from unguarded Leachery, I have been told, that a late worthy and learned Physician, that had examin'd into the Numbers confin'd for Lunacy and Madness, upon the strictest Examination, found they reach'd to a Number I dare not name. another Physician ascribed Wrong-headedness, gloomy Thinking, Melancholy, Despondency and Darkness on the Imagination, to the abounding of Choler in the Stomach, which every one knows to arise from Intemperance and Excess. Whatever be in these Gentlemens Observations and Opinions, it cannot be doubted, that the clear, ready and pleasant Exercise of the intellectual Faculties, and their eafy and undisturb'd Application and Attention to any Subject, is never to be obtained, but by a free and regular Performance of the natural Functions, which, as has been shewn, the lightest and the least Food can only procure.

7. It is undeniable, that our concoctive Organs at present are fitted and contriv'd by their Maker, for animal Food, at least for some time; and in the present ruinous State of the Globe we inhabit, the Infertility of the Earth in some Seasons and Countries, the Necessity of Labour, Industry and Ingenuity, to draw from it its kindly Productions, but especially for military Force and Prowess; animal Food, and a Proportion of fermented Liquors, seem extremely convenient and fit, that is, for mechanical Force, strong Labour, and bodily Prowess; and, for some Ranks and Orders of Men, indispensable and unavoidable: But, at the same time, their Labour and Exercise, in some Measure, antidote the Evils and Diseases that naturally must follow from such a Regimen; tho', generally, they even must give up for it some Part of the Duration of their Lives. And even this Necessity of animal Food, differs according to the Nature of the Climat; the northern requiring more than the fouthern Parts. But for those who are under no Obligation of bodily Labour, whose Callings and Professions make a sedentary Life necessary, or whose Occupations require only clear Heads, great Attention, and a free and easy Exercise of their intellectual Faculties, which intirely depend on the easy and regular Performance of the animal Functions, either Pythagoras's or Cornaro's Regimen must be absolutely

lutely necessary, and that of the Laborious, destructive and ruinous.

8. Our Bodies, in this present State of Things, by their own Nature, and from the Nature of Things within and about us, cannot be brought into absolute Subjection and Obedience; but we may readily bring them to the present Docility and Subjection we have of the domestic Animals; by timously bridling, trammeling and disciplining them, i. e. by feeding them coolly and sparingly, giving them due Air, Exercise and Cleanness, and phyficking them properly when they grow rampant, rebellious, or obstreperous: And for this very wife End is the long Nonage of the human Race design'd, viz. for the due Culture of the Body and Spirit. And thus we might bring our Bodies to the same Subjection, at least, that we do our Dogs and Horses, and have the fame Service, Pleasure and Obedience from them, till we drop into purer ones. And it is very observable, that all kinds of Food that are insipid, mild, cool and watery, whether of Meats or Drinks, are falutary and curative, prolific and lengthen Life: and on the contrary, every thing in Food that is much tafty, poignant, bot, salt, sharp or stimulating; is pernicious, deleterious and morbific, and destructive of Life and Spirits, and that in Proportion to the Degree of their Sapidity and Deliciousness; and all this, without Excep-G 4 tion

tion or Limitation, I think: So wisely are Things contriv'd, that sensual Pleasure naturally and necessarily produces Pain; and Virtue and Temperance beget Happiness and Health; and that in every Instance. Virtue and Happiness, Order and Peace, Self-denial and Serenity, Vice and Misery, Luxury and Pain, Rebellion and Punishment, are natural, physical and necessary Causes and Effects.

9. OUR Passions and Prejudices are the great Obstacles to all our just and solid Thinking, as well as our Acquisition of Virtue. Pride, Self-sufficiency, Ambition and Matice, make us desire and wish that our Opinions were true: Opinions, Systems and Maxims, lightly receiv'd, shut up our Minds from receiving or attending to more Light, from Tradition or Experience: Luxury, Riot or Leachery, destroy the Organs of our Faculties; all together make Virtue, deep and just Thinking, not only not amiable, but exceeding painful and difficult; and we determine to be against them, because they are and must be eternally against us. Now the lightest and the least, by makeing us healthy, chearful and easy, moderats and restrains all these; it cools our Blood and Juices, weakens our Passions, fixes our Attention, and makes intellectual Enjoyments and Pursuits easy and delightful, and the Acquisition and Practice of the Virtues natural and ready.

IO. TAKE

and

10. TAKE a Child of healthy Parents, coming into the World in fuch Perfection of Body as is common to the middling Rank; let him be suppos'd to be always manag'd, as to Diet, nearly by the above-mention'd general Rule, viz. the lightest and the least; and that Air and Exercise be join'd to form his Organs; let his Mind be at the same time cultivated by all the proper Means of Knowledge, Wisdom and Philosophy, during his Youthhood; and let him in Manhood act that Part his Genius and Vocation fit him for; at, or towards Fifty, let him begin gradually to abate of his Food, both in Quantity and Quality; and at last descend out of Life, as he ascended into it, by being fed, exercis'd and air'd, as he was in his Youth; he will then go down to the Grave with his Spirits, Senses and Faculties, and the whole Compound perfect and intire, without great Distempers, violent Pains, or Lowness and Oppression (at least, such is the natural Effect of those Means and Causes); because the Blood and Juices will always be fweet, cool and fluid, and confequently can meet with little or no Resistance in their Circulation or Secretions (which alone is the Cause of Pain). It is of such a Man, and of fuch a Life alone, that we are to judge of the Happiness or Misery of our present State of Being (all the rest being the Works of our Hands, and the Effects of our own Choice);

Irregularities, Accidents, or unnatural Appearances of a few monstrous or preternatural Individuals: As in Plants, we judge of their Nature, Species or Tribe, by the fairest, fullest grown, and best cultivated; and not by any irregular or monstrous Production.

II. I HAVE already said, that true Mania's, real Lunacy, Madness, and a disorder'd Brain, (a Disease by which so shamefully many suffer in England, and those of the best Kind, and many of them of distinguish'd Parts) can posfibly be accounted for, from no other natural Cause, but a Mal-regimen of Diet; and the best Physicians have no other Method of curing such Diseases, but great, proper, and frequent Evacuations of all kinds, Vomits especially, with a low Diet, and then bracing by Vegetables, Astringents or cold Baths; all the rest are but trifling. But People think they cannot possibly subsist on a little Meat, Milk and Vegetables, or any low Diet; and that they must infallibly perish, if they should be confin'd to Water only; not confidering that nine Parts in Ten of the whole Mass of Mankind are necessarily confin'd to this Diet, or pretty nearly to it; and yet live with the Use of their Senses, Limbs and Faculties, without Diseases, or but few, and those from Accidents or epidemical Causes; and that there have been Nations, and now are Numbers of Tribes, who voluntarily confine

fine themselves to Vegetables only; as the Essenes among the Jews, some Hermits and Solitaries among the Christians of the first Ages, a great Number of the Monks in the Chartreux now in Europe, the Banians among the Indians and Chinese, the Guebres among the Persians, and of old the Druids among ourselves: And there are whole Villages in this Kingdom, (even of those who live on the Plains) who fcarce cat animal Food, or drink fermented Liquors a dozen times a Year. 'Tis true, most of these cannot be said to live at Ease and commodiously, and many may be faid to live in Barbarity and Ignorance: All I would infer from this, is, that they do live, enjoy Life, Health and outward Serenity, with few or no bodily Diseases, but from Accidents and epidemical Causes; and that being reduc'd by voluntary or necessary Poverty, they are not able to manage with Care and Caution the rest of the Non-naturals, which, for perfect Health and Chearfulness, must all be equally attended to, and prudently conducted; and their Ignorance and Brutality is owing to the want of the Convenience of due and sufficient Culture and Education in their Youth. But the only Conclusion I would draw from these historical Facts, is, that a low Diet, or living on Vegetables, will not destroy Life or Health, or cause nervous and cephalic Distempers; but, on the contrary, cure them, as far as they are cureable.

cureable. I never once dreamt, nor do I think it natural, reasonable or practicable, as human Affairs are now constituted, that the whole Mass of Mankind should or could live on Vegetables only; the Blood and Juices they would beget, might not, perhaps, be rich and durable enough for Labour, Force and Prowess; though I will not absolutely determin the contrary, confidering that all these are innate and original Powers in the Body: But this I pretend to demonstrate from these Facts, that Abstinence and a low Diet is the great Antidote and universal Remedy of Distempers acquir'd by Excess, Intemperance, and a mistaken Regimen of high Meats and Drinks; and that it will greatly alleviate and render tolerable, the original Distempers deriv'd from difeas'd Parents; and that it is absolutely necesfary for the deep-thinking Part of Mankind, who would preserve their Faculties sound and intire, ripe and pregnant, to a green old Age, and to the last Dregs of Life; and that it is the true and real Antidote and Preservative from Wrong-headedness, irregular and disorderly intellectual Functions, from Loss of the rational Faculties, Memory and Senses, and from all nervous Distempers, as far as the Ends of Providence and the Condition of Mortality will allow.

Over-dose of Port, Punch, Gin, or Brandy, will

will make a Man as mad and distracted for a time, as any Person confin'd in Bedlam can be: It is equally evident, that a Surfeit of strong high Foods will fink, depress and disable a Man as much from all rational Thinking and Action, as habitual Melancholy and Hypochondriasm. Here are two sensible Causes of the two different kinds of Madness and Lunacy, or Deprivation of the rational Faculties, at least of their Use for a time. Either of these, continu'd in, will fix and habituat these two Distempers into their habitual Natures. All Distempers are cured by their Contraries; low living and Water-drinking, will not only prevent, but cure these two kinds of Distempers. Excesses in this low, cool living, as to the Quantity taken down, can only produce a little transient Sickness, and Evacuation upwards or downwards; and he who would preferve his Head clear, his Faculties quick, and his Attention fix'd, need only live as low and cool as he finds his Nature can bear with tolerable Ease, and only recruit when she gives him a Call; for he will have many Calls before the fuffers greatly for Want, unless violent Passions be the Cause, which are a third Species of Wrong-headedness, or Madness; but which is feldom carried to an Extreme, but where the Habit and the Body is already greatly distemper'd, spoil'd and putrified.

13. I CAN conceive the Matter no otherwife than thus: The Mind or Soul is the felfmoveing, self-active, sentient and intelligent Principle, with limited, but invariable natural Powers of Liveing, and of Thinking, Freewilling, and beginning Motion in those Bodies, whose Passivity or Inertia is not superior to its active Powers. How it exerts these Powers on divinely organiz'd Matter, I do not here pretend to fay; but I conceive it acts on the Organs by means of the Mechanism of the Brain and its Nerves, which are an Infinity of differently situated, complicated and stretch'd Little Filaments or Fibrils, fill'd with a foft milky cellular Substance, (like a Rush with its Pith) contain'd in small membranous extremely elastic Sacks or Tubuli, all whose elastic and energic Virtue consists in the proper Tension or Vibrations of these Sacks or membranous Coats, spread over all the Solids of the Body, which being extremely elastic and springy, convey harmonious and divinely proportion'd Vibrations, Undulations and Tremors, excited outwardly by Objects to this fentient and intelligent Principle; and reciprocally the Soul, or felf-moveing Principle, impresses proper Vibrations and Tremors on these infinitesimal membranous Sacculi to the respective Organs of Sense and Muscles; and thus Sensation, Perception, Images, Ideas and muscular Motion may be perform'd. When the Juices of the Body are

corrupted, their Particles too big, too sharp, too corrofive, or any way-improper, they may excite Tremors, Vibrations and Oscillations unharmonious, heterogeneous and dissonant, in the Course of the animal Functions: in Sleep, in Dreams, in Diseases, or in any State of the Body: On these unnatural, wild and inconfistent Ideas, Sensations and Sentiments, the self-active Principle may act very consistently to its Nature, viz. reason justly, choose judiciously, and operate consistently; and yet the Groupe and whole Aggregate and Connexion of fuch Cogitation and Ratiocination may be wild, extravagant and unnatural, and quite wrong-judged, and out of Common Sense, and just and healthful Thinking and Consistency. This is the best Idea I can conceive in these abstruse and obscure Distempers, which I only propose as a Philosophical Conjecture: others may explain the Matter better, if they can.

14. On the whole, I think the lightest and the least Food may be justly term'd the shortest and most effectual Antidote, and the most universal Remedy, for all Distempers of the Body, and Errors and Mistakes of the Mind, that depend upon, or have any Relation to, the Body, that the Wit of Man can suggest or invent.

#### CHAP. III.

Reflections on the Nature, Cause and Theory of acute, epidemical and contagious Distempers, in the Animal and Human Creation.

1. I PON all the Experience I have ever had, or the Observations I could ever read or make, I have concluded a Fever, or an acute Distemper, (genuine or symptomatical) is to be denominated fo, or to be called fuch, chiefly from an uncommon, dureable Quickness, Fullness, Hardness, or Labour, in the Pulse, and a Foulness of the Mouth or Tongue; and that the first proceeded from too great a Quantity, Density or Tenacity of the Blood Globules; and the second from too hot, acrid and briny a State of the Serum; and that both together made that State of the Blood which produc'd malignant, putrid and cacochymic Fevers, of which there are endless, useless and frivolous Distinctions among Authors, which can neither be afcertain'd, when they happen, nor afford just and distinct Indications to profecute a proper Cure: These two mentioned Distinctions admit all the Degrees of finite Quantities, hold thro' all their various Kinds, (whose Symptoms seem to me rather Effects than Causes) and will account for all the Appearances of acute Distempers. As to slow,

or, as they are called, nervous Fevers, I reckon them only Symptomatic, and the Product of an hot scorbutic Cachexy, some Capillaries, Glands, or some noble Organ, beginning to be obstructed, schirrous, or to spoil: And, I think, an Hectic is caused by tumified or ulcerated Tubercules in the Lungs, or from purulent Matter concoding somewhere, or from some of the Viscera corrupting; and all the Kinds of them, from bad Juices first, and obstructed Glands or Viscera after.

2. If this Account be just, as it is simple, the Indications for the Cure of the several kinds of Fevers will rife very naturally and readily; viz. in the first kinds of Fevers; Ift, Evacuations of all proper kinds, especially Phlebotomy, till at least the Strength and Velocity of the Pulse subside, and, 2dly, cooling, acid and thin Dilution plentifully and uniformly thrown in, to separate the Blood-Globules, and keep all the Capillaries pervious, and prevent their Obstruction and Coalescence. In the second kind of Fevers, less, though sufficient, Evacuation, but more plentiful Dilution, of the mucilaginous kind, to sheath the acrid Salts of the Serum, and then the Testacea, with the mild ponderose (Cinnabar, native or artificial, and Antimony Diaphoretic, Bezoarticum Minerale, &c.) to break their Points, are here indicated; and in the compounded kinds, a Composition of both H In-

Intentions, and both kinds of Medicines; in the Symptomatic Kind, besides the general Intention, a particular Application and topical Remedies to the les'd Viscera or Organ. Perhaps simple and clear Orange-Tea or Whey thrown in perpetually, and the cooling Salts, with the simple Testacea, even in the bloodglobular Fevers, may do best; and Barleywater, or thin Water-gruel, with Juice of Lemons, and the mild ponderose with the Testacea, may do well in the serous Kind, if constantly, regularly and plentifully thrown in. But Fevers, in general, will be best understood, in my way of Thinking, from the Nature of their worst and most deleterious Kind, under which I would class all the eruptive Kinds, as lesser Degrees of the same Species.

Cause, have much puzzled and perplex'd some Philosophers; and yet, if we take the Matter right, there will no such Difficulty be sound in it, as is commonly imagin'd. For supposing, 1st, That all Matter is attractive, both in its small and great Parts: 2dly, That this Attraction is according to some constant and invariable Law, as the subduplicate, subtriplicate, or some other reciprocal Proportion of the Distance from the Centre of the Particles: 3dly, That the less a Body is, the greater will be its Degree of Attraction in respect

respect of its Solidity, or the Quantity of Matter it contains: 4thly, That Fire, Heat, Fermentation, and all kinds of intestine Motion, have a natural Tendency and Energy only to divide and resolve Bodies into their smallest Parts; and consequently that chymical Fires, and all artificial Operations, by which the Particles of Bodies are violently agitated, can have no other Effect than to divide them into lesser, and still lesser Parts; which Parts, when once separated and set free, either recede and fly off from one another, if without the Sphere of each other's Attraction; or coalesce, and run into one another's Embraces, and so form Bodies of a different Texture and Bulk. Thus, for Example, the Juice of the Grape, when duly fermented, turns vinous, that is, by the intestine Motion and Heat, arising from the Laws of Gravity and Attraction, the Tartar and essential Salt runs together, and sticks to the Sides of the Vessel, the Husks swim on the Top, and the Stones and earthy Parts drop to the Bottom, and form the Lees, and the vinous Part swims in the Middle, according to its Purity, or relative Levity. A second Fermentation on the same Body by the same Laws and Mechanism, renders that acetous which was before vinous; the Sulphurous or inflammable Spirit evaporating, and the effential Salts remaining diffolving and mixing with the Lymph, makes it acetous: These divided by a still greater and

more violent Heat, as in an Alembic, separats the Parts more minutely, and minutely throwing, off the lightest first, and the others in Proportion to their Gravity and Volatility; and when artificially treated, afford the Spirit, the Oil, and the Salt, apart. 5thly, There are properly but three kinds of Salts, though never any of them is to be obtained pure, viz. the Acid, the Alkali, and the Urinous or Volatil Salt. The Acid seems to be angular, with plain Surfaces; hence its Sharpness, and greater Attraction. The Alkali feems to be porous and obtuse, or calcarious, as hard Sponges; and hence its Fermentation with Acids. The third feems to be porous and obtufe, but intimately united with a light volatil Oil or Sulphur; and hence its Volatility and Detonation. And these are the Salts that all animal Substances, and most Vegetables yield, when chymically prepar'd, or much divided and sublim'd by Putrefaction, Fermentation, or Distillation. 6thly, These Salts are divisible or subtilisible in infinitum, and are mix'd with one another in all Proportions, and with more or less Sulphur, Oil, or inflammable Spirit, which renders them capable of infinit Volatility and Sublimity, and so of infinit Force or Activity; and it is to these that Contagion and pestilential Distempers seem to owe their Malignity, Universality, and deleterious Nature.

4. A PESTILE NCE, or Plague, arises mostly from one of these Causes: 1st, Dead Carcafes of Men, Horses, or Cattle slain, and putrifying above Ground by Heat and Moisture, and throwing their noxious Particles, and infinitely small volatile urinous Sales, through the Atmosphere. 2dly, Dead Fishes thrown out of the Sea, and putrifying on the Shore; or Clouds and Swarms of dead Infects bred in Fens, and hot marshy Countries, as Caterpillers, &c. drowned in the Ocean, and thrown ashore by the Tide in scorching Climats, to putrify and ferment by Heat and Moisture, and send forth an Atmosphere of active urinous Salts. 3dly, Cloaths, Rags, animal or vegetable Substances, taken from Persons dying of a Plague, and saturated with fuch infectious or deleterious Particles which stream from them. 4thly, Bad Food, i. e. putrified, rotten, and too minutely divided Flesh, abounding with detach'd urinous and volatile Salts; as the Hydrophobia in Dogs and other Animals, is probably from Surfeits of putrified Carrion, or by the Infection being communicated by the Bites of such. Or, 5thly, From mineral, arfenic and poifonous Damps, Vapours, Exhalations arifing from Volcanoes, Grottoes, Ruptures, or Mines, excited by subterraneous Heat and Fermentation. Upon exact Search and Inquiry, one of these five Causes will constantly be found to H 3 have

have been the natural Source of all the Plagues, or pestilential Distempers, that have ever been in the World. They can only arise from an high Exaltation, Volatilisation and Sublimation of these urinous animal Salts, and mineral Steams, which being hard, porous and alkaline, but fitted with a light, caustic and athereal Oil, or Sulphur, whereby their Velocity and Elasticity is increas'd, they become small, volatil, and highly attractive, by their acid Sulphur, when taken into animal Bodies in great Quantities, by the Lungs, or Vasa Inhalantia: They soon by their Effervescence (like Barm in Wort) rend, tear and putrify the Solids, and break the Cohesion of the Fluids, and so destroy animal Life; and they fooner enter into, and make quicker Havock on, such as live high, as those of this Island do, than those of any other Nation what soever, (as Davila observes in his History of the Civil Wars of France) like the Hogs, which of all other Animals catch fuch Distempers the foonest, and propagate it the quickest. This has been particularly observ'd in Asia and Confiantinople by Dr. Ottoni \*.

5. BOTH kinds of Salts, or deleterious Particles, when collected into great Volumes, and united into large Clusters, suddenly and violently destroy the animal Machin, viz. the

<sup>\*</sup> Vide Philosophical Transactions.

the first constitutes Poisons, and the latter Plagues. Acids must always consist of sharp, angular, and hard Particles, as is evident from their Effects on Metals, and animal Organs; and since they must have a Figure, that of a triangular equilateral Prism seems most suitable to their Nature; and such Poisons manifestly appear to be, from Experiment, as in the Action of Aqua Fortis, Aqua Regia, or Spirit of Vinegar on Metals; and when admitted into the animal Habit, immediately six and coagulate the Juices, and violently rend and tear the Solids.

Dogs, and Rage and Lust in other Animals, arise from the Abounding and Fermentation of animal Salts only; particularly the Madness of Dogs is observed to proceed from Surfeits of Carrion and putristed Flesh, they filling their Blood and Juices with such volatil and animal Salts, that are detached, and in a State of Activity; which Hydrophobia is now so successfully, and, I think, rationally cured by ponderous Medicines, those especially that are the quickest of all in their Operations, as large Doses of Turbith, as might have been justly expected\*; but the Cure cannot be

<sup>\*</sup> Vide Philosophical Transactions for 1737. Dr. De-Jault's Book.

certain, unless it be brought to rise to a quick Salivation; for as the Effect of this Poison is quick, so must that be of its Antidotes. Mercurial Inunction, with a Quicksilver Ointment, and the active Ponderose, may hasten and ascertain the Cure in such a desperate and frightful Distemper.

- 7. ALL epideimcal, infectious and eruptive Distempers, are but lesser Degrees of pestilential ones, caused by these animal Salts weaken'd and diluted. The Itch arises from the same animal Salts, of a more course, dull and less deleterious Nature, encourag'd by Nastiness, as Vermin are bred in close damp Rooms. The Small-pox is the first Elements, or the lowest Degree of the Plague and Pestilence; and the Great-pox is the same, more condens'd and concentred: And thus, by an easy and natural Piece of Philosophy, all epidemical Insections, and pestilential Distempers, may be accounted for.
- 8. ACUTE Diseases are generally produced more immediately by Excesses in strong, fermented, or spirituous Liquors. Spirits and volatil Oils have the most sudden, the most active and deleterious Quality. Gluttony may create Obstructions in the Glands and Capillaries, and so produce chronical Diseases; but it is by Drunkenness alone, and dealing too freely with Fire and Spirits, that quick and

and violent Devastations are made. I am never under any Apprehension for those who drink nothing but Water, (the only Beverage fitted and perfected by the Author of Nature for animal Bodies) let their Complaints and Diseases be called by whatsoever Name they will; there is no possible Case in an animal Machin, but that one, viz. where Nature is endeavouring to throw the peccant Humours on the farthest Distance from the Centre and Bowels, and on the Extremities, that Waterdrinking is not fafe and proper; and in Perfons habituated only to Water, very gentle and mild Cordials will ferve, to wind up the internal Springs of the Circulation, and help them to propel the morbid Matter to the greatest Distance; and then, and only then, when there is an Anxietas Pracordiorum, an internal Disorder on the Springs and motive Powers, a Sickness, Nausea and Retching, and even then only, when the Disease is too strong for Nature's weak Powers, is she to be fortified with Cordials; and they ought to be the most simple and temperat, (especially to Persons generally sober) even in the retir'd Gout, Small pox, Eryspelas, or any flitting or changeable Distemper; and it is only in the Intervals of such Distempers, that Waterdrinking is adviseable. Spirituous and fermented Liquors are only proper, on internal Sickness, Anxieties, Inappetency, and Lowness; or in Extremities, as a Spur or Filip, to give

give Nature a little Respite when oppress'd, and enable her to go on with the extirpative and preventive Remedies mentioned. And even in acute Cases, if we believe the well-attested Reports of the Ice-water Doctors of Naples and Rome, it is surprising, in such Cases, what Cures they have perform'd, by pouring down plentiful Draughts of Ice-water, or distill'd Rain-water cool'd with Ice. Bar-ley-water, with Syrup of Currants or Lemons, or Orange whey or Tea, might perhaps do the like here. I think, after proper Evacuations, proper Dilution is the universal Remedy in acute Cases.

9. I say, I think timeous, well-judg'd and plentiful Evacuations of all kinds, with full, free and grateful Dilution, the great Affair in Acute Cases; animal Salts highly exalted, refin'd and fublim'd, (that is, divided) are the Leaven and Test towards Putrefaction, as any one the least acquainted with Philosophy must know, which is the true natural Cause of the Plague, and all putrid and malignant Fevers: And as Acids only stop Fermentation, Ethiops, as made of the best Acid, and the most effectual Deobstruent, bids fairest for Prevention, as acid Dilution, after proper Evacuation, feems the best Method of Cure; just as in great Conflagrations, the Business is to withdraw and disperse the Fewel as fast as we can, and pour on Water till the Flames have

have not Force to consume the Dwelling; when the Danger is over, there will be Time and Leisure given to set in Order, and make it convenient and habitable again. It is not my Affair here to detail and limit the specific Means; they may be met with in Lominus's Eloganty, and in Sydenham solidly laid down; and with a good deal of specious Probability in Langrish's Theory of Physic, and precisely pointed and adjusted by the most ingenious Dr. Bryan Robinson, in his excellent Animal Oeconomy towards the Close. All Acute Distempers are lower Degrees of, and have some analogous Resemblance to, contagious and epidemical Distempers. Latest Accounts from Constantinople, and all over Asia, inform us, that the most effectual Security Europeans and Francs have in a Pestilence, is to withdraw into a found pure Air, and live very temperatly, and, on the Necessity of a nearer Approach, to live on Vegetables only.

10. SINCE all kinds of Fevers are but Miniatures and Steps towards a Plague, which is the highest Degree, and quickest Dissolvent of the animal Frame, quod potest majus, potest minus; plentiful and proper Evacuations at first, acid and cooling Dilutions, with interspers'd Diaphoretics, as the Constitution of the Patient, and the Malignity of the Disease, require and call for, seem to be the most solid Indications in the Pestilence, and

and in all putrid and malignant Fevers; especially that of the confluent Small-pox, in its first Stage; such as a roasted Orange with Bawm, Sage, or Green-Tea, and sweetened with Currant-gelly, Barley-water with Spirit of Nitre, small Sack-whey made with Juice of Lemons, or the like. On the second Fever of the Small-pox, and after Maturation in all eruptive Discases, gentle Diaphoretics, and mild Cordials, are indicated, to keep out the morbid Matter on the Surface. And the best Antidote in Nature against the Small-pox, and the Plague itself, is certainly Æthiops Mineral and Cinnabar of Antimony in Pills or Bolus, taken twice or three times a Day, and wash'd down with Orange-whey, as those who understand the Nature and Efficacy of these Medicines must see, and of which I have had some successful Experience; for the confluent Small-pox is but a Miniature of the Plague, and both are cureable in good Habits. And I am fatisfy'd the Hydrophobia itself can only be folidly cured by Mercury judiciously managed.

tient Greek Physicians, especially those about the Time of Hippocrates, so successfully, and with such wonderful Eulogies, from all Antiquity, cured their Patients, when it is certain the Materia Medica was then very narrow and simple, and those Medicines mentioned

tioned and described by them were of the roughest and most active Kind, such as Hellebor, Coloquintida, Elaterium, and the like, and their Number very small. All I can imagine to account for this, is, that Diet, or rather absolute Fasting, (as was certainly the Practice of Asclepiades) much Dilution, and especially plentiful Water-drinking in acute Cases, was their great Affair: but their Climat and Diseases were quite different from ours. This Method tho' has lately been renewed with unaccountable and almost miraculous Success in Snow or Ice-water at Naples, as may be seen by the Account of it in the Philosophical Transactions. I have well-attested Relations, and by the most sober and intelligent Persons, (Physicians and others) of the wonderful Effects of it in almost all Cases with a quick Pulse; in some particularly, by pouring down every Hour, or every half Hour, a Pint or half a Pint of this Water, cold or hot, according to the Season, and sometimes acuated, when fluggish, with Spirit of Nitre or Currantjelly; and continued even to 35 Days, without any earthly Food; and even in a nervous Fever, and a beginning Phthisis: by which the Patients were perfectly recovered from all feverish and nervous Complaints, and by living at first on Asses Milk and light Soups, and so returning gradually to a common Diet, have continued well and healthy ever fince. Many more and very different Cases of the fame

fame Nature, (with a quick Pulse) and some Chronical ones, have been fent me well attested; but this first one I pick'd out as a general Model and Specimen: I cannot think, indeed, this Method imitable in our colder Climat; but this I am very certain of, that if the animal Body be nothing but a Compages or Fabric of Pipes, as it most certainly is, then plentiful Dilution, by injecting the thinnest, most fluid, and moistening of all Liquids, is the readiest way to cleanse and make them pervious; and the only thing that can preserve them open, if they are not clogg'd and obstructed with too gross and improper Food in the Time; for in Acute Cases, there is little or no Digestion, and there most certainly is a most universal Obstruction of all the Glands or Capillaries: For let Physicians dispute to the End of the World, about the Cause of Fevers, I think there can be but these two. an acrid, hot and viscid Blood and Juices, and an universal Obstruction of the Lymphatics, Capillaries or Glands, as these putrified Juices happen to fall on particular Organs or Bowels; and confequently there can be no other proper and adequat Cure of them, but proper Evacuation in all the probable and possible Ways, and plentiful Dilution by the lightest, coolest, and most penetrating Fluids, together with grinding Medicines; all other Methods seem to me absurd and frivolous. But it must depend on the Judgment and Experience of

of the Ordinary, to apply these general Methods to particular Cases, and particular Patients; for Climats, Seasons, and different Airs, have the greatest Influence on Acute Cases, and no one Method of Cure can be universal to all Countries and Constitutions, and Acute Cases require Attention to the minutest Circumstances.

#### CHAP. IV.

#### Of the BLOOD.

9. 1. HE Blood is the Source and occasional Cause of Animal Life: In the Blood is the Life thereof, say Moses; and, I think, so says the best natural Philo-Sophy; and according as it is good, bad, or indifferent, so is the Health of the Animal. When I find the Blood like Lambs Blood, that is, when the Serum is about One-half, or One-fourth, of the Whole, near limpid, or of a pale yellow Colour, not over saltist, nor too sweet, the Curd florid, without Size or Buff on the Top, and readily yielding to the Knife, or dividing Instrument; I conclude my Patient in no immediate Danger, let his Symptoms, or his Distemper, be called how it will; not but that fuch a Person may have fometimes grievous Ails, to wit, from topical Injuries, a loaded or relaxed Stomach, or Solids,

Solids, obstructed meseraic Glands, or from the Blood and Juices not being as yet perfectly sweeten'd and thinn'd in the capillary Vessels (but there forming Obstructions); from preternatural Formations, or epidemical and accidental Injuries: But while the Case is as I have just now described it, I am consident the Patient is under no present mortal Distemper, and in Time, by proper Means, may get over these Symptoms, and well again, if he is not too far gone in Life.

§. 2. THE Blood appears by the Microscope, like Water with mix'd foft Flesh Globules, which by Dr. Jurin's \* accurate Experiments, are about Three-fourths of the Weight of the whole Mass, and in Diameter about 124 of the Diameter of an ordinary Hair of the Head. By a Chymical Analysis, he found a great Proportion of Phlegm or pure Water in the Serum, and but little Salt, Oil and Earth; but that the Curd had much less Phlegm, and a great deal more of these others: But I have little Faith in the Principles of any natural Bodies forced out by the Tortures of Fire in Chymistry, at least for the Purpose of Medicine, that Analysis quite altering the Texture, Figure and Properties of the integral Particles of natural Bodies; nor have I ever, in my Practice and Observation, found a Chymical Medicine of

<sup>\*</sup> Vide Philosophical Transactions.

any Value or Efficacy in the Cure of Chronical Distempers, which I could not supply better by unanalys'd natural Bodies, and their integral Particles, in Water, prepared only by common Cookery; besides the Damage these Chymical Medicines, when introduced into the Habit, do, in the small Vessels, if continued long, or given in any great Quantity.

§. 3. THE Foulness, Acrimony and Size of the Blood, I take chiefly to arite from strong fermented Liquors, in which the Oil, Spirit, and Salt, is fet free by Digestion, and then superabounds. Nature has created for us animal and vegetable Foods, but no fermented Liquors: they are the Product of infernal Art. I have by frequent little Phlebotomies, aqueous Beverage, a low Diet, and the mild Ponderose, observed the Buff on the Blood grow thinner, its Colour livelier and whiter, the Serum more transparent and sweeter, and the Symptoms of the Distemper milder and less frequent, by sensible Degrees; and no doubt they all come on in the same Order and Degrees, by the quite contrary Methods to which they go off. Strong fermented Liquors contract and bind together the Blood Globules, and stuff them with their Oils and Spirits, so that they become lighter, and fwim on the Top of the separating Mass, fill the Serum with their Salts, and weaken and break the Cohesion and Elasticity of the Solids,

lids, by their too strong Stimulus, so that they are not sufficient to circulate and mix in due Proportion the several Principles, and continue the Mass of Blood, so as it ought to be, in a sound State of Health; and hence Obstructions, Distempers, and Death.

