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AN

ENQUIRY

INTO THE

MEDICINAL VIRTUES

OF

BATH-WATER,

AND THE

INDICATIONS of CURE,

Which it answers,

Proposed and begun

By GEORGE RANDOLPH, M.D.



LONDON:

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PREFACE.

AVING been desired by several of my Friends to make an Enquiry into the Virtues of the Bath-Wa-

ters, in the same Manner, and upon the same Plan, as I have already done into those of Bristol: I have for some time declined it, as believing it to be a Work of more Time than I was willing to spare, and what would cost me more Pains, than I was well able to undertake. For as it is no easy Matter, to adjust and settle the several Uses and Virtues of any Mineral Water what soever, so will it be more particularly difficult to do this, in regard to the Waters of Bath; because of the great Multiplicity of Cases, to which they are applicable; all which must be reduced in whole, or in part, to the same Indications of Cure, before we can confistently talk of their being benefited, by one and the Same Water; and this not only as to the internal, but also as to the external Use of it, in every Particular: A Circumstance which A 2 adds

adds to the Difficulty, and renders a Work of this Nature, not only very extensive, but also exceeding intricate and perplexed. Yet nevertheless, when I began to consider, that I was looked upon by my Friends as qualified for this Work, it being well known that for Several Years past, I had been a diligent Enquirer into the Virtues of Bath-Water, and that I could not deny what I had frequently declared, that in my Opinion these Waters Stood in need of some farther Explication; I chose to comply with their Request, especially as I now proposed to spend the greater Part of the Year at Bath, and it was my Duty to consider throughly of every Observation I had made, both during the Time when I formerly refided there, and fince. I therefore refolved, notwithstanding the many discouraging Circumstances attending it, to make a Beginning; and although the Whole of this Work taken together, might appear formidable, and beyond my Strength, yet when I confidered, that I was at liberty to proceed, as leifurely as I pleased, in my own Way, and at my own Time, I faw no Reason why I should decline undertaking that which was really my Duty to fet about ; and which I could not perform better than under the Eye of the Publick, as it would be a Security

Security for my pursuing the Subject with

proper Application and Care.

I shall therefore proceed, according to the Method laid down in my late Treatise on Bri-stol-Water, in the following Manner. First, I shall give a History of the Water, from as high Antiquity, as any Thing certain can be collected, until this present Time; endeavouring to shew what has been the current Opinion of Physicians concerning it, what Diseases it has been principally used and esteemed for, at different Times, and for what it is now at this Day in Reputation; thereby attempting to give such a general Idea of this Water, as may be of Service to those who are not yet acquainted with its Use and Virtues.

And for the better afcertaining of fuch Cases, as Physicians may think proper to send bere for Relief, I shall in the second Place, enquire into the Nature and Cause of such Distempers as it is found more particularly beneficial to, thereby, endeavouring to find out what Indications it answers, how far it may be depended on in the many different Disorders it is good for, and how far not.

And this being done, I shall, in the third Place, enter into an Examination of the several Properties and Qualities of this Water, so far as they are discoverable by Experiments.

This is the Method, though not the Order, in which I propose to proceed: For as I find the Historical Part a Work rather of Labour, than of Science, and that such, as does not so immediately respect the Business of a Physician, I shall begin with the second Part, which as it treats of the Nature and Cause of such Distempers as are more especially benefited by the Bath-Waters, will not only be better suited to the Study of my Profession, but also be more useful and interesting to the Publick. And even here, I cannot by any means undertake to go through my Subject: No, that would be a Work of too great Extent, to be attempted at one Time: And in this, I doubt not but I Shall be excused by every considerate Reader; first, as this leisurely way of proceeding will give me an Opportunity of taking a more di-Stinet View of every Particular. Secondly, that if any Mistakes should be made, such Errors may by this means be discovered and acknowledged when I come to revise and finish the Whole.



CHAP. I.

Of Chronical Distempers in general.

fideration of the Human Body, is that of an Hydraulic Machine, confisting of Solids containing, and Fluids contained: So the usual Way of accounting for all Distempers incident to it, has been from some preternatural Default, either of the one, or of the other.

Those that think the Fluids chiefly to blame, are of opinion, that almost every Disease, is the Effect of some unhapy Alteration, either in the Quantity, or the Quality of the Humours.

Those that suspect the Solids to be principally in Fault, lay great Stress upon the Tone of the Fibres, which being in their natural State of Tensity, perform their several Functions aright; but receding from this, in either Extreme, are, as they conceive, the latent Cause of most Disorders.

And though no one, perhaps, has been fo wholly addicted to either of these two Theories, as not to be willing to make some small Allowances to the opposite Side; yet has it by no means been agreed, which of the two is most in the right; but in different Ages, and under different Symptoms, the one or the other has been occasionally espoused, according to the reigning Philosophy of the Times.

And yet it is very apparent, that so long as this Matter is left undetermined, the Practice which is built on these Principles, must be full of Uncertainties; for if it is not agreed where the Fault lies, whether

of Chronical Distempers in general. 3 in the Fluids or the Solids, by what Rules are we to proceed? To brace the Fibres is one Thing, to depurate the Humours is another; and if we attempt the one, when we should be aiming at the other, we may make great Mistakes; and this more especially, if the Mathematicks should step in, and lend Demonstration to our Philosophy.