§. 4. THE whole Business of a Physician, in Chronical Distempers at least, is to render the Blood (and confequently all the other Secretions separated from it) sufficiently fluid, sweet and balfamic; this alone can restore to the Patient perfect and dureable Health, and nothing less ever can. Many a Person is born with this bad Blood from difeased Parents. and in some I have seen it sensibly, (without catching Cold, as is the common Cant,) even when very young, to my great Surprize; but always found the Parents had been unhealthy, when they were born, or had died early of some Chronical Distemper, or the Children were begot when the Parents were old, and consequently the Blood running into Viscidity and Size. It is true, a deep Cold will bring on a transient and acute Viscidity, which may be foon remov'd by fost and Diaphoretic Medicines; but the true chronical and dureable Size, can only come from the Salts, Spirits and Oils of fermented Liquors, compressing and breaking the Blood-Globules: If this has not come to such a Degree, as actually to kill the Seminal Animalcula in the Parents, it may tho' thus make the Blood so viscous, as to pro-

produce Fits, or other mortal Distempers in the Infant, or some Acute or Chronical Distempers in its more advanced Age, especially when the Party has come to its full Growth, the Solids are developed and fix'd for some time in their Extension; which may happen at any Time, but chiefly about Thirty-five, or towards the Meridian of the now common Length of Life. For though a Person is born with such a corrupt and fizy Blood from his Parents, yet while the Solids and Veffels are developing, unstretched and extending, this Size and Craffity may not appear to the Senses, even on Blood-letting, till about or towards the Time mentioned, because from the Fibres and Coats of the Vessels stretching and yielding, the Globules are not so compressed, as to be broken and disfigured, which is necessary towards the Production of this Size. The Globules may be approaching, but not come into actual Contact and Compression. I never saw a deep obstinate Chronical Distemper, without fizy Blood, at least in its last Stage, nor do I think it possible.

§. 5. THE Instances mentioned by Dr. Lower, of the Broath flowing from the Nose, after a long Hemorrhage, and of pure white Blood, by Dr. Beal, and such-like Cases, are only from the extreme Viscidity of the Crassamentum or Grume, which hinder the Assimilation or intimate Mixture of the

new Chyle with the old Mass, and make them separat like Oil and Water; which is likewise the Case in confirm'd Tropsies, Diabetes's and Jaundices; in which last Diftemper, upon opening a Vein on some threatening Symptoms, I have feen the Curd coated on the Top with a yellow Buff, and the Serum like a foul Tincture of Saffron; and no Cure is to be hoped for in such Cachexies from Evacuations only of any kind. Catharties, Diuretics, Diaphoretics, or Emetics, are nothing but mere temporary Reliefs, (of all which Emetics procure the longest and greatest) nothing but a thin deobstruent Regimen of the softest and coolest Nature, which will readiest unite with the old viscid Mass, with the mild grinding Ponderose, such as Cinnabar natural and artificial, Antimony, Diaphoretic, Millipedæ, prepared Egg shell, or Crab's eyes, and the like, long continued, with a proper Regimen, can extirpate so strong a Cachexy.

§. 6. The scarlet Colour of the Blood is undoubtedly owing to the Air and its Nitre in the Lungs; there are Properties in the Air which all our modern Philosophy, or most accurate Experiments, have not as yet discovered or accounted for. Those of the promoting and actuating Light and Fire, and giving the scarlet Colour to the Blood in the Lungs, are some of the most uncontestable and considerable. I have constantly observed,

that

that those who had weak, bad or tender Lungs, those who were much subject to Coughs, Cold-catching, to be Asthmatic or Catarrhous, have always had bad Blood: Nor is it possible it should be otherwise; the venal Blood is of a sensibly paler and fainter Red, than the arterial; and strong Lungs and a good Air, contribute much to the grinding, mending and giving the fcarlet Colour to the Blood \*. The Air in the Bronchial Vesicles (which, when blown up fully, rife almost perpendicularly on the Branches of this pneumatical Mackin) both fuffers the Blood to pass freely through the Lungs, and, by their elastic Vesicles blown up with elastic Air, separat the compress'd venal Blood Globules, and by its introduced Nitre, divides them from their too close Union, breaks them into their elementary leffer Globules, and so brings them to that Minuteness, which is necessary to reflect only the scarlet Colour or red Rays.

S. 7. THE Heat of the Blood certainly arises from the Velocity of its Circulation, and the mutual Friction of the Globules on one another, and on the Sides of the containing Vessels, which will be increased as it is more or less stored with sharp Salts, hot Oils, or any fuch active stimulating Particles. The Author of Nature has adjusted a due Medium,

Vide Leuvenhoeck.

between the too flat and low Crase of the Blood, and that of the too pungent and active Nature, which is in Proportion to the Strength of the Solids, and their elastic Power; in which the most perfect Health consists: All over or under this Mediocrity is worse, though that under is much fafer for long Life, and that above for greater Strength. The Study of a Philosopher or Physician, in regard to the Body, is to preserve this just Balance between the Blood, and Juices, and the Solids; for it is from the Juices solely that all the Solids are repair'd and increas'd; and Medicines can do little or nothing but on these Juices: The Solids, by their malignant Nature, may be broken, putrify'd or relax'd; but can scarce ever be much carried into a higher Perfection, more benign Temper, or stronger Elasticity, even when the Juices are mended by Diet, than they are constituted by Nature; so that removing Impediments from them, and bringing them to their own original Tone, is all that can be done; and even that is only by the Intermediation of found Juices: So that if any Experiments could be contriv'd to determin the original Firmness, Force and Elasticity of the Solids, a Regimen might be readily found, that should thin and dilute the Crase of the Juices to be in a true Balance to them, or a little under it, which would be the same with the Panacea.

#### CHAP. V.

Of MERCURY, its Nature, sensible Qualities, and Effects.

§. 8. MERCURT judiciously manag'd, seems to me, to be the only true Panacea, and universal Antidote, sought by wise, and boasted of by pyrotechnical Enthusiasts. Mercury seems pointed out and impress'd by the Signature of the God of Nature, for the Cure, at least for the Relief, of intelligent Creatures, made miserable by hereditary Discases, by natural Appetites irregularly indulg'd, by Ignorance, bad Example and Frailty, in the human Kind especially made so by high Food, and spirituous Liquors mostly. I will not run into the subtle and too refin'd Qualities of this only secondary and true sensible Fluid in all Nature, (which, though entertaining to Philosophers, would be of little Use in the Practice of Physic; our Senses and Sensations being so obtuse, as to be little hurt by Indivisibles or Minutenesses) but take those that are manifest and incontestable, which are, 10. Its Gravity, which is at least fourteen Times more than that of the other sensible Fluid in Nature, viz. Water: from whence flows its Momentum and Force, in opening a Way to itself in all Animal Tubes, where the Resistance is less than

its Force, or where the Aperture is naturally to be effected. 20. The Rotundity of its component Particles, which in all Probability holds to its very last and least Particles; for to the last invisible Particle (when compress'd on a smooth polish'd Glass) it continues still globular; and the less the Particle is, the more perfect the Spheres, fo that its very least Particles must on that Account be perfect Spherules, as is evident by fine Microscopes. 30. The Smoothness and consequent Softness of these Particles on sensible Animal Substances, they having no Points to tear Animal Fibres and Tubes, and by their Globosity touching them in a Point only; and this is evident from its great reflective Virtue, every the least Globule being a perfect Speculum. Its readily answering, by this extreme Smallness of its Parts, the least Impulse; for on the least Compressure between smooth polish'd Glasses, it readily slies into perfect Spherules, innumerable and invisible, even to the finest Glasses; so that the least Heat or Action puts it into Motion, as is evident from its Ascent in Glass Tubes, or in an Alembic, not so readily indeed as Water or Air, (for that were supposing it to act contrary to the universal Law of Gravity) but by reason of this Smallness of its Particles, and its greater Degree of Attraction, more readily in Proportion to its Density and Gravity than any other Fluid. 50. Its greater Degree of attractive Force and Ad-

Adhesion to some Bodies or Particles of Matter more than to others, as to Gold, and Salts of all kinds; which probably may arise from the Smallness of their Pores, which can only receive and retain so small Particles as those of Mercury probably are. These are sensible, known and acknowledged Properties peculiar to Mercury, from whence all its great and falutary Effects on Animal Bodies may be readily explain'd and render'd intelligible, without running into Finenefles and Subtilties, and these salutary Effects are indeed great and many.

6. 9. THE great Art required to make Mercury the most useful, salutary and beneficial possible, in the several Cases propos'd, is, 10. To divide it into the smallest Particles possible, and then to unite it with some other Medium, which may keep these Particles separated, and at a Distance from one another, so as not to be readily united again into larger Globules or Clusters, by which means it may be more easily introduc'd into the smallest Fibres, and capillary Tubes, by the Force and Course of the Circulation, to render them pervious, dissolve their obstructing Slime, and carry it out of the Habit by the Common Shore (the Guts) or the Emunctory, Urinary or Perspirative Drains, which Qualities make the proper and peculiar Excellency of Mercury above all other Medicines.

dicines. When it is given crude and in Substance, or in its grosser Preparations, i.e. without Chymical Fire; beyond all Doubt (as we see daily by its sensible Effects, and fometimes by its visible Appearance in Substance on the Surface of the Skin) some of its smallest Parts, by their Mobility, attractive Force to one another, and ready Ascent, pass through the whole Habit, not only in the Course of the Circulation, but even through the Sides of the Tubes themselves, through the Membranes and parenchymatous Substances: But then this Effect is not so soon, so readily and effectually produc'd in the crude Substance, as in some of its Preparations, where it is minutely divided, and its Particles kept separated and at a Distance from one another, to enter fingly the small Tubes. 20. To endeavour to make the Medium of the Division, this Cover and Shell of the Particles, and the Matter they are united with, as falutary and conducive to the Intention of the Cure as possible; or to mix the Particles of the Mercury with some vegetable or mineral Substance, that has been found by Experience specific in the Distemper given. This will be more plain, in running through some of the most common Preparations of Mercury.

§. 10. THERE is scarce a Body or kind of Matter with which Quicksilver, with Labour and Art, may not be incorporated or intimately

mately mixt. It may be united either with Salts by Chymical Fires, as in Sublimat, Precipitat, Calomel, and the like; but as the Salts, when thus divided, have a strong Stimulus, are extremely active, and fo necessarily produce very violent Pains and Evacuations of all kinds, qua data Porta, I think they are extremely dangerous in delicate Constitutions, and tender Bowels; especially if they must be long continued, to alter the whole Mass, and perform the Cure of a great and stubborn Distemper: All of this kind I call Mercurials cum Stimulo. 20. Or with Sulphur, Antimony, Sugar-candy, Turpentine, Crabs-eyes, and the like; especially such Bodies as are harmless, and not violently active Medicines, and are not so ready to run the Patient into great Evacuations, and consequently more proper for tender Bowels, and weak Constitutions, when design'd as Alteratives. Sulphur in Æthiops indeed will gripe and purge there, but this is readily prevented, by joining equal Quantities of Crabs-eyes, Crocus Martis, Astringens or proper testaceous Powders, which by their absorbent Quality will make this an admirable, easy and safe Medicine, I think, above all others, if long continued, as I have often found with great Pleasure. Cinnabar native, but especially recent, and much levigated, and factitious also, is as safe and eafy as Sugar, but must be long continued to produce any fensible Benefit, being weak, though

though of all the Preparations it is the most proper, and will at last have the safest and best Effect on very slender Habits, because tender Constitutions are more easily alter'd. The Alcalifatus, by the strong Friction required to unite the Mercury with the Crabs eyes, divides it the most minutely; and by the natural Porofity of the Crabs-eyes, there are prepar'd Celluls to separate and retain them asunder, whereby it would be the most safe active Preparation hitherto, I think, found out; but that, like Calomel, from its infinite Division, and the Smallness of the Particles, it is apt to falivate, if given in any Quantity without interspers'd Cathartics: But every Preparation of Mercury hitherto in Use will do the same, except Cinnabar, and therefore must be watch'd. But, I think, the most effectual way of administring Mercury to a given Distemper, is to unite and combine it (by Pounding, Rubbing, or with Fire) with that specific Medicine, that has been found most effectual in that Disease: Thus, for Example, in the Scurvy, Gout, Erysipelas and cutaneous Defedations, plain Quicksilver, Æthiops, or Alcalisatus well rubb'd into Gum Guaiac, and join'd to an Aloetic, will be found the most effectual Remedy: In Hysterics, these join'd to Gum Pills, with an Aloetic, or Extract of the Bark, or of wild Valerian with Millepeda, these, I say, in such a Case will do great Matters: In Obstructions of

of the Menses, Æthiops with Steel, does excellently: In Intermittents, Mercury with Bark and Steel, either in Substance, in an Electuary: Or in Pills, as with the Extract of the Bark and Salt of Steel: In an Inflammation of the Eyes, Athiops with Millepedæ and the lenitive Electuary, or the Electuarium Diacassia cum Manna, join'd with Milk of Sulphur; and the same in the Piles, or Hæmorrhoidal Inflammations and Tumours: In the Erysipelas, and every other Inflammation, and in Disorders of the Stomach and Bowels, Æthiops, or Alcalisatus, with Rhubarb in Pills, or in an Electuary: In a Rheumatism, Æthiops or Alcalisatus with Gum Guaiac in large Doses: In the Sciatica, Æthiops or Alcalifatus with boil'd Turpentin: In the Jaundice, Ethiops or Alcalifatus, with Venice Soap, or the Sapo Philo-Sophorum, and with Lime or calcin'd Egg-shells: In an Anafarca or even beginning Ascites, Æthiops or Alcalisatus, with Resina Jalapii; and so in other chronical Distempers. All I intend here, is, that supposing the Preparations of Mercury do attenuat the Juices, and open Obstructions the most readily and effectually of any thing known, that then another Medicine or Medicines may be joined to it, that is known or acknowledged to be most effectual in the Disease given. I neither set down Forms, nor determine Concomitants; that must always be under the Direction of the

the Physician in Ordinary, without whom no one in their Senses ought to venture on Mercury, either Simple or any-how prepar'd; for it is either a divine Antidote, or may become dangerous by a wrong Manner of using it, without due Regard to the Case, and the Patient, as well as the Form. But judiciously and properly manag'd, ponderous Medicines, and mercurial Preparations, are not only the sole universal Attenuants and Deobstruents, but also the most simple, natural and efficacious Destroyers of Viscidity and Acidity, or whatever salin Cachexy.

#### CHAP. VI.

Of MILK, its Nature and several Kinds.

low Diet, both from Observation and Experience, to Milks, viz. Asses, Mares, Cows, Goats, and Womens, all of them excellent in their Kind, and preferable in this Order: Milk is a Medium between young Animal Food and mere Vegetables. Milk is white Blood already made, adjusted to all the Meanders of Circulation, and prepar'd by the Hand of Nature, and intended and signatur'd by its Author, for the cureing, nourishing and fortifying of weak, tender and diseased Animals.

the

mals. Asses Milk needs no Concomitant, but in extremely bilious Stomachs; and I question whether testaceous Powders join'd with it, does not hurt, instead of benefiting the Patient; if it purges, or even curdles, that is of no great Disadvantage to the Patient, if he is not quite gone; for that Curdling shews great Redundancy of Gall, and an inflammatory State in the chyliferous Tube, which requires Vomiting, Purging, and Cooling, which the Asses Milk will do most gently and safely in some; and in a short time these Effects will cease, or may be easily removed by a little Decoctum Fracastorii at Night, or Spa or Pyrmont Water, or Bristol, or any chalky Water, for common Drink, when these Symptoms exceed. But to be useful in very tender Cases, Asses Milk ought to be esteem'd Food rather than Physic, and taken accordingly; and tender Persons, especially in inflammatory Cases or Diseases, with acute Pains, ought to live on it, and take it in such Quantities as they can bear. All cacochymic confumptive thin atrophous Persons ought to enter upon it directly, and continue it twice or three times a Day, till they are quite recovered; for I know nothing in Nature that will so soon recover and plump up the muscular Flesh and Habit, as Asses Milk long continued; for all Chyle that nourishes must first be reduced to the Nature and Consistence of Asses Milk, else it will never kindly pass into

the Lacteals. I say nothing of Mares Milk, because it is not much in Use in England, though much admired in Eastern Countries.

§. 12. Some Persons have a natural Averfion to Cows Milk; with others it curdles, and either binds too much, or purges, or fo inflates and comes off in Phlegm, that they cannot take it without abundance of Pain and Suffering, which is an infinite Loss to them, it being the safest, gentlest and most certain and universal Antidote in all chronical Diftempers, without Exception of one. The only certain way to make it agree, is first to cleanse the Primæ Viæ by Vomits, or an Aloetic Pill now and then, mixing the Milk at first with Bristol, or any other soft, but chalky Water, making it into a Gruel or Pudding with Seeds, as Barley, Oats, Wheat, Sago, Rice, and the like, putting sometimes a Spoonful of White Wine to it; making Bread into Biskets with sweet Cow Milk, without Teast or Salt, with a quick Fireing, taking little at a time, but often; or, laftly, putting a Spoonful of Compound Peonywater into a Quart, or a Tea Spoonful of Spirit of Hartshorn to a Pint; and thus gradually carrying off the Load, Heaviness, and Flatulence or Tumult it seems to raise, which entirely proceeds from the ill State of the Stomach and Bowels, that by a Distemper

are loaded with Wind, Choler and Phlegm, where the concoctive Powers are inflamed greatly, the Glands tumid, the Lacteals obstructed, the Perspiration stopp'd, the Blood viscid, and all the Functions in a ruinous State; and not from the Nature of Milk, which is the mildest, softest, most nourishing, and falutary of all Foods; and the vulgar Error of its being Phlegmatic, is from its being the best and most effectual of all Balsamics and all Lambatives: As we see it is form'd by the Hand of Nature, for the Young, that is, the Weak and Tender; and there is no real Difference between a weak tender Animal by Nature, and one made so by a Difease, but that the Case is much worse in the last than the first, and therefore this natural Antidote is more necessary in it: And I never knew one who labour'd and endeavour'd heartily at it, but at last overcame these Difficulties to his great Pleasure and Satisfaction, unless the Case was totally gone: Drinking a little Green Tea, or tepid Barley or Bristol Water, when it oppresses, will help it off and relieve. What makes Milk at first so disagreeable, painful and oppressive, is the inflammatory bilious and acrimonious State of the Stomach and Bowels, which presently turns the Milk into a hard cheefy Curd, and sends off the Whey into the Lacteals too thin and too fast: Nothing in Milk but the fweet white Whey, that is, the Serum, with the K lighteft

lightest and smallest Particles of the Curd, nourishes, or can enter the streight and invifible Mouths of the Lacteals; and hence only is the nutritive Virtue of Asses, Womens and Mares Milk, and Goats-whey. Strong Runnet, or any strong Acid, will turn Milk into a hard cheefy Curd, which will neither come up nor go down without much Labour, Struggle, and Oppression, especially in weak or bilious Stomachs; weak Runnet will make a tender Curd, which will eafily flide off: So that the whole Art of making Milk agree with any Stomach, is to prevent its turning into too hard a Curd, which any Alcali will do, Sugar, Crabs-eyes, Chalk, the volatil Spirits, and the like. As the Viscera cool, and the Choler lessens, the Disorders from Milk evanish. However, I should those whose Stomach abounds with Bile, and so is in an inflammatory State, to live on Seeds, mealy and foft Roots, and well-dress'd Vegetables, for some time, especially those who have bad Livers, and an Overflowing of the Gall; for as to consumptive, scrophulous, scorbutical, diabetical and cancerous Cases, Milk and Seeds are the best Antidot, and seldom difagrees. I have been told of two Pigs, fed one with the same Quantity of Milk, the other with fweet Cow-whey; the last became the fattest, whitest and sweetest. But the most infallible Remedy is for a long Time to chew a little good Bark at Noon, and some Rhubarb at Night constantly,

stantly, at least till this Difficulty is overcome: The first gives a Tension and Spring to the Coats of the chyliferous Tube, the second does not only the same, but also carries off the Load and Superfluity from it, before it accumulats and acidulats too high. Sweet Cowwhey, or Orange-whey, is an admirable Antidot in scorbutic and cacochymic Habits, in bilious Vomitings, and bectic or low feverish Cases: It is preferable to most, if not all forts of Diet-drinks, antiscorbutic Juices or Ptisans; and they who would, at least all the Summer Months, drink a Quart of this, more or less, half in the Morning, and half at Night, would go a great way to prevent autumnal Fevers, violent gouty Paroxysms in Winter, scorbutic and scrophulous Humours and Defedations, and cachectic Juices; especially if some particular Plant, as Scurvygrass, Ground-ivy, Colts-foot, Baum, Sage, or the like, were infus'd in it, or a little Milk of Sulphur (in case it is not of itself too purgative) were first taken in a Spoonful of it.

§. 13. GOATS-MILK, or rather its Whey, is a wonderful Strengthener and Cleanfer. It is furprising to me, that our Countrymen, after they have heard of the many great Cures in deplorable Cases, perform'd by the drinking of Goats-whey in Scotland, Ireland and Wales, with a proper Regimen of Diet, K 2 Air

Air and Exercise, do not more generally apply to it at first in low consumptive, wasteing, scorbutic and cachectic Cases, or in all viscid or inflammatory Juices. It was in great Esteem among ancient Phylicians; and the Goats, feeding in a pure Air, and high Places, on the most tender, light and aromatic Plants, must com+ municat a Spirit, Balsam and Sweetness to the Whey, and consequently to those that use it freely and plentifully, and accordingly we find its Efficacy; it gently purges, opens, cleanses, cools and balmifies; and must furely be a more natural and gentle Diluent than any artificial Diet-drink whatfoever; and in scorbutic, bilious and inflammatory Cases, is a most sovereign Antidot. But it is common to fee the most obvious, natural and simple, but most beneficial and fanative Things flighted and overlooked, while new, foreign, costly and complicated ones, are admired: But Time and Suffering will give Wisdom and Experience, if any thing will.

Momens Milk, which is indeed most natural and homogeneous to human Bodies in very low consumptive Cases, and is found extremely beneficial in them; not only to the Young and Tender, but to the Ancient Tender, and the Middle-aged, worn out by Diseases. This Milk would be infinitly more beneficial and salutary, were it not for the rank, high, foul

foul Feeding and common Uncleanliness of Nurses, and such low-condition'd Persons. If Nurses liv'd on Cows-Milk, Seeds, Roots and Vegetables, well dress'd, and drank nothing but Toast and Water, or Barley-water, or unfermented Liquors, and were kept clean and sweet, their Milk passing through infinitly more fine and delicat Strainers than those of any brute Animal, would be a real Nectar in Atrophies, paralytic and nervous Cases: But on the contrary, as Things are now constituted, Nurses are the most humorous, voluptuous and domineering Persons in a great Family; and if Food and Nutriture can have any Influence on the Body, Humours and Passions of the Child, I think it as necessary to have a healthy, clean, fober, Nurse, as such a Mother, for the Heir of a Noble Family; fince it is certain the Child is fed and increas'd as much, and is longer under the Influence of the Nurse's Juices and Humours, than it is confin'd in the Mother's Bowels; and without all Doubt, the Body, Humours and Passions partake of the Materials with which Children, and even grown Persons, are fed and nourish'd, as constant Experience and Observation testify; and I should rather confine my Child to the innocent and undiseas'd Nourishment of Watergruel, Cow-milk, and Seeds, than to the Milk of a foul, rank, luxurious and vitious Nurse.

to Femily Pages at is consin the Ch nomical as bus soum an bleasters finants is break cather condide on the children best income Procedure W 19 residential biological biolog affile of or meet should be a like affile

THE

# Natural Method of Cure

In the

## DISEASES of the BODY,

And the

DISORDERS of the MIND Depending thereon.

#### PART III.

#### CHAP. I.

REFLECIONS on the Nature and General Method of Cure of Chronical Distempers.

of this Treatife, that none can be long, or grievously ill, who has good-condition'd Blood and Juices, except from accidental or epidemical Distempers, from an habitual Mal-Regimen of Diet, or one which is improper for the Party, or from meseraic Obstructions, or scirrhous abdominal Glands. The most universal, efficacious and K4 adequat

adequat Cause of Distempers, is a constant and habitual Neglect of the sole universal Antidot, or Preservative against Diseases, ' viz. the LIGHTEST and the LEAST of Meat and Drink a Man can be tolerably eafy under. If the Person has brought into the World a Taint of his Parents corrupt Juices, or a natural Tendency of the Animal Salts, Spirits, and Blood Globules, to run into Clusters, to unite, and be compress'd, that is, to beget foul and fizy Blood; and if he does not duly and properly profecute a thinning, low, cool, balsamic Regimen, gentle Evacuations, and sweetening alterative Medicins, but goes on in the common high Diet of the Voluptuous, and the Excesses of those who are born healthy and strong, and with sweet Tuices, he may be ailing, fickly, and tender all his Life-time; and if the Corruption and Malignity of his Juices have proceeded fo far as quite to spoil some of the great and noble Viscera, or putrify the Canals themselves, he must soon and infallibly die. But if one has come into the World duly form'd with fweet Blood and Juices, (like that of a Lamb) but by a constant Neglect of the Lightest and the Least, spoils and corrupts his Blood and Juices himself, the Effect will be gradual, and by many flow Steps and Degrees, and with different Circumstances, according to the natural Formation and Habitudes, and the Nature of the Materials of which the Excesses

committed consist. If the Structure of the Lungs be too streight originally, the Breast narrow in its accidental Formation, the Sternum too sharp, or if there be Tubercules, or Warts in them originally, or an Adhesion to the Pleura, or if the bronchial Arteries be too narrow, or its Vesicles too small, or the Ribs be compress'd; then by a viscid Serum or sizy Blood begot from such a Mal-Regimen, the Circulation labours or is interrupted there, and an Asthma, Phthisis, Pleurisy or Peripneumonia ensues, which terminat in an Empyema, Consumption or Dropsy. The same fizy Blood, and viscid Serum, if the Lungs be tolerably strong and well-form'd, (which corrupted Juices always first try to break, and hence the vulgar Notion, that Colds are the universal Cause of Diseases) will stop in the capillary Arteries, and Veins, which causes a Rheumatism, universal or particular: If thro' their natural Strength and Spring, all the small Vessels are not obstructed, then the most fizy and inflammatory Part is thrown on these Organs and Limbs, where the Capillaries are most compress'd, and least roomy, viz. the Joints, and so produces the Gout. If the Serum, besides its Size, be full of Salts and Sulphurs, then come cutaneous Foulnesses and Inflammations, as Erisipelas, scorbutie Eruptions, Leprosy, bilious Ulcers, and the like. If a particular Organ, as the Liver, be obstructed, or naturally ill form'd, (as too large,

large, hard and unyeilding) the Bile stagnats and is corrupted in it, and biliary Concretions or Stones are formed in the Gall-bladder, and so a Jaundice ensues. If the whole Mass of Blood and Juices be corrupted, and no one particular Part is weaker than another, but the whole System of both Solids and Fluids is disorder'd, the Juices sizy, and the Solids putrified, broken, or relaxed, all the animal Functions labour; and thence the whole Train of nervous, hysterical, scorbutical and hypochondriacal Symptoms arise. But univerfally all these Diseases come from spoil'd, viscid, salin or inflammatory Juices, as their primary and productive Cause, or what is commonly meant by a scorbutic Habit; at least all the Good the best Physicians can do, is on these Juices; the Solids we can but little alter after Maturity.

§. 2. In all Cases where there is a quick strong Pulse, or where there is a weak quick Pulse, though small, but oppress'd, or labouring, if it continue, and the Head aches, or is confused; in all instammatory Cases, such as Eryspelas, the Rose, a painful Rheumatism, a Pleurisy, or the like; in all Cases attended with violent or acute Pain, be where it will; in almost every Case of a Distemper, (if nothing absolutely forbid it) in the sirst Instance, Bleeding is absolutely fit and indispensable; and in painful Cases with a quick

quick Pulse, it ought to be plentiful at first, and repeated once or twice, or oftener, till the Pain abates, and the Pulse subsides; for in all fuch Cases, the Blood is either too much, too hot, or too fizy, and generally all together: As to the particular Vein or Artery (if necesfary) whence the Blood is to be taken, it is of no great Consequence; but for a present Relief, the nearer the Part principally affected, the better. But I should always prefer, in Chronical Cases, small and partial Bleedings, often repeated, to too large and plentiful ones; in every Case, and even in eruptive and gouty Cases, the Eruption will be fooner and fuller, and the Gout become more regular on Bleeding, if it is not too large; the Veins and Arteries thereby become more roomy, the Resistance in the Circulation is less, the Force of the Heart, and of the muscular Coats of the Blood-veffels, becomes greater, in Proportion to the Resistance of the less Quantity of Blood remaining, thereby to accelerat the Circulation, and forcibly to throw the peccant Humours on the Parts Nature designs them, the most remote from the noble Organs: And when any of the mentioned Symptoms subsist, I think a Repetition of Bleeding ought not to be hesitated upon, which, timeously and freely perform'd, has faved many a Life. Half a Pound, or a whole, or even Two Pounds at different Times, out of Thirty, or perhaps Forty or Fifty in the Whole, will never bring any one into

a Disease, or real Danger; for Diseases are in the bad Blood, and Life will be carried on, and even very tolerably, (at least for a time) if the great Organs of Sanguification be found and strong, even with Asses Milk, Chicken-water, or even Water-gruel, running only into the Blood, which will at last, by the Laws of Sanguification, turn into good Blood, as we know from great Wounds, the Experiments of Transfusion, and violent Hamorrhages. Lowness, Faintness, and a Disability of Motion, may ensue on too great Bleeding, which ought not to be practised, but only small frequent Phlebotomies; and these Lownesses are not Distempers that will endanger Life or Health; and by a proper Regimen, the Case will be constantly much mended from the better Mass of Blood remaining: And it is not an unpleasant Speculation to observe, that by the Mechanism of the Body, when a Vein is open'd with a large Orifice, every Phlebotomy draws out a larger Quantity of the vifcous or bad Blood than of the good or fluid Blood, in Proportion to the whole remaining Mass; because in the running Mass the bad, i.e. the lightest Blood, by the circular Pression of all Fluids, is thrown outwards to the Sides of its containing Tubes; and the good, i.e. the heaviest Blood, runs in the Middle, as is demonstrable from the Laws of Hydrostatics; and by Experience we find frequent Bleeding will exhauft all the fizy Blood at laft.

If on a partial Bleeding (which, if in my Power, I always premise to the ordering of Medicins, if for no other Reason, yet to inquire into the State of the Juices and Viscera, which, when perform'd with a large Orifice, I prefer to the Pulse, the Tongue, the Urine, and the Dejections all together, to form my Indications) the Blood be tolerably good, the Proportion of the Grume to the Serum pretty near equal, the Grume not very viscid, and the Serum not much discolour'd, nor saltish, then I conclude, after the Universalia, a Regimen, and Medicins for strengthening and winding up the Solids, with Air, Exercise and domestic gentle Purgations, will do the Bufiness, and I have seldom seen Prognostics from such Appearances fail. But on the contrary, if the Blood, when let out of a large Orifice, and quite separated, has a Buff or blueish Skin on the Top, is liverish, the Serum disproportion'd, discolour'd and saltish, to a great Degree, then I am satisfy'd the Patient will never be quite well, nor continue long in an uniform and durable State of Health, without fweetening, thinning and mending his Blood; and then I order (with a Diet) fome Preparation of the ponderous Medicines, with the Juice of some antiscorbutic or alterative Plants, proper and specific for the Complaints and Symptoms, and a daily or familiar and gentle Evacuation, to rectify these, and at proper Distances during the Cure, partial and small Phle-

Phlebotomies repeated, to draw out the old Mass of corrupted Blood, as they can bear it; and to give Room for a new Chyle from proper and specific Food, to supply its Place, such as may readily affimilat and mix with the morbid Juices, and rectify the whole Mass; and it is not to be imagin'd how much these frequent and small Bleedings contribute to quicken and accelerat this thorough Change and Assimilation, if discreetly managed. Suppose but an Ounce of proper well-digested and comminuted Chyle or Milk, (which we know is already good Blood) can assimilat with and be retain'd in the whole Habit, nay, suppose but a Dram a Day, (which I fear is more than will be allow'd in very bad Cases) the Loss of a few Pounds of Blood by such partial and small Phlebotomies will be repair'd in much less than Six, at least Twelve Months time, with an equal Quantity of sweet pure Blood, which will go a great way to rectify the whole Mass, and lessen all the Symptoms, except possibly that of Lowness, which however will also be much reliev'd; and if the Phlebotomies be prudently and properly tim'd, may be very little or none at all, especially when the Blood is very bad: So that, on the Whole, gentle, partial and regulated Phlebotomies, as the Patient can bear, or the Case indicats, is one of the most general, effectual and expeditious Operations in the Cure of chronical Distempers- For I never once

once saw any real Hurt ensu'd on Bleeding, that I could rationally ascribe solely to Bleeding, and not to the Nature of the Distemper; and I was never much frighted for any kind of Hamorrhage in any Part, unless it was with extreme Violence, if the Patient would fubmit to a proper cool Regimen of Diet; for under a Diet not forcing or feeding the Hamorrhage, the Blood will stop of itself, when the Vessels are duely emptied, or the Superfluity of their morbid Blood has run off, Sweet Blood being the most sovereign of all animal Styptics: Hectics and Consumptions, in their first Stages, may be effectually prevented or cured by such partial Phlebotomies timeously administred; but in the subsequent Stages they will only precipitat their Fate. Some Physicians have alledg'd, that there is no certain Prognostic to be made of the State of the Patient, or Nature of the Diftemper, from the Appearances of the Blood on letting, because they have observ'd from the commonly esteem'd good or bad Blood, the fame or various and unaccountable Symptoms have ensu'd, and so seem'd not to depend on it. But these Gentlemen may with as much Reason dispute the Evidence of our Senses in other Cases: We know good or bad Blood by the same Marks and Criterions, that we judge of our Meat and Drink: Good Blood, fuch as I have defin'd it, may have happen'd in a bad Case; but then the Glands

of Secretion or Perspiration have been obstructed, or the Solids have been relax'd,
tainted or spoil'd, or the Blood still bad in the
Capillaries, Lymphatics and Glands, or the
Regimen has been too rich, or too much.
With what I call bad Blood, a Man may go
on, when of strong Solids or Nerves, for
some time, but precariously, and never in any
Degree of perfect Health, which he can never
have, till the Blood is render'd sweet, thin
and balsamic, and all the Glands open and
pervious, and the Secretions regular and uniform; and in this alone perfect good Health
consists, which the Lightest and the Least
only can beget and maintain.

6. 3. I AM bold to say, no Operation, Remedy or Antidote in Physic, is so universal, speedy and effectual as Vomits, when they can be given with any Safety, at least in these our Northern Climats. I know not the Name or Kind of a Distemper afflicting the animal Machin, where Vomits are not beneficial, salutary, and of Efficacy; because almost all our Diseases proceed from too much and too strong Meats and Drinks. It is a known Fact, that Hippocrates, the Father of Physic, advis'd for Prevention, the fat Patients to vomit twice a Month, and the lean, once. Vomits not only throw off concocted Impurities directly from the Stomach, the Pylorus, and the Glands about the Abdomen and Heart, (the

(the Source and Spring of Life and Motion) but by their Concussion and Convulsion, act upon the most distant Veins, Arteries, and Glands, and break open and squeeze every Part of the Machin. Vomits are in Diseases what Bombs are in besieging Forts; they are in Physic, and the internal diseas'd Parts, (which cannot be otherwise reach'd) what Dresling, Cleansing, Cauterizing, or even Amputation, respectively are in external Surgery, without which the internal Sores would grow foul, gangrene and mortify. To be afraid or hesitate in giving proper and proportion'd Vomits in internal Distempers, is as absurd as to neglect or fear proper Dressings and Cleansings in outward Wounds and Sores; for in bilious and phlegmatic Stomachs all the Glands are little Ulcuscula, and there is as little Hazard of weakening these Organs employ'd in Vomiting, as there is of weakening the Arm or Leg in dreffing an Ulcer in them, all the Organs and Limbs being animated Parts; and when the noxious Humour is remov'd, they heal and strengthen of themselves, by the Laws of Circulation and Nutrition. Indeed the Stomach itself has none, or but a very small Share in the Act of Vomiting; it is the Muscles of the Abdomen or Breast alone, that compress the Stomach to throw out its Contents; and the Stomach is no more hurt or weaken'd by the Action of Vomiting, than a Clyster-bag is, by the Apothecary's squeezing

it artfully to inject its Contents. It is a seeming frightful Operation, and attended with some Pain and Sickness to the Patient; but it is the most beneficial and salutary, and of the most immediate Relief of any Operation in Physic; as is evident from what has been observed; for the Too-high or Too-much being the universal Cause of most British Distempers, and these incrassating the Blood and Juices, and so interrupting the animal Functions, whatever will so compress, squeeze, and force open the internal Organs and Glands, as to make them the soonest throw off their Crudities and Mucus, and grind and dissolve the viscid Juices, will soonest and most effectually relieve; for all the morbid Mucus must be discharg'd from the Insides of the Canals, before a dureable Relief or Cure can be expected; and this Vomits alone can do. I can think of no Case wherein they cannot, and ought not to be attempted, and persisted in, as the Symptoms return, but an Hamorrhage, Hamoptoe or Rupture of some Vessel, and even these I have known perfectly cured by Vomits; and if a gentle, unsickening, easy Manner or Medicin for a Vomit were found, I think it would be of the greatest and most universal Service in British Physic: But I fear it is contradictory; for the more active and forcible they are, the more beneficial they will be: And I know none preferable to the Indian Root, and its Preparations.

rations, join'd to a few Grains of Tartar, or Drams of Wine Emetic, as the Case and Patient require; or a Decoction of the bitter Plants, and even urging with the Finger, or a Feather, in relax'd Stomachs or Glands, if often at a time and daily repeated, give infinit Relief.

. 4. Nothing I know, or have tried, can supply the Place of a Vomit, when fit or necessary, but Quicksilver, or some of its Preparations, such as Calomel, Alcalisatus, Æthiops, and the like, join'd with a Purgative, as Pilulæ Ruffi, Cochiæ Minores, de Aloe lot. Jalap, Rhubarb, or the like. Quickfilver well kill'd, with any proper Mucilage, and a Purgative join'd, is the fame with Bellofte's Pills, found so effectual in many Cases, which thus may be much more properly fitted to the Patient and the Case, than these general Quack Medicins can be. These, some time continued, will by Degrees open the Glands, to make them spue out their gross and superfluous Contents, and carry off by their Weight, and deobstruent Powers, the Crudities and Superfluities of the Stomach and Bowels. But they will neither do it so soon, so effectually, nor so dureably as Vomits repeated, according to the Indications of Nature from the Symptoms of a Nausea, Oppression, Flatulence, Watchfulness, Sickness, Inquietude and Inappetency; and both together, I think, no cureable chronical Distemper L 2 could

could withstand. However, in Persons fearful of Vomits, or where from a Rupture, or other forbidding Indication, they cannot be safely given, these are the only efficacious Medicins that can supply their Place; at least, I think, they must be of this Tribe or Nature, fitted nicely to the Delicacy of the Patient, and the Nature of the Distemper; and I will venture to affirm, that all the Quack Medicins of any Virtue or Efficacy, however diversify'd, have had Mercury in some Preparation, Antimony, and its Preparations, or some of the more dangerous mineral Medicins, (as Arsenic or Cobalt) with or without one kind of Carthartic or another, for their Base. For mineral Medicins feem defign'd by Nature for high Feeders, and strong Constitutions; and Vegetable ones, or mineral Waters, (as well as a vegetable Diet) for weak and delicat Constitutions, especially when already under a low or vegetable Diet; and I am of Opinion, the more simple the Mercurials and Cathartics are, both are the better and safer. I think the Practice of Medicin has receiv'd great Benefit from the now experienc'd and familiar Use of Quicksilver, and its various Preparations; especially since the universal Prejudice and Terror of it, and of its being appropriated to one Distemper only, is so worn off; and it is now under the Management of those who understand its Nature and Operations, and that of the animal Oeconomy. Plain Quickfilver is certainly as innocent

cent and fafe as Affes Milk, if judiciously and in proper Cases prescribed. I have often known it do no manner of Good, but never knew it do much Hurt, unless over-dos'd, or without interspers'd Purgatives, or given in an improper Case. In asthmatic Cases, scrophulous Ulcers, in Tumours, Foulnesses, and Obstructions of the alimentary Tube, of the Mesentery, Lasteals and other internal Viscera, fwell'd and scirrhous Glands in any Part of the Body, a Leprosy or Scurvy, and viscid Blood and Juices, I think, Hydrargyrum distillatum, properly combin'd, is Sovereign, and the true Panacea appointed and mark'd out from its own Signature by Heaven; for it is the only known simple Fluid except Water and Air: Nothing but a low Diet can equal its Efficacy, and both, judiciously join'd, will cure every Distemper cureable. I do not know if it would not be beneficial even in cancerous and scirrhous Cases, at least at first, especially if the scirrhous and cancerous Glands were cut out, and the corrupted Part could possibly be quite taken away; for there can be no Danger but from its Gravity, and that might be prevented by small Doses, its deleterious Qualities being none; for it is never changed into any other Nature by Mixture or Division, but always resolves itself into similar lesser Parts of the same specific Nature. It would at least mend the whole Mass of the Juices, and open all the Obstructions, except in that particular Gland

or cancerous Part; all the Ill it could do even there, would be from an Hamorrhage or Hamoptoe, or its Bursting; and if the Blood is mended, that would be none at all: But I should not advise it, till the corrupt Part was cut out, if possible. But in no cancerous Case whatever can Quicksilver-water hurt; but on the contrary, long and obstinately persisted in, and drunk plentifully, will do all that any other Preparation of Mercury, or the crude itself can do, without any Possibility of Danger, especially join'd with a total Milk and Seed Diet, which timeously begun, I think, would antidote any cancerous Humour whatever. I am affured of a perfect Cure of a Cancer in the Tongue, which had resisted an Infinity of all Sorts of Medicins, cured by liveing eighteen Months on Asses Milk folely and only.

of takeing Quicksilver, is after it has been distilled, well wash'd with Salt and Water, and pass'd through Chamois Leather, to purge it of all its beterogenous Mixtures, (with which the Dealers in it sophisticat it, and render it not only often ineffectual, but extremely pernicious) to take it in a Quill or clean Tobacco-pipe, about half an Ounce Morning and Night, and once a Week a gentle Stomach Purge of a Scruple or half a Drachm of Jalap with Nutmeg, (in asthmatic

or anasarcous Cases) or of the Pill Ruffi, or Cochia Minores, with a third Part Quicksilver well incorporated, or de Aloe lot. or Rhubarb, in nervous, stomachic, or scrophulous Cases, to prevent its lodging in the Glands or Plicatures of the Guts, and to carry off all the Foulness, that it may disengage or force off from the Viscera, and to prevent its salivating, which this Management will do (for we have now certain Evidence, that it will pass through every Pore, and even through the folid parenchymatous Substance of every Bowel and Membrane, when got to the Capillaries, and smaller Arteries, more readily almost, than it will through Chamois Leather); and with it, in very bad cachectic and cacochymic Habits, and cancerous or scrophulous Cases, to direct a total Milk and Seed Diet, and Abstinence from fermented Liquors; and even in middling Cases, and Disorders of the alimentary Tube only, to direct a very cool, low Broth or white Meat Diet, or rather that which I call the trimming or middling Diet, of one Day white animal Food, and another Milk and Seed Meats, without fermented Liquors. Thus manag'd, Quicksilver would perform great Cures, as I have seen; and in bad Cases, where it has done nothing, I greatly suspect, it has been because it has not been thus manag'd, viz. with a low, or Milk and Seed Diet, and interspers'd Stomach Purges.

§. 6. IF there be a Panacea or Universal Remedy in Nature, especially in Cases not quite gone, where the Viscera are not intirely spoil'd, and the Blood not turn'd into a Fishglew, with a Serum vitriolic or arfenic, I think these three Medicins judiciously combin'd, duely dos'd, and sufficiently persisted in, come nearest to it, viz. Alcalisatus, Æthiops, or Cinnabar, or some one or other of the Preparations of Mercury, fine Stimulo, with Resin of, or fine Gum Guaiac, Campbire, and Salt of Steel, (where Steel does not force too much, or over-heat) made into Pills, or into an Electuary, with Conferve of Garden Scurvygrass, or Rob of Elder, and a Decoction of the Woods, or the Gout Diet-drink \* sweeten'd, with Milk drunk after it, join'd to a low Diet. These mild Mercurials will most effectually attenuat and distolve the Viscidity of the Grume of the Blood: at least, I think, I may defy the Wit of Man to fuggest a Mean or Medicin more likely to effect it, either from its own Nature and Qualities, or more confirm'd and approv'd by Experiment. The Guaiac will by its Gum and Balfam sheath the Salts of the Serum, or foften and dissolve them, and throw them off by the Pores of the Skin in a gentle Diaphoresis, or Perspiration, and intestinal Evacuation; and the Salt of Steel will keep up the Tension of the

Fibres and Solids. These long continu'd, with a Decoction of the Woods, or the Gout Diet-drink before-mentioned, or small Sprucebeer of the same Intention, as used in New-England, will do all that Physic can do, in Cases not extremely bad, and come to the last Stage; particularly in cacochymic Cases in general; for it is well known what Guaiac, its Gum, its Bark and Wood have done in venereal, scrophulous and scorbutic Cases, where the Juices are vitiated to the most extreme Degree; and the attenuating, discutient and deobstruent Nature of Camphire in small Doses is now well known. The same Purpose may be obtain'd by the Pilul. Athiop, wash'd down with a few Spoonfuls of the Tin-Etura ad Stomachicos in Water, in the Edinburgh Dispensary, in gentler Cases. But nothing will do without a cool, low and sweet Regimen; and when Air and Exercise is join'd, and these long persisted in, it is almost all, I think, Mortality will admit.

#### CHAP. II.

OBSERVATIONS on the Natural Method of Cure in particular CHRONICAL DISTEMPERS.

HYSTERICISM OF HYPOCHONDRIACISM. §. 7. IN Nervous Cases of all Kinds, that are not extremely bad, or attended with Fits, Convulsions, epileptic or apoplectic Paroxysms frequently returning; for a general and chronical

chronical Medicin, I know none preferable to these following: The Alcalisatus, or the other Mercurials fine Stimulo, the foetid Gums, with the Sal Succini and Martis, made into Pills, and wash'd down with an Apozem of Radic Valerian Sylvestris, Quinquina, the Misleto, and a few Seeds, on simple Chamomil Flowerwater, or Fountain-water, with fome interspers'd Stomach Purges, as Hiera-Picra, Tin-Aure of Rhubarb with Bark, Pilul. Ruffi, &c. but especially repeated Vomits, a Regimen. Air and Exercise. I think these answer all the Intentions a Man of Experience and Philosophy, and one acquainted with the animal Oeconomy, can form to himself in such Cases, in their first Stages: It is true, in bad Cases, and worn-out Constitutions, nothing will soon do; but these I know (rationally and experimentally) will, in time, antidot all the general Causes of these Disorders, in their first Stages, if perfisted in; and I see no Reason why one should change such a Course, there being no rational Probability of altering it for a better or more effectual, unless some particular Symptoms demand a more immediat Attention Relief.

Of FOETIDS.

§. 8. For a present Relief on extreme Lowness, Oppression or Anxiety, for a Filip or Spur, I think nothing can exceed a Tin-Aure of true Assa-fætida and Wood-soot, made on compound Pæony-water, with a Tincture

of Castor and Sal Volatile, and a few Drops of Oleum Succini added to it. A Tea Spoonful, two or three of this, in a small Draught of the above Apozem, will sooner, more effectually and longer give Relief to these Symptoms, than any thing I know: Even your Cordials of Sir Walter Raleigh, and the like, I think, are only dry Drams, and they are scarce Reliefs, and not Cures. With this Intention only these perspiratory, hot and forceing Medicines ought to be given, and no Hope or Expectation is to be put in them further, but as one who stands to draw his Breath only for a Moment, when he has a steep Hill to ascend: But the whole Stress of the Cure is to be put in Alteratives and Diet; for fuch stimulating Medicines then become of wonderful present Benefit; but they ought to be laid aside, when any Relief is got by them, till the next Attack, and the general Method and Medicines pursu'd, otherwise their Efficacy by frequent Use will be worn out. As to the Effect of these Medicins on any sudden Attack of Lowness, Oppression, Anxiety, or nervous Dyspnea, (if a Sickness at Stomach is not, as it mostly is, the Case, and then they ought to be taken in some Cordial, and afterwards some Stomach Purge ought to succeed, or a Vomit premitted, if Time allows) they, as all the Eastern Gums, Fætids and Volatils, force the Perspiration for a short Time, and drive the viscid Juices to the Circumference, and

and by their actual Heat melt perhaps the gelatin Serum in the Capillaries (as Fire melts Jelly of Hart shorn); for there can be no Virtue in Soot, but from the actual Fire lodg'd in it, or from its acid Oil; the one of which melts the gelatin Serum, while the other vellicates the Solids to force on the languishing Circulation, which makes it of more present Esticacy than even Assa-fætida itself, and the Eastern Gums alone, which have shut up in them folar Heat, or Fire, or the Matter (perhaps) that makes the Rays or Fluid of the Sun's Heat. Of this Class also are the volatil Salts, which, I think, on this Consideration, are preferable to the Eastern Gums: The Gums are solar Rays included in a viscous Balsam; Soot and volatil Salts are culinary Heat join'd to an Acid; and hence alone the Philosophy of their Operation and Effects is to be deduc'd. For there is no material Difference, but in Subtilty, between Solar and Culinary Heat.

A RHEUMATISM.

6. 9. In a Rheumatism, or beginning Viscidity of the Juices, where the Size and Viscosity is uniform, and almost equally dispers'd over the whole Mass, or is constantly slitting, and not fix'd to particular Parts, (which is what is commonly called a slying Gout or Rheumatism) the Resin or Gum Guaiac, either alone (in liberal Doses) or join'd to the Mercurials sine Stimulo, with a cool, soft, low Diet,

Diet, either Vegetable, or of white Meats, with little or no fermented Liquors, will do great Matters, as I have often experienc'd. For on Bleeding, (and frequent small Phlebotomies ought to be interspers'd) though the Blood be fizy, with a thick Buff, and the Serum yellow or dirty, these Medicins and the Diet, some time continu'd, will infallibly alter it, or sheath its Salts, make its Curd more thin and florid, and its Serum of a less dark Colour, rebate the Violence of the Pains, and bring natural Sleep, Ease and Chearfulness, as I have visibly and sensibly seen, and is a constant and undeniable Fact, especially if the Corruption be not too deep, and the Constitution has ever been tolerably good and firm, and Life not too far spent. But the Effect will be more readily obtain'd, if Vomits and mercurial Purges, as of Calomel with Resin of Jalap, be interspers'd, as the Strength of the Patient will permit.

SCORBUTIC BLOTCHES and LEPROSY. §. 10. In scorbutic Blotches, white crusted Scabs, and peeling Scurfs, which approach towards a Leprosy, especially if they be any ways moist, Pills or an Electuary made with Alcalisatus, Antimony Diaphoretic, not much wash'd, (which hinders its Efficacy) native Cinnabar, and Powder of Jalap, duely dos'd and properly form'd, and wash'd down with sweet Cow-whey, Orange-whey, or Bates's Anti-

Antiscorbutic Juices, will do great Service, especially if the Distemper be recent, and the Person strong. The aluminous and chalky Waters will help this Case much, (especially if the Sores be fluid and running) particularly those not combin'd with much Iron, but with Talk and Nitre, or Alum, as those of Holt and Chiltenham most certainly are; and if frequent Vomits and mercurial Purges be interspers'd, but especially if a white Meat Diet, and Abstinence from all fermented Liquors, be join'd, I think the Method cannot fail. But in very tender Cases, and in the Fair Sex, (to whom cutaneous Defedations are more grievous and mortifying, and who are not able to bear these active and strong Medicines) nothing will do so effectually as unwash'd Diaphoretic Antimony with Milk of Sulphur, and Millepedes wash'd down with Asses Milk, a total Milk and Vegetable Diet, and drinking nothing but the cretaceous Waters, fuch as the Bristol, and those in the Neighbourhood of Bath; and I have known for a Certainty this Method cure totally and lastingly in that Sex, when it has resisted Salivation, the alterative Ponderose, the Precipitate per se, all the Antiscorbutics, and Wooddrinks, long persisted in, and the common Quack-sweating Methods, under even a very temperat Diet of animal Food, and common fermented Liquors: And I am fatisfy'd, that even the Lepra Gracorum and Arabum could

not long resist this Method, especially with a total Milk or Vegetable Diet. In such Constitutions the Meshes of the Cutis and Cuticula, and the Orifices of the perspiratory Ducts being too streight and fine, or quite thut, the Salts of animal Foods, and fermented Liquors, being constantly entangled in them, corrode the Scarf Skin, and there produce corrosive Foulnesses. Some learned Professors promis'd a Cure to weak Persons by Woods, sweating Machins, even under a free animal Diet; but they have only deluded the Patients Hopes, a little Time bringing all the Symptoms back again.

INTERMITTENT FEVERS.

6. II. INTERMITTENTS or periodical Distempers are a kind of acute chronical Diseases; they are the middle Point between violent acute Distempers, and obstinat chronical ones; and I never saw an obstinat, cruel, habitual chronical Distemper acquired, but was begun by an Intermittent Fever not afterwards duely treated by the altering ponderous Remedies, and a Regimen, which alone can obviate their ill Effects, not of the Intermittents, (for all acute Distempers, and indeed all Distempers whatever, are a Labour of Nature to purify the Juices, according to the common Saying, Dolor est Medicina doloris) but the bad State of the Fluids, which causes them; and therefore they may come into my De-

sign of treating here of chronical Distempers only; especially since they have been so various and complicated of late Years. Indeed almost all chronical Distempers admit of these Periods in some Degree or another: The Gout, the Rheumatism, but especially those called nervous Distempers, have generally one Day or more worse, and another better sensibly. As to a true, simple, genuine Intermittent, it is most infallibly the Struggle and Labour of a fizy Blood, when a great Part of the Size has been gradually accumulated, and collected towards the Middle of the small Passage from the Arteries into the Veins, or the lateral Branches of both; for the Arteries converging gently, many of them terminat in the Veins in one continued Tube, (except the lateral ones, which form the Glands) which again gently diverging (at least the Trunkpipes) form, as it were, a double Cone: The Blood, when fizy, passing with Difficulty this middle narrow Space, (like the Waters of a River, when the Chanel is narrow, and contracted in one particular Place) rages, and runs with Impetuosity; and the thinnest getting through first, the Size is by Degrees left in the wider Part of the Tube, till the Whole of it comes to be collected at this narrow Pafsage. Then, by Force of the Heart, and muscular Coats of the Arteries, the Whole of the new-gather'd Mass of this Size being forc'd to pass there also, by the Laws of the Circulation,

lation, Nature and the whole animal Oeconomy labours to effect it: hence first the Chill, and Rigours in this Labour of Nature, because little warm Blood can reach the Capillary Veins and Extremities. This Stage must always be attended with a quick Pulse, tho' the Patient may be in the Chill of Death, which shews the Heart and muscular Coats of the Arteries are in violent Action and Labour, while the Size is thus discharging thro' this narrow Pass. By this means the Size is in a great Degree dissolv'd and broken; and then entering into the wider Veins, the Serum being render'd thinner, is made capable to be thrown off with Violence by the lateral Branches, and the Orifices of the perspiratory Ducts. The finest of its broken and watry Particles get through, and the serous Parts of the Blood are thus discharged by a profuse Sweat. This is not an Hypothesis, but the real and true Theory of simple and uncompounded Intermittents, founded on Experiment, which tho' are infinitely varied and complicated according to the Degree of the Size, the Constitution and Age of the Patient, and many other Cirumstances, which I have not room to detail. Vide Hales, Part II.

S. 12. When an Intermittent happens, the Patient is not in the worst State of Blood and Juices; that may subsist in a great many other Cases and Distempers, particularly in the M Gout.

Gout, Rheumatism, Jaundice, Scurvy, Anafarca, Asthma, and the like, especially in their last Stages. I have known an Intermittent happen, when the Blood has been in a much better State, than it was before; viz. after useing the proper Means of alterative Ponderous Medicins, and a low Diet to mend it. I always take it for a certain Sign of Convalescence, and a dureable Mending, when it happens in a very bad Case; and to be produced mostly and immediatly by the greater Relaxation of the Solids, especially when under a cool low Diet, which the Bark and other Astringents quickly mend and wind up. In simple Intermittents, and young found Constitutions, any thing that will constringe the Fibres and Solids, to give them a little more Spring and Force, fo as to make the Size pass through the Streights easily, or discharge it by the perspiratory Ducts, will do: as Juice of Lemons, a Decoction of Chamomil Flowers, or of Acorns, or the Powder of these; any astringent Vegetable, or Mineral will do it; as Spirit of Vitriol, of Nitre, of Sulphur, of Sea Salt, Tinctures of Steel, Spa, Pyrmont or Tunbridge Waters, and the like; so that it is not the Bark alone, or the Bark as a Specific, but the Bark as one of the best, coolest, and most easily digested Vegetable Astringents, that cures Intermittents, as it gives a Firmness and Elasticity to the Fibres, and unites and gives a due Cohesion and Consistence to the

the Blood Globules thus broken and divided by the Distemper, and by the Labour of Nature, in forceing the Fluids through the evanescent Arteries into the Veins, and through the Strainers and perspiratory Glands; but this the Bark, or even any of these others mention'd, will do with Certainty, in simple and benign Intermittents, and healthy Constitutions only.

§. 13. IN many Cases of Intermittents, where the Constitution is bad, and the Solids corrupted, the Bark (of which a Drachm or two constantly secur'd against Relapses, when it first came into Europe) will now do nothing. The true Reason of which is not only the Sophistication of the Quinquina, which now out of Avarice (as all other foreign Medicins are) is mixt with twenty other infignificant or perhaps pernicious Barks, which are not easily discover'd or separated; but also from the universal Depravation of the Blood and Humours of Patients now-a-days, to what they might have been formerly: Upon which Account it is an excellent Preparative, not only to cool and thin the Blood by previous Vomits, Stomach Purges, and Salin Juice of Lemon Draughts, and to unite Rhubarb with Bark and Aromatics, but also to let the Patient have as many Fits of the Fever as he can possibly bear, in order to attenuat and divide the Blood in passing through these streight and M 2 narrow

narrow Passages; and by the quicker Circulation that necessarily attends it, before any specific or strong Astringent be tried, to tighten the Fibres, and stop the Paroxy sms; and perhaps the very best were to leave it intirely to such general Medicins, that it might extinguish of itself; and then the Blood would be eminently fined and thinned, and high Health would ensue. But since the Patient will seldom submit to this so tedious a Cure, I think there is no fuch certain and falutary a Method, as in the Intervals of the Fits to administer Vomits, and the mild Mercurials and Attenuants, together with the Bark, to mend the Blood and Juices; and therefore I never fail, after I have for a due time stopt the first Paroxysms, to order Ethiops Alcalisat. Antimony Diaphoretic, Gum Guaiac, and Salt of Steel, with Extract of the Bark, in some Form or other, wash'd down with Spa or Pyrmont Water; or a Decoction of the Bark, to be continued for a long time after the Fits are stopt by Astringents, together with a Regimen and Rideing. There are some, who in strong and robust military Constitutions join Arsenic five or six times sublimed (which only divides its Parts) with Quicksilver, and make it up in Pills with Mucilages, and give eight or ten or a Dozen such a Day. But I am never for Snuffing a Candle with a Cannon Ball, when a Pair of Snuffers are at hand, which will do it more fafely and cleanly, tho' perhaps

perhaps not so soon. These are dangerous and deleterious Medicins: tho's strong Persons may bear them for a time, yet they insensibly destroy them. The Observation on Crises, and critical Symptoms, so regular and certain, in Southern Climats, from the Regularity of their Seasons and Diet, will seldom take place in our Northern Countries; tho' I think the great Affair of Evacuations and Alteratives in Fevers of all kinds, ought to be before they come to their State; afterwards Nature is to be left to its own Work, with warm Dilution only.

### A SCROPHULA.

§. 14. A SCROPHULA is a mere glandular Case; viz. where-ever an Emunctory Gland or Glands are dureably swell'd, obstructed, or scirrhous, whether impost humated or not, there is some Degree of a true Scrophula. The Glands are the last and the least Organs of ferous Secretion; the Diameters of their component Tubes are so infinitly small, and their Circumvolutions and Plicatures often fo numerous, that, in delicat Nerves, and tender Constitutions, the smallest inattended Injury or Bruise, the least Degree of Size in the Blood, will tumefy and obstruct them, or if they be originally or naturally lax. They have special and particular Membranes, that coat and involve them; fo that when they are tumefied and obstructed, their exerctory Duct is thereby M 3 Mut

thut up, (as a full-stuff'd Purse shuts its Mouth strongest) that it can scarce be reach'd by Medicin, or empty'd by the Laws of the Animal Oeconomy; and this Coat, thus Hermetically seal'd, as it were, becomes a Cystis which can never be open'd, and nothing but Excision can extract it; and this Cause is so universal in all Countries where Animal Food, and strong fermented Liquors, are too freely used, that there is scarce an Individual that has not these Scrophulous Glands, internally or externally, in some one Degree or other, sooner or later. In Britain scarce a single Individual is without some Degree or other of the Scropbula, or Scurvy, as the general Causes of all their Miseries, at least after Thirty-five.

### The KING'S EVIL.

call the Scrophula the first Stage, and the Kings Evil the second Stage of the same Distemper) I know nothing of any Efficacy to extirpat them, but the mild Mercurials, or rather Quicksilver itself, at least Aqua Mercurialis, with a Vegetable, or even a total Milk Diet, both long continu'd. In such Cases, especially in young Persons, the scrophulous Glands are all incystated, and there is no Possibility of opening or dissolving them. If they are external, they may be cut out; but if internal, (as is most commonly the Case) there is nothing to be done, but by sweetening and thinning

thinning the Juices, and thereby hindering their Compression from Fulness or unroomy Vessels or Bowels, to keep them fost and yielding, that they may not interrupt the Circulation, or the Play of the nervous Fibres. All the Use of dry'd Sponge, Volatil Salts, Flag root, and the like, I think, trifling and delusive; even the Wood-drinks, tho' most specious, are here of no great Value. The most effectual Method I know, have try'd, or can conceive, is a total Milk and Seed Diet, Quicksilver, or some of its Preparations with Millepedes in Substance and unprepared, together with interspersed Purges and Vomits, which in time, if it does not totally dissolve or extinguish these Glands, or open the incysted Tumours, will dry them away, and the Circulation will find Means, and inlarge Canals, to do without them; as the Navel-string of new-born Infants falls away, when it is no longer of Use; or as the Blood, when an Artery is cut in two, in the larger Trunk, inlarges the lateral ones, and thereby brings the fame Quantity of Blood and Spirits to nourish and cherish the circumambient Parts. At least the inlarged and incysted Gland, by the consequent Fluidity, Sweetness and Thinness of the rest of the Juices, will lie as easy, and give no more Pain or Trouble, than the Nail on one's Finger, unless it be tumefied and blown up by a high Diet. And I M 4 think

think hereditary Scrophulous Persons, especially those advanced towards the Meridian of Life, that suffer under these Heartbreaking Lownesses and Anxieties, consequent upon internal, meseraick, scrophulous, obstructed Glands, are as directly call'd on by Heaven to enter upon a low Diet, and ponderous Medicins, as if an Angel came from it to command them; and to continue it to the last of Life, if they would have free Spirits, and Freedom from Pain continu'd with them. The Aqua Argentea, or Silver Water, (which is two Quarts of Fountain Water boil'd with four Ounces of Quicksilver to one Quart) with Milk, Jelly of Currans, of Oranges, or even with a little White Wine, would help them much: But a vegetable and Milk Diet is their proper and natural Food, as much as Seeds are that of small Birds.

### An ASTHMA.

§. 16. IN Ashma's and Chronical Affections of the Lungs, I know no better Medicin, than purify'd Quicksilver made into Pills with Gum Ammoniac, boil'd Venice Turpentine, or with Lucatellus's Balsam, and occasionally with Mass. Pilular. Russi, Cochia minores, or de Aloe lota, of any of these, two Parts, and one Part Quicksilver purified, as a Purge now and then, or the Pilula Scillitica, of the Edinburg Dispensatory: These, long continu'd with a soft, cool Diet, without

any Liquor but Barley Water, weak Mead, or Metheglin for common Drink, will help much in the Cure of an Asthma in its first Stage. Mercury here, if in any Case at all, is a Specific; here its small Parts break the Viscidity and Tenacity of the Serum in the Pulmonary Vessels, and inlarge, like so many Wedges or Stretchers, the smallest Arteries, and widen their Diameters, to let the Blood circulat through them, that it may there be impregnated with the Nitre of the inspir'd Air. This Method, long continu'd, cannot fail to make the Fits easy, and at last totally to cure them, as I have often seen: For the absolute Cure of an Asthma depends on thinning the Blood, and stretching the Pulmonic Arteries: Regimen can only do the first, and Mercury in some Shape is likeliest to do the last. If the Cure has been imperfect, it is because this Regimen has not been constantly and exactly persisted in; or that the Lungs, or some of the great Viscera, have been quite spoil'd, or that Life has been too far advanced for a total Cure. And by this Method, early and long persisted in, two of the most common, yet most fatal, Consequences of an Asthma are prevented in Persons somewhat advanced to Maturity; viz. Infecundity and an Ascites, the first preceding generally the last; for if the Blood cannot, freely and readily pass through the infinitesimal Pulmonary Arteries,

and between the Bronchial Vesicles, it can never be fufficiently broken and thinn'd, (the great End of the Compressure and Mechanism of the Lungs, and of the Cure of an Asthma) nor form'd into small enough Globules, nor (which is most material) can it be sufficiently impregnated with the Nitre of the Air, the great Principle of its Vitality; and so being gross, grumous and vapid, furnishes not sufficient Spirit and Vigour for Fecundity; and not being sufficiently comminuted, is not sent back with sufficient Velocity, or, which is the same, makes too strong a Resistance on the Extremities; so that, by its increas'd Gravity, it cannot return again with due Velocity and Vigour by the Veins to the Lungs; but first stagnates in the Feet and Ancles, and after bursts the Lymphatics of the Abdomen, putrifies the Peritonaum, and ouzes through the Sides of the thin, now rotten lymphatic Tubes and Canals. In Paroxysms nothing relieves like Squill Vomits, or daily Thumb Vomits, and Lac Ammoniacum in large Doses, made on simple Penyroyal Water frequently after.

### A DROPSY.

§. 17. A TRUE form'd Ascites is no more to be cur'd, than a confirm'd Phthisis from putrify'd Lungs or Tubercules. The Lymphatics are here burst, the Peritonaum putrify'd and consum'd, the Grume of the Blood

Blood become a Clot of viscous Glew, and the Serum a mere Lixivium. These can never be restored, and all that can be expected in such a State is a mere palliative Cure, to pass off this lixivious Serum, as fast as it drops into the Cavities, to keep the Passages of all the Secretions as pervious as can be, to take in things of as little Volume, and as foft and unactive in their Nature, as posfible, and to endeavour to mend, thin and sweeten the Blood, as much as the Nature of the Distemper will admit; and I think these are all the rational Intentions, that in such a Case can be form'd. All violent Remedies, as strong Vomits, Purges, and Diuretics, are precipitating Fate only at the Expence of a little present Relief; they only empty, to fill the faster, by inlarging the beginning Ruptures of the Lymphatics. The acrid pungent Plants, with the cooling acid luices, and the simulating aperient Salts, seem to answer this palliative Intention best; such as are Mustard Seed, Juniper Berries, Horse-radish, Aron Roots compounded with Salt of Tartar, Nitre, Wormwood, Sea Salt, or the Lixivial Salts of Plants; on which Account Mercurius dulcis and Alcalisatus, and Salt of some diuretic Plant, with Rob of Elder, have such sensible Effects in this Distemper, as I have often experienced in its first Stages, and in young Persons; but nothing will do without a Diet

of the Lightest and Least, to prevent the forceing the Serum through the Ruptures of the Lymphatics, or the widen'd Meshes of the Sides of the Tubes. It is a vulgar Error, that Water-drinking is of dangerous Consequence in this Case; nothing is more false. Too great a Quantity of any Liquor is wrong, because, by its Weight, it may increase the Rupture of the Lymphatics; but this does not happen from the Quality of common Water, but the Quantity of it; for no Liquor is of a more innocent and beneficial Nature, so soft, light and cool, as pure Water. 'Tis true, in such a Case, the less of any Liquor, the better; but if any, nothing can exceed Sherbet, of Water and Juice of Oranges, sweeten'd with a little Honey; and I have known many a Dropsy, in free Drinkers, prevented by drinking nothing but Water, as it alone infallibly cures an Anafarca at last, if early begun.