But supposing we could be certain when the Fluids, and when the Solids were in Fault, even then, this Way of Reasoning would be too general and abstracted, to anfwer the End proposed by it: For although it may unquestionably appear, in this or that particular Disorder, that the original Fault is in the Fluids, yet if this is only declared in general Terms, without specifying the particular Nature of the offending Matter, it cannot point out to us any rational Method of Cure; for granting, that where the Fluids err in Quantity only, there may be some kind of Direction, yet when we come to confider the feveral different Qualites of the Humours, which B 2 give

give rife to different Distempers, there is very little that can be depended upon: The Galenists make the proper Crasis of the Blood, to confift in a due Temperament of the four Qualities, hot, cold, dry, moist. The more enlightened Chymists, will have every Evil to arise from saline Acrimonies, and Effervescencies; (though among the. many innumerable Combinations of Salts, they are not agreed, which particular Kinds belong to any particular Distemper:) But who fees not that both these different Opinions, are nothing more than the Off-shoots of their respective Philosophy? So that till the learned World are better agreed concerning the specifick Nature of morbifick Juices, fuch our imperfect Knowledge can never be received as a Fundamental; add to this that the real Crasis of the Human Blood, as requisite for Health, or productive of any particular Distemper, seems a Secret far above the Reach of Man's Discovery, having evaded all Researches, both ancient and modern; and moreover it seems requisite to the understanding

Of Chronical Distempers in general. 5
derstanding of the true Nature of the animal Fluids, as they are the Cause of Distempers, that we not only should be acquainted with the Blood itself, but also with the particular Crasis of every Humour secreted from it, and their several Deviations from their natural State.

And, on the other hand, if we have recourse to the Solids, and look upon some Defect in them, as the original Cause of Distempers, we are still under as great Difficulties as before; for granting that the Circulation of the Fluids, depends upon the Tone of the Solids, yet it is by no means a fettled Point, what Difeases arise from the lax, and what from the tense Fibre? Both, for instance, may be the Cause of Obstruction, and how we are to distinguish the one from the other in all Cases, is not yet determined; and it is farther doubtful, whether fome Parts of the Body which are called fibrous, have any Elasticity at all, (viz.) the Brain; and in those Parts where the Fibres are elastic,

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the Degree of Tensity in every Fibre is so different, according to its different Situation and Office, that no one Medicine can be rationally adapted to the Arengthening and bracing one Sort of Fibres, but what may proportionably hurt another; unless we can suppose that this Medicine shall exert itself only on the Part affected, and that we know how to proportion the Degree and Force of it, to every Fibre, and to every different Make of such Fibre, in different Constitutions and Ages: And if it be objected, that bracing Medicines are often found to be of great Service in feveral Distempers, I will not dispute the Efficacy of them, only beg Leave to obferve, that it is possible we may be mistaken as to the Manner of their Operation; and if so, this Way of Reasoning will amount to nothing more, than what the Logicians call Sophisma non Causa pro Caufâ.

Some, indeed, there have been in all Ages, who have not attached themselves either

either to this or that particular Theory: If the Doctrine of Solids has not been fufficient to ground their Practice upon, they have had recourse to that of the Fluids, and fo by adapting neither, have pleafed themselves with avoiding the Errors of both; but let them take the one, or the other, or both, it is plain that the same Uncertainties which belong to each, will be found in both; neither is it possible we should build a rational Practice upon them, either separately, or jointly, till fuch time as we know whether the Fluids move the Solids, or the Solids the Fluids; which are Agents, which are Patients; how they act, how they are acted upon; and whether any thing more fubtle than both, may not be the primary Cause of all their feveral Movements. These are Questions deep and difficult, yet such as ought to be resolved, before we presume to found Practice upon these Principles. Hippocrates * divides the whole Human Body into σώματα ίχοντα, ενιχόμενα, και,

ophon-

^{*} Hippoc. Epid. Lib. 6. Sect. 8.

Parts contained, and the Parts actuating; by which it is plain, that he did not look upon the Solids or the Fluids as the first Movers, though he at the same time thought it necessary, that we should understand the moving as well as the moved Parts. It would be thought a Piece of Presumption in any Body to undertake to account for the Desects of any curious Machine, upon a general Notion only of mechanical Principles, without understanding that particular Principle, upon which such Machine was built.

Something indeed has been attempted this way, by attributing all Sensation and Motion to the Nerves; but as nothing more is told us concerning these Nerves, than what was before taught of the Solids in general, namely, that all their several Motions and Actions depend upon the Tone of the Fibres; this adds no Knowledge: And though some have gone further, and sought for the primary Cause

and Colours of his Picture; and this is no

more than what we have been told from

the highest Authority, that we are fear-

fully and wonderfully made, and that

this Knowledge is too high for us, we

cannot attain unto it.

C Leaving

* It were endless to enumerate the many different Opinions entertained by different Authors concerning the Animal Spirits; what Dr. Hales says, in his Hamal Spirits; what Dr. Hales says, in his Hamal saticks, p. 58. is enough to shew we know little or nothing about them; where speaking of the Nerves, he says, "It is not easy to determine whether the "Force by which they act, is confined in Canals "within the Nerves, or acts along their Surfaces like electrical Powers."

Leaving therefore the uncertain Guesses of vain Philosophy, let us rather keep to the plain old Paths of Practice and Obfervation; always remembring, that our Reason is not the Informer, but the Informed; not the Master, but the Scholar; and that we were never intended to plan and defign the Building, but to furvey and examine it, and to listen to the Instruction of him that made it; and in fo doing I trust I shall be able to give a more fatisfactory Account of Chronical Distempers, than any * Philosophy has hitherto afforded us, at least I shall have this comfortable Proverb of my Side: He that follows Nature is never out of his Way.