#### An ANASARCA.

6. 18. As to an Anafarca, if no other dangerous Distemper be complicated with it, it being only an universal Size of the Blood and Juices, and a consequent Relaxation of the Fibres and Solids, whereby the Resistance of the Humours is stronger than the Force of the Heart and Arteries, the Circulation is slow from the Extremities upwards to the Heart and Lungs, whence the Feet or Hands

Hands become tumefy'd; a total and absolute Cure may be expected by first attenuating the Juices by the ponderous Medicins, such as Æthiops, Cinnabar Alcalisatus, with Gum Guaiac, Nitre; Salt of Wormwood, with Vitriolum Martis towards the End, and the like; together with proper Evacuation, Vomits especially, and a low, cool, thin Diet; and then, when the Blood is thin enough, and the tumefied Parts subside, braceing with Steel and Bitters, or the Acidulæ, with constant Exercise. I have known this totally and absolutely cur'd by Exercise, and drinking nothing but fair Water alone; and I think Water-drinking can never fail, if the Party is not too far gone in Life, or is not naturally weak and delicat, or has not been long flagrantly intemperat.

A DIABETES.

6, 19. NEXT to an Ascites in its Nature, is a Diabetes, which is commonly call'd Hydrops ad matulam. I take it to be only a Symptom, or the last Stage of a hot and universal Scurvy, where, in a weak nervous Constitution, too high, hot, and inflammatory a Diet (at least for such a Constitution) has been long inadvertently persisted in; or when, in a robust firm Constitution, spirituous and burning Liquors, and falt and high-feason'd Meats, have been obstinatly indulged; whereby the Blood (being of the Nature of Milk)

Milk) is broken and fus'd by the great Quantity of animal and lixivious Salts in it, which turns it, and separats the Curd from the Whey, as Runnet turns Milk; and so all the Serum runs off through the most patent Passages, or the new Chyle cannot incorporat with the old glutinous Grume of the Blood; and accordingly, in a deep and inveterat Diabetes, I have seen it run off the Patient in a few Days: A constant Thirst, a small, low, bestical Pulse, with great Oppression and Anxiety, are the Symptoms which distinguish it from the Floods of pale Water in Hysteric Cases, (which yet is of the same Nature, and differs only from a Diabetes, as an Infant from an old Man) which is very feldom attended with a Thirst, at least an intense and constant one: For as to the Taste of the Water, it will be pretty near the same in both; only in deep Diabetes's, the urinary Juices have a sensible Sweetishness, being deprived of all its Salts, which remain behind in the Mass. The Cure of a Diabetes is by all means to procure an Union between the Grume and the Serum of the Blood with the new Chyle, and to use only such Food as is already form'd into the Nature and Confistence of sweet Blood; and therefore, in a deep Diabetes, a total Milk Diet is even more necesfary than in the Gout or Phthisis. Chalky Waters, (which may be readily known by their

their turning milky, upon forty or fixty Drops of Oil of Tartar per Deliquium pour'd into a Pint of them) as those of Bristol, and the Lime Stone Water by Bath, and fuch as no doubt may be found in many Places where there is Plenty of Lime-stone; Hartshorn Drink with Gum Arabic; Barley Water with Syrup of Comfry, and all such foft, cooling, mucilaginous Drinks, which give a Balfam and Union to the Parts of the Blood; a Diet of the same kind, Milks of all Sorts, foft Seeds, white young Meats, no fermented Liquors of any kind, and an Electuary of Cinnabar, Bark, Rhubarb, with the Rob of Elder, these, obstinatly and rigorously persisted in, will at last sweeten, balmify and unite the Parts of the Blood, in those not far advanced in Life. But Errors in the Nonnaturals are here as fatal as in a nervous Atrophy, which constantly attends this Case; and I know no Disease but a Phthisis that requires greater Strictness; and I have always observ'd, that here (as in all Nervous, Scorbutic, and Arthritic Cases, when the Blood grows thinner, and the Distemper yields) there is a Scorbutic Rash, a Miliary Eruption, or Cutaneous Foulness, appears all over the Habit; just as in a Fit of the Gout, or an Intermittent, Scorbutic Ulcers and Blotches rise and appear in a State of Melioration of the Blood and Juices, when the Force and Elasticity of the Solids have

have got in some Degree the better of the Resistance of the viscid Fluids; and very often a Rash, critical Ulcer, or Inflammatory or Cutaneous Eruption, unskilfully cur'd, stopp'd, or dispell'd, has been the Cause of a subsequent Diabetes; when Nature design'd to throw out of the Habit the Salts and Sulphurs of the Blood, and, by untimely and ill-judg'd external Applications, the peccant Matter is thrown back on the Habit. So necessary it is to understand the Animal Oeconomy, to be an accomplish'd Surgeon, much more to be a Philosophical Physician.

### INFLAMMATION in the Eyes, and the HA-MORRHOIDS.

§. 20. Inflammations in the Eyes, especially after the Small Pox, or in the Hamorrhoid Veins, call'd the Piles, and univerfally all Kinds of Inflammations in whatever Part, (which I take to be one and the same Distemper on different Parts external or internal) are to be treated with frequent gentle Phlebotomies, till the Violence and Acuteness of the Pain ceases, with a total Abstinence from all Animal Food, and fermented Liquors, cool Purges of the Salts with Manna, or the Lenitive or Diacassia Electuary, drinking plentifully sweet Cow Whey, or the Decoction of Quicksilver in Water; and for an extirpative Cure, and to cut off Returns, a long Course of Æthiops with Crabs

Crabs-eyes, (which is the best way to hinder the Sulphur in the Ethiops from gripeing or running into finking Diarrhæa's in tender Constitutions) and rigid Abstinence from every thing that will heat, inflame or agitat too violently.

### The GOUT.

§. 21. THE Gout, being also a violent Inflammation, first on the foints, and then over the whole Habit, (shifting from Part to Part, till at last it fixes on the Bowels, and internal Parts) as much as an Erysipelas, or the Rose; is never to be greatly lessened, much less eradicated, or extirpated, but by Mercurials fine Stimulo, or their mild Preparations with Gum Guaiac and Nitre long continued, and a total Milk-diet, or Waterdrinking, with the common animal Diet; perhaps this last alone may be sufficient, early enter'd upon in good Constitutions, which will certainly lessen and weaken all the after Fits, but will not extirpat the Distemper. All other Methods or Medicins to effect a total dureable Cure; all Nostrums, Specifics, or Alteratives besides, are mere Trick, or worse, to cheat Patients, and deceive weak and credulous Persons; for nothing but what will cure the most obstinat and intimat of all Inflammations, or lixivious, scorbutic Habits, can relieve or cure the Gout. Mercury is mark'd out, and fingled by the Appointment of the God of Nature

Nature to attenuat, open, deterge, and diffolve; and Milk and Water, and Seeds, to cool, nourish, and balmify; and both together are the only natural and necessary Antidot to obviat the Cause of the Gout. If an Angel should propose any other Method, or Medicin, as Nature is now constituted, he ought not to be minded. Vegetables of the foft, juicy, mild Kind, such as Turneps, Potatoes, young Seeds and Plants, and all much dress'd Garden-things, are much the fame with Milk. But Milk and Bread alone is the only certain Remedy; about three Pints of Milk, and fix Ounces of Bread in a Day. Those who have not the Courage to pursue this Method, or find not any great Inconvenience from slight and regular Fits, may keep it ever so (or at least till towards the Decline of Life) by a total Abstinence from all fermented Liquors, except, perhaps, clear unhopt Small-beer, or this Diet-drink, which I prefer, from Experience in this Case, to all other Kinds of Beverage: Take of Raspings of Guaiac Wood two Pounds, (or rather its Bark one Pound) a Pound Loaf of Bread much bak'd, hot from the Oven, a Pound of unbruis'd Juniper berries, fix Seville Oranges, roafted and flic'd, and a Pound of desputed Honey; put all these in a fix-gallon Pipkin, and pour on them fix Gallons of boiling Water, let them stand six Weeks in a warm Corner of a Room with a Fire; strain them off through a fine Lawn on the Cock

Cock into well-cork'd Bottles for constant Drink. This, as constant Drink, and white Meats for Dinner, with Milk Meats for Breakfast and Supper, and gentle Stomachopeners, as Hiera Picra, the Pil. Ruffi, or de Aloe lota, or, which I prefer before these, the Rheum Quinquinatum, made with Bark one Ounce, Rhubarb two Ounces, two roasted Oranges, Juniper-berries half an Ounce, Snakeweed and Cochineal, each a Drachm, in a full Quart, or thirty Ounces of White-wine, infus'd forty-eight Hours by a Kitchen Fire, strain'd and filtred: Of which four Spoonfuls should be taken at Night for a Dose, 'two, three, or four times a Week in the Intervals of the Fit; this gently evacuats and yet keeps the Solids tight and firm, but ought to be taken and continued during the whole Intervals. All hot Things, high Cordials, and strong either Meats or Drinks, (except when the Gout falls on the Stomach or Bowels) are adding Fuel to the Fire; and he that uses them will as furely suffer in Proportion, as he that handles burning Coals, or hot Iron, will be burnt. As to Sulphur, or rather its Flours, I still think it an excellent Remedy in the Gout, the most simple, safe and effectual of any, except the Method I have now described; as by its Stypticity, it constricts the Vessels, and by its purging Salt and Oil lubricats and evacuats (for Sulphur is but Salt and Oil); and if a proper Regimen and due Exercise were added to it, I am per-N2 fuaded

fuaded it would do more in Time, than any one so simple a Medicin hitherto known, except Quicksilver and its milder Preparations, which, judiciously manag'd, I truly account the Elixir Vitæ, in this, and most Chronical Distempers; but here a cool, soft, spare Diet is nine Parts of ten; Medicin is only the other tenth Part. Gouty Persons have always strong Solids and Nerves, the Inflammation, Fever and Pain, and consequent Abstinence in the Fits, thins the Blood, and breaks the Cohesion of its Particles in every regular Fit; and hence the high Spirits of the Gouty in the Intervals, and their long Lives.

### The SCIATIC.

§. 22. THE Sciatic is but the Hip-Gout, and, towards a lasting and dureable Cure, is to be treated in the same Manner, and by the same Medicins, mentioned for the Gout. But being in its first Stages often but Topical, and that in gross Cachectic Habits, and scorbutic Constitutions, the sharp Serum and viscid Part of the Juices settles and gelatinises in the Hip-Joints or lower Vertebra; and there being furrounded with bulky and thick Muscles, and deep and large Articulations, becomes so fix'd and painful, as quite to disable and confine the Patient, it may require a particular Attention. And in this Case I have never found any thing so effectual and speedy as Pills made with Alcalisatus, -boil'd Turpentine, Æthiops and Nitre; thefe

these taken in a due Dose twice a Day with Bath Waters, Batheing, and interspers'd Purges of Calomel, have feldom failed in Time to effect a Cure, either by regular Fits of the Gout afterwards on the Extremities, or by a dureable Recovery from the Distemper. But to prevent Returns, the same Method and Medicins are to be used as in the regular and form'd Gout. Large Doses of æthereal Oil of Turpentine with Honey, very often dislodges it in a few Days; but this is extremely fickening, and strongly vomits, unless much diluted with weak Sack-whey.

### MENSTRUAL OBSTRUCTIONS.

§. 23. IN Obstructions of the Menses, and all their flow Irregularities, I have never found any thing so effectual, (if there was not a deep Cachexy; tho' some Degree of one is always necessarily attendant on such Irregularities, elfe they could not happen) as some of the mild Mercurials mixt with Steel, and the specific Emmenagogues, together with Aloetics; as Ethiops mineral, the Trochisci de Myrrha, and Sal Martis and Extractum Quinquinæ made into Pills; the Alcalisatus, with the Pilula Gummosa, and the Limatura Martis, and the like; the first by attenuating the Juices, and opening the Obstructions; the second by balmifying and rendering them consistent and uniform; and the last by giving a due Tension and Elasticity to the Fibres and Coats of the Vessels. N 3

This Method, duly persisted in, sitted to the Patient, wash'd down with Bath or Spa Waters, a Regimen, and due Exercise, will seldom fail, if Interspersed mercurial and aloetic Purges be join'd. Rubigo Martis, e Æthiops, and Aloe made into Pills with the Acidula, do the same.

### FLOODINGS.

§ 24. IN Floodings I know nothing like the Bark, Eaton's Styptic, (which in this Case I prefer much to Helvetius's, as being safer, cooler, and less rough and grateing) and the grumous Part of Sheep's Blood dry'd and powder'd, and apply'd plentifully both outwardly and inwardly. Every one knows the agglutinating Quality of sweet Blood, and I apprehend it is to this, that Eaton's Styptic owes its foft, mild, foldering Efficacy. Steel Preparations, even the mildest and most liquid, are more rough, harsh, and caustic here than is natural or fit for such tender and delicat Parts; the other is more mild, substantial and soft, to patch a Hole, or glew up a Rupture, or to give a Balsam to the acrid and inflam'd flowing Blood of the Patient; and I am confirmed in this by a Physician of great Worth and Candour who has great Opportunities of dealing in such Cases by his Practice of Midwifry. The same Method and Medicins must be used in all Hæmorrhages external and internal from whatever Part;

Part; for they are all of the same Nature, and from the same Cause, viz. an inflammatory Crase, Sharpness, and Size of the Blood; and are seldom attended with any dangerous Consequence in otherwise sound Habits. But the best Medicins in the World will do nothing here without a cool, foft, balfamic Diet, of which I know Milk in this Case to be the very best and most specific, as being Blood itself, only without the Colour, and so being endowed with the Quality of that very Medicin (Sheeps Blood) which I have mentioned as most specific in such Cases; and I could venture my Life, that he who would live on Milk and Seeds only for some Time, should not be much hurt, or long fuffer, by any  $H\alpha$ morrhage, unless some of the necessary Bowels were hurt deeply, especially after premitting two or three, or more Phlebotomies, as the Symptoms indicat.

### The WHITES.

§ 25. THE Fluor albus is only a Disease of viscid Juices, and relax'd Solids, or of the Sphineters of these Passages, through which the Menses pass. By the wife Contrivance of Nature, the Cavity that receives the Organs peculiar to the Sex, is larger in the Female than the Male; the Muscles are bigger, and the Arteries of a larger Diameter, and a greater Quantity of Blood is conveyed thither for the Nutrition of the Fætus at the Time of Breeding, which at other Times ebbs and N4 flows

flows monthly in healthy Females, to prevent a Plethora, and consequent Inflammation or Fever. In Parturiency the Fætus drains off this Superfluity; and hence the greater Health of delicate parturient Females, which never lasts longer, if not critically managed. For all the Operations of Nature, all the animal Functions, are transacted with Regularity, Order, and Mechanism. There are at last found visible secretory Organs, in Fundo Uteri, endow'd with proper Sphineters for this regular and periodical Secretion in the Sex; when the Blood is sweet, and of a due Fluidity, the Secretions are made clean and free, and these Sphineters shut up close, like those of the intestinal Secretion; when the Blood becomes viscid, or inflam'd, it weakens or relaxes these tender Sphineters, so that after the grumous Part, or the Blood Globules, is secreted, the morbid Serum continues to flow; and hence it is, that this Distemper is rarely, or scarce ever to be cur'd, but by a total Change of the whole Mass; and this is the principal Cause of Infertility and Abortion in Persons of Condition; for the Fluor Albus arises from small Wounds or Ulcuscula in Fundo Uteri, and must be treated accordingly: Astringents therefore may palliat it for a Time, but it will ever return. I know, from Reason and Experience, there is nothing sufficient for a durcable extirpative Cure, but what will mend, attenuat,

nuat, and sweeten the whole Mass of the Juices, and brace and strengthen the Solids; a total Milk and Vegetable, or white Meat Diet, Air, Exercise, with the mild Mercurials and Sweeteners, and then gentle Tighteners (Steel and Extract of the Bark) with cold Batheing, are alone sufficient to perfect such a Cure in delicat Constitutions in Time; and this Distemper generally afflicts the most lively, the most polite, and amiable of the Sex, and almost always makes them infertile. Cinnabar natural and factitious, testaceous Powders, Extract of the Quinquina, Terra Japanica, and the like, made into Powders or Pills, with Affes Milk, a cool Diet of the white Meats, and the weaker Acidulæ for Drink only, are what I have found most successful. But few will have Patience and Perseverance to go through with this tedious Cure, and very often by Neglect, or a Mal-Regimen, they turn confumptive; for this Distemper being really internal, and from Membranous Ulcuscula, will at last reach and affect the Lungs themselves, and cause a Phthisis Pulmonum, as generally, where these Ulcuscula are very malignant, there are Tubercles also in the Lungs beginning, or meseraic scirrhous Glands.

### A CONSUMPTION.

§. 26. NEXT to Hysterics, or Nervous Discases, a Consumption is the most fatal and destructive Distemper that afflicts the Young and

and Delicat in this Island; and indeed there is such a Connexion between high Hysterics with Fits, and a Phthisis Pulmonum with Tubercles, that they generally and naturally flide into one another; and both are the fatal Distempers, that afflict or destroy the noblest Spirits, and finest Genius's, of this Island, as every one who has been attentive must have observ'd: And I never once had Occasion to attend to the whole Course of a Consumption from Beginning to End, but I constantly observ'd, that high Hysterics, and great nervous Symptoms, were the first Stage, or Elements of a Phthisis. And I always foretold, that these Symptoms (especially in tender, delicat, lively young Persons) would terminat in a real sensible Phthisis Pulmonum, if not prevented or remedied; and when the first nervous Stage of a Consumption was not attended to, or not remedy'd, it was never to be cured afterwards in the following Stages or Degrees; and hence, to a thinking, reasoning Physician, the Necessity of a low cool Regimen in nervous Cases of any Degree, will be manifest. And a Phthisis Pulmonum is no otherwise to be cured, or treated, than high Hysterics, viz. in the first Stage by the mild Mercurials, with the volatil and foetid Gums, or Lucatellus's Balsam made into Pills, or Gum Ammoniac malax'd with Alcalisatus, Ethiops, Cinnabar native or factitious, or Quickalver

silver itself duly purg'd, Asses Milk, with the Testacea, a total Milk and Seed Diet, Air, Exercise, daily Friction, and cleansing after with a coarse Cloth dipp'd in cold or warm Water, according to the Season. If this Method were timeoufly, rigidly, and obstinatly persisted in, some of the noblest and brightest Spirits this Age or Country produces, might be preserved. But it is seldom enter'd upon with any Exactness till it is too late, and the Distemper has got too deep a Root in Tubercles, Ulcers or Ruptures on the Lungs; and then a total Cure is not to be expected; a palliative one is all that can be pretended. In a Word, if Hysterics, as well as a Consumption, are not cured by the mentioned Method and Medicins, there is no Possibility of an extirpative Cure, or, indeed, any tolerable Degree of Ease, but by a total Milk and Seed Diet, with frequent interspers'd gentle Emetics, which will infallibly cure totally, if any human Means possibly can.

TAUNDICE.

6. 27. A Jaundice is an Obstruction in some of the Parts or Appendages of the Liver, or perhaps in its whole Substance, and generally either of the Porus Biliarius, the Ductus Cholodochus, or both; from a Viscidity, Grossness, or ill Condition of the Bile; or from bilious Stones and Concretions in the Gall Bladder

Bladder itself, from the same Cause. The Bile is a Liquor drawn out of the Blood, and elabour'd in the Liver to antidot the too great Abundance of too gross, and too many Salts, and Oils, and Sulphurs, mixt in the Blood, thro' Intemperance and Excesses in too rich and too high Meats and Drinks. The Author of Nature wisely foresaw, that human Creatures would not always follow, and continue in the Lightest and the Least, nor would be contented with vegetable Food, and plain Water, but would lust after the Blood and the Flesh of their Fellow-creatures, and wallow in fermented, strong, and spirituous Liquors; and therefore, to antidot the ill Effects of such a Diet for some Time, for a Trial of their Virtue, and to allow them the free Use of their Faculties for a Season, intended the wonderful Organ the Liver, the largest, most complicated, and the most artificial in the whole Machin, to draw and elicit, as by an Alembic from the Blood and Tuices, the most deleterious, and poisonous Part of these high Meats and Drinks; and even to make the extracted Bile useful and necessary to concoct and purify the Chyle from fuch strong Aliment, and so of a real Poison to make an useful Antidot, at least for a Time, and in Youth-hood. The higher the Food is, the larger the Liver necessarily grows; and at last even so big as to fill almost the whole Cavity of the Abdomen. The Bile

not only gives a Balfam, Union, Homogeneity, and Confistency to the various Chyle, but is the primary and most active Stimulus to the peristaltic Motion, by which the Superfluities of the Food, and its groffer indigestible Parts, are thrown out of the Body. In Animals that live on Vegetables and Water only, the Bile is only like strong Elder Vinegar, or Verjuice, with a little Animal Oil; but in voluptuous Men it is like Oil of Vitriol, green, yellow and black successively, and is the secondary Cause of all the atrocious, excruciating and fatal Distempers that afflict Mortality. A temporary Jaundice seldom fails to succeed on a violent Fit of the Colic, which Colic is owing to the distemper'd Bile thrown too plentifully on the small, sensible, and tender Guts; where stagnating, it stops the Biliary Passages, and so must recoil on the Habit. I know not so speedy and certain a Relief or Cure in a Jaundice, as frequent repeated active Vomits, which not only pump up the Bile collected in the Primæ Via, as it flows, and force off small Stones stopping the Porus Biliarius, or lodg'd in the Gall Bladder, as I have feen frequent Vomits do, but likewise attenuat the Juices, and open the Glands of the Liver itself. Plenty of fost diluting sulphurous Water (the Bath especially) a thing cool, liquid Diet of Broths, Milks, or watery Seeds, Fomentations, and mercurial soft Plaisters on the afflicted Parts,

the Liver especially, will most readily cool, relax and open; and fince the Nature of the corrupted Bile comes nearest to a saponaceous Solution, to supply its Place with Pills of Alicant Soap, Quicksilver, or Æthiops, Salt of Wormwood, and Resin of Jalap; both to open, deterge, and sweeten the Juices, and to scour and clear off the Mucus of the foul internal Coats of the Vessels; great and strong Doses of Soap taken at once I have feen sometimes succeed; but I think it has not been so much from its specific Virtue, as the violent and repeated Vomitings it excites in some Constitutions. But as Soap (though the best artificial Succedaneum to vitiated Bile) is, to some, so nauseous and fickening in the Stomach, that they cannot bear it long enough to have its due Efficacy, I think the best and most effectual general Method in Jaundices, is Vomits often repeated, perhaps every three or four Days at first, Rhubarb and Quicksilver made into Pills with balfamic Syrup, wash'd down with Barley Water acidulated with the Juice of Oranges, and sweetened with Curran-Telly, or with fweet Cow or Orange-Whey, no fermented Liquor, but as a Cordial on Extremities, a Diet of Milk, Broth, or white Meats, Air, and Exercise as they can bear, a long Use of Sulphurous Waters, with Batheing in them, and the general Methods for sweetening, attenuating, and opening Ob-Aructions.

structions. I have seldom fail'd, if call'd in Time, by frequent Vomits, Pills with Æthiops, Soap, and Salt of Wormwood wash'd down with Orange-Whey, and a very cool, low Diet, to bring about an extirpative Cure in Persons of a tolerable Habit, not too far gone in Life.

#### The SCURVY.

6. 28. I CALL that a Scurvy, or a scorbutic Habit, when the Blood and Juices are much and throughly saturated with saline and fulphurous, or firy Particles, with a thick Buff, or the Curd of a liverish Consistence, a yellow Serum; whose Symptoms are generally an habitual white, or foul crusted Tongue, a large red Brickdust Sediment in the Nightwater, but with great Varieties; infomuch that when the Perspiration is stopp'd, or the Animal Functions labour, the Water is pale, clear, and copious, so as to seem to threaten a Diabetes, (and then the Hysteric and nervous Symptoms follow quick) a Burning in the Hands and Feet, and a preceding Coldness or Chilness in them, Blotches, Scales, Pimples, or Heats over the Body, in the Breast, Back, Thighs, and Peritonaum, with frequent bilious Vomitings; the Serum of the Blood is sometimes saltish, even to the Taste, and its Grume liverish, viscid, and cohesive, tho' perhaps without a visible Buff on the Top; for then the Case is very bad

and far gone; the Dejections are various and uncertain, according to the Nature and Quantity of the Food, but rarely figur'd; interrupted and broken Sleep, and scarce any comfortable Refreshment from it; often a Thirst in the Morning, and on some strong Hawkings, throwing up Bits of blackish or bluish Phlegm, after which they are easier for the Day, tho' scarce ever in perfect, placid, and ferene Health, but always restless, anxious, unconstant, precipitat and passionat; the Liver is then beginning to be faulty, obstructed, or scirrhous; and this is the fundamental Distemper, the productive Cause, and, as it were, the Base of all the high Hysterical and Hypochondraical Symptoms, of all the Vapours, Lowness of Spirits, Flatulence, Spleen, Fits, Convulsions, Epilepsies and Apoplexies, to which the People of Condition, of this various, watry, and turbulent Climat, are subject; and differ only according to the Frame, Age, and Manner of Living of the Person. All these Symptoms proceed from, and are caused by, viscid Juices, saturated and over-stock'd with too many faline, Sulphurous, or inflammatory Particles, which first produce a Labour and Struggle of the Circulation, and obstruct the Perspiration, and then affect the Viscera, by making Obstructions in the Lungs, whence Asthma, Phthisis and Pleurisy, or Peripneumonia; or in the Liver, Spleen, or Peritonaum, and thence

thence Faundice, Dropsy, or the incystated Glands of the Breaft, Abdomen, or Mesentery, become scirrhous; and lastly the universal nervous System is thereby affected, perhaps all at once, or fometimes one Part fooner than another, according to the original Make, and the Degree of the Taint communicated by the Parents, or the Materials of the Excesses. And therefore I never knew a more proper Defignation of various oppress'd and anxious Distempers than Scorbutico-nervose, viz. those where no particular distinguishing Symptom, or sensibly corrupted and spoil'd Bowel above another, was yet discernible, so as to give them a Designation from such a State of corrupted, viscid, faline and inflammatory Juices, and pickled, broken and relax'd Solids. For a palliative Cure in its first Stages, and to keep the Diftemper at a Bay, I know nothing so effectual as drinking fweet Cow-whey, especially in the Summer Months, chewing Bark freely in the Forenoon, to keep up a due Tension in the Solids, and Rhubarb at Night for the same Purpose; and at the same time to carry off the Secretions of the Glands of the Alimentary Tube, which always are discharged upon the Common-Sewer of the Body, viz. the Intestines, and to carry off likewise new-generated Superfluity and Fuel to the Distemper; a light white-meat trimming Diet, little or no fermented Liquor, but small Spruce New-England Beer, or the Gout Diet-drink formerly

merly mention'd, Air and Exercise, the Fleshbrush used Morning and Night, to rub off the Salts and Scales, as they are secreted by the per-Spiratory Ducts, and to allicit the Circulation towards the Surface; and constantly after washing the Body all over, and that strongly and much, with a coarse Towel dipp'd in Water, and drying with one well air'd; which is a true, but a more constant and uniform cold Batheing, without the Shock and Violence on Nature, from Plunging. But if this Distemper is come to great Heights, or advanced towards its last Stages, with high, acute and anxious Symptoms, so as to threaten an Alienation of the Faculties, insupportable Terrors and Panics, total want of natural Rest, Fits, Convulsions, or Syncopes; nothing will then do, but Milk and Vegetables, for Food; frequent Vomits, Mercury, only in its milder Preparations, applied and fitted to the Case and Constitution of the Patient; but in their most simple and natural Preparations; with repeated small Phlebotomies, which gradually lessen the old briny Mass, and give Room for this sweet and soft Supply, from the Diet, to enter the Habit; and with other proper Cleanfings of the Stomach and Bowels, by Vomits, Rhubarb, or Aloe, as the Symptoms indicat. I think this the shortest, safest and most effectual Method the Nature of Things, or the animal Oeconomy, will admit, in this universal and epidemical Distemper of Britain and Ireland, pointed out by Reason, and justified by

by Experience; few or none ever failing of a perfect Cure, or a notable Relief, in this Method at last, who have not the Viscera intirely destroyed, or have Time in the common Duration of Life for a total Cure; and even in that Case, the Pains and Symptoms will be less, than under any other Method and Medicins, the Time of their Dissolution will be prolong'd, and their Departure render'd less violent and torturing. Living on Milk and Vegetables, drinking fweet Cow-whey all the Summer Months yearly, will keep this Distemper long under, and at a Bay; all cooling, diluteing and thinning Foods will help it, particularly living much on Lettuce in the hot Weather, boiled or raw.

#### The Colic.

Bowels, is generally the Beginning of some other translateable or slitting severe chronical Distemper, viz. of the Rheumatism, the Gout, of Hysteric Fits and Convulsions, the Jaundice, Palsy, Epilepsy, or Apoplexy. A constant Heart burning, sour or putrid Belching, (as of rotten Eggs) throwing up green, yellow or black Choler, are often its Harbingers; which, if not remedied, seldom fail to bring on violent Fits of the Colic; and all of them are produced by Excesses in the Too-hot, Too-high, or Too-much, in respect to the Constitution of the Party. The Blood and Blood-vest-

sels, the Glands conglobat and conglomerat, being then full of ill-condition'd Juices and Chyle, will no longer receive the daily new Recruits thereof, which stagnat and recoil on the Chyliferous Duct, where they first acidulat, and then putrify; and occasion first these Heart-burnings, sour and rotten Belching, and afterwards bilious Vomiting, Fits and Convulsions, by the Overslowing and ill Condition of the Bile. The common Distinction of nervous and humorous, or bilious Colics, I take to be founded only on the Difference of the Constitutions of the Subject; and they are not different in Nature, or ought to be differently treated, but in the Doses of the same Medicines; for there is no Difference but in the Degrees of the same Substance, between the Vapour or Smoak arifing from hot Water, and the Water itself. The Cure of the Colic lies in cleansing the Stomach, as often as the Symptoms indicat, by repeated Vomits, and the Intestins by warm Stomach Purges; among which I prefer what I call the Rheum Quinquinatum, in this Case, viz. Bark, Rhubarb, Bitters, Aromatics, and roafted Oranges infus'd in Wine; four Spoonfuls of this, or equal Parts of it with Tinetura Sacra, taken going to-bed every Night, or every other Night, or pro re nata; the Reafons of this Composition will be evident from what has been already hinted. But, besides, the Patient

Patient must use a very moderat Diet of the common Food, and a total Abstinence from fermented Liquors, and drink nothing but Toast and Water, Bath, Spa, or Pyrmont Water to his Meals. Many I have totally cured of habitual Colics by drinking nothing but Toast and Water tepid, especially after first having cleansed the Stomach and Bowels by a few Vomits, or some Doses of the mentioned Mixture. What is here advanced, will equally serve in most or all of the Disorders of the Stomach and Guts, or the chyliferous Tube, that do not depend on some specific Disorder in the Habit translated upon them, such as the Rheumatism, cutaneous Defedations, Gout, or Scropbula, whose Treatment has been already directed.

#### VENEREAL DISTEMPERS.

6. 30. I SHOULD here put down my Thoughts on Venereal Distempers, but that the late Treatise of Chirac de Re Venerea has made every thing that can possibly be said on that Subject useless; he having treated it, and many other chronical Distempers united with, or akin to it, with a Justness, Fullness, yet with a Simplicity and Perspicuity, that renders that Treatise one of the most useful Books in the Practice of Physic, that has appear'd since Sydenham's Time. I shall here only take Notice of two things concerning this Distem-

per: 1º. That I cannot be of Opinion, that either the small or the great Pox, was originally a Distemper peculiar and appropriated to any certain Time or Climat, or endemial any-where, no more than the Itch, Leprofy, or Plague. A particular Air, Climat, original Frame, Manner of Living, epidemical Vices, and the like, may vary the Symptoms, exasperat and increase the Malignity and Degrees of one Distemper, called by such a Name, more than another; as particular Species of Plants differ by Culture, Sun, and Soil; but that they should alter the particular Nature and Species of a Distemper, by which it is distinguish'd from all others, I think, is unnatural, unphilosophical, and absurd. Diseases have a general Nature and Symptoms from the Habitudes of the Patients, from the Climat and Country, the Air and Food; and they have a particular Nature from their Seminium; and they have Degrees or Symptoms from the Vices and original Formation of Individuals. I take the Essence of a Venereal Distemper to arise from the Nature of that particular animal Salt which abounds in the Spermatic Organs, and in the Substance therein generated; and, to speak more explicitly, I take it to be a subtle, active and caustic Alcali, less fublim'd and volatil than that which is the Cause of the Pestilence, and infinitly more fine and volatil than our most perfect common volatil animal Salts. When Lechery, Climat,

Climat, Nastiness, and various Commixtures, a hot Diet, and Laziness, have co-operated and fermented to their Height, these Salts turn acrid and caustic, and so produce what is called the Great Pox: In lesser Degrees it has weaker Symptoms, but has one general, adequat, and specific Cause, viz. an Abundance and Exaltation of caustic, active animal Salts, actuating spermatic Substances of all kinds; but is envelop'd and sheath'd with a foft mild Jelly, when innocuous; and to the Activity, Stimulus, and Titillation, of this volatil Alcali, Lechery and its Senfuality is owing. Salts, especially volatil Alcali's, are the great Promoters of Salacity, as is evident in Goats, Pigeons, Sparrows, &c. And that which was the Burning in England some Ages ago, with all its Symptoms, was really the fame in Kind, though not in Degree, with the Haws in Ceylon, only exasperated and fublim'd higher by the inoculated Ferment, from that particular Island and Climat; just as the Leprofy of the Arabians and Greeks is specifically the same Distemper with the Scurvy and Itch of the Germans, and other Northern Nations; for the Difference of Climat, Regimen, and Habitudes, alter in some Degree the specific Nature and Kind of Things. 20. That a low, cool, very abstemious, nay a total Milk and vegetable Diet, is as necessary and useful fometimes, if not more, in Venereal Distempers, than in any other Chronical Diseases what-0 4

whatsoever; and if Mercury, and its Preparations, make not always a total, perfect, and lasting Cure, it is because a Regimen, strict and parsimonious, has not been added to it for a due Time, or that some of the noble Organs, or the intire System of the Solids, are putrified by it. 'Tis notorious, that the Dutch Mountebank Ibra, by no other Art but his Raisins, and dry Bisket Diet, with a very flight and simple Mercurial Pill, Guaiac Dietdrink, and Sweating, cured Venereal Distempers, nocturnal Pains, and carious Bones, that had defeated the most effectual Medicins of the College: And a great Admiral, when he went into warm Climats, cured all his infeeted Sailors with tying them down to live on nothing but Water-gruel and Cream of Tartar, for three Weeks in the flighter Cases, and for fix Weeks in the deeper; and I am satisfy'd, a strict, spare Milk and vegetable Diet, with no Drink but pure Element, a Decoction of the Woods, or Spruce-Beer, would cure, and carry it off as effectually, as it does other Chronical Distempers: But I readily own, that Mercury and its Preparations, and Guaiac and its Preparations, will quicken and facilitat the Cure one half: As to other Evacuations, I have no Opinion of them, but to drive the peccant Matter out of one Part of the animal Body to another more improper: And as Mercury, and its Preparations, with a low Diet, is the sole Cure of the Pox, so it is of all other Chronical Diseases whatsoever ;

and if Venereal Distempers are now a weakening in their Malignity, as it is said; it is because the more frequent Use of Mercury has destroy'd the Force of that caustic Salt in its Sources, and thereby the Acrimony and caustic Nature of its Seminium, in those who are generally the Propagators of it; Mercury and its Preparations being now used in most chronical Distempers.

§. 31. I SHOULD fay something here of the Stone and Gravel, but that fince the fuccessful Experiments on Mrs. Stephens's Medicin, and fince it has been examin'd and approv'd of by the Members of the College, and its Efficacy explain'd and accounted for, from the Principles of the best natural Philosophy, and its Form garbled and polish'd by two of the worthiest Men, and most accurat Observers of this Age; all I can possibly suggest, can be of little Value or Use. Only since it has been furmis'd by some, and contradicted by none, that vinous Beverage quickens and promotes the Efficacy of the Medicins; I think myself obliged to fay fomething to this seeming Objection to one great Principle I have laid down (without Exception) in this Treatise, viz. That fole Water-drinking, in all Cases, is one of the surest Means to preserve or restore Health, and that strong fermented Liquor, much less vinous Beverage, (except as a Mcdicin or a Cordial on Extremities) is not an Institution of Nature, nor conducive to Health.

Health. That Mrs. Stephens did not advise Sole Water-drinking under her Medicin, but rather directed the contrary, is no great Wonder; it might have too much discouraged the Use of a Medicin, nauseous in itself, and requir'd in large and frequent Doses; and that the Gentlemen that have been at most Pains to discover its Nature and Efficacy, have said nothing for or against sole Water Beverage under it, might be for want of Cases, where the Patients drank Water only under it, to make the proper Experiments by. The only Reason I have learn'd that is given for drinking Wine under it, is that thereby the Urine is render'd more Alcalin, and confequently more efficacious to work on the Stone: But furely this would be too frivolous for fuch ingenious and penetrating Gentlemen to offer as folid, and so could not come from them; they well knowing, that fermented Menstruums rather destroy than promote the Alcalin Virtues of Medicins; for the same Quantity of alcalious Matter, impregnating an equal Quantity of an aqueous and a vinous Menstruum, will render the first much more alcalin than the second. Fermented Liquors harden and consolidat the alcalin Particles, as we may observe from unslak'd Lime, which will be much fooner and more fully broken and disfolv'd by a watery than by any fermented Menstruum; and it is well known, that Water is the specific Dissolvent of all Salts. But that,

that, in my Opinion, which should totally discourage fermented Liquor Beverage under all Lithontriptics, is, that it is univerfally agreed, that Stone and Gravel owe their Origin and Cause solely to the Tartar or Salts of sermented Liquors, perhaps also to the animal Salts of high Food, either in Parents or Posterity; and furely the Medicin would work the quicker on the Stone, at least have less to do, while that which is the Cause of its Accretion were intirely remov'd: And the Physician Dolaus, tormented both with Gout and Stone, found a Milk Diet the best Cure for both, and advis'd it equally in both \*. Cyprianus, who had cut fourteen hundred Patients for the Stone, affirm'd, that among all those there was not one who drank any thing but small fmooth Ale, or aqueous Liquors only. They are scarce ever subject to it in the Eastern Countries, at least the Natives, who drink little but Water . I have had Patients under this Medicin for the Stone, much tormented with bloody Water, which Water-drinking only has intirely stopp'd, except on violent Motion; and which, on the drinking the least Wine, has return'd, even without Motion. I have known one, who, before Mrs. Stephens's Medicin was discover'd, was so violently tormented with the Scone, that he had fent for

<sup>\*</sup> See Dolaus on the Cure of the Gout by a Milk Diet. + See Kolben's History of the Cape.

Mr. Cheselden to cut him, who finding him under so bad a Habit, durst not attempt the Operation, but advis'd him to a low, cool, foft Regimen, and Barley-water-drinking, to mend his Constitution; whereby he soon became so easy in some time, that he thought no more of that painful and dangerous Operation. In a Word, it is my Opinion, in this, as I certainly know in all other painful and dangerous Chronical Distempers, that sole Water or unfermented Liquor Beverage, under their proper medicinal Antidots, would much quicken and facilitat the Cure: In slighter and less atrocious Distempers, I can allow a little compounding the Matter, between sensible Pain and sensual Pleasure, I fay, in other milder Cases; but in the Stone and Gout, I should think, would not admit even this, because here the Cause of the Distemper is increas'd and enrag'd by this fatal Indulgence.

§. 32. The Seminium, Elements and Principles of Specifically different Distempers, are the several different Sorts of Secretions (their Specific Nature and Qualities, and the Figure and Laws of Attraction of their constituent Particles) made by the different Glands and Strainers of the animal Body. Thus the Mucus, Phlegm and viscid Serum separated by the emunctory Glands of the Nose, Throat, Windpipe, Lungs, and alimentary Tube, design'd by Nature

Nature to sheath, lubricat and preserve the Elasticity of these Organs, when viscous, faltish, or morbid, I call the Seminium, or Principle of Coughs, Asthma's, Pleurisies, Scirrhus's, Consumptions, &c. The Bile, when viscid, vitiated and corrosive, I call the Seed and Principle of the Scurvy, Jaundice, Colic, Dropsy, hot and inflammatory Ulcers, and the Cancer. The Serum of the Blood, when thick, sharp, urinous, and caustic, is the Seminium and Cause of the Rupture of the Lymphatics, of cutaneous Defedations, the Leprosy, Small-pox, an Ascites, or Dropsy. The perspiratory Matter, which, when a Perfon is healthy, steams freely from the whole Surface, (like the Smoak of Water from a boiling Pot) when the Blood becomes thick, fizy, and viscid, and its Particles not sufficiently small, nor duly broken and fin'd, by the digestive and concoctive Organs, and can pass no more through the Skin, but is confin'd to, and recoils upon the Habit on the Bowels and Cavities, produces Flatus, Anxieties, Depressions, and Lowness of Spirit; and when it taints and spoils the Viscera, it causes Fits and Convulsions, and all the Train of nervous Distempers. So the Sperm and seminal Substance, when the specific animal Salt, which is the Cause of Lust and Lechery, is high, hot and corrosive, through Climat, Luxury, high Food, Laziness, Nastiness, and various Commixtures, begets Pains, Cor-

Corrosions, Inflammations, Ulcers, and phage-danous Tumours on the tender and delicat Parts of Generation first; and at last spreads all over the Habit like a Cancer or Plague, and confumes both Flesh, Skin and Bones. Its Time of Appearance in any Country depends on the Degree of its Malignity, and it is called by new Names from its new Symptoms; and yet it is all that time but one and the same specific Distemper, in various and different Symptoms and Degrees of Malignity. I think this the Cause of the Great Pox. For Distinction's fake, I observe three Kinds or Degrees of animal Salts or Spirits, (though their Degree be infinit, as that of all Qualities) that which we call our common animal Salt or Spirit, as that of Hartsborn, Silk, Sal Armoniac, and other animal Substances, which too are real Caustics; that which produces the Plague, which is the highest Exaltation, Sublimation, and as it were the last Division and Subtilisation of these volatil animal Salts; and that which produces the Pox and the Cancer, which is more coarse and fix'd, and, as it were, a Medium between the other two, and may be therefore broken, melted and diffolv'd by the fine Globules of Mercury, and constant Water Beverage. From all which it is evident, as well as from Reason and Experience, that a proper, simple, thin and cool Diet is nine Parts of ten of all that is real or successful in Physic, and that Medicin is but the other Tenth,

Tenth, and that the Author of Nature has with infinit Wisdom and Goodness, in a great measure, put our Health in our own Power, so that almost Quisque suæ Fortunæ & Sanitatis Faber; especially when the Children are not palpably fuffering for the Sins of their Parents, as is the Case of all hereditary Distempers.

#### CHAP. III.

An Answer to most of the Objections against the Efficacy of a low, and of a vegetable Diet, directed for the Preservation of Health, and Cure of Distempers.

6. 1. COME have objected, that by thus frongly pressing the Lightest and the Least, and confidently affirming, that Temperance and Abstinence have but one Extreme, the Too-high or Too-much in Food, I may feem to infinuat, that a total Abstinence may be the very best of all; or to think, that none ever hurt his Health by any Degree of Abstinence whatfoever. And yet it is a wellknown Fact, that many have actually died by an obstinat Resolution to take no Nourishment; and that from some violent Passion, as Love or Grief, Revenge or Discontent, some have pin'd away, and put an End to their Days;

that by an obstinat Neglect of due and proper Nourishment, the digestive Organs have in time acquir'd an analeptic or paralytic State, that they actually could digest nothing; or that by long Fasting and Abstinence, the concocting Ferment or Juice in the Stomach and Glands has turn'd acrid or morbid, and mixing with the Blood, has corrupted and spoil'd the Juices, and caus'd Diseases, and at last Death.

§. 2. THE Whole of this Objection, and fuch-like, is mere vulgar Error, frivolous, and unphilosophical. I am here inquireing what is the Law of Nature in Diet, not by what Cunning or Craft this Law may be eluded. The Author of Nature declares his Will, his Laws, his Orders in material or natural Things, in the animal Oeconomy particularly, by general Effects differing in certain Proportions, according to different Circumstances; by placing us as it were between two parallel Walls, and barring us up either before or behind; and so it is then evidently his Law and Order, that we should only go backward or forward, as the Bar happens to be put. has put Valves or Stops in the Arteries that open towards the Surface of the Body, and shut towards the Heart; and therefore I say it is his Law and Order, intimated by them, that the Blood should move forward towards the Surface of the Body, and not backward

to the Heart even in all Animals, (yet I know not, but by great Intemperance in strong Liquors, even these Valves are sometimes forc'd, and the Blood, by regorging on the Ventricles of the Heart, may there clott and harden, and thereby becomes the natural Cause of Polypus's) but it is not so in the Veins.

§. 3. WHEN I say, that contrary to the Nature of some other moral Virtues, (whose Perfection lies in the Middle between both Extremes) Abstinence has but one Extreme, the Too-much or Too-high in Food, I mean only, by a strong Figure, to take off the crafty Puzzle thrown in by some, that Persons may hurt their Healths, and endanger their Lives, by, fay they, an ill-judg'd Abstinence. The wife Author of Nature has barr'd up the Too-little or Too-light, with Pains and Sufferings so intense and excruciating, as strongly declare, that it is not his Law and Order, that we should perfift obstinatly in them, but descend into that middling Quantity we are tolerably easy under. It is true, he has also barr'd up the Toohigh and Too-much with Pains and Penalties, but they are neither so intense, nor so quickly fatal. The Too-much and Too-high will produce Diseases in Proportion to their Degrees directly, but they neither kill fo foon, nor torture so much, as obstinat Fasting will, if it be possible to persist in it naturally. It is certain, that Self-preservation is an essential LAW

Law of Nature; and yet from Frensy and strong Passions, we hear of its being deseated daily. We judge of the Nature, Tribe and Species of a Plant or Animal, by the sairest and best, and not by monstrous or accidental Productions in either Extreme; as this Death by Fasting implies a direct Monstruosity.

6. 4. WHEN I advise therefore the Lightest and the Least, I mean, To take regularly Something and Somewhat; for Nothing neither admits of Degrees nor Qualities. pose (to shew the Absurdity) a Man took half a Pound of Bread and a Pint of Water three times a Day, what would be the Consequence? The Objector thinks the Patient would certainly die; his concocting Juices would turn acrid, and fo spoil his Blood, and thereby he would pine, and at last extinguish; and yet Callian \* tells us, that the antient Hermits allow'd themselves but a Pound (or even less) of Bread with Water in Twenty-four Hours; and most of them liv'd to an Hundred, some to an Hundred and Fifty, others to Two hundred Years, without Diseases, and with great Screnity and Chearfulness. And Dr. Barwick tells us, in the Life of his Brother, who, in the late Civil Wars, had for many Years been confin'd in a low Room in the Tower, dureing the Usurpation; that at the Time of his going in, he was under a

\* Vide Cassian's Conferences.

Phthisis, Atrophy, and Dyscrasy, and liv'd on Bread and Water only feveral Years there; and yet came out at the Restoration, sleek, plump, and gay. Many such Instances I could produce, but it would be lost Labour.

§. 5. As to those who have starv'd themselves to Death, to alleviat violent Pains, high and unnatural Passions, Discontent, or a Tadium Vita, they do not properly belong to the general State of human Nature, and fo have no Place in a Disquisition about the general Laws of Nature in the Human Species concerning Diet. Their Faculties, with the material Organs belonging to them, must be spoil'd and distemper'd; they are Lunatic and out of their natural Senses, (as all violent Passions are a temporary Lunacy and Madness) and are no more to be instanc'd against the Law and Order of Nature as to Diet, viz. the Lightest and the Least Food a Man can be tolerably easy under, than Selfmurder is an Instance against the great Law of Self-preservation. If I might tell my own private Opinion, it is, that where ever these violent Supernatural Passions of Love, Grief, Revenge, or Discontent, happen to fuch a Height, there is a deep Cacochymy there already; that the Juices are already inflamed or putrified, acrimonious or arsenic, and that the Solids and intellectual Organs are spoiled, relaxed or putrified, and disobe-P 2 dient

dient to the Will, and rational Spirit; and either dissonantly play, and make a confus'd Discord, or possibly may be play'd upon by some foreign Spirit, like the Obses'd; which in this Dyscrasy sinds a proper Organ for its malicious Inspiration, as Insects or Vermin plant their Eggs on the Leaves of morbid Trees; but at least the Spirit, as well as the Body, must first be greatly distemper'd. But these last Solutions may be mere Conjectures, and as such I only mention them.

6. 6. Bur the most whimsical and unphilosophical Part of this Objection, is, that the Archaus, as some term it, or (which is the same thing) the inexplicable Ferment, in the Stomach and Glands, turning acrid and arsenic by Fasting, corrupts the Blood, and fo causes Diseases and Death; which is merely to substitute something or any thing to supply the Void Ignorance has made, and thus every thing may be concluded from any thing. The true Fact, I think, is this: The wife Author of Nature has, by his own omnipotent Hand, originally and primarily form'd the infinitesimal Solids of all Plants and Animals; neither lifeless Nature, nor Matter and Mechanism, with all its Laws, being capable to frame the least original Organ or Fibre of either, as may be strictly demonstrated. It is certain from the Expences of

of Living, Action, and the Secretions, the Blood, but especially the new Bile, if not recruited, diluted and cool'd, with fresh Chyle, and aqueous Fluids, in some Degree, would turn hot, viscous and thick, and so produce Diseases of all kinds; but then Water-gruel, Milk, and Garden-stuff, would be the very best and most effectual to prevent all these Inconveniencies, and keep it always cool, fweet, and fluid; and of these there is no Meafure needs be put, but by Calls of the Appetite, unless the Party be ill and diseas'd: For, by a necessary Mechanism, the animal Fibres and Tubes are fet a playing, to take in Nourishment, and Materials for Accretion, Evolution, and Extension, from any Fluid or Juice next to them, whether good, bad, or indifferent; and thus grow and extend, as far as their original Stamina admit; after which they harden, fix and stop, the Juices thicken, and the Vegetable or Animal naturally and necessarily dies, and turns into Dust: And this is all that digestive or concoctive Powers can do; they can only fuck in by their attractive Powers, and by their mechanic Powers grind and comminute the Materials nearest the Orifices of their Lacteals and Vasa inhalantia, to fit them to plump up and extend these original linear Solids, till they arrive at their utmost Extension and Growth; and this they will do from their own inherent original Elasticity and Attraction, directed by the P 3 Action

Action and Influence of the immaterial selfmotive Spirit, that governs and moves all the Organs and Functions of this elastic Machin; so that, like the Root of a Plant, the Animal is fed or nourish'd by a watery Mucilage, or the nearest fluid Mixture, whatever that be; as is evident from hence, that our Bodies may be fed and sustain'd by Clysters, Fomentations, Injections, Transfusions, and even Steams and Vapours, as really, though not fo fully and dureably, as by the Mouth and digestive Organs, without any Archaus or Ferment. All depends on the original Elasticity and Attraction of the Solids, and the Direction and Superintendence of the immaterial indwelling Spirit; and any fluid Mixture will do, that lies nearest; but what will most easily grind and divide, is fittest and best. It is true, as has been said, to keep the Blood cool and thin, and to have the Health the best it may be, regular Supplies of fresh Chyle are necessary; but Water, Milk, Seeds, Fruit and Vegetables, will do that best of any.

§. 7. On E favourite and specious Objection, made by some unphilosophical Persons, against a low, cool Diet, is the Danger thereby from the over-abounding either of the too alcalious, too sweet and soft Juices, or the too sharp and sour ones; one or other of which, they say, Seeds and Vegetables may produce, and into

into one of which, in their Opinion, they are naturally apt to run; at first into the Too-sweet, and at last Too sharp, and both in their Turns. But the Experiments affign'd for Proof of this Objection are far from being decisive of the true Cause in the Cases objected, viz. that fuch and fuch Diseases are relieved or cured by Acids, or alcalious Medicins respectively, because, forsooth, Acids in the Air, and in the Mixture of chymical Liquors, destroy Alkali's, and on the contrary. Now I would desire those Gentlemen to consider, 10. That there is no manner of Certainty, that Acids, or alcaline Salts, can operate in the capillary Vessels of living animal Bodies, after the same manner as they do in the open Air, and at perfect Liberty; because their Operation is and must be obstructed, or much altered, by the attracting Sides of the flender Tubes, (as we see in Mercury and Water in small glass Tubes) and by the constant Motion of the Particles of animal Fluids in the Circulation; whereas Rest is an indispensable Condition towards the free and full Action of the innate Laws, and the Properties of minute Bodies. 20. It is a great Doubt with me, whether there be in Nature, antecedent to the Tortures of the Fire, (natural or artificial) any true, at least perfect Alcali's. I am sure the Appearances (viz. their Fermentation with Acids) may be more philosophically accounted for otherwise, viz. from

from their specific Gravity and Attraction, which are certainly their most active Principles, and likeliest to produce the Appearances under Consideration: And the Figures of the two different Kinds of Particles must greatly partake in the Effect, viz. from the Particles of the Acids being probably triangular, and highly attractive, and those of Alkali's being porous Calx's, whereby the sharp Points of the Acids will be sheathed or blunted in the Pores of the Alkali's; for though Nature, by the simplest Causes, produces various and furprising Effects, yet the infinitly wife Author of Nature, being here confined by the Essence of that Matter, which he has made, to some Figure inseparable even from the least Particles of Matter, no doubt would chuse the fittest, of which these two mentioned seem the best contrived. 30. I could never conceive, that Health and the Cure of Diseases (being so necessary a Qualification for all the wife Ends and Purpofes, for which an infinitly wife Being could fend his Creatures hither) could ever make them depend upon the Subtleties and Dreams of Pyrotechnical Enthusiasts, or the Tortures of Chymical Fires. I allow Chymistry one of the fittest and noblest Instruments to discover analytically the Nature, internal Composition, the Laws, Size, and Figures, of the component Particles of Bodies, as far as it can go; and so to be of noble Use in Natural Philo-

Philosophy: But for Medicin, and the Cure of bodily Distempers, there is scarce a valuable Composition discovered by Chymists, that by long Experience and Observation, I could prefer or equal to the simple Products of Nature, when judiciously and experimentally chosen and treated. But, 40. The true Cause of the Distempers here said to be produced by the alcalious State of the Juices, and cured by Acids, and on the contrary; was the tender Crase of the too viscid Blood and Juices, produced by the Too-much of Food, viz. by more than the Wastes of Living, or the Expences of the natural Functions, required; Acids then, by constringing and vellicating the Solids, (which is their natural and necessary Effect) increasing their Spring and Action, (as we wind up the Spring of a Watch to make it go faster) and so accelerating the natural Functions, whereby greater Discharges were made, and all the Digestions (first and second) became more perfect; rendered the Juices more fluid, and the Functions more easy and natural. But I even doubt of the Facts and Cures alleged in this Objection; for Nature often faves and cures in time, when Art cannot kill. But I think the whole Doctrine of Acids and Alcali's in the medical Etiology, a mere Pyrotechnical Romance, especially in the Cause and Cure of Diseases without the Bounds

Bounds of the Prime Vie, as the ingenious Dr. Pitcairne has demonstrated in his Tracts.

6. 8. ANOTHER great Complaint against a low Diet, vegetable Food, Milk and Milkmeats, and all Legums, Herbs and Fruits, is, that in these our Northern Climats they are windy, flatulent and tumifying, creating insupportable Hurricanes and Convulsions in the Stomach and Bowels of some Persons. I grant that where the Stomach is hot and inflamed by high Meats and Drinks, and the Bowels loaded with Choler, Phlegm, and Wind, these Symptoms indeed at first may happen; but that is only from the former Diet and Mal-Regimen. No Food can be had on the Globe without Wind, that is, without elastic or unelastic, i. e. fixed Air, thut up and inclos'd in its Substance; Air being a Part of its original Composition. In found Bodies, and clean Constitutions, this Air is evaporated and thrown off by the Perspiration; for which End that Infinity of per-Spiratory Ducts all over the internal and external Surface of the Body is design'd; so. when the Body is in a good State, and those Ducts are pervious, when the Digestions are good, and the Food sufficiently ground and comminuted, and the Wind set free, it passes without the least sensible Observation, Trouble or Inconveniency, by Perspiration, like Smoak

Smoak out of a Chimney; but when the Food is but grosly digested, and the perspiratory Ducts stopp'd by the Grossness of its Particles, then the included Air is long retained and accumulated in the Body, as by a foul Chimney the Room is choaked with Smoak; and this is the true Case in most chronical and all nervous Distempers. But then there is a great Difference between the Pain arising from the Windiness of high animal Food, and strong Liquors, the Torture, Panic and Convulsions they produce at last, and the Wind of vegetable Food, as is between a freezing Northeast Wind, and a warm Western Breeze; the first being composed of pointed animal Salts, and burning Oils and Spirits, and the last only of cool simple Air, Earth and Water. But in these last, the Windiness and Flatulency may be greatly lessened by much and well boiling or bakeing; culinary Heat, in all Instances, when judiciously applied, having the same Effect as the Heat of the Sun, as is evident from infinit Experiments; and the Parts of Vegetables being more easily difsolved and divided into their integral Particles, the prespiratory and flatulent Substance will more easily pass through them. Boiled Milk, and ground Seeds, are not subjected to this Incommodity, and roasted Fruits very little. But indeed the Objection will only take place at first, when the Luxurious are but just changing their Regimen, or are grown

grown old. A little Patience and Perseverance in the Endeavour after the Lightest and the Least will fully answer this Objection: But a vegetable Diet is what I never recommend, but in very bad Cases, and when Water-drinking under an animal Diet has not been able to make a Cure, nor greatly to relieve, and that even under this Restriction the Patient continues extremely miserable: Tho', I think, Milk and Seeds, in all Cases, will do all that Art can.

6. 9. WEAK and fearful Patients, and unexperienced Physicians, have been much frightened and terrified upon an Intermittent Fever's sometimes supervening on a low Vegetable or Milk Diet, entered upon for the Cure of Hysterics, Convulsions, epileptic Fits, nervous Lownesses, the Gout, or the first Stage of a Phthisis. The Physician advising has been blamed, and the Patient discouraged and frighted, so as to drop the Regimen and Method, and has therefore ever after lived a dying, melancholy and miserable Life; and some have been forced to throw themselves into the Hands of Quacks, and on destructive, deleterious Nostrums, for a small transitory present Relief; and of this I have feen some Instances, of which a few have happen'd in my own Practice, and in Cases at first under my own Direction. This is a melancholy Degree of Infatuation and Ignorance both in the Patients and Physicians; and not

to be accounted for, but in the unsearchable Wisdom and Secrets of Providence, as happening (I have known) to some of the best and most amiable Persons. But in the Name of Wonder and Astonishment, can a low, cool, balsamic Diet kill or create Distempers? while it is plain to a Demonstration, that it is only the too-high Diet, and Food not fitted to the Constitution and Difeases, that produce all the bodily Miseries and Sufferings of Mankind. The Matter of Fact and Truth is, when the Glands and Capillaries are obstructed, and the Juices are greatly corrupted and spoiled by a Viscidity in the grumous, and a lixivial Acrimony in the serous Part of the Blood, its Resistance is so great in the Vessels, that the natural Force and Elasticity of the Heart and Solids is not able to surmount it; and so all the Circulation is terminated in the larger Arteries and Trunk Vessels, or the greater Branches of fuch of them as just enter and terminat in the Viscera, or internal, Membranes and Surfaces. And hence grievous oppressive Symptoms, great Anxiety, and Labour in the animal Functions: And from these, ob-Aructed Viscera, a deep Melancholy and Sinking, or a beginning Inflammation or Gangrene on the Bowels and noble Parts; and thence again Convulsions, epileptic Fits, constant Hysterics, a Faundice or Dropsy, and the last Stages of mortal Distempers daily happen. A low Diet and deob-Aruent Medicins are advised; and in some time the

the Juices by them are much diffolv'd, thinn'd, and broken, some of the Viscera and Obstructions are loosen'd, and the Disproportion between the Resistance of the Fluids and the motive Force of the Solids is leffen'd in them; the Circulation is render'd more extensive, and passes now from the Arteries into the Veins; in many Arteries and Veins through their whole Length, if not most of their meeting Capillaries, which before could not be perform'd, or but partially and with much Labour. And now the Symptoms change their Appearance, and instead of the mention'd ones, either an Intermittent, a regular Fit of the Gout, (as happen'd to myself, the first time I ever had it, after I had been two Years under a total Milk and Vegetable Diet) a scorbutic Itch, miliary Eruptions, Blotches, or imall Ulcers despumat over the Body; and colical Gripes, bilious Vomiting, or the like, may be brought on. The ignorant and unexperienc'd Physician is puzzled; and the poor Patient terrified, and returns to a high Diet of animal Food, and strong fermented Liquors, which fixes and perpetuats these Disorders; and so the former Regimen and Medicins are condemn'd and laid aside; whereas these Symptoms were the infallible Evidences of its Fitness and Efficacy; the Juices and Solids by them despumating, and throwing off on the Extremities their Recrements and Impurities. For every one that is acquainted with the Animal

Animal Oeconomy knows, that an Intermittent, or any periodical Distemper, is nothing but the Struggle and Labour of Nature, to pass the too viscid Juices through the capillary Arteries into the capillary Veins; which shews a much greater Degree of Fluidity and Sweetness in the Blood, than when it cannot get further than the Trunks, and greater lateral Branches, and so rests in the Viscera, and internal Membranes, as it always does in the last Stages of these mention'd Distempers. The same Reasoning is applicable to the Gout and scorbutic Blotches, both which are Signs of mending and purifying Juices; and consequently Perseverance in the same Regimen and Medicins must at last perform an extirpative dureable Cure, and perfect Health and Spirits, if any thing can possibly do it; whereas by returning to a high Diet, the Solids by the Diet being now more weaken'd and relax'd, and brought into a Balance with the Diet, and all the bad Symptoms exasperated, must infallibly end in Death, or at least in a wretched dying Life.

6. 10. LET two People be taken as nearly alike as the Diversity and Individuation of Nature will admit, of the same Age, Stature, Complexion, and Strength of Body, and under the same chronical Distemper, and I am willing to take the seeming worse of the two; let all the most promising Nostrums, Drops, Drugs,

Drugs, and Medicins, known among the learned and experienced Physicians, antient or modern, regular Physicians or Quacks, be administered to the best of the two, by any Professor at home or abroad; and I will manage my Patient with only a few naturally indicated and proper Evacuations, and Sweetening innocent Alteratives, which shall neither be loathsome, various, nor complicated, and require no Confinement, under an appropriated Diet, or, in a Word, under the Lightest and the Least, or at worst under a Milk and Seed Diet; and I will venture Reputation and Life, that my Method cures fooner, more perfectly and dureably, is much more easily and pleasantly pass'd through, in a shorter Time, and with less Danger of a Relapse, than the other, with all the Assistance of Art, Skill, and Experience, under a full and free, though even a commonly reputed moderat Diet, but of rich Foods, and generous Liquors, much more under a voluptuous Diet.

§. II. COUNTRY Apothecaries, ignorant Practitioners, much more commonly, Quacks, who never dare order a Regimen, and who are continually cramming their Patients with nauseous and loathsome Potions, Pills and Bolus's, Electuaries, Powders and Juleps, and plaistering every Pore of their Bodies, and at the same time incourage or allow them

to fatiat themselves with all kinds of toothsome and palatable Meats and Drinks, what do they but roaft fuch Patients alive? I have known and heard of many fensible Patients, who in some acute Distempers, and where they could not think and chuse for themselves, after they had recover'd by the Strength of their Constitution, have declar'd, that they have suffer'd more from the nauseous Medicins, than from their Distemper. And some of the Learned I have heard give as a Reason for encourageing their Patients in swallowing whatever they can get down of poignant Food, that Nature had provided many Out-lets and Passages for Superfluity and Cramming. Supposing this Fact of the Indulgence of the Author of Nature were true, yet is it not Madness and Arrogance thus to abuse it? Would it not be more prudent not to abuse the Bounty of Nature in Contradiction to Nature? Not to thrust down, than to be forced to throw off again? Not to poison, than to have recourse to an Antidot? But the Truth of the Matter is just the Reverse: Nature has indeed provided many Out-lets, as by Perspiration, Vomiting, a Looseness, Sweating, Coughing, and many other Secretions: But these, if necessary, are all perform'd in the best, easiest, and pleasantest manner, under the Lightest and the Least: Whereas on Cramming, Luxury, high Living, most if not all of these Out-lets are shut and obstructed,

structed, or the Discharge by them made with Violence and Pain, and hence only Sickness and Diseases proceed; so that the Argument brought in favour of Luxury, is a very strong and solid one against it.

§. 12. Some also have affirm'd, that nothing but folid Food can nourish, and that Broths, Soups, Milk, and fuch aqueous Food, weaken, waste and liquify the Constitution and Habit. But these are poor Philosophers; . for in Truth and Reality, no Food can nourish, i. e. increase the Quantity of the Flesh and Blood, supply the Waste of Action and Living, and the necessary Secretions, but what is liquid and extremely thin; and Whey will nourish more quickly than Beef \*, though not so dureably, as is well known to every one who understands the Animal Oeconomy. Let one swallow down what he will, that Part of it which nourishes, must be thinner and more fluid than the Whey of Ass's Milk; nay posfibly as thin as a Vapour, else it can never enter the Lacteals, (the only Passages by which Nourishment or new Chyle can get into the Blood) or at least pass through some of the extremely minute Canals much less than a Hair: The rest only scratches the Palate, and the Organs of Sense, and poisons the World afterwards. This is so certain, that it

<sup>\*</sup> Vide P. 1. Chap. I. towards the End.

is with the utmost Difficulty the Lacteals can be injected with the thinnest tinged Liquors, fo as to be made visible; and some of the very best Physicians and Philosophers have thought, that they have no patent Orifices into the Guts, but that the Chyle is strain'd through the Substance and Coats of the Guts, into these invisible Tubes, like Quicksilver through Chamois, or Oil through Paper \*. But let it be observed once for all, that I speak not here of what is necessary to procure brutal or mechanical Force or Strength; but for the Diseased, the Weak and Tender, and those who only want clear Heads, free Spirits, and Freedom from Pain or Oppreffion; for high Meats and Drinks I own necessary for the Laborious, the Strong, and the healthy Young, if taken with Moderation.

6. 13. THAT there are Instances of some Men who have lived to a great Age, under a great Fullness, and what in others is commonly reckon'd Intemperance and Excess, both in strong, rank animal Food, and fermented Liquors; nay, of some who have gone on to Fourfcore, and fuffer'd very little, though almost daily intoxicated with Spirits, and Liquors that have pass'd through the Tortures of the Fire; that there have been such thoughtless Mortals, I will not deny: But

<sup>\*</sup> Vide Berger. de Natur. Human.

such Instances are of no more Weight against what I advance, viz. that the shortest and most infallible Means to prolong Life, to preserve Health, Freedom from Diseases, and Freedom of Spirits, is to take down constantly the Lightest and the Least Food a Man can be casy under, or a constant Endeavour after the Too-little; than the Life of an Elephant or Roebuck (some of which have been said to live Four, Five, or Six hundred Years) is longer than that of a Lap-dog; or that the Lives of the Antediluvians were longer than ours. The Wisdom, the Art, and Perfection of Physic, is to make a Man live chearful and eafy, without Pain or Disease, with the Use of his Senses and Faculties, and at last dissolve without lingering Pain, when he has lived as long as Nature fram'd him to last. London Houses are made to last Fifty Years, Country Houses for Five hundred. With some the common way of dealing with their Patients, is constantly to blow the Fire, as with a Pair of Smith's Bellows, till they blow it out, or in a few Blasts consume it to Asbes. The Method I would infinuat, is to take out the Ashes, and dead Coals, keep it open, and give it Air; and then it will burn chearfully as long as the Nature of the Materials will allow. long-liv'd Glutton or Drunkard kills more by his Example, and the flattering Hopes, those who know not their own Strength, and what they

they were made to bear, entertain, than Hippocrates ever faved.