There

^{*} Dr. Sydenham, in his Letter to Dr Short, published at the Beginning of his Tractatus de Podagrâ, addresses himself to the Doctor in the following Words:— "Te tamen Natura ad eas potius subtilitates determinaverit, quæ e Praxi nascuntur, quam ad inanes Speculationes, quæ duo haud minori intervallo a se invicem distant, quam sapientum res
feriæ et maximi momenti, a puerulorum sudo et
crepundiis disterminantur, et fortasse, nisi me fallit
observatio mea, rarò in eodem subjecto con-

OR

There is no Truth in regard to the Human Body more apparent than this, that the Egesta, ought to be in proportion to the Ingesta, and that an Inequality between the Aliment taken in, and the Humours fent forth of the Body, is the frequent Cause, both of acute and chronical Distempers; an acute one, if Nature is roused, and struggles for a Crisis; a chronical, if the effects it a ropulas in a more gentle and natural Way. The feveral Accidents, which may occasionally give rife to fuch Difproportion are not before us at present, but that such Disparity is very common, and the natural Consequence of almost every Irregularity in Life, is univerfally allowed; and the immediate Effect of this upon the transudatory Lymph is a Matter well worth our Enquiry.

The Doctrine of Lymph transuding through the Coats of the Vessels in every Part of the Body, is as old as Hippocrates, and has been of late so well established

by a modern Writer*, that there is no need of further Proof: Our present Purpose is rather to shew the great Importance of it, and to prove that aqueous Moisture, of which this Lymph chiefly consists, is the grand Instrument of Admission, Distribution and Secretion of every Thing that goes into the Body; and that the transfudatory Lymph is that which is principally affected, by every Error in regard to the Ingesta, and that which communicates it to every Part.

I shall not here dispute what Proportion of our Food is conveyed through the Lacteals, and what is absorbed by the meseraick Veins; in both Cases, whatever enters the Blood, is in a liquid Form, and is carried thither by means of a large Proportion of aqueous Moisture, without which nothing can get into, or transude from, the Blood-Vessels; and as whatsoever is intimately mixed with Water, must impregnate

^{*} Abraham Kaau

But when we consider farther, that aqueous Moisture, is not only the Instrument of Admission into, and Transudation from, the Blood-Vessels; but also the Vehicle which conveys proper Supplies to the extravasate Parts; that every Vessel, every Membrane, every Fibre receives its natural Moisture from it, and that no one Function of the Body, can be performed without its Help; we shall then conceive, not only how this transudatory Lymph partakes of every Evil, but also how it may communicate it to every Part.

And when to this we add the Influence it has upon the glandular Secretions, and confider how they all depend upon the healthful

healthful State of this Fluid, we have the greatest Reason to believe that this is the Humour principally concerned in the Production of Chronical Distempers; that which first receives the Taint, then communicates it to the Blood, and afterwards fixes it; and as this Connection between the glandular Secretions, and the transudatory Lymph, seems to be a Matter of great Consequence, I shall endeavour to explain it.

All Animal Secretion may be considered as two-fold, and is either porous, or glandular; that which transpires through the Pores, is the very transudatory Lymph itself, and so is regulated by the proper or improper Crass of it; it remains therefore to prove, that what is carried off by the Glands, depends also upon the same Cause.

As there is a certain Quantity of Solids, as well as Fluids, admitted into the Blood;

And when to this we

fo, in some proportion, must both of them be carried out: The Pores feem for the most part destined for the Exhalation of the more fluid Parts: The Glands for the Excretion of those which are more solid; but as the folid Particles cannot be excreted but in a liquid Form, and by the Help of a large Proportion of aqueous Moisture, it is provided that That Part of the transudatory Lymph, which does not reach the outward Surface of the Body and transpire off, shall be referved for the Supply of natural Moisture to the inward extravasate Parts; among which the Glands must have their Share, and that (as I conceive) in a very large Proportion; because every Recrement that is not carried off through the Pores, must be secreted by the Glands; neither can they perform their several Functions without a considerable Quantity of aqueous Moisture: For the Glands are not to be conceived as sufficient of themselves to secrete their re**spective**

spective Juices, by means only of what is brought to them by the Arteries, but as requiring withal an additional Moisture from without, which Moisture is supplied by the transudatory Lymph, and by this they are irrigated and fed, as Seed is in the Ground; and that it is so in fact, will appear from the following Considerations:

First, From the general Difference obferved in the several glandular Secretions of the Human Body, some secreting slowly and but little, others very largely, and much quicker, and not at all in proportion to the Quantities of Blood brought to them by the Arteries.

Secondly, From the particular Difference observed at different Times, in the same Secretions. Sometimes the Glands will discharge a great deal, sometimes very little, and this in persect Health, without

any fensible Increase or Alteration of the arterial Blood; and this is particularly observable in the Urine; so that it has been thought impossible that this should be the only Supply; and what shall we say of the Breasts in Women? Here are Organs persectly formed, Arteries bringing the Blood, and Veins carrying it off, and yet no Secretion, till such Time as Nature deposites the transudatory Lymph in proper Quantities, on these Parts, and then they flow in Abundance.

ny of the Glands, seem to be more than the Blood by way of the Arteries can yield, considering that the Veins carry off near as much as the Arteries bring; and it is very agreeable to the animal Occonomy, to consider the Glands as the Emunctories of such excrementitious Lymph as does not perspire off by the Pores; which is farther proved from the constant Hurt of the Glands when this transudatory

Moisture

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Moisture is either deficient or redundant, and their several morbid Swellings, and Discharges from the ill Qualities of it.

If then this is the Case, and this aqueous Lymph, is not only the Instrument of Admission and Distribution, but also that on which all the glandular Secretions in great measure depend, it must be affected by every Error as to the Ingesta, and being so affected must cause Irregularities as to the Egesta; not to mention that the Egesta being disturbed from other Causes, must reciprocally affect the transudatory Lymph; fo that in every Light in which we can take it, the transudatory Lymph will be found to be the usual Seat of Chronical Distempers, which I shall make appear by proceeding to a more particular Explication of them.