6. 14. ANOTHER great and formidable Puzzle against a low Diet, in the Gout especially, is, that some have grown worse under it, and have been ever after declining; and fome have actually died, after they had enter'd into this Regimen; and therefore some weak Dealers in Physic rail against it, pretending Experience and Observation for their Justification. I would ask these Gentlemen, Is it from the Nature and Essence of the Diet that this Misfortune happen'd? This they will not care to fay, since nine Parts in ten of the Mass of Mankind, who follow this Diet, do well, and are free from the Gout. Is it then from the Nature of the Distemper? This they dare not say neither; for a low Diet is the proper Antidot to Inflammation, in which the Essence of the Gout consists. Nay, but, fay they, the Inflammation of the Gout is on the Limbs and Extremities, and a cool Diet will draw it upon the Viscera and noble Parts. Allowing this its whole Force, it is only an Argument for warmer and more generous Medicins while the Fit lasts; and it is in the Intervals that a low Diet is chiefly recommended to lessen the future Inflammation; and after all, I much doubt, even when it is on the Extremities, if the Diet ought not to be low and cool; only the Solids and digef-

tive

tive Organs are to be gently and temperatly braced and corroborated, to keep the Inflammation on the Extremity, which vegetable Bracers and Astringents will do. But the lower the Diet is, the fafer: Give Rest to a broken Leg after it is set, it will cure itself; give the Stomach little or nothing to do in the Affair of Digestion, (which is its proper Action) and it will mend itself. In gross foul Habits, and putrified Juices, great Disorders have ensued on a low Diet; but that was from a Despumation of the Habit: And I am convinced, whatever these suffer from a low Diet, would be doubled without it; and he who dies under it, would have died in half the Time, and suffer'd double the Misery, without it: Nothing but putrefied Organs, and greatly corrupted Juices, can destroy such a Person. When Life is far advanced, no wife Man ought to change any thing in his Regimen, but the Quantity.

§. 15. Some ingenious Gentlemen have faid or fneer'd, For him, (the Author) who is as robust as an Horse or an Elephant, a vegetable Diet may be proper; but for poor tender, vapourish, and nervous Creatures, it is Poison, Death and Destruction. Such Objections I should be asham'd to answer, if I did not know they came even from Persons of Character, and reputed Eminence in the Profession; and yet it is wrong,

wrong, and even frivolous, in every Part. As for myself, I have been all my Life of a Spongy, flabby, relax'd Habit, of weak Nerves originally, easily ruffled, surprised and hurried, and thereupon readily running into Evacuations of all kinds, which infallibly indicat weak Nerves; and these Symptoms have been increas'd by a lazy Disposition, and heighten'd by a Mal-Regimen, and sedentary abstracted Studies. And as to the Foundation of the Objection itself, it is frivolous. For if a strong robust Body, originally or by a mistaken Regimen, comes to have putrifying Juices, and broken or relax'd Solids, and yet by a low Diet, and ponderous Medicins, can recover a found Constitution, and good Spirits; such a Diet will be infinitly more necessary for a poor weak nervous Creature: The first may struggle and hold it out a great while by his natural Force; but the latter must be extremely miserable, or perish soon, without it. In Reason and Philosophy, the Food ought to bear a Proportion both in Quantity and Quality to the natural Strength, Bulk and Capaciousness of the Subject; and on that Score, if a large, strong and capacious Subject cannot be cured without a low, cool and spare Diet; much less, sure, can a poor, thin, small and weakly Creature be cured without it in a proportional Degree. The Objection is, just as if one should aver, that though a Kite or Carrion-Crow might live active Q4

# 232 The Method of Cure in Diseases active and gay on a low Diet, yet it would destroy a Nightingale or Wren.

6. 16. THERE are Inflances alleg'd, of those who after having been long under a low Diet, even of Milk and Vegetables, without being quite recover'd, nay, even still continuing bad under it, upon returning to a full high Diet, (at least a common Diet of animal Food, and fermented Liquors) have got perfectly well; and some (such as I have formerly taken Notice of) that having chang'd their low Diet upon some accidental or epidemical Distemper happening to them, or by the Advice of some complaisant Foreigner, have afterwards grown tolerably well. All I can say to these is, that very possibly a low Diet might be prescrib'd where it was not absolutely necessary, nor in all Circumstances the fittest (as to those well otherwise, but sunk, emaciated, and their Juices render'd poor and effete, by violent Passions, ill-judg'd Fasteing and Abstinence, or violent Exercise). And yet I know, or can possibly imagine, but one Circumstance where this can be the Case; viz. when upon opening a Vein with a large Orifice, the Curd of the Blood has appear'd florid, sufficiently fluid, with a right-colour'd and duely proportion'd Serum; but this Grume or Curd has been weak, poor and thin, without a sufficient Body and Balsam, and the

the Serum too watery and pellucid. Some fuch Cases have occurr'd to me, where I always advis'd a trimming or even a common Diet of animal Food, and fermented Liquors, in Moderation, to be gradually enter'd upon to thicken and balmify the Juices; and it has fucceeded accordingly. But as this Cafe feldom or never happens, but from a precedent too long Continuance of a low Diet, or the Circumstances above recited, or from a too anxious and ill-judg'd Profecution of the Lightest and the Least; so it is certain, if such Perfons had gone on in the same Method of a low Diet with Discretion, they would have been perfectly and dureably well at last, and the Grume of the Blood would in Time have thicken'd and strengthen'd even by the same Diet; for Nature will at last ever have its Due: But by Reason of their Fears and Apprehensions, and their Desire of being soon better, being allow'd and incourag'd to a higher and fuller Diet, they have thereby fooner inrich'd and strengthen'd their Blood and Juices, and acquir'd high Health for some time; but have ever paid for this lucid Interval, by shortening their Days, and dying in more Misery. And therefore, with due Caution, I have sometimes indulg'd such Persons for the Hardness of their Hearts; and they have gone on in common Life very well, which has been only owing to the balmifying, cooling and attenuating Regimen they had been

fo long in formerly. But this has happen'd only to the Toung, and to those who were under or only about the Meridian of Life, who having naturally a long time as yet to live, could not be expected to have so much Steadiness and Resolution as to persevere in so particular and uncommon a Regimen; and therefore I thought it not Prudence to put their Virtue and Courage to such a Trial, but brought them out of this low Diet by Degrees with Caution, and with Advice to return to it upon the flightest persevering Ails. Those long past the Meridian of Life, I have never suffer'd to change. From this Account of the Case, it is plain the future Health injoy'd was not owing to the Change of a lower for a higher Diet, as the Objectors would infinuat, but to the Benefit already receiv'd by the low Diet, and its having thinn'd the Juices, cleans'd the Viscera, and empty'd the Vessels, and thereby render'd them capable to receive a fuller and stronger Diet, and hold well for a time; though it is certain they had lived longer and healthier at last, and died with less Pain, had they continued their Diet. But I much doubt the Fact, on which the Objection is founded; for Nature is never so irregular and dissonant to herself, as this Objection supposes.

§. 17. THERE is not a more puzzling and terrifying Objection made against a low Diet, and

and the Study and Pursuit of the Lightest and the Least, which I have so strongly recommended, than that some who follow it look ghastly, pale, ill-colour'd, and wasted to a prodigious Degree; which seems to threaten the Approach, and be the Harbinger, of Death and the Grave; so that most Persons, terrify'd with the most distant Prospect of it, eat and drink to the full, to secure against it; and so keep themselves eternally ailing and miserable, to prevent, as they think, this fatal Effect. And yet there is not a more groß and more pernicious Mistake, than the Whole of this Objection: For the sole Intention of a low cool Diet is, by the most effectual Means, to prevent this very thing they fo much dread. The Disease itself may be so rooted and incorporated with the whole Habit, and transubstantiated into the Solids; the Viscera may be so obstructed and spoil'd, the Blood and Juices so viscid and morbid, that even the new, sweet, balsamic Chyle may not mix, affimilat, and incorporat with the old Mass, so as to make an homogenous Fluid, (at least not in any small Time) to nourish, plump up, and carry on the Circulation to the Extremities, and capillary Arteries and Veins, whence lively Colour, Complexion, and Plumping arise; and this may cause an universal Wasteing, till the Blood and Juices be sufficiently thinn'd and balmify'd, and acquire its scarlet Colour, and the Ob-Aructions

structions of the Capillaries and Glands be made pervious. But this is not the Fault of the Diet, but of the Distemper; for all the World knows and acknowleges, that fuch a Diet makes Children, Farmers and Country Persons, who can afford no other Diet, look the freshest, most healthy and lively; and this Diet never fails in one fingle Instance, when the Cure is once thus completed, the Juices sweeten'd, and the Functions made regular and free, it never fails, I say, to produce this Plumpness, Liveliness and Freshness. While the Cure is performing, the greater the Waste of the old morbid Habit is, the more perfect and full will be the Recovery, and future Plumpness, provided the Wasteing come from the Thinness, Coolness and Softness of the Dict only; without Hectic, violent Evacuation, or evident Symptom of some noble Bowel spoil'd; for then it is the furest Mark of their future perfect Recovery. A Person who is two or three Years in wasteing, and all that time pursues the Lightest and the Least, will infallibly in as many more, or fooner perhaps, come to perfect Health and Plumpness again; and it is this Diet alone that can prevent their running down too fast and precipitatly, and the only thing in Nature that can put a Stop to their wasteing, and, as it were, put a Drag on the Wheels, to hinder them from running too fast down Hill; for when the Tuices

Ap-

Juices are perfectly sweet, the Wasteing will cease, and the Plumping begin. When I see a Person thin, meagre, and ill-colour'd, I conclude, without asking Questions, that he is under a Mal Regimen of Diet as to him, whatever other Appearances of Health he may have; and if he continue so dureing a whole Life, I conclude he continu'd under that improper Regimen; for a proper, low, fost Diet will as infallibly at last (if no great Organ be spoil'd) make him look fresh, plump and healthy, as Summer will succeed Winter. A Person under a cachectic Habit, and chronical Distempers, must waste and throw off every Fibre and Atom of that old Habit, fluid and solid, before he is renew'd, and becomes plump and healthy again; and those who are under the Necessity of such a Diet, or under the Lightest and the Least, ought to expect this Degree of Recovery, fome fooner, some later, according to the Degree of the Malignity and Obstinacy of the Distemper, and to ground the Hopes of the Degree of their future Recovery on this Fact, and not to be puzzled and terrified by Gainsayers; for if they persevere obstinatly and strictly, they will recover, and get plump, gay, and healthy again, if none of the great Organs be spoil'd; and even then they will last longer, live casier, and lie down more gently: And this is the best can be expected in fuch a bad Case, where some necessary

Appendage or Organ to Life is quite and irrecoverably spoil'd or lost; for no Diet, Medicin, or Means, can create such an Organ anew; and yet Nature has wonderful Refources even in fuch a Case, under a low fweetening Diet, either by makeing the remaining Part of the Organ sufficient by its Dilatation, and by opening new Passages, or forming succedaneous Joints and Organs, to make the Person last and become easy under fuch a Misfortune; and we have Instances of Persons who have lived long and easy with one Lobe of the Lungs or Liver, when the other has adher'd or turn'd scirrhous, and been quite useless; and where the Hip-Joint dislocated has form'd a succedaneous one; and where an Artery cut by inlarging the collateral Branches, has nourish'd the Part, even there where that cut Artery was originally directed: But these Advantages can never happen, but under a soft, cool Diet. It is indeed a fatal Symptom to waste and fall away under a full, free, and high Diet: It is a certain Symptom of a Non-assimilation, a Decay, or a scorbutic and nervous Atrophy; it shews want of Digestion, or Assimilation of the new Chyle with the old Blood; but under a Milk and Seed Diet, all these Faults and Inconveniencies are avoided, as much as the Nature of the Case will admit. Milk and Seeds will thin, dilute, unite and incorporat with Glew sooner than Birdlime, Size, or Camp-Jelly diluted would;

would; Water and aqueous Liquors warm'd, will dissolve and incorporat with the strongest Viscosities, and are the only Substances that can possibly do it: So that on the Whole, in bad Cases, sizy Juices, lixivial and inflammatory Blood, watery Fluids, with cool, foft and light folid Powders or Mixtures of Seeds, as Milkmeats, Seed-meats, and vegetable Food, must be allow'd to be the only possible Mean in all Nature, that can prevent this so much dreaded Wasteing and Consumeing; and they that waste and fall away under it, must consume twice as fast in half the Time without it. And it is observable in all those who waste in a mortal Distemper, that their Atrophy is always attended with and from some sensible Evacuation, such as a Diarrhea, constant Night-Sweats, an Hamorrhage, profuse Ptyalism, or a violent Cough; and those who waste insensibly under a Regimen, are seldom in Danger of Death, but generally recover, and grow fat at last, if the Wasteing be not attended with some profuse Evacuation mention'd, which implies the Corruption of some necessary Organ of Life. But this Case being the most formidable of any, will be fully consider'd in the following Chapter,

§. 18. It is a common Objection against a low and vegetable Diet, that it cuts off the Means of a Cure, if either by Accident or epidemical Causes, a Distemper seizes such a Person.

Person. But these Objectors do not confider, that by this their own Confession, the proper and most effectual Cure of any Distemper is by a low Diet, since it supposes this Diet would cure the Distemper when the Party seized were under any other Regimen, viz. one of Meat and Wine. But to answer the Objection directly; as to Accidents and epidemical Distempers, I know no Fence against them. If the Misfortune happens by an Accident, none can doubt, that he who has good Blood and Juices (and which this Diet is supposed always to produce) will fooner and more probably be cured by the common Methods, than he who has the contrary Habit: And the same is to be said of epidemical Distempers; he who has a good sweet-blooded Habit, will have a better Chance to get over them, than he who has a morbid Constitution. But, 1. Under a low Diet it is a Contradiction, that a Man should naturally, and from the common Laws of the animal Oeconomy, fall into any dangerous, painful, or mortal Distemper; for the Antidot, i. e. the low Diet, is a continual Preservative, as even this Objection supposes, and as Heat is a constant Preservative against Cold. But, 2. Suppose the impossible Case should happen, it is but lessening the Quantity of the Materials of the same Diet for some time, with the common Medicins, which will more effectually and fooner cure the Dif-

Distemper, than it would be cured even in descending from a full animal and vinous Diet into a low one. But, in Fact, the Objection is both unnatural and unphilosophical, and implies its own Answer.

§. 19. It may be the Opinion of some Physicians, as well as of some Patients, that Life, without sensual Pleasures and Enjoyments, is not worth haveing; and therefore, when their Patients are by Luxury, or hereditary Distempers, reduced to a very low and wretched Condition, they think the Preservation of their Lives by so long and painful a Self-denial as is here prescribed, would be too dear a Purchase; or that the Game is not worth the Candle: and so may prescribe very active and dangerous Medicins at a Venture, either to relieve or to end them; at the same time indulgeing their deprav'd Appetites in whatever kinds of Meats and Drinks they crave, or can get down. But such Physicians do not consider, that they are accountable to the Community, to their Patient, to their Consciences, and to their Maker, for every Hour and Moment they shorten and cut off, of the natural Duration of their Patients Lives, by their immoral and murderous Indulgence. And the Patients do not duely ponder, that Suicide (which this is in Effect) is the most mortal and irremissible of all R Sins:

Sins: And Neither has sufficiently weighed the Possibility, that the Party, if not quickly cut off by both these preposterous Means, may linger out miserably, and be twenty or thirty Years a dying, under these Heart and Wheel-breaking Miseries, thus exasperated: Whereas by the Methods I propose, if they obtain not in time a perfect Cure, yet they certainly thereby lessen their Pain, lengthen their Days, and are continued, under the Order of Providence over them, and the benign Influence of the Sun of Righteousness, who has Healing under his Wings; and, at worst, soften and lighten the Anguish of their Dissolution, as far as the Nature of Things will admit.

#### CHAP. IV.

REFLECTIONS on the general Method of Cure of hereditary or acquired Tenderness, Thinness, Wasteing, or Valetudinariness of Constitution, from whatever Causes.

1. IT is certain every Animal (rational or irrational) in perfect Health, where all the Functions are regularly perform'd, and who has at hand Sufficiency of proper Food, must become at last plump, fresh, and roundish: If it is otherwise, though there should be no real Complaints of Disorders felt or sensible, yet there must be a Defect somewhere, either of an improper Diet, an imperfect Digestion or Assimilation, or les'd internal Or-It is very possible this Defect may not be sensible or felt, while the Fibres and Solids are not yet come to their greatest Extenfion, that is in Youthbood; being hid and conceal'd by the greater Elasticity and Volubility of these Solids at that Time of Life. But if there be an habitual Thinness, Leanness, Tenderness, and Valetudinariness, there must be some Dyscrasy in the Juices, or Imbecillity in the Solids, natural, hereditary, or acquir'd. The intellectual Organs may be, and often are, in fuch Constitutions more acute, penetrating and comprehensive, than in those of the Fat R 2 and

and Plump, especially if these last are overloaded with Clay; but the bodily Health of the Lean and Wither'd is always fo tottering, precarious, and subject to the smallest Accidents, that it hinders even the Improvement and Culture of fuch delicat intellectual Organs, to that Height they might otherwise be carried. If these Infirmities be only middling and tolerable, and not come to their last Stage, a general Temperance, good Air, Exercise, and a proper Care of all the Nonnaturals, may suffice to carry on Life tolerably, to the Length of its natural Duration. But when the wasteing Case is extremely bad, obstinat, and dangerous, not yielding to the best Advice and Means commonly used, I intend here to suggest the most probable Method known to me, or I think knowable in the Nature of Things, to give fuch the best Chance for an extirpative Cure, at least for as long a Life, as much Ease, and Freedom of Spirits, as such a Case will bear.

§. 2. In such a Case, and such a Stage of it, as I have describ'd, there is nothing can do any real Service but a strict Milk and Seed Diet; and if it has not been enter'd on before, it ought, without any Hesitation or Preparation, to be enter'd upon directly; especially if upon letting out a few Ounces of Blood for Trial, it is found sizy, (as I could venture my Life it will in such a Case be, as I always found)

found) no such Atrophy, or Thinness, being ever possible, or of any Duration, but where the Blood is almost like Camp-jelly, so as that no Assimilation can be made; and Milk and Seeds can only furnish out a Chyle, that will gradually mix with, dilute, and thin this old glewy Fluid, and prevent a mortal Wasteing; and in this Case, Ass's Milk is far preferable to any other Kind, it being already true, fweet, kindly Chyle, which only can get through the Lacteals, probably almost in its own unbroken State; and to which all Chyle, that naturally nourishes, ought to be similar in Fluidity and Sweetness, come it from animal or vegetable Food; the Qualities of Ass's Milk being, due Thinness or Fluidity, Sweetness and Balsam, which no other Chyle or nutritive Milk, from either animal or vegetable Food, has in fuch an Eminence; and consequently no other Milk or Chyle is so nutritive, or so readily convertible to Flesh and Blood. The greatest Cures I have ever seen perform'd in Distempers abso-· lutely despair'd of, in this Kind, have been perform'd by Ass's Milk for Breakfast and Supper, and only Cow Milk and Bread for Dinner, hot in Winter, and cold in Summerheats. Nervous and scorbutic Acrophies, and Thinnels in lesser Degrees, may admit of greater Variety of Foods. All the Garden Things much boil'd, and dress'd with Cow Milk, are much the same as a total Milk Diet, R 3

23517

Diet, with the Difference only between animal and culinary Cookery; but a Milk and Seed Diet, or even Milk only for Diet, (as in Dr. Taylor of Croyden's Case) is the most infallible, and indeed the only proper Means known or knowable, to give a Chance for a Cure, in such a deplorable Case as I have represented, or indeed in any desperat Case whatever; and I am positive, if this Regimen will not do, no other possibly can; and if it should not cure, it will absolutely prolong Life more, and make the Symptoms milder: But most Patients will not be brought into it, till it be too late. And here the artificial Ass's Milk, of three Parts Barley-water, (made with two Ounces of Barley, one of candied Eringo Roots to three Pints of Water boil'd to a Quart and strain'd, and a fourth Part of boil'd and skimm'd Cow Milk added to it) may be a good Succedaneum to natural Ass's Milk, if it cannot be readily had.

§. 3. So much for the Diet of such thin, wasteing, and valetudinary Patients, in its last Stage: And as such have neither Digestion, nor Strength to bear active strong Evacuations, or Alteratives, their Medicins must bear a Proportion to their Diet and Imbecillity; there is no Evacuation proper and accommodated to their Strength and Spirits, but weak wash Vomits, often repeated, ten or twelve Grains of Powder, or an Ounce of the

the Tincture of Ipecacuana work'd with Chamomil-Flower-Tea, and provok'd with a Feather, once a Week, or at least every Full and New Moon; but especially upon Watchfulness, Flatus, swell'd Stomachs, or casual Exacerbations of Symptoms, to which all such are generally subject: But what I much prefer to all artificial Emetics, is tickling the Throat and Glands with their Finger till they keck, and then spitting, or suffering the Phlegm to run out into a Bason; and repeating this for thirty or forty different times every Morning, or every second or third Morning, or as often as they find a Necessity or Inclination to a painful or laborious Belching or Explosion of Wind; for by this Method long and duely pursu'd, they will empty the Glands of their Phlegm or Choler, and pump up the penn'd Wind with much more Ease and Safety, than by any artificial Emetic whatsoever; without those Deluges of nauseous Draughts commonly used by unskilful Apothecaries, to save their Time; when it is certain from Experience, that a dry Vomit, with little or no Liquor, though more painful, is infinitly more effectual, than two or three wet Vomits with much drinking; for the great Efficacy of Vomits lies in the Throws and Spasms on the Muscles of the Abdomen, by which the Obstructions in all the Glands are forced open, the Size in the Juices is broken and R 4 divided,

divided, and the Perspiration render'd pervious; and by these Thumb Vomits, (as I call them) without Drink, or Powders, together with constant drinking Ass's Milk, I have done myself more Service, in mending my Blood, and plumping up the Muscles, as well as many others, to whom I have communicated and taught the Trick, than by all the other Operations of Physic or Medicins I have ever used in such low and desperat Cases. This Method is only an Imitation of the Operations of Nature, which naturally and mechanically prompt all Persons loaded with Phlegm, Choler, or Wind, by tickling their Throat till they keck, to throw them off; which generally relieves in fuch a Circumstance, like Sneezing; and Medicus debet Columnodo Naturæ administrare. And any one who has an Aversion to artificial Vomits, may by Practice, and bringing the Muscles of the Abdomen to an easy Play, get a Facility in this Trick, for his certain Relief on all necessary Occasions, as I have found to my great Comfort, and the Relief of many others, especially the Delicat, Hysterical, Wasted, and Lowspirited: But it must be pursued with Obstinacy and Perseverance, till a Facility be acquir'd.

6. 4. The only Inconveniency of such frequent Thumb or other Vomits is, that the necessary Revulsion caused by them sometimes makes them

them extremely and painfully costive. But so far is this from being a real Evil, that it is one of the best Effects these Vomits can produce; for any Degree of Looseness or Purgeing is almost certain Death to such Persons, and they generally go off in a Colliquative Diarrhæa, which these Thumb Vomits generally remedy or prevent; for these Diarrhæa's in fuch tender and thin Persons, not only carry off all their Food, but indicat that the whole System of the Solids and Nerves are irrecoverably relax'd. But should such a Costiveness be obstinat and troublesome, a little lenitive Electuary over Night, a Drachm of Lac or Flores Sulphuris, an Anderson's or a Rufi Pill or two, will fafely and gently relieve; a Milk or a Broth Clyster, with a little Oil of Sweet Almonds, will bring forth the harden'd Balls, that obstruct the peristaltic Motion; supping on Apples and Milk, stew'd Prunes with Senna, or any fuch-like gentle Aperient, will constantly relieve this Symptom: But in Reality, unless it becomes extremely painful and obstinat, it is much better to bear than relieve it; for thereby the Food has a longer Time to pass the Lacteals, to mend the Blood, and plump up the Muscles, and to allow the Solids and Nerves to constringe, to crisp up, and regain their Buckle and Spring; for I know nothing that depresses the Spirits, wastes the Flesh, and relaxes the whole System of the Nerves

and Solids, so much as frequent and copious Purgeing and Stooling, as is well known in the common and unnatural Cure of the Gonorrhea Virulenta; and therefore I seldom or never use any Purgatives myself, nor prescribe them to my nervous and valetudinary Patients: More Abstinence even under a low Diet, more Exercise, and Thumb-Vomits, always supply to me the Place of Cathartics, in such delicat Cases: It is only the Strong, Robust, and those of too hard and firm Nerves, that successfully bear much Purgeing; and I think two pretty severe Vomits hurt not the Constitution so much as one drastic Purge; for it is notorioufly known in all fuch Cases and Constitutions as are now under Confideration, that it is the Relaxation and Imbecillity of the Stomach that is the great Cause of all their Sufferings, together with the Viscidity of the Juices; and if these be sufficiently attended to, all the rest will come about in Time; the Stomach itself, like a broken Leg, by giving it little to do, or using it very spareingly, will knit, thicken, and consolidat of itself mechanically; the infinit Glands of the Stomach and Guts, constantly spewing out their viscid Contents, want frequent Cleanseings by Thumb Vomits; below they are fewer towards the Rectum and Anus, and so these want fewer Cleanseings by Purgeing.

6. 5. WHEN the Blood and Juices are thick, viscid, and glewy, (as they always are in such Cases) and thereby all the Capillaries and smaller Lymphatic Vessels are stuffed, obstructed, and compressed, nothing will give them Relief, Freedom, and Roomyness, like little frequent Phlebotomies, three, four, five, or fix Ounces at most every Week, Month, or Quarter, as they can bear it, or as the Blood appears when let out of a large Orifice; but it is never to be continued after the Blood hath lost its Buff, or its liverish Crassity, nor after the Patient goes into Fainting, or long Lowness upon Letting; for if either of these ensue to any Degree, it is a certain Sign Phlebotomy will no longer do (no not in any Case where Phlebotomy is perform'd; for where it is proper, it will always raise the Spirits in a little time after); nor is the Evil in the great Trunk Vessels, but in the smallest Branches and Capillaries, for which another Method is to be tried, afterwards to be fuggested. But as long as the Blood is still cover'd with a Buff or Parchment, its Curd still liverish, and its Serum yellow, tawny, or saltish, and the Patient has rather better than worse Spirits after it, little frequent Phlebutomies will be of great Service to give the Juices room to circulat, to take off the Refistance from them, to the motive and elastic Powers of the Organs and Solids, and to supply its Room with soft, mild, sweet and found

found Juices, which by Degrees will affimilat and mix with the old viscid Mass, and mend it. I have known beginning Phthises Pulmonum, Hectics, Pleurisies and Rheumatisms, often prevented or cured by these, when a soft, sweet whey Diet has been join'd to them.

6. 6. WHEN the Blood is brought to a pretty tolerable State in the Trunks of the great Vessels, and the Fault seems now confin'd to the Glands, Capillaries, or Lymphatics, the alterative Medicins, that are most likely, that I ever could find to reach them, were Cinnabar native or factitious, the Aqua. Argentea, Millepeda, Nitre, and Lac Sulphuris, with the Testacea, combin'd in such Forms as were most agreeable to the Patient, or fat lightest on the Stomach. I can honestly aver it, I never saw such salutary Effects in any obstinat Cases, especially such as those now under Consideration, as from long Perseverance under large Doses of native or factitious Cinnabar, wash'd down with Ass's Milk, or fweet Whey. It seldom gives any Trouble, unless it be in the Stomach at first; and has no sensible Operation, but sweetening and attenuating the Blood in the smallest Veffels gradually: It only keeps from troublesome Costiveness such weak Constitutions, by the Sulphur in its Composition. I have given it for a long Time to three Drachms a Day in any Vehicle; and twice a Year, Spring and Fall, for fix Weeks; and had it continued

for

for twenty Years, by which the Patient has grown strong and fat at last. And I take it to be a much nobler Medicin for mending the Blood, and opening the Capillary Glands, and preventing acute Distempers, provided due Temperance and Exercise be join'd to it, than even my Lord Bacon's fo fam'd Catholicon Nitre, which yet is most certainly a noble Simple, and the greatest Antidot against Inflammations and feverish Disorders known to Men. Experience shews that it attenuats and malaxes the Curd of the Blood, and thins its viscid Serum, even in the Air, or in Blood let out; and its Effects on Fire, and in Respiration, prove it the greatest Friend to animal Bodies. The Millepeda, as is known, are nothing but a simple kind of Sal Armoniac, or Nitre, mill'd by animal Organs, and intimatly mix'd with animal Juices; and is noted for its Efficacy in Inflammations on the Eyes, and Obstructions in the optic Nerves and Glands, and fure they are among the most delicat of animal Organs. The Fault is, these are not given long enough, nor in fufficient Quantity, to produce any great or sensible Effects: But I firmly believe them to be far beyond all your now fam'd chymical and quack Secrets, Drops or Pills, if a proper Regimen be join'd with them, and are without all possible Danger to the weakest Infant. As to the Testacea, their Nature and Operation are sufficiently known, and their

their Texture visible by a common Microscope, viz. that they are only solid Spunges, which suck, attract and receive into their Pores all Acids where-ever they meet them, especially in the Prima Via, where Acids are chiefly to be found; and I am certain, Cinnabar, Crabs-eyes, Nitre, and Cochineal, finely powder'd, and wash'd down with any agreeable acidulated Draught, fuch as the salin one of Salt of Wormwood, and Juice of Lemon duely mix'd in common Water, Milk, or Barley-water acidulated with Currant-Jelly, and the like, is one of the best Febrifuges known to Men, particularly where no cutaneous Eruption, or critical Push, is expected; for then these Medicins must be affisted with some warmer constringent and propelling Mixtures, to forward this Effect.

§. 7. FRICTION with a coarse Towel, warm Flanel, but especially the Flesh-brush, over the whole Body, and particularly the Spine and Limbs, is an admirable Operation to allicit the Blood and Juices to the Surface of the Body, and consequently to plump the Muscles. It rubs out and discharges the Plugs and Obstructions in the Orifices of the perspiratory Glands; and if the whole Skin be wash'd after with a wet Towel in warm Water in cold Weather, and in cold Water in hot Weather, it will contribute to free it from the Scurf, and chopp'd Cuticle, that clogs

the

the Perspiration, which will greatly serve to promote the Circulation; and this Method ought to be continued for half or a quarter of an Hour, Morning and Night; and a close streight-button'd Cotton Waistcoat, for constant Friction, ought to be worn next the Skin, and a broad Belt about the Loins, to keep all the Bowels and the Lacteals in their proper and natural Situation.

§. 8. WHEN the Blood is in a good meafure thinn'd and sweeten'd, (which a little Phlebotomy will always discover, by comparing the Blood with that of a Sheep or Calf) the best Medicins for braceing, tanning and hardening the Solids, the alimentary Tubes in particular, are the Bark, and its Preparations, the Extract of the Bark with a third part of the Extract of Rhubarb, made into Pills with Balfamum Polychrest. or an Electuary of these, with any agreeable Syrup; about half a Drachm or forty Grains of these twice a Day on an empty Stomach, wash'd down with Bristol Water, or the following Apozem, viz. fix Drachms of powder'd Quinquina, half an Ounce of Misleto, three Drachms of the Extract of wild Valerian, two of Orange Peel, half a Drachm of Cardamoms, and one Drachm of Cochineal, infus'd in three half Pints of Bristol Water to a Quart, strain'd and filtred, about four or five Spoonfuls of this for a Dose, for fix Weeks,

Weeks, Spring and Fall; chewing and swallowing a Scruple or half a Drachm of fine Jesuits Bark three times a Day, on an empty Stomach, and every third Night chewing a Scruple of Rhubarb, is an excellent Bracer in such a low Case; and ten or sisteen Drops of Elixir of Vitriol in a Glass of fresh Spa or Pyrmont Water, (if it does not tighten too quickly, or pain such tender Entrails) taken twice a Day, would much serve the same End, and give Appetite, Strength and Spirits.

§. 9. COLD Batheing in the Sea, or a River, a cold Bath, or Batheing-Tub, at least all the hot Part of the Summer, would greatly advance the same Purpose; but even this so effectual a Strengthener will be of little or no Value, unless the Blood be already thinn'd and sweeten'd. I myself have tried it many Hundreds of Times, with no manner of Benefit; nay, in some it has been attended with many Incommodities, and much Danger of violent Head-achs, Chills, Contractions and Intermittent Fevers, if too long or too hastily purfued, before the Blood was mended, which when effected, both I and many others have found great Benefit from it; so that I have never advis'd Cold Batheing fince, without previously, by Phlebotomy, seeing into the State of their Juices and Bowels; and always forbad it, when I found them bad. It is always necessary, at least at first, to have the Head well spung'd, and cool'd with cold Wa-

ter, before plungeing; and they should either be thrown in Head-foremost, or, which I think safest, walk down the Steps as fast as they can, and bending their Knees, and shortening their Bodies, get their Heads under Water; this for three or four times in the cold Bath, and out again, which ought not to exceed two or three Minutes. In a River or the Sea they may continue ten or fifteen Minutes: For, like all other medical Operations, it is much better to be perform'd often, and but little at once, than to be long about it at one time: Gutta cavat lapidem non vi, sed sæpe cadendo. It is certainly, in valetudinary and wasted Constitutions, of great Efficacy in warm Seasons, when the Blood is sufficiently thinn'd.