As Chronical Distempers are seated chiefly in those Parts of the Body, where the Circulation of the Humours is most easily inter-

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Of Chronical Distempers in general. 19 interrupted; fo the most general and simple Account that has been given of them, is from Obstruction, which the smaller Vesfels must be more particularly subject to, from any the least Defect, either in the Humours paffing, or the Veffels through which they pass; but as this Account is too general, and does not fufficiently diftinguish between one Chronical Distemper and another, in that it does not inform us where these minute Vessels are, in the arterial, lymphatick, or glandular System, (which is very material for us to know, because Obstruction in each of these have different Consequences;) so this Way of Reasoning is not so very instructive, as may at first Sight be imagined: For if the Narrowness of the Vessels were the only Difficulty, there would be a greater Sameness in Chronical Distempers as to the Parts affected, and as to the Cure; nor is it eafy to conceive how Obstructions in the smaller Vessels can be the Cause of all this Mischief, because it is well known,

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that

that we can tye up an Artery, or cut off a Limb, without any fuch Confequence; so that unless these Obstructions are very general, fo as to affect the Circulation of the whole, they are of little or no Significance, at least not sufficient to produce so great Disorders. Obstruction is indeed a very general Word, and may be applicable to the Stoppage of any Humour in any Part of the Body; but if meant of Fluids circulating within the Vessels which contain them, does not feem to be the Caufe of Chronical Distempers, which, if I am not mistaken, arise rather from extravasate than intravafate Humours, and are feated (at least in their first Beginnings) not within, but without the Vessels. And it is from this latter Kind of Obstruction, that I shall endeavour to account for the great Variety of them.

All Chronical Distempers arise from some Error, either as to the Ingesta, or Egesta; both which may be hurtful to

Of Chronical Distempers in general. 21 us, either in Quantity, or Quality; and that either in Excess or Defect.

This Disproportion first shews itself in the transudatory Lymyh, which is either loaded with such Particles as are not natural to it, or robbed of such as are; for as aqueous Moisture, of which this Lymph chiefly consists, is the grand Vehicle, by which every Thing is first conveyed into the Blood, then distributed through every Part of the Body, and afterwards carried out of it; it is not only the common Repository of every nutritive, and excrementitious Particle, but also the instrumental Means of applying the one, and discharging the other.

What Diseases arise from too great Evacuations, or Non-ingestion of proper nutritive Juices, and the several Alterations occasioned thereby, in the Quality of the Humours, I have endeavoured to explain in my late Treatise on Bristol Water.

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What proceed chiefly from too plentiful Ingestion of Aliment, or Non-secretion of necessary Recrements, whereby the Body is loaded with Humours that are excrementatious, I shall now have occasion to consider.

If then the Body is overcharged, either by taking in more than it lets out, or letting out less than it takes in, it is plain, in this case, there must be a Superfluity; which may be either simple or compound. Simple, if the superfluous Humour has no material ill Quality belonging to it; Compound, if it has; in both Cases Nature will feek a Discharge of the redundant Matter, by fome means or other; and this is ordinarily effected, either by the Increase of some of the Secretions, or by the Lodgement of it in some particular Part; both which will have their respective Benefits and Inconveniencies, according to the Condition of the Humours to be discharged, and the Nature of the Part affected.

And here let us stop a little, and consider the many innumerable Evils which may arise from this Cause only, supposing there is Strength to throw out, and make an effectual Discharge; for these Humours may be deposited, either on the outward Integuments, or on the muscular Flesh, or on the Membranes, or on the Ligaments, or on the Joints; all which have their respective Disorders belonging to them; and those, many of them very troublesome and painful: Or, lastly, they may fall on any of the Glands, where, though they find a freer Exit, they may occasion great Variety of Disorders, many of which may be attended with very fatal Confequences.

Nor is the Place, where these Humours are to fall, determined always by the natural Strength, but often by external Accidents, which will sometimes act in direct Opposition to it, and cause Humours to strike inward, which might otherwise

have come outwards, and as these Accidents are innumerable, so may they happen at any time, either before Nature deposites this Superfluity, or after; and give Disturbance accordingly. And this will account for almost the whole Tribe of Chronical Distempers, as they appear in their first Beginnings, and for the Dangers attending them, supposing Nature in full Strength, and able to effect a proper Crisis.

But if it shall happen that she is not able to do this, then will she either faintly attempt a salutary, or yield to an unsalutary Criss: In the first Case, the Effort will be incompleat; in the second, it will be dangerous; so that besides the many Accidents from without, the Dangers and Dissiculties from within, are numberless, which will harass and plague us, according to the different Malignity of the offending Matter, and the Nature of the Place on which it is deposited; whilst the glandular System being hurt more or less, in whole

whole, or in part, through frequent imperfect Discharges, or unnatural Supplies of soul Lymph, shall mutiply the Evil, and answer the Sum Total of most chronical Complaints. And here we see not only the Rise, but also the Progress of these Distempers, how they will battle it Day after Day with the animal Strength, how they will dispute every Inch of Ground with it, and if there is a weak Place to be found, how they will be sure to attack it; and that it is our Part, if possible, to give no Advantage to so powerful and subtle an Enemy.

But, Lastly, If the Foulness of the transudatory Lymph is such, that not only the Glands in general, but those in particular, whose Functions are most requisite for the immediate Purposes of Life, shall not receive their proper Supplies, but instead of being irrigated with kindly genial Moisture, be choak'd up

with foul unnatural Humours; then will it not be in our Power to procure any Crifis at all. But Nature will deposite her Burthen upon the weak Part, which will be so far from giving Relief, that it will rather increase the Evil, whilst the natural Strength being able to make but a faint and feeble Resistance, opens a Passage for the Enemy into the Head Quarters; then the Strong-holds in which we trusted are yielded up, Diseases enter,

---- Portisque patentibus omnes
Accipiunt socios, atque Agmina conscia jungunt.

And from this Account it appears, that the Cause of chronical Distempers is not to be sought for, either in the Fluids, or the Solids, abstractedly consider'd; but in the Excess or Defect of the Ingesta or the Egesta, which alters the Crass of the transudatory Lymph, and by means of this communicates the Evil to any Part, and very frequently to the glandular System.



CHAP. II. Of the SCURVY.

I Do not begin with the Scurvy, as a Dif-temper which is in itself so immediate. ly benefited by the Bath Water, but rather as it is the usual Source and Concomitant of those which are; and will not only ferve to exemplify what has been already faid in the foregoing Chapter, but also prepare the Way for the better Explication of what is to follow; for as I am about to enquire into the Nature and Cause of fuch Distempers as are benefited by the - Bath-Water, I cannot well proceed to the particular Explication of them without fome previous Account of the Scurvy, which is necessarily connected with, and in E 2

in fome shape or other, attends upon every one of them.

By the Scurvy, I do not only mean that high Degree of it, which is principally fo called, but also every Deviation of the Humours from their natural Crasis, into that which is irritating and acrimonious, which commonly goes under the Name of a scorbutical Habit or Disposition, and which is the natural Refult of every Error as to the Ingesta or the Egesta, in Quantity or Quality, be it either in Excess or Defect.

Thus, for Instance, if the Ingesta be either defective in Quantity, or the Egesta excessive, the Body is robbed of its natural Moisture; whence the Blood is exalted, and the Humours become acrimonious, for want of fomething to lower and dilute them, and so counteract the Mischiefs chiefs arifing from its natural Heat and Motion.

On the other hand, if the Ingesta are too great or the Egesta too little, there will be Acrimony, though of another Kind, and with different Consequences; not for want of a due Proportion of aqueous Moisture, but from an Over-proportion of acrid excrementitious Particles, with which the Body will be loaded, and which will lay a Foundation for Distempers, very different in their Kind from those proceeding from Inanition; and in both these Cases, it is plain, that if the Quality of the Aliment taken in, is fuch as increases Acrimony, or the Nature of the Humours let out, fuch as does not sufficiently secrete it, it must add to the Misfortune, and make Matters worfe. And thus we fee how every Error in Quantity as well as Quality begets Acrimony, and how very material it is to distinguish between that which proceeds

ceeds from Inanition, and that which arifes from Repletion, both which go under the Name of Scurvy, though very different both as to their Causes and their Cure; as also, whether the one or the other, proceeds from any Excess or Defect, in the Ingesta or the Egesta, or from a Complication of both. These are Circumstances well deferving our Confideration; and are, if I may so express myself, our Card and Compass, in all scorbutical Cases. And it is farther to be observed of the Ingesta and Egesta, that the several Irregularities of them are not only the efficient Cause of Acrimony, but also that the Degree and Force of it is regulated by a right or wrong Performance of them: Thus, for Instance, the Humours may be highly fcorbutick, and yet if the Secretions are open, so as regularly to discharge a proper Proportion of the offending Matter, no material ill Consequence shall follow; on the contrary, if they are shut up, so as not

not to carry off the necessary Recrements, or are obstructed by any Accident, the smallest Degree of Acrimony may have very fatal Effects; so that the Scurvy both in its Rise and Progress greatly depends upon the Quantity and Quality, of what is taken in, and let out of the Body,

I would not here be understood to make the Ingesta and the Egesta the sole and only Source of acrimonious Humours, because it is well known that Impurities of this Kind, may enter from without, by means of vitiated or infected Air; though if we take Ingestion in the largest Sense, so as to include every Thing that enters the Blood, either from within or from without, there may be no Impropriety in faying fo: But so far as the Scurvy arises from common and ordinary Causes, so far as we generally find it connected with most chronical Distempers, and so far as I am at present concerned with it, it is the undoubted

doubted Consequence of some Error as to the Ingesta or Egesta, and must be considered as such in common Practice. And as to that high Degree of this Distemper, which is emphatically called the Scurvy, and is for the most part the Effect of corrupted Air; so far as it is so, it can only be cur'd by the Amendment or Change of such Air, in all other Respects it is reducible to the same general Causes as the former.

We do not indeed pretend to understand the specifick Nature of any Acrimony whatsoever, much less the several amazing Varieties of it, which may arise by different Accidents; but if we are acquainted with the ordinary Inlets and Outlets of it, if we understand its general Causes and Consequences, surely we have what is sufficient to answer our Enquiries, and ground a rational Practice upon.

It is indeed to be observ'd, that Acrimony, either ingested or retain'd, does not always shew itself under the Form of Acrimony; because where natural Heat is wanting, it may be overpower'd by phlegmatic and wat'ry Humours: Thus, for Instance, a Hectick itself will sometimes end in a Cachexy, and yet nevertheless it is undobtedly true, that neither the Ingesta nor the Egesta, can be excessive or deficient, without generating fomething more or less hurtful to the Animal Oeconomy, which, as it is for the most part of a sharp and irritating Nature, may well deserve the Name of Acrimony; tho', strictly speaking, it may not always be acrimonious.

The Scurvy is so very complicated a Distemper, that it is in vain for me to attempt to describe it in all its various Shapes; my Design here is only to enquire into the Nature and Cause of it in general, so far as

it is connected with other Chronical Diftempers; that when I come to the particular Confideration of these Distempers, I
may be the better able to explain them.
And therefore I shall say nothing here of
the Cure of the Scurvy, or of the Virtues
of Bath Water; only observe in general,
that Mineral Waters seem more particularly calculated for the Removal of this Disorder, as they supply the Body with aqueous Moisture, much more subtle and permeable than common Water is, and by so
doing rectify the Impurities of the transudatory Lymph.





CHAP. III.

Of the GOUT.