§. 10. Bur no Rule or Institution for braceing the Solids and Nerves is equal to Exercise of all kinds. Rideing, Coaching, Walking, Bowling, playing at Shuttlecock; in short, all Exercise of whatever kind it be, is good and beneficial. In Winter and bad Weather, within Doors the Tremoussoir, a Hamock, the Dumb Bell, plying a Pump, walking in a Gallery, or a Suite of Rooms; in good Weather these other mentioned Exercifes, and many more mentioned by Gymnastic Writers, of which the ingenious Valetudinarian may contrive some properly suited to the Weakness of his particular Organs, or Limbs:

Limbs: But none of them will be of any great Efficacy, without joining a proper sweetening and diluteing Regimen. Exercise ought to be constant, uniform and regular as Diet, and to be pursued on an empty Stomach, at as great a Distance from Meals as is possible; not violent, nor long at a time, but orderly at proper Hours; and no more interrupted any long time than Food; not to Sweating, but to Warmth. I am greatly perfuaded Rideing is best for Digestion, for dispersing and opening abdominal and meseraic glandular Obstructions; but Walking is best for Nutrition, distributing the Chyle, and plumping up the Habit and Muscles. Violence and Obstinacy in Exercise of any kind, is destructive to Health, and has the same ill Consequences as all other Excesses.

ficians especially, have been so late in examining and discovering the great Benefit of mineral Waters of the several kinds. First Plants, Fruits, Seeds, and Roots, were tried for the Cure of Distempers; and in examining them, little else was necessary to observe but the Use the several kinds of Animals made of them for their Food or Physic, when ailing or aggriev'd: After that, Men observed what Effect the Juices and Flesh of several Animals had on some Constitutions and Disorders, for Food or Physic; then they practised

but

ais'd on the Minerals of all kinds, which was a most unnatural and unphilosophical Course of Medicins, at least when not infinitly levigated and refin'd; and even then scarce ever proper to enter an animal Body, or its delicat Meanders, at least humanly prepar'd; as we see by the brute Creation, which by no Art will ever be brought to fwallow them fpontaneously, even in Water for Drink. But to fit the Minerals, (even against the Intentions and in spite of Nature) the Tortures of the Fire in chymical Preparations have been found out and applied, which I am convinc'd have been more pernicious and destructive to human Creatures, either in its vegetable or animal, much more in its mineral Products, than Gunpowder itself; and all this Time the salutary Effects of the natural, or, I may fay, the divine Preparations of the mineral Tribe, combined, proportioned and divided infinitly in the several kinds of mineral Waters, have been overlook'd; and yet, I may fay, there is scarce a Mile square on the Surface of the Globe, at least not a Mountain or even Hillock, where there springs not up some mineral Water, fitted for the Cure of human Distempers in all the kinds of Medicin, Evacuant, Alterative, or Strengthening, if duely examined, and judiciously directed, especially if a proper Regimen of Diet were joined to them. And I think it Demonstration, that where there is a Hill or considerable Eminence, there must be a mineral Water, fince a Hill is nothing

but the Nest of some Mineral; but there will be requir'd Skill and Experience to fit them to the Disease and the Patient. I should hope, fince the infinit Variety of mineral Waters in his Majesty's Dominions, have been begun to be carefully examin'd, and their several Compositions, Natures, and Virtues, have been, with some Exactness, inquir'd into and found, if Temperance and Propriety in Diet were univerfally studied and recommended, the better fort of People might pass their Lives in less Misery than they commonly do; for I cannot but think the Author of Nature, who has so liberally provided for the Wants and Necessities of all his Creatures, (among which Want of Health is the most material and weighty for all the Ends of Liveing, in order to present or future Felicity) has appointed and marked out, by his own Signature, fome general one for this Purpose; and in fifty Years Study and Observation, I could never yet meet with any one that has this Mark of divine Appointment so glareingly as a low Diet in general, and in particular Cases a Milk and Vegetable Diet, or a Diet of very little animal Food, and common or mineral Water Beverage of one specific Kind or other, fitted to the Complaints and Symptoms. The Determination of the specific Mineral Water must be left to the Sagacity of the Physician in ordinary, and to the Kinds, Degrees, and several Stages of the Dif-

open

Distempers. But I think one or other may be easily found, that would greatly alleviat the Complaints of most Valetudinarians; and few or none of them are much hurtful in any Case, but what the Patient will readily find himself, or an ordinary Physician may diffinguish. The chalybeat mineral Waters are all Astringent and Invigorating, the falin all Evacuant, and the cretaceous all Alterative and Sweetening, and a Mixture of Principles has a compounded Effect.

§. 12. It is of the utmost Consequence, that such valetudinarian, wasted, thin Constitutions, breathe a good, kindly and benign Air. I have often had Occasion to mention of what Use and Necessity the Air is to attenuat, enliven and brighten animal Blood and Juices, as is manifest from the Difference. between the arterial Blood mill'd and clarify'd by the Air and its Nitre in the Lungs, and the venal Blood, which has not as yet gone through that Operation, or is stumm'd in its flow and remoter Circulation. A pure, clean, tepid, dry Air, saturated with a due Degree of volatil Nitre, and the Steams of odoriferous and sanative Plants, induces a Balsam and Liveliness on animal Juices, as is evident from the Difference between Summer and Winter, fair and cloudy Weather, on Animals of all Kinds; and therefore a Valetudinarian should chuse to live in an S 3

Northerly and Easterly Winds, of a moderate Elevation, or in a Medium between the Tops of the highest neighbouring Hills and the Surface of the Sea or Rivers; and have his Windows exposed to South or West, and his Bed-chamber ventilated by open Windows in the Day-time. The true Reason, Philosophy, and Benefit of all which is, with great Judgment and Elegance, explain'd and enforc'd by the ingenious and learned Dr. Arbuthnot in his Essay on Air.

§. 13. I HAVE been longer and more particular on this Distemper than any other, because it is a general one, includeing Scurvy, Scrophula, Atrophy, Phthisis, Gout, Stone, Asthma, and nervous Disorders of all kinds, in their last Stages, which are generally, one or other, the radical and fundamental Disease or Source of all chronical Distempers whatsoever, attended with an Atrophy. I have taken this Case in its last Stage, and worst State, and carried it on from thence to its Term, either in Death, or fuch a Degree of Recovery. and Health, as an hereditary Valetudinarian can expect, or rise to; which can never indeed be to the Force and Vigour of a Kite or Carrion-Crow, but to the Spirits of a chearful, joyful Nightingale or Lark: And I have labour'd it more, as to Perspicuity and Detail, than that of any other chronical Distemper, becaufe

cause it is the Lot of the brightest, most acute, and penetrating Genii, and because I intend it as a Model for all the more and less piteous Stages of this, or any other chronical Distemper; for slighter Symptoms and better Circumstances of this or these Disorders, will require less Time, Attention or Exactness in their Cure; for it is undeniable,

Quod potest majus, potest minus,

But here I beg the Reader to attend, that I by no means intend these Directions and Methods for the Strong and the Robust: Their Medicins and medical Operations, to do them any Service, must bear a Proportion to their own natural Strength, and the Obstinacy or Painfulness of the Distemper. This Method would be to fuch, like battering a Fort with Popguns.

#### CHAP. V.

Of the different Powers of Diet, and of the Diseases each Kind is capable to cure or eradicat.

Total Ass-milk Diet (about two Quarts a Day, without any other Meat or Drink) will, in time, cure a Cancer in any part of the Body, with mere common Dreslings, provided the Patient is not quite worn out before it is begun; or too far gone

in the common Duration of Life: And even in that Case, it will lessen the Pain, lengthen Life, and make Death easier; especially if join'd with small interspers'd Phlebotomies, Millepedæ, Crabs-eyes prepared, Nitre, and Rhubarb, properly managed: But the Diet, even after the Cure, must be continued; and never after greatly altered, unless it be into Cow-milk with Seeds \*.

- 2. Any Cancer that can be cut out, contracted and healed up, with common, i. e. foft, cool, gently astringent Dressings, and at last left as an Issue on the Part, by a Cowmilk and Seed Diet, ever after continued in, may be made as easy to the Patient, and his Life and Health as long preserved, as if almost he had never been afflicted with it, especially if under Fifty.
- gentle and frequent Phlebotomies, as Symptoms exasperat, a little Ipecacuhana or Thumb-Vomit, repeated once or twice a Week, chewing Quill-Bark in a Morning, and a few Grains of Rhubarb at Night, will totally cure Consumptions; even when attended with Tubercles, an Hamoptoe, and Hettic, in the first Stage; will greatly relieve, if not cure, in the second Stage, especially if Rideing, and

<sup>\*</sup> Vide Astruc de Re Venerea.

a warm clear Air, be joined; and make Death easier in the third and last Stage.

- 4. A TOTAL Cow-milk Diet, about two Quarts a Day, without any other Food, will, at last, totally cure all kinds of Fits, Epileptic, Hysterical or ApopleEtic, (which are all but Degrees or Symptoms of one general Disease, which I call Scorbutico-nervose, or the plain Scurvy, in its last Stage) if enter'd upon before Fifty: But the Patient, if near Fifty, must ever after continue in the fame Diet, with the Addition only of Seeds; otherwise his Fits will return oftener, and more severely, and at last cut him off.
- 5. A TOTAL Cow-milk Diet, without any other Food, will bid fairest to cure a Hamiplegia, or even a dead Palsy, and consequently all the lesser Degrees of a partial one, if enter'd upon before Fifty: And this Diftemper I take to be the most obstinat, intractable and disheartening one, that can afflict the human Machin; and is chiefly produced by intemperat Lechery, with its necesfary Attendant habitual Luxury. It may be retarded in its Progress by strong Vomits, Mercurial and fætid Gum Medicins, Air, Gestation, the Pilula Ethiopica of the Edinburgh Dispensatory of the last Edition, with Water Beverage, and Mineral Water, and cold or hot Batheing in the respective Seasons;

but is never to be eradicated, if the Stroke is deep, or Life far spent, but by Cow-milk only.

- 6. A TOTAL Milk and Seed Diet, with gentle Vomits before and after the Fits, chewing Bark in a Morning and Rhubarb at Night, with Phlebotomy about the Equinoxes, will perfectly cure the Gout, in Perfons under Fifty, and greatly relieve those further advanced in Life; even those who have chalky Nodes, and fix'd foints, especially join'd with Air and Exercise, and strong and constant Friction; but must be continu'd ever after, if such desire to continue well.
- of fweet Almonds, drunk about a quarter of an Ounce twice a Day on a fasting Stomach, or Soap and Egg-shell Pills, with a total Milk and Seed Diet, and Bristol Water Beverage, will either totally dissolve the Stone in Kidnies or Bladder, or render it almost as easy as the Nail on one's Finger, if the Patient is under Fifty; and much relieve him, even after that Age.

OF all these mentioned Cases and Cures, I have known or treated Instances, so that they may with high Probability, and medical Certainty, be depended on. The following are reasonable and probable, but not so certain, for want of sufficient Experiments.

8. A

- 8. A TOTAL Milk and Seed Diet, with cool Purges now-and-then, as of Manna and Cream of Tartar, or Glauber's Salt, with a Pill of the Pracipitat. per Se, or Pills of the Mercurius Alcalisatus, with Terebinthina Cocta, will, in fix Weeks or a Month, totally cure and eradicat any Venereal Diftemper in its first Stage, or while it is only term'd a Gonorrhæa Virulenta, without other Symptoms, if Bark and Rhubarb are chew'd for some time after, to consolidat and constringe.
- 9. A TOTAL Milk and Seed Diet, continued for fix or eight Months, will totally cure and extirpat Venereal Distempers in their second Stage, (when they may be called the Great Pox, with Bubo's, Cancers, and Cutaneous Defedations) if Pills of Pracipitat. per Se, or of Mercurius Alcalisatus and Gum Guaiac, with Dreflings of the Unguentum Neopolitanum constantly applied, be join'd and constantly persisted in dureing that Time, which may be done without keeping House, or Interruption of Business.
- 10. In those who for the last Stages of Venereal Diseases have unsuccessfully gone through a full Salivation, a total Milk and Seed Diet, long and strictly continued in, would certainly cure and eradicat the Distem-

per, if no other *hereditary* Disease be complicated with it: Whereas, in the common Management, a total *Cure* is seldom to be obtain'd, and thereby many are miserable all their Days.

- a Milk and Seed Diet, Quickfilver well purified half an Ounce twice a Day, Squill Vomits about new and full Moon, and after with the Squill Pills of the Edinburgh Difpensatory, might be totally eradicated; especially if a Southern Climate, and warm clear Air, were join'd.
- 12. In a painful and dangerous Pleurify, after a good part of the Size of the Blood has been drawn off by large Phlebotomies, and the Distemper, by faponaceous and oily Emulsions, with volatil Alcalies, is lessen'd; if a total Milk and Seed Diet were instituted and duely persisted in, the Blood and Juices would in time thereby be sweeten'd, and a Return, a Phthisis, and an Empyema, be effectually prevented.
- 13. A MILK and Seed Diet, with Vomits of Ipecacohana, and a few Grains of Tartar Emetic, repeated every new and full Moon; in the Intervals, Alcalifatus, and Guaiac Pills continued; and when the Blood is sufficiently attenuated, and the Obstructions opened,

opened, if cold Batheing, with vegetable Astringents, (Bark especially) were imploy'd to finish the Cure, and the same Regimen ever after continued; this Method, I think, would sooner, more pleasantly, and more dureably, cure and extirpat all kinds of Mania's, Phrensies, and Madnesses, (which are so shamefully frequent in Britain) than the common one of treating them with tearing Emetics, and scrapeing Cathartics, under the usual full strong Diet of animal Food, which does but add Fewel to the Distemper; and generally the Distemper returns in a greater or lesser Degree, to the Party or his Posterity.

14. In any Hamorrhage, either from the Lungs, Nose, Anus or Uterus, how violent foever, if after some repeated Phlebotomies to moderat the Flow, the Use of Eaton's Styptic in Bristol Water, or the Tinetura Rosarum, with Bark in Substance, Extract, or Decoctions, were freely administred, a total Milk or Seed Diet was ordered and duely profecuted, it would totally cure these Symptoms, would at last sweeten and balmefy the Blood and Juices, and prevent Returns. For all Hamorrhages are of the same inflammatory and acrid Nature, differing only according to the Part where the Rupture of the capillary Vein happens, and suppose a thick Curd, and a sharp Serum in the Blood.

- proceeding from a spoiled or obstructed Liver, a viscous or morbid Bile, or biliary Stones, which prevent the Separation of the Choler, and its Passage into the Intestins, by which means it is forced back into the Veins, is rarely and perhaps never to be totally cured and eradicated, but by a Milk and Seed Diet, frequent and active Vomits, saponaceous Emulsions, with volatil Alcalies, mercurial Plaisters on the Region of the Liver, Bath-waters, and constant Rideing. This Method, I know from Experience, will perform a total dureable Cure, and otherwise I never saw it effected.
- with fole Water Beverage, would at last cure and extirpat any Degree of the Scurvy, scorbutic Ulcers, and impostumated Glands, even the Lepra Gracorum and Arabum, or at least make them infinitly easier and better, if duely continued, and Atthiops Mineral, Cinnabar of Antimony, or the Aqua Argentea, were join'd to it in a long Continuance.
- 17. In every Chronical Distemper whatsoever, which always comes on gradually, with evident Symptoms, when it first seizes a Person, after Bleeding, a Vomit and a Purge, if the

the Patient abstain'd ever after from all fermented Liquor, and drank nothing but pure Water, cold or tepid, according to the Seasons, it would very probably cure him effectually, and secure against Returns, at least if this Beverage was continued, whatever his solid Food should be.

- 18. TOTAL Water Beverage, with some occasional Vomits, on Fits, and once a Week Hiera Picra, Tincture of Rhubarb, or an Anderson's or Russi Pill, Two or Three, will totally cure, and at last preserve from Returns, in any bilious Colic, let the solid Food be almost what it will. This I have always found certain, in Persons of a tolerable good Constitution, not too far gone in Life.
- and lessen the Violence of the Fits of the Gout, keep them long moderat and regular, and preserve Life, Limbs, and Spirits, perhaps as long as the Constitution was made to last, whatever his solid Food should be: And the same is true of the Rheumatism, after the Fits are lessen'd by the Means afore directed; for the Gout is but a topical Rheumatism.
- 20. FISH, in general, is not near so high and inflammatory as Flesh, unless they are exalted with high and rich flesh Meat, and spicy Sauces; though some kinds of Fish, as Salmon,

Salmon, Carp, Sturgeon, Lamprey, &c. are higher than Mutton, Veal, Lamb, and Chicken.

21. OF all others, a total Ass-milk Diet is the coolest, most sweetening, and restorative possible: Next to it, is Cow or Goat-milk Whey, if not too flatulent or purgative. Cow-milk, boil'd or raw, for the whole Food, is next in Degree to those. Farinaceous Seeds (as being young Vegetables without much Wind or Salts) are in the fourth Degree of Diet. To these succeed in the next Degree, the farinaceous Roots, as Turneps, Potatoes, Parsnips, &c. but are more flatulent and windy than Seeds. Higher than these are the Pot-berbs and Salladin, but still more flatulent, even when much boil'd, especially with the least Butter. The highest of all vegetable Foods, are the Fruits, especially the late Fruits, even Apples or Pears; for all these are vinous, almost as much as the Grapes, which Grapes will fuddle and madden Apes \*, as much as Wine or Spirits will human Creatures: For it is a Mistake to think, that nothing but fermented Liquors will fuddle and inflame animal Juice. The Juice of any vinous Vegetable, even unfermented, too plentifully fwallow'd, will quicken the Pulse, and so intoxicat Animals of very elastic Solids: For

<sup>\*</sup> Vide The History of the Cape of Good Hope.

neither Fermentation nor Distillation makes Wine or Spirits; they only congregat them, as a Burning-glass does the Rays of the Sun; they are still Lancets with a slight and thin Sheath.

- 22. HALF, or even a whole Pint of old defecated Wine, with half or even a whole Pound of any kind of Fish or Flesh, to the Young, Strong, and Laborious, with the common Appurtenances of Bread, light Pudding, or Tarts, in Twenty-four Hours, (perhaps best divided into two Meals) with vegetable Foods for Breakfast and Supper, will preserve the Young and Healthy till Forty.
- 23. LEAVING off Flesh-meat Suppers with Wine, and eating only one moderat Flesh Meal a Day, will probably preserve any Person, not labouring under any chronical Distemper, in good Health, for the first seven Years after, before Fifty.
- 24. If a Man after Forty, though in perfect good Health, begins not to study Regimen, and manage his Diet, at least in Quantity, I conclude him neither *Physician* nor *Philosopher*, let his other *Talents* be what they will; for he thereby trusts the Duration of his future *Life*, *Health*, and worldly *Happines*, to mere *Casualty*, and blind *Chance*, as they are called.

- 25. MILD, soft, middling Malt Liquor is infinitly fitter for all British Constitutions, whose Appetit and Digestion is as yet tolerable, than any kinds of Wine, either Foreign or Home-brew'd; it will prevent the Stone and Gout, and almost all kind of Instammations, and is far best for carrying on Old Age.
- 26. PROPER and well-tim'd Evacuation only, lessens Distempers, and gives a tolerable Degree of Relief under them; as it removes Impediments, and gives room for specific sweet Juices from the Chyle of proper Food to be receiv'd into the Habit, to dilute and cool the vitiated Blood and Juices.
- Ponderose, and the mineral Astringents, much less the cordial, volatil, and aromatic Tribe of internal Medicins, do but very little towards the perfect Cure or Extirpation of any natural or internal Distemper. They may relieve, give a short Reprieve, throw a little Weight into the Balance on the Side of the Cure; and so are not to be totally slighted, especially in acute Cases; but the substantial and momentous Part of the Cure lies here: Nature has so contrived the Animal Machin, that the Outlets of Export ariseing from Action, Exercise, and the Performance of the Animal

mal Functions, are perpetually changeing and altering the whole Machin, Fluids and Solids, either into Better or Worse, and in a few Years perform it: But the Orifice of this Animal Machin being larger than the Sum of all the Outlets, if Care were taken, that in that time nothing should be receiv'd by the Orifice but what were in its own Nature foft, cool, kindly and found, Time and Nature would preserve the Animal in Health, as long as the Materials of it were made to last; fo that almost the Cure of Diseases is brought to fuch a Problem as this:

- 28. A Vessel full of a Lixivium, or gross Fluid, being given, which discharges itself by several Outlets at the Bottom, whilst an equal (or perhaps somewhat a larger) Quantity of fresh Water flows into it from above, to find the Time when the lixivious Mixture remaining fhall be less than any given Quantity.
- 29. Some perhaps may controvert, nay ridicule, the Doctrin laid down in these Propositions. I shall neither reply to, nor be moved with, any thing that shall be said against them. If they are of Nature and Truth, they will stand; if not, I consent they should come to nought. I have satisfied my own Conscience; the rest belongs to Providence. Possibly Time and bodily Sufferings may justify them; if not to this Generation, perhaps

haps to some succeeding one. I myself am convinced, by long and many repeated Experiences, of their Justness and Solidity. If what has been advanced through this whole Treatife does not convince others, nothing I can add will be sufficient. I will leave only this Reflection with my Reader, viz. That all Physicians, antient and modern, allow that a Milk and Seed Diet will totally cure before Fifty, and infinitly alleviat after it, the Con-Sumption, the Rheumatism, the Scurvy, and the Gout; these highest, most mortal, most painful, and most obstinat Distempers: And nothing is more certain in Mathematicks, than Quod potest Majus, potest Minus; or, what will cure the greater, will certainly cure the lesser Distempers; since it is self-evident, that all bodily Diseases arise from corrupted Juices, and spoil'd Solids.

#### CHAP. VI.

Rules for preventing Infertility in both Sexes, and Miscarriages in the Female Sex.

Perhaps, where great and opulent Families sooner become extinct, or change Lineage so quickly, as they do in England; or where such Devastation of the Female Sex, especially among those of Rank and Condition, is made by Abortion and dangerous

gerous Child-bearing; and no-where is Man-Midwifery fo necessary and profitable a Profession. This Misfortune appears not to the Poor, the Necessitous, or those of the middling Rank; for no-where is there a finer or more numerous Posterity, than among the Highlanders of Scotland, or the native Irish; but to those who have all the Conveniencies and Delicacies of Life in the greatest Plenty and Perfection; and if these have Posterity, they are often deformed, diseased, stunted and short-lived. This therefore can happen only from the Difference in their manner of Living and Feeding; unless we should say, that impartial Providence compensates the want of some Conveniencies to the poorer, by more confiderable Advantages in another way.

2. It is certain nothing can produce Fertility in either Sex, but what promotes perfeet Health: Nothing but good Blood, Spirits, and perfect animal Functions, that is, high Health, can beget perfect Fecundity; and therefore all Means and Medicins, all Nostrums and Specifics, to procure Fertility, different from these, which produce good Blood and Spirits, are arrant Quackery and Cheating. This is evident from the brute Animals, who never can procreat, till they are healthy, gay, and active; and therefore the Rules I have adduced in the former Part T 3

of this Treatise, for promoting or recovering Health, may, to Persons of a proper Age and Circumstances, be looked upon as so many Rules for promoteing Fertility.

3. I THINK it is now pretty evident, to every unprejudiced Person, who is ever so little acquainted with the best natural Philosophy, and the latest Discoveries in natural History, with the Uses of the respective Organs, in the different Configuration of the Males and Females, together with the plainest and most certain Laws of Analogy, that the Principle of Generation, or the infinitestmal Corpuscle of the Animal, is in the Male; and that the Female is only, as it were, the primary Nurse to it, furnish'd with a proper Nidus and the specific Nutriture for it, for a certain Time, till it has acquired Strength enough to bear its own proper Element; which State it no sooner attains to, than it breaks its Prison, and escapes. This is the Use of the different Configuration of the Sexes when divided; and an analogous Provision for the same Purpose is provided for those hermaphroditical Animals, whose Situation and Nourishment makes it necessary they should be so. No Sperm hitherto examin'd by the Microscope, after Liquefaction, but discovers these infinitesiminal Animalculi many Millions of times less than the smallest Hair, liveing, moveing and playing in the pellucid

pellucid Fluid; and if it is not so, no Generation ever follows. These Animalculi we may justly suppose to have been originally form'd by the immediat and omnipotent Word of the Author of Nature; no second Causes whatever haveing either Skill or Power enough to produce them in this their infinitesimal Parvitude, and to be contain'd within one another in a similarly decreaseing Proportion, back to the first Pair; and originally lodged in some convenient Cells, near the prostate Glands, or in some of the Appendages of the Testes, analogous to the Place of the Ovarium in the Female, till the Male has acquir'd fufficient Vigour and Balm in his Blood and Juices, to fecern a proper foft Fluid with a fine volatil Salt, to transmit them into the Vesicula Seminales, and thence to their second Stage of Existence, the Female. Their Multitude is only to secure against the possible Chances of some one or more not getting through the Uterus by the Tubi Fallopiani into the duly prepared Ovum, there endow'd with a convenient Nidus and specific Nutriture, to increase them gradually to their due Magnitude and Strength, fo as to be able to bear their proper Element. Equivocal Generation, by many repeated Experiments, has been proved false beyond a Reply; and the impregnated Ovum, with a seminal Animalculum in it, has been traced through the Tubi Fallopiani from the Ovarium to the Uterus. T 4 Leu-

Leuvenhoeck, in numberless Sperms of different Animals, (if healthy) has constantly observ'd by his Microscopes, these Animalculi, with all the Evidence and Certainty of the Senses; and Malpighi has discovered in Hen-Eggs, the daily gradual Progress of the Cock-tread, from its Punctum Saliens in the big End, till it broke the Shell in a perfect Chicken, and accurately described all its Appearances; none of which was to be found in those which were set a Hatching without the Concurrence of the Male. After fo many and accurat Experiments made by Naturalists, there can remain no Difficulties in this System, with those who fully understand the infinit Divisibility of Matter, or whose Imagination is not very gross, vitious, or limited.

4. If this System be the true one, as I certainly think it so in the main, it will be very evident, that Luxury, intemperat Lechery, inflammatory and bilious Blood and Juices, may destroy and kill these Animalculi in their primitive Cells, or the Heat and Acrimony of the Fluid, in which they are transmitted, may burn them up, before they reach their proper secondary Station. With the luxurious and hot-headed Males, this is almost constantly the Cause of Infertility, though the Blame is commonly laid on the more temperat, cool and healthy Females. It is certain

tain from Philosophy as well as Observation, that sole Water drinking Males are very rarely infertil. I remember Dr. Taylor, the Milk-Doctor of Croyden, (whose Case I have narrated in the English Malady) pointed out to me two or three opulent Families in his Neighbourhood, who after Marriage had continued feveral Years without Posterity, and were extremely folicitous about it; and whom in two or three Years time, he had brought to have feveral fine Children, by keeping both Parents, all that time, to a total Milk and Seed Diet. This he most solemnly averr'd to me, and we know, that even old Homer had observ'd, that the Feeders on Milk were the honestest of Men.

Γλακτοφάγων 'Αβιών τε, δικαιοτάτων άνθεώπων.

5. I own in this Case, I am much more concern'd for the Female than the Male Sex. The Males having stronger, but coarser, both Bodies and Faculties, by their Licentiousness and Luxury, often bring on their own Sufferings, and bodily Misfortunes; whereas the Females in general, having weaker, but more delicat and pliable Bodies and Spirits, and tied down by Custom, and the Tyranny of Men, to many Restraints, (which Men infolently despise) are more temperat, abstemious, and modest; and suffer at least in this Life, infinitly more in the Oeconomy of Childing than Men; not only from the Pains and

negu

Anxi-

Anxieties of Breeding and Child-bearing, but from the innumerable Accidents of Miscarriages, and being subject to the Wildnesses and Caprices of debauched Husbands; by all which they often ruin their Constitutions, and shorten the Duration of their Lives; and, at best, pass through a much more severe State of Purification, than Men, for the general, do; and yet, if I were called upon, I could take my Oath, if there be any thing real or valuable in Virtue, that in the Compass of my Acquaintance, (of the same Degree of Virtue, or Freedom from Vice) I have known ten good Women, for one equally good Man; though I own an abandon'd Woman is extremely bad; for Corruptio optimi est pessima. The Design of this Chapter is solely to fuggest to that more innocent and delicat Part of our Species, all that comes within the Compass of my Experience, Observation or Knowledge, to cure or relieve the several Disorders or Inconveniencies that attend them in this State of their Lives.

6. It is a common profane Joke, of ignorant and low Wits, upon the Hysterical, and green biliary Complaints of the Sex, that Concubinage or Matrimony would be the best Remedy for these Disorders: But these kinds of Sneerers understand as little of Nature, as they do of Religion. Tender young Females, with hysterical and green biliary Complaints, upon

upon Conception, during the time of their Pregnancy, may sometimes, at least as they grow big, get better Appetits and Spirits, from the long precedeing Inappetency, frequent Reaching, and from the Fætus drawing off the Superfluity: But, alas! this will be but a short and precarious Reprieve; for after Child-bearing, or, what more generally happens, after an Abortion, the same Symptoms return with doubled Violence; and when they begin to miscarry, they generally go off in a Decay, a flow Fever, Fits and Convulsions; whereas, had they forborn Matrimony till they had mended their Constitutions, by the Rules laid down in the fourth Chapter of this Part of the Treatise, (being supposed young) they would have ever been free from the mentioned Inconveniencies.

7. I HAVE hinted at the chief Source of Infertility in the Male Sex, which, besides Accidents and a Mal formation, is chiefly owing to the Luxury of the Individual himself, if he has been born sound, or has not deriv'd corrupted Juices from his Parents: In all which Cases, nothing will restore Fertility, but what mends the Constitution, the Rules for which I have laid down, with great Plainness, in this Treatise. The Infertility of the Female Sex is owing to one of these three Causes. 1. A too great Flux of the Menstrual Purification, for which the proper Cure

Cure is directed above, under that Symptom. 2. From too small a Flow of the same, (which, I think, in a Medium, ought to be about two Ounces) for which also the Remedy is suggested under the Head of Obstructions: Or, 3. From a Weakness that happens in the Intervals of the Menstruations, called the Fluor Albus, described and prescribed for above likewise. Frequent Miscarriages attend all these three Causes, often at all times, but most commonly between the third and fourth Month, when the Weight of the Fætus is too great for the contractive Powers of the Uterus, whereby it is forced away before its due Time; which is a plain and manifest Symptom of tender and relaxed Nerves and Solids in the Mother, and which ought to be a Warning to both Parents, to set about all possible Means to strengthen and brace the Solids, at least of the Mother, in order to prevent the future Progress of this Imbecility; which Means, the best known to me, and the most rational and successful I have observed or read of, I intend now to suggest.

8. When a married young Woman begins to miscarry naturally, and without any Accident, she rarely goes on after to the full Time, but miscarries regularly every three or four Months, till either she gives over Breeding, or is cut off by the Frequency of the Miscarriage, and its Consequences. In which Case,

Case, were there no other Reason, as soon as it can be safely done, she ought to be blooded fix or seven Ounces, out of a large Orifice at the Arm, to examin into the State of the Blood and Viscera, and if the Curd of the Blood be found sizy or liverish, (as I could venture my Life it will in such a Case generally be) she will never bring a Child to its full Time, whatever the Appearances of Health in the Mother be otherwise, till the Blood be thinned and balmified, which can only be done the soonest, by little Phlebotomies, (of about two Ounces) every Month immediately after the Menstruation; the mild Ponderose, Cinnabar especially, twice a Day, about 40 Grains or more for the Dose, wash'd down with Asses Milk or Orange-whey; good Hours, gentle Exercise, a white Meat Diet, with a little French Claret in Bristol Water, Milk-porridge only for Supper, cold Water Friction, and the other Rules formerly given for braceing tender Nerves, and mending bad Juices; which will be sooner effected in the Young, as these must be. By this Method I have often cured Infertility in the Sex, and prevented Abortion, and improved their Constitution, when the Blood and Constitution has not been very bad. But upon this Examination of the Blood by Phlebotomy, if the Curd is found to be thin, waterish, and too foft and spungy; then real Cold-batheing long continued, vegetable Astringents, the Bark especially,

cially, drinking Tunbridge or Spa Water in the proper Season on the Spot, will be found to succeed best.

9. BUT if the Constitution be so weak, lax and delicat, that even this Method will not carry them on to their full Time; then nothing is so likely to do as fole Water-drinking: Common Water, with a little Milk, and tepid Spa or Bristol, and animal Food, the youngest and lightest, and at Noon only, and Milk Meats (Ass's or Cow's) for Breakfast and Supper, during the whole Time of their Pregnancy. Wine and all fermented Liquors, give too great a Velocity to the Blood, push it onwards with too strong a Momentum, force open the uterin Vessels, and drive off the Placenta from the Fund of the Uterus, by opening the Sphineters of the menstrual Flux; so that the Fætus must necessarily come off, which is never to be retain'd by Art or astringent Medicin, after the parturient Woman finds a Tendency in her Bowels to part with it. All that can be done then, is by gentle Forcers or Volatils, together with foft Oils and Balsamics united to mild Opiats, to quiet Nature; and leaving her to her own Play, patiently wait her Time and Manner; for, to use Astringents in such a Case, is like setting the Room on fire, and locking the Door.

10. IF this Method should also prove unsuccessful to procure Fertility, and prevent Abortion in tender young married Women, as it often does in those who are tolerably healthy; a total Milk and Seed Diet, rigidly continued for a Year or two, cannot fail; especially if due Care of the other Non-naturals be added, half a Drachm of the Bark be chew'd and swallow'd in the Morning and before Supper, or Pills be made of the  $E_{x-}$ tract to the same Value, and once or twice a Week ten or fifteen Grains of Rhubarb be taken over Night, during all the time of the Pregnancy. I have feen the finest Children come, under this Regimen, I ever beheld; and I am fully perfuaded, if any thing in Nature can prevent Infertility, and bring fine Children, it is a Milk and Seed Diet, continued both by Father and Mother, till the Effect be produced. This Regimen secures the Health of the Children, if they come, it being the same, Nature puts them under as soon as they fee the Light; and cures all the Disorders they may happen to receive from diseas'd Parents in their Formation; and if it does not cure the Infertility of the Parents, it certainly mends their Health and Constitution.

II. BUT if the Desire of Posterity, so natural to young-married Women, should not prevail with them to enter upon this cool, soft, wholsome Regimen, I mean a total Milk

Milk and Seed Diet; yet there is one Argument which I think could not fail in that Sex, which is, that I can affure them upon my Credit and Veracity, that it is the only Method known or knowable to Mankind, to preserve and improve the Beauty, Cleanness and Sweetness, of the Tender and Delicat, far beyond Quicksilver, which the Mothers of the Georgian Daughters give them, to improve their Beauty, for a long time, before they enter in the Seraglio's of the great Men of Afia. These young Ladies, who are so anxious to preserve their Faces, Complexions and Shape, that they often endanger their Healths and Lives on that Score, will find this Regimen far beyond the Paint and Spanish Rouge and Colouring, (which always at last destroys the Delicacy of the Skin, and the natural Beauty) and yet is so universally practis'd now for that End. Scorbutical, Icteric, and Biliary Constitutions, may for a while look pale, languid, and fallow, under such a Regimen; but in time all these mortifying Symptoms will evanish, and an inimitable Bloom, Blush, and Brightness, will fucceed, infinitly beyond all the Colouring of Art or Paint. There is no Beauty like the Bloom of Nature in perfect Health: Such a Regimen duely continued, heightens the Scarlet of the Blood, sweetens and thins it, so that it is able to circulat freely through the transparent Scarf-Skin in its least and last Capillaries and Meanders; and at the same time thins, fmooths,

smooths, and renders the Cuticule so transparent, that the Vermilion Blush, and its own natural and healthy Whiteness, becomes perspicuous. This I most certainly know, not only from Reason and Philosophy, but from repeated Facts and Experiments, haveing recovered, preserved and improved by this Regimen duely continued, the Beauty of some of the finest Women in England. But they must not be discouraged, if upon short Trials the Effect is not produced, for at first it may happen quite otherwise: But let them have but Patience and Perseverance, I will venture my Fortune and Life on the Success at last. Had Agrippina, who every Day bathed herfelf in a Tub of Ass Milk, to preserve and increase the Smoothness, Softness, and Delicacy of her Skin, made this, or Cow's Milk with farinaceous Seeds, her only Food, and with this had fomented the Insides instead of the Outsides of her Vessels, she had accomplished her Purpose with infinitly greater Efficacy and Success. But what need of Arguments to prove this Fact, since every one's Senses can witness to the Beauty and Comeliness of healthy young Children, and Dairy-Maids, who are fed mostly after this manner?

12. If a married young Lady under a common temperat Diet, should find herself apt to miscarry, besides avoiding as far as she can, all Surprizes, Frights, and shocking Sights, all violent

Kind, it would help her much, if she lost about two, at most three Ounces of Blood at the Arm, near about the time she used to be out of Order, at least for the first three, or four, or sive Months, after she has reason to believe she is breeding, which the first missing her Ordinary, ought to certify married young Women; by which so safe and small a Loss of Blood, its Force and Momentum downwards will be abated, and a Miscarriage prevented: But Care should be had, that this small Phlebotomy be not carried on after the fifth Month; for then the Danger of Miscarriage lessens, unless it be by Accidents.

13. Young married Women, on breeding, generally after missing the first Return, are very apt to turn sickish in a Morning, reach, and throw up waterish Phlegm and Choler, especially if they have been plentiful and free Feeders, which often forces an Abortion. I know no Remedy so effectual for this, as the Thumb-Vomit above described, which, without Violence, discharges the Stomach of this superabundant Phlegm and Choler, and ought to be daily, and every Morning, repeated, till this Symptom ceases: Half an Hour after, drinking a small Glass of tepid fresh Spa-water, with ten Drops of Elixir of Vitriol, and at Night, at least two or three Days in a Week, taking ten or twelve

twelve Grains of Rhubarb, wash'd down with a Glass of the same Water, with a Spoonful of Claret: These ought to be continued during all the Time of this breeding Sickness.

- 14. A TEA made of Jesuits-Bark, Misleto, Orange-peel and Cinamon, on Bristol-water, three, four, or five Spoonfuls of this, taken two or three times a Day, on an empty Stomach, is an excellent Cordial against the Lowness of Spirits common to breeding Women, and also an excellent Antidot against Miscarriage; or an Ounce of Bark and Rhubarb, with a Drachm of Salt of Wormwood, infus'd in eighteen Ounces of French White-wine, Arain'd and filtred, four Spoonfuls, more or less, as it operats downwards, is an excellent Remedy, taken every other Night, both against the Sickness incident to breeding Women, and also against Abortion, and prevents too obstinat Costiveness, which is often the Cause of it.
- nel, and after washing the whole Body over with tepid Water, before a good Fire, the Rupture-plaister kept constantly to the Back, a broad Girdle of Cotton applied about the Middle, good Hours, chearful Company, and, in a Word, every thing that is proper to promote Health and good Spirits, ought to be attended to, by tender and delicat Breeders;

for one Miscarriage hurts the Constitution, and weakens the Nerves, more than two full Births.

16. It is a vulgar Error to confine tender breeding Women to their Chambers, Couches, or Beds, dureing all the Time of their Pregnancy. This is one of the readiest ways to make them miscarry; it is like the common Advice of some unskilful Persons, to such as have anasarcous or dropsical Legs, viz. to keep them up in Chairs on a Level with their Seats, which is the ready way to throw up the Humours into their Bowels, and fix them there. The only folid and certain way to prevent Miscarriage, is to pursue all those Means and Methods that are the likeliest to procure or promote good Health, of which Air, and gentle Exercise, is one of the principal. All Violence or Excesses of every kind are to be carefully avoided by the Parturient; but fresh Air, gentle Exercise, walking, being carried in a Sedan or Chaise, on even Ground, is as necessary as Food or Rest; and therefore is never to be omitted, when the Season will permit, by tender Breeders. If these Rules, judiciously applied, and strictly followed, will not prevent Infertility and Abortion, I fear nothing will.

#### CHAP. VII.

Rules for obtaining and preserving Health in the Decline of Life; or for securing a Green Old Age.

I. A S there are few Individuals, who have not sufficient Reason to conclude, that at about the Age of Forty-five, or Fifty, they have passed the Meridian of Life, and are stepping down Hill; the whole Space of Time (be it more or less) which is allotted to them between this Season of Life and the Hour of Death, will, by a reasonable thinking Man, be called Old Age. It is, as it were, the Twilight of Life, or a second Childbood, with this effential Difference however, from the first Infancy, that in This the Faculties and their material Organs are uncultivated, unextended, and want their Perfection; whereas in this Second, the Faculties and the Senses likewise may, by a wise and prudent Oeconomy, be supported to the very last Stage of Life, in Vigour proportionat to their earlier Cultivation and Improvement; and hence it is, that I call Old Age the Twilight or Evening of Life; and, to carry on the Metaphor, I further observe, that if the earlier Years have been spent in Health and Innocence, this Evening, like that of a Summer's Day, will be calm and serene.

ferene, nay sweeter and more delightful than the precedeing Day.

- 2. Were our Views to be carried no further than the narrow Circle of seventy or eighty Years, this Calmness, this Serenity, so much to be wished for, would surely invite every thinking Man, who had his own Happiness in View, to step forward in that Path of Life which Nature itself has evidently pointed out to him; and if we carry our Ideas beyond this narrow Circle, and contemplat a future Existence, is it not Madness to deviat from a Path which leads to an happy Eternity?
- 3. The irksome Experience which I have had of Multitudes of thoughtless unhappy Individuals, who by their Folly and Luxury have weakened the primary Powers of Nature in their own Constitutions, who without any severe Chronical Distempers or Accidents have, as it were, wilfully made themselves wretched, is a sufficient Call to me, to point out to my Fellow-Creatures the best Rules, which I am capable of laying down, for obtaining and preserving Health in the Decline of Life, a lively rational Head under Silver Hairs, and a vigorous active Heart to animat even a feeble decaying Trunk.

that of a Summer's Day, will be calm and

(crene,

4. Now one of the most effectual Me. thods which a wife Man can purfue, in order to obtain the Blessing of what I call a Green Old Age, is to begin at least at the Age of Fifty, to lessen his daily Sustenance of Meat and Drink, both in Quantity and Quality, but especially in the first. I have, in my Essay on Regimen, demonstrated that about this Time the great Crise or Climacteric of Life generally happens in both Sexes. Then it is, that the Blood and the Juices of the most Healthy and Strong begin to cool, to thicken, to become vapid, and to be obstructed in the Capillaries and Lymphatics; many of which Vessels, by such Obstructions, coalesce and become cartilaginous, the Perspiration is lessened, all the several Secretions are rendered less perfect, all the Solids grow stiff and hard, and lose their Elasticity, and the Circulation is gradually reduced into a narrower Compass, approaching still nearer and nearer to the Trunks of the Blood-vessels, or their first Branches.

5. AT this Time it is, that an observant wise Man will discover, that his Vigour is past the Meridian, and begins to decline; and this Discovery will distate to him a Necessity of takeing fuch Meafures, as may render the Progress of Old Age as slow as his Nature will admit of; and such as may contribute

ness, and the Preservation of his Senses, and his Faculties, in all the Persection that can reasonably be hoped for.

- 6. Now I am perfuaded, this desireable End cannot, by human Means, be attained, without a gradual Diminution of his Meat and Drink, and this both in Quantity and Quality, especially in the First; and this is a Rule which must be practised by the Man who is turned of Fifty, and is defirous of living to Seventy or Eighty. It must be strictly and uniformly purfued, and he must resolve to be deaf to the Calls of craving Appetites, which, at this Time in Life, are ufually so depraved by Prejudice, Example, and Excess, that their Judgment is false, and their Dictates destructive, when they point out the Quality, or direct the Quantity, of his Food.
- fingle Instance, amongst Men of Rank and Affluence, of a long Life, high Health and Spirits to the last, secured these valuable Blessings by the mere Force of Regimen, even after a luxurious, and consequently an unhealthy and dispirited Youth. At Forty, he began to curb his Appetites, and to manage his Diet, which, after several Essays, he fixed at twelve Ounces of solid Food, and sourteen

of Wine, in twenty-four Hours; from this Time, (viz. the Age of Forty) gradually lessening his Diet, till he reduced it to the Yolk of an Egg (i.e. about an Ounce of folid Food in twenty-four Hours, and probably did the same by his Wine). He enjoyed a perfect State of Health, and was at the same time happy in high Spirits to the Age of an Hundred, or, as some Authors say, an Hundred and Twenty: A very extraordinary Instance this, in a Man of Cornaro's Rank in Life, who had in his Youth indulged in high Food, and rich Wine. Now it is highly probable, that from the Time of the first Reduction of his Food fo, at the Age of Forty, he must gradually have lessened the daily Quantity, about two Ounces every ten Years, till he had at Length reduced it to an Ounce a Day. The happy Result of this gradual Reduction shews, that he must naturally have had very strong Solids: For I am quite per-fuaded, that if instead of this stinted Quantity of animal Food, he had, at the Age of Forty, confined himself to Cow's Milk and Bread, to Vegetables and Water only, he might probably have lived to a much greater Age, with a clearer Head, and higher Spirits; for the sovereign Method of prolonging Life is to preserve the Blood in a thin, sweet and balmy State, by which only the Circulation can be kept sufficiently extensive and full, through the various Meanders of the Capillaries,

laries, and all their delicat Circumvolutions in the Glands: For natural Death by reason of Age only, is the necessary Result of thickening the Blood, which gradually lessens the Extent of, and finally stops, the Circulation, even in the Trunks of the Vessels.

- 8. IT is now about fixteen Years fince, for the last time, I entered upon a Milk and vegetable Diet. At the Beginning of this Period, this light Food I took as my Appetite directed, without any Measure, and found myself easy under it : After some time, I found it became necessary to lessen the Quantity, and I have laterly reduced it to One half at most, of what I at first seemed to bear; and if it shall please God to spare me a few Years longer, in order to preserve in that Case, that Freedom and Clearness which by his Blessing I now enjoy, I shall probably find myself obliged to deny myself One half of my prefent daily Sustenance, which precisely is three Winchester Pints of new Cow's Milk, and fix Ounces of Biscuit made of fine Flour without Salt or Test, and baked in a quick Oven.
- 9. MODERAT Phlebotomies to such as can bear them without Fainting or great Lowness, especially such as have ever by a common temperat Diet preserved a robust Constitution, will greatly assist in procuring a Green Old Age; for Death (as I have already

observed) overtakes the temperat Man lento pede, by flow and gradual Advances, by thickening from time to time the Juices, viz. the Curd and Serum of the Blood, and thereby obstructing first the Capillaries and Lymphatics, and then the first Branches, and lastly the Trunk Vessels themselves. Now moderat and frequent Loss of Blood keeps the Vessels always roomy, and draws off more of the thick and viscid Juices, and in a greater Proportion than of the fluid and good Blood, as I have before shewn.

10. IF proper, light, and wholfome Food, fuch as is easily digested, be taken in the smallest Quantities that can prevent the Anxiety of Hunger, the kindly Chyle from thence drawn will keep the whole Mass of Blood cool, thin, and fweet, longer and better than any other Method of Diet, which, in my Judgment, Art can suggest. Now in order to render this Regimen easy and familiar to the Patient, he should enter upon it at the Age of Fifty, at least before he is Sixty, that the Change from higher Feeding may not be attended with Fainting, or too great Lowness. I have at this time a Patient upwards of Eighty, in perfect Health and Serenity, who yet has ever been of a delicat and tender Constitution, whose present easy and happy State seems to be the Consequence of drawing seven or eight Ounces of Blood about

once in two or three Months; and in Fact, I have found, that frequent moderat Phlebotomies, (for Instance, once every Quarter of a Year, or at least in the Spring and at Autumn) when they can be borne without Faintings or subsequent Lowness of Spirits, will greatly contribute to the Preservation of Life, and afford a reasonable Prospect of a green and serene Old Age.

11. ANOTHER Method of procureing these Blessings is to promote and encourage Perspiration. Now in old Men, from the Weakness and Slowness of Digestion, by a Contraction of the Chanels for Circulation, (many of the smaller Vessels becoming solid) and by a consequential Laxity of all the motive Powers, the Perspiration gradually decreases, the Skin grows dry and stiff, the perspiratory Ducts are closed; and hence come Wrinkles in the Skin, and Paleness in the Face. Now the Encouragement of Perspiration in every safe and proper Way, is the most likely Method of preventing (or at least of retarding) these Effects of Age; and this may be done by frequent and powerful Friction over the Body, the Limbs, and Spine, (especially in the Morning and at Night) with a Flesh brush, a rough dry Towel, or a Piece of warm Flanel, afterwards washing, in the warm Seasons, with a Towel wet in cold Water, and in the colder Seasons, in warm

warm Water. Let this be done before a clear Fire, and let the Patient after such Operation put on a Cotton Waistcoat next to his Skin. But nothing will so effectually prevent this, as a total Milk and Seed Diet.

- me, as conducive towards a green Old Age, are these, viz. In cold Nights, half a Pint of warm small Sack-whey, with forty or sifty Drops of Spirit of Hartshorn, taken at going to Bed—a Pill, two or three, of true Assaction which is to be felt the ensuing Night—in want of due Rest, these, or a Drachm of Mithridate, or half a Drachm, or forty Grains of old Venice Treacle, or Sir Walter Ralegh's Cordial, wash'd down with warm Sack-whey.
- 13. It will be highly beneficial to use all such bodily Exercise as a Man in Years can with Sasety bear; an Horse, whilst his Strength is equal to it; afterwards a Chaise or Chariot, in good Weather, or in bad let him walk an Hour in the Morning, the same in the Evening before Sun-set, and let his Walk be taken in a sheltered Place. Those who are unequal to these Exercises, may, however, use the Tremoussoir, (or Chamber-Horse) a dumb Bell, or an Hammock: For Exercise, in some Shape or other, must be had; and this may be adapted to the Time of Life, and the different Stages of a natural and necessary Decay.

14. To promote the great Point in View, a chearful healthy Old Age, nothing, in my Judgment, can more effectually conduce, than a serious Attention to the gradual Advancement of these Stages in Life, and a proportionat Regulation of Diet; and hence will it be highly adviscable to drop, by Degrees, folid Food, and to flide into Liquids only. The stronger animal Food may, at first, be succeeded by weaker, fuch as Chicken and Veal. These, in Process of Time, must give way to thin Broths made of Vipers, with Veal or Chicken; which must at length be laid aside for vegetable Soups, (made with little Butter) and finally, half a Pint of Ass Milk for Breakfast, the same for Supper, and a Quart of sweet Cow's Milk for Dinner, will, upon Experience, be found to be a Diet calculated to prolong Life, keep the Head clear, the Spirits free, the Perspiration tolerably full, and Circulation pretty extensive: And if this very abstemious Regimen is not strictly pursued, and craving Appetites must have some Indulgence; in such Case, the lightest and the least Food, which can prevent the Uneasiness of Hunger, will be found to be a rational and almost certain Method of procureing uninterrupted Health, and a green Old Age.

of obtaining these Blessings, is to go to Bed, and

OI WIT

and to rise from it, early; the first by Eight or Nine o'Clock in the Evening, the latter by Six in the Morning, during the Summer Season, and at Seven in the Winter; and the Prudence of fuch Practice will appear, when it is considered, that at Night the Air is generally damp, heavy, full of nitrous, arsenic and noxious mineral Particles, which being specifically heavier than its other constituent Parts, gravitat and descend the soonest towards the Surface of the Earth, that is, in the first Hours of the Night; and from these, an early warm Bed is the best Defence: Now before the Dawn of Day, all this hurtful Matter is discharged and drops, and in the Place thereof the Air is impregnated with balfamic and fragrant Particles drawn from the lightest and sweetest Vegetables; and these, early-rising Persons, of a tender and delicat Frame, should strive to enjoy, whilst they are hovering, as it were, in the lower Regions, and before the Force of the Sun has carried them out of their Reach. Another beneficial Result of early Rising is, that it affords Time sufficient for the bodily Exercises above suggested.

16. It will be found necessary for a Man in Years, to endeavour to keep his Belly firm, and its Dejections solid and formed, as a proper Means of preferving a due Tightness in the whole System of the Solids and the Nerves; and this can only be uniformly effected

effected by very moderat Meals on the lightest Food. Slipping Bowels in Old Age will destroy the Firmness of the Nerves, and Freedom of the Spirits, and soon bring on Lowness and Sinking, peculiarly hurtful to Old Age. This the wife Hippocrates well knew, when he warmly recommended to Men in Years a Firmness in the Bowels, which I would advise as a very essential Step towards an healthy Old Age. Now when an old Man, by endeavouring to preferve this Firmness, finds that he becomes too costive, and that his Head is thereby clouded, or his Belly tumefied, (the usual Consequence of Overfeeding only) a small Quantity of Hiera Picra, or Tincture of Rhubarb, one or two Ruffi Pills, or Anderson's Pills, taken over Night, will easily remove such Uneasiness: And be it remembered, that all the Openers taken by old Men should be of the warmer and more carminative Sort, because the cooler, more drastic, and quicker Purgers, are flatulent and dispiriting, and after the Use of such, the Bowels are apt to continue for a considerable time in a loose, flabby State, a Consequence to be especially avoided by Men in Years; whereas the warmer and more carminative Openers leave the Belly tight and firm, the moderat Use of such neither hurts the Appetite, nor finks the Spirits, and the Frequency of fuch Assistance will be found highly beneficial in the Decline of Life.

- 17. ONE of the most irksome Confequences of old Age, is Wind and Flatulence, so pent up in the Bowels, that by reason of a weak Digestion, and obstructed Perspiration, the Patient has not Force to throw it off. The most solid Cure of this Symptom is the lightest Food, and the least in Quantity, which can secure him from the Anxiety of Hunger. Milk and Seeds have less of this Kind of Wind, than any other Eatables, and that which they have is of a gentler and sweeter Sort. I cannot say, that in these Oppressions by Wind, I ever observed, any great Relief was to be had by the use of Aromatics and Spices, unless an Aloetic Opener was joined with them: They only attenuat, and do not expel Wind.
- Eructations, nothing affords so quick and effectual a Relief as Ipecacuana, or Thumb-Vomits, as the Patient can bear them, and as the Exacerbations indicat, to pump up the Wind, and force it upwards or downwards, or through the perspiratory Pores. After such Operations, a Glass of generous spiced Wine, and at going to Rest, or a small Quantity of Hiera Picra, will have a good Effect; and afterwards chewing half a Drachm of Bark on an empty Stomach twice a Day, which will give Strength to the digestive Organs and the Solids.

X 19. AN-

- 19. ANOTHER Mean conducive to an healthy Old Age, is to keep the Feet and Hands especially, as warm as possible, by woollen Socks, and furred Gloves. These Parts being furthest from the Heart, the Source and motive Power of the Circulation, for this Cause an old Man should never go to Bed with cold Feet; and if they are chilly, let him first warm them well before a clear Fire, or bathe them in warm Water, otherwise will his Sleep be short and interrupted; and in cold and frosty Nights, let his Bed be well warmed with a Pan of clear Coals, sprinkled with some aromatic Seeds or Gums; at such times a Bag of warm Sand, or an hot Iron, in a thick woden Case, placed at the Feet of his Bed, and a Fire burning all Night in his Bed-chamber, will, each of them, contribute to his Health and Comfort.
  - Southern Exposure; if possible, let it be well ventilated in the warmer Part of the Day, by opening the Windows; and let it be kept perfectly sweet and clean, and this rather by constantly rubbing, than by washing.
  - 21. A MAN in Years should not choose his Habitation in a large and populous City, but rather in a clear, dry, and sandy Country, and

and his House should be of a moderat Ele-

- keep his whole Body in a State of due Warmth, and yet such as is consistent with Ease and Activity; and therefore the properest Cloaths are those which are light as well as warm. Let his Winter Habit be put on early in the Autumn, and not laid aside till late in the Spring: Let him guard against North easterly Winds, and foggy Frosts: Let his Fuel be Wood, if possible; if not, Coals which are the least sulphurous, most pitchy and resmous: Lastly, let him avoid smoaky Rooms, and foul Chimneys.
- 23. ÆTHIOPS Mineral, and Jesuits Bark, feem to be, and are Medicins excellently calculated for the Preservation of Life and Health; the first for those who are originally robust, and who persevere in the common Use of Meat and Wine, in Quantities fitted, though, to their Time of Life; these may, by proper Doses of Æthiops Mineral, be kept moderatly open, and their Blood preserved in a State of Sweetness and Fluidity. The latter of these Medicins, the Quinquina, chewed (about half a Drachm in Quantity) on an empty Stomach, and swallowed, its Extract in Pills, or the gross Substance in Wine or Tea, will brace and strengthen the Solids and X 2 Nerves;

Nerves; a Regimen which should commence at the first Approach of Old Age, and be continued constantly, at least Spring and Fall, to the very last Stage of Life. To the Tender, Delicat, and fuch as are unhappy in weak and lax Nerves, the Bark is the best and safest of all the vegetable Restringents and Bracers; all its Qualities are probably not yet discovered. When it is properly chosen, thin and quite fresh, rightly prepared, and duely dosed, I take it to be not only the best Febrifuge in all Intermittents and Remittents, but likewise the best Antihectic, the best Styptic, a Stopper of Mortifications, with a Regimen, Anasarca's and even Ascites's, especially if mixed with Salt of Steel. I take it likewise to be an excellent Medicin in Lowness of Spirits, and most nervous Disorders; and hence it is, I cannot too earnesty recommend its Use to the tender, delicat, and nervous old Man, in order to procure him the Bleffing of a Green Old Age, as far as Art and Medicin can contribute to it. Misleto of the Oak, dried Orange-peel, Cinamon, Japan Earth, (and some other vegetable Astringents) are sound to have something in them of the Nature of the Bark, but in Virtue and Efficacy are greatly inferior to it.

24. LASTLY, The Reader must excuse me, whilst I speak my Persuasion, that nothing will more effectually contribute towards the

Felicity of a Green Old Age, than innocent and entertaining Amusements, engageing and light Studies, and rational Diversions in a chearful and affectionat Society; above all, a clear Conscience, beneficent Temper, peaceful Resignation, and well grounded Hope, which

Summum nec metuat diem, nec optet.

THOUGH many of the Directions given in this Chapter are adapted to Men of Fortune only, yet those who are not such, may possibly herein discover some Rules of Liveing advantageous in themselves, and at the same time practicable without Expence. Let the Man who is really poor, take care to avoid the Inconveniencies of the Non-naturals; and his very Poverty, by confining him to a low, thin Diet, may probably procure for him the Blesling of long Life, and a Green Old Age.

To conclude; I cannot but hope, that Persons of all Ranks and Conditions may, by a ferious Attention to these Rules, make some Discoveries, which may assist in conveying them, without violent Shocks, through a State of Mifery and Probation.

25. I HAVE above observed, that to prolong a Green Old Age, nothing was more conducive than the Firmness of the Bowels, and a due natural Costiveness, at least of figur'd Stools ; but since a Diarrhaa may hap-X 3

pen

pen from casual Excesses, Colds, or Epidemical Distempers, to such, which not only carries off the Nourishment and Spirits, but, if continued, will endanger the Life of an old Man, I have therefore reserved the Cure of it to this Place.

#### A DIARRHOEA.

A DIARRHOEA, Flux, or Chronical Looseness, if it is simple, and not Symptomatic, arises from an imperfect Digestion, or a bad Chylification; the last from viscid Juices, so stuffing the Blood-vessels, that they will admit little or no new Chyle; the first from a Relaxation of the Solids, whereby the Chyle not being sufficiently thinn'd or mill'd, cannot pass the Lacteals; and so stagnating in the Prima Via, there acidulats, and turns into the Nature of an active Purge. This is the Case with a simple and primary Diarrhæa; the Symptomatic may arise from many Causes, a flow Fever, a scorbutic Habit, any topical Distemper translated, as the Gout, Rheumatism, or Erisppelas. This last kind of Diarrhæa can never be totally cured, till the primary and original Distemper be first remedied, and so it becomes a simple uncomplicated one; just as an Ulcer can never be cured, till by proper Alteratives it be made a simple Wound. For the Cure of a simple Diarrhæa then, nothing is so effectual as frequent Vomits, both to cleanse the Prima Via, that the digestive Organs may have their proper

proper Play, as also to withdraw and revulse the peccant Humours from the relax'd Bowels, and to cleanse them, Powders of toasted Rhubarb, prepared Coral, with a few Grains of toasted Nutmeg, in small Doses, wash'd down with tepid Bristol-water, or the white Drink, Teas of Bark, Cinamon, Misleto, and Orangepeel, four Spoonfuls twice a Day, on an empty Stomach; but above all takeing special Care of the Diet, which ought to be the lightest, and most easily digestible, Rice, Sago, Biskets, and the several forts of Seed meats, made with Milk or Water, little at a time, but oftener: All kinds of Exercises the Patient can bear, and first Bristol, then Spa or Pyrmont Water for Beverage, with a little spiced Claret. This Method will do, if any thing can, if the Constitution be tolerably good, even though tender.

arrage cance, which facy will not for

### The CONCLUSION.

T may be very justly and reasonably supposed, that all, especially duely cultivated or senfible Patients, already know and are convinced (at least in the main) of the general Truths here laid down, about the Cure of Distempers. Scarce an Apothecary's Apprentice, but can tell, that proper Evacuations, mild Alteratives, and gentle Bracers, orderly pursued, and duely continued, are the most effectual Means and Medicins to cure the Diseases of the Body, and the Anxieties of the Mind, that are the Consequences of such bodily Diseases; and no considering Patient, but is convinced, that if he could but moderat his Appetites, and stick to the Lightest and the Least he is tolerably easy under, he would in time get rid of his Diseases and Complaints; that is, at least, he could thereby starve them away in time; so that what I have so strenuoully and perpetually inculcated about Abstinence, Fasting, or the Lightest and the Least, is all Labour in Vain, and mere jejune Repetition. The sole Question in Physic, it feems, and which alone ought to be the Subject of a sensible Physician's Study and Inquiry, is, How, takeing Mankind and the World as they actually are, with their present Ignorance, Appetites, Passions, Luxury and Intemperance, which they will not forego, CYCE

even under the Terrors of eternal Punishments, it is possible to cure or relieve them of their Diseases and Complaints, the soonest and most effectually. Some from their Situation in Life, their Employments and other Circumstances, may find the Rules I have laid down for the so tedious Recovery of Health, extremely inconvenient and difficult to pradise. Others from the Violence and the painful Craveings of their Appetites, Passions, Habits, and the Customs of the Country, will be extremely averse to cure their Complaints in the Manner I propose. To both such I might just as well have said nothing at all, as to have recommended so impracticable and disagreeable a Manner of Cure. To these, all I have to answer, is, Ift, I have suggested the most effectual and quickest Remedies and Medicins to me known, and chosen after the experimental Refusal of a Thousand others, faid to be of the same Intention, under the present common Regimen, and fashionable Manner of practifeing Physic; and so have answered the first Condition; but without promiseing a solid and dureable Cure in such Circumstances. 2dly, That taking in all the Conditions proposed, they make it an imposfible Problem; and with as much Reason they might require the Quadrature of the Circle in integral Numbers, or a perpetual Motion. Health and Luxury are incompatible: Strong Fibres and Nerves, and immoderat

derat Lechery, are contradictory. Long Life and continued Intemperance, in the Nature of Things, are impossible. Physicians under fuch Conditions, by strong and repeated Evacuations, and violent Astringents and Bracers alternatly prescribed, may keep up the Patient for a while, but that even poorly and precariously; and at the same time, and by these very Means, they precipitat the Patient's Fate. The Proposition I laid down to myself to prove, was, That Men, in a great measure, had the total Cure, at least a great Degree of the Alleviation of their Miseries, in their own Power; all, but that one of Hunger perhaps, or Simplicity of Diet, which cannot come to any very painful Extreme in this Island. To bear and forbear, is all that is absolutely necessary in this Life, to make a Man tolerably easy; and his Pain and Suffering cannot have risen to any great Height, who will not submit to this. I have labour'd to shew in this Treatise, by going through most of the common Distempers, Acute and Chronical, Epidemical and Cephalic, the Evacuations, Alteratives, and Bracers, proper to alleviat them, without any Consideration of a particular Regimen; and to extirpat them, have added the specific Regimen. If this will not give Content, we must conclude from this Appearance, as it necessarily follows from many others, that Pains, Suffering, and Diseases, are necessary

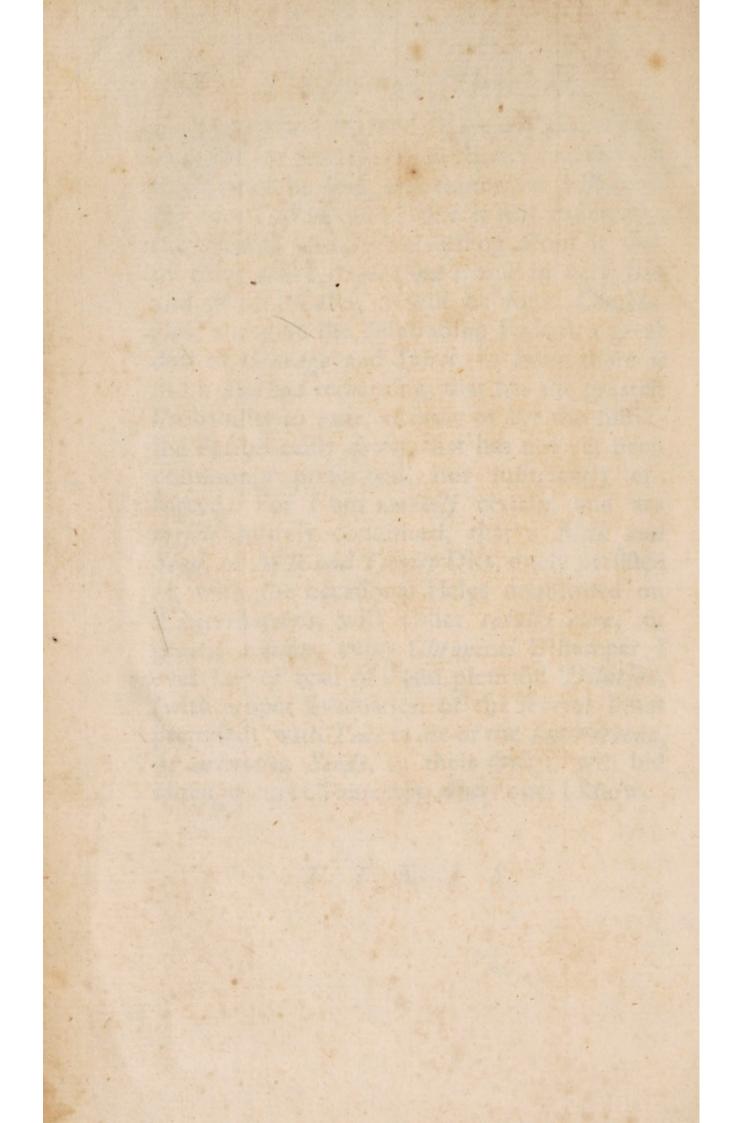
in the Oeconomy of Providence, to make Men virtuous, in order to become afterwards happy; and that Omnipotence and Omniscience has chosen this Mean, as the most effe-Aual to bring them to this State at last. So that all Endeavours, however reasonable, to steer any other Course, will be vain, till the Sufferings are more exasperated, as in the torturing Engines there are requir'd a Turn or two more of the Screws to make the Criminal speak out the Whole. For my own Part, neither my Constitution, the natural Tenderness of my Nerves, my Habitudes, nor even my Conscience, would permit me to see my Fellow-Creatures in Pain and Misery, without contributeing all in my Power to their Relief. Absolute Resignation, nay inward Contentment and Joy, in the infinitly wise and perfect Will of God in all things, prosperous or adverse, I know is my Duty, is a State I admire, and ought to aspire after. But I am sensible I am very far from it at present, and I fear I could not be perfectly happy in any Place, as I now feel myself, if I certainly knew, that any of my Fellow-Creatures were to be eternally miserable anywhere. I have therefore done my best, and I believe my last, in Physic: I think I have demonstrated from the Nature of Things, from the Writeings of some of the best Physicians, my own long Experience, by running through all the commonly described Distempers, that the

## 316 The Method of Cure, &c.

the Means and Methods I propose, will either eradicat, or greatly relieve them; and though the Method be flow, and somewhat self-denying, yet Custom will make it still easier, and the Health and Spirits arising from it will in time make it pleasant; and in very bad and painful Cases, it will be some Consolation, and give the desponding Patient a great deal of Courage and Spirit, to know there is still a Method remaining, that has the greatest Probability to cure, relieve, or lay the suffering Person easily down, that has not yet been commonly prescribed, nor sufficiently enforced: For I am morally certain, and am myself intirely convinced, that a Milk and Seed, or Milk and Turnep Diet, duely persisted in, with the occasional Helps mentioned on Exacerbations, will either totally cure, or greatly relieve, every Chronical Distemper I ever saw or read of; and plentiful Dilution, (with proper Evacuation of the several kinds premised) with Teas made of the saponaceous, or aromatic Seeds, in their Order, will bid fairest to cure all cureable Acute ones I know.

### FINIS.









LIBRARY