HE Gout, according to the most general and receiv'd Opinion of it, is nothing more than an Effort of Nature, endeavouring to throw off some morbifick Superfluity on the Extremities of the Joints, and fo caufing Inflammation and Pain, and all other its usual Symptoms; and the Reason why these Pains are so very acute, as also the Cause why the Lodgment is made on these Parts, rather than on any other, has been deduced from the joint Confideration of the offending Matter, and the particular Structure of the Parts affected. Some Writers will tell you, that the Humours in this Distemper are ex-F 2 ceedingly

ceedingly faline, and acrimonious: Others lay the Fault on a tartareous Earth: Others, on viscid Phlegm. One affirms, that the gouty Matter is too gross and heavy to reach the minuter Vessels, and is therefore deposited on those Parts which are most distant from the Heart, where the Motion of the Blood is slowest, and crude Humours are most apt to lodge: Another, is of opinion, that it is so exquifitely fine and fubtle, that it is capable of passing through all the Strainers of the Body, without giving the least Uncafiness, until it arrives at these Parts; and though all these several Opinions are inconsistent with each other, and deserve the Name of random Guesses, rather than of rational Conclusions, yet one or other of them, together with some peculiar Structure of the Blood-Veffels, has been the constant Refuge of those, who have undertaken to account for the Cause of the Gout. We have been accordingly told, that the Blood-Vessels of these Parts where the Gout is principally

principally feated, are exceeding tense and fpringy, by which they are render'd straighter, and more difficult of Passage, than other more yielding Parts; that they are frequently compressed by the adjacent Bones, and withal of fo small and capillary a Make, as must render them very subject to Obstruction; and this has been thought a Confideration of fo great Weight, that of two late Writers on this Subject the * one lays the principal Cause of this Diftemper on the constitutional Straightness of these Vessels: The + other, on a natural Rigidity coming on them upon the Decline of Life: But as they do not pretend to give any Proof of the particular Minuteness of these Vessels, and it is univerfally allowed, that there are other Veffels of the Body more subject to Obstruction than these are, and more liable to be affected with old Old-age; this Way of Reasoning will never hold, and that the Fault

^{*} Dr. Cheyne. Essay on the true Nature of the Gout. † Dr. Oliver. Essay on warm Bathing in gouty Cases.

Fault

Fault cannot be in the Straightness of the Vessels, will appear from the following Considerations:

than other more violding Perrs; that they

First, Because the Gout is not so confined to the Foot, but that it often feizes on other Parts: Now, if the Fault was in the Vessels, I conceive the Effect would be as fixed and stated as the Cause; where these straight Vessels are, there always must the Gout be seated. And though this may feemingly be accounted for, from the gouty Matter being more gross at one time than another, and so obstructing sometimes larger, and sometimes smaller Vessels; yet, surely, where it is once fixed, it ought upon this Supposition to take its natural Course, and not fly from one Place to another, from the straighter into the wider Vessels, and so alternately, as the smallest Accidents shall determine. In blad tower livy yaire and

of Dr. Office, I flay on warm Rathing in goury Cafes,

Secondly, This Opinion is confuted not only from the Transition itself, but also from the Manner in which the Gout moves from one Place to another; which is sometimes so sudden, that the Relief of the Part is, as it were, instantaneous; and withall so compleat, as cannot be accounted for from obstructed Vessels, which recover gradually, be the Fault either in the Solids, or the Fluids.

Thirdly, The striking in of this Humour, upon the Application of the slightest Repellents of the cold or astringent Kind, and the immediate Ease thereby receiv'd, shew plainly, that the Straightness of the Vessels cannot be the Cause of the Disorder; because whatever Effect such Application may have on the Fluids, it is acknowledg'd that they contract the Solids, and consequently must increase the local Evil, which it is plain they do not: Nay, it is found by Experience,

Experience, to be more difficult to bring the Gout down into the Foot after such Application, than it was before.

Nor have these very ingenious Explications of the Cause of the Gout, been so univerfally approved, but that many are inclined to think that this Disorder is not feated either in the Blood, or the Blood-Veffels, but is rather to be attributed to the Nerves; and fo far the Advocates for this Opinion have the Advantage, that they can give a more plaufible and confiftent Account of every Symptom, and explain Difficulties much better this Way, than the other; but then it must be confidered, that the Nerves are to be looked upon as Chorda sonum reddens quem vult Manus & Mens, just as we think, so they will chink. And when the Advocates for this way of Reasoning come to Particulars, they shew their Weakness, some laying the Fault on the Animal Spirits; others

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on the Tone of the nervous Fibres, both which may be questioned; the one, as to its Agency; the other as to their Existence: And, supposing them agreed where to lay the Blame, whether on the Solids or the Fluids, they will still differ as widely as ever; the Solidist disputing the State of the nervous fibres, whether too lax or too tense; the Fluidist that of the Animal Spirits, whether too agile or too languid, whether desective or redundant; so that, in short, the Whole of this Theory amounts to nothing more, than explaining one unknown Thing by another.

I shall therefore subscribe no farther to any of these prevailing Opinions, than to that general one only, which I first set out upon; which is, that the Gout is an Effort of Nature to throw off some morbifick Superfluity. How this Superfluity is first occasioned, and in what it consists, will in some measure appear, from what has been said in the two foregoing Chapters.

But it will here behoove us to be a little more particular.

The Gout is acknowledged to be a Diftemper ordinarily arifing either from Repletion, or Retention, or both; the usual Causes of it are Intemperance on the one hand, and want of Exercise on the other: Hereditary Disposition, particular ill Qualities in the Food we accustom ourselves to, or in the Air we breathe, may haften its Approach; but generally it feizes upon us on the Turn of Life, when Ease and Indolence invite, when Thought and Care increase, and the natural Secretions begin to flag; fo that we may eafily account for what gives Occasion to this Superfluity, and as easily tell in what it confifts (viz.) excrementitious Acrimony ingested or retained. Why these Recrements make a Lodgment on these tendinous Parts, will appear partly from the particular Structure, and partly from the intended Use of them. The Tendons of the Foot, and membra-

nous Capfula's belonging to them, are by Nature cold and exanguious, and confequently more liable to lodge Humours, and less able to rid themselves of them, when lodged, than other more warm and invigorated Parts; and when the natural Heat begins to decay, as it will upon the Decline of Life, these Inconveniencies increase: Add to this, that these Parts are extremely fenfible, fo that they cannot bear the least Irritation without being greatly affected by it. Thus we observe in Surgery, that the least Prick of a Tendon is not only attended with exquisite Pain, but also very often with imminent Danger.

But we may not only argue from the Nature and Make of the affected Parts, but also from the intended Use of them, which is to move the extreme Joints, where there is no room for muscular Flesh, and where there is most need of muscular Motion; as therefore these Parts

were designed for Motion, they will be the more apt to be affected for the want of it; and if not kept in constant Exercise, lodge Humours, which might otherwise transpire. Labor Carnibus et Articulis convenit, says Hippocrates*; and daily Experience convinces us of the Truth of this Observation.

And thus we are led to account for this Distemper's seizing on many different Parts at the same Time, or running from one Place to another; for as all tendinous Parts agree in this, that they are more exanguious and sensible, than the more slessly Parts, so the same Lymph which is hurtful to them in one Place, may easily be conceived to be so in another; and tho' some Places may be more subject to this Distemper than others, yet all seem liable to it, and that in the internal, as well as the external Parts.

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^{*} Epid. Lib. 6. Sect. 5-9.

And thus having given an Account of the Nature and Cause of the Gout; let us next proceed to the Cure.

The Gout may be confidered, as regular or irregular, as simple or complex.

By the regular Gout, I mean that which comes regularly in the Foot; by the irregular, that which comes elsewhere.

By the *simple*, that which is simply so, without the Complication of other Disorders; by the *complex* such as has other Disorders complicated with it.

The regular simple Gout, is, as I have before observed, nothing more than an Effort of Nature to throw off some morbifick Superfluity; and therefore if she works right, and no Difficulties are apprehended, is best cured by the old Stoical

Rule

Rule of bear and forbear. We cannot derive the Humour to a fafer Place, we cannot carry it off fo effectually any other way. Malum bene positum non est movendum. But if we apprehend, that without fome Help, Nature may either rage too high, or flag too low: In the first Case, she is to be affisted by some gentle Evacuation, or spare Diet, such as may lessen the morbifick Matter, and not diminish the natural Strength. In the fecond, she is to be encouraged by fome warm Stomachick, fuch as may add Vigour to the Blood, without heating too much; to which End, as nothing conduces better than Bath-Water, given prudently, in fuch proportion as is requifite, fo nothing will fit better on the Stomach, nothing will strengthen it more effectually, and enable the concoctive Powers to affift in the falutary Discharge of the offending Matter.

But as what is done in the Fit, is only for a Time, and has no lasting Effect, because it does not reach the Root of the Disease, but tends only to the present Discharge of the peccant Humours; so the chief Bufiness of a Physician, especially in regular Cases, is not so much to give Ease in the Fit, as to prevent the Return of it; and he that brags of a Cure for the Gout, because he is able to relieve Pain, and take off a Fit, most miserably deceives himself and his Patients; for if he has done it fafely, all the Benefit is present Ease; if unsafely, as is generally the Case, Life itself is risqued for the sake of it.

But if Men will take the Cure of the Gout in a right Sense, and be content with alleviating the Evil, without attempting an entire Riddance from it, I am so far from thinking the Gout to be the Opprobrium Medicorum, that I believe there is hardly

hardly any Chronical Distemper in which a skilful Physician may be of greater Service. First, as the Gout confessedly requires great Care and Caution. Secondly, as our Care will not be in vain, because the Danger is not so much in the Distemper itself, as in the Irregularity, or high Degree of it; both which it is in our Power, humanly speaking, to prevent.

Now, in order to lessen the Violence of this Disorder, our first Intention must be, to prevent the Generation or Retention of acrimonious Impurities in the transfudatory Lymph; which is effected, by taking in nothing that may increase, something that may correct the Evil, and keeping open the natural Secretions. By Secretions, I mean not only those that are glandular, but chiefly those of the exhalatory Kind, which are highly material in themselves, and on which the glandular Secretions depend; and there is nothing so effectual to this End, as constant Motion

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and Exercise; the several Degrees and Manner of which, must be determined by Circumstances; I shall only observe here, that all Evacuations substituted in lieu of that procured by Exercise, tho' often very necessary, are vastly inferior to it in Effect: For though they may evacuate Quantity, they do not so certainly depurate the Juices, or, if I may so speak, they do not winnow the Chaff from the Wheat, as Exercise generally does.

As to those Things which are taken into the Body, whether by way of Meat or Drink, they deserve our particular Attention, something may be done to prevent, nothing should be vertured upon that may exasperate the Disorder: Temperance in general, and a prudent Use of such Meats as are suitable, both in Quantity and Quality to the Strength of our Digestion, should be a standing Rule with us; and as to Drink, it should be in such Proportion to our Meat, as may serve to promote,

mote, but by no means hinder, the Concoction of the more substantial Parts. In Kind, it should be soft, milky, aqueous, not altogether without the Admixture of generous Wines and Spices; for it is to be confidered, that though aqueous Liquors conduce towards the Correction and Exhalation of acrimonious Humours, yet if constantly adher'd to, or taken in too great Quantities, chill the Body, and lessen the exhalatory Secretions, instead of increasing them, in that they check the animal Heat, and so disable Nature from throwing off her Recrements; the Confequence of which is, that though we do Good in one Sense, we do Harm in another; and whilst we think we are mitigating the Degree of the Gout, endanger an Irregularity of it: And many there are, who have miserably deceived themselves with this Kind of Regimen, especially if they have begun upon it late in Life, when Age and Infirmity does not admit of this Sort of Treatment. And yet notwithstanding, if the digestive Faculties are good, and the Secretions tolerably open, it is very true that Temperance as to enflaming Meats and Drinks, is very necessary, and ought carefully to be observed; but as these two Circumstances, in regard to the Stomach and the Secretions, are often wanting, and are indeed, for the most part, the fundamental Cause of almost every Difficulty that occurs, our principal Concern must be to keep them in order; and therefore our first Consideration should be, whether one, or both are in Fault, and how circumstanced as a Cause, or a Confequence. Does a bad Digestion cause a Non-Evacuation of necessary Recrements, or does a Non-Evacuation caufe a bad Digestion? If the former, then every Thing must be insisted upon, that can contribute to a more perfect Concoction in the first Passages, and to the Conveyance of wholesome and nutritive Juices into the Blood; if the latter, we must forward, as much as possible, the Distri-

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bution of them through the Body, and of Consequence the Excretion of what is proper to be secreted out of it. If there is a Fault in both, we must have a constant Eye upon both; and as the one depends very much upon the other, so qualify our Medicines as they may have Respect to both, leaning always to that Side, which most needs our Help; and so neceffary it is to observe this, in every Medicine we give, or Evacuation we make, that I will be bold to fay, that among all the Variety of Remedies which have ever done good in the Gout, simply considered as fuch, the Benefit received, has therefore been receiv'd, because it has affisted either the Concoction or Distribution of Aliment, or both.

But as we do not profess to give Directions for the Cure of the Gout, only aim at explaining the Benefits arising from the Use of the Bath-Water, it may be proper to re-consider this Distemper both

as to its Cause and as to its Cure, that we may the better conceive the good Effects that are to be expected from it. And first, I shall observe in regard to the Cause, that Bath Water prevents the Generation and Retention of acrimonious Impurities, as it supplies the Body with aqueous Moisture, and so answers the Purpose of a Diluter; and this it does more effectually than other Water, because it does not chill the Blood as that is apt to do, and fo check the Exhalation of the transudatory Lymph, and is withal so active and permeable, as to reach the remotest Parts; whereby these good Effects extend further, even to the minutest Secretions, and so this Water not only dilutes, but also carries off great Quantities of acrimonious Lymph. And hence it is, that fcorbutick Habits either from Indolence or Intemperance, who have reason to apprehend the Gout, have recourse to the Bath-Water as the most likely Preservative, whilst those who have already been

been afflicted with it, look upon it as the best Remedy they can take, by way of Prevention.

And it is further to be observed, that the Bath-Water not only ferves to keep open the exhalatory Secretions, and confequently the glandular, which depend upon them, but also is a great Strengthner of the first Passages, whereby those who have been feverely handled by the Gout, meet with a defirable Stomachick, which both helps Digestion, and defends the vital Parts from any Attack, which might otherwise be made upon them; so that every Benefit arifing from an Amendment made, either in the concoctive or distributive Powers; is procured by Bath-Water, and every Indication of Cure answered, in a very natural and eafy Way.

But it may be faid, that our Business at this Place is not so much with the regular as with the irregular Gout, and that not
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withstanding the Explication I have given, of the regular Gout, I have by no means explained the Virtues of Bath-Water, which are chiefly seen in that which is irregular. But as the irregular Gout is for the most part the Effect of the regular ill-managed, I hope I have so far explained the Use of Bath-Water, as to shew how it may be guarded against; and shall now proceed to shew how such Irregularity is actually remedied by it.

The many various Irregularities of the Gout, and the different Treatment proper for each, must be learnt from those who have professedly wrote upon the Subject; as to the Indications of Cure, which I am chiefly concerned with, I find all are agreed, no one doubting but that our whole Business is to remove the Disorder from within, outwards; from the wrong Place to its right one. The Means how this is to be done, must be learnt from a Confideration of what Place the Gout is fallen upon,

upon, and from what Cause; which, together with a Comparison between the
Strength of the Patient and of the Disease,
may teach us to form a tolerable Judgment of what is requisite to be done.

There is perhaps nothing within the whole Compass of Physick, but what may accidentally have been of Service: Sometimes Evacuations are necessary; sometimes on the contrary, we are obliged to support our Patients with every cordial nourishing Thing we can think of; sometimes it is requisite we should deal roughly with the most forcing Medicines; at other Times, the very gentlest are offenfive. In short, all the Recommendations that have been given of Vomiting, Bleeding, Purging, or any other particular Method, are relative to the Case in hand, we cannot here be guided by Rule, but by Circumstances; our Course of Practice cannot be dictated to us, any more than the Course of a Ship in the Sea; all we have

have to do is to aim at the proposed End of bringing the Gout into the extreme Parts, and effect it in the best manner we are able.

This then being the Case, our next Enquiry is how this End is promoted by Bath-Water; which may be done either directly, as it respects the first Passages, or indirectly as through the Strength and Vigour of these, it helps other affected Parts. When the Gout is irregular, and seizes upon the internal Parts, there is no Place fo liable to the Attacks of it, as the first Passages; infomuch that I question whether the Gout external, is more appropriated to the Foot, than the internal is to the Stomach and Bowels; in most Cases therefore, we have recourse to this Water, as a Medicine which operates directly on the Part affected, as what will fit eafy on the most loathing Stomach, and comfort the difeafed Part, and by so doing enable it to throw off the Diftemper from within, outwards, and fix it in

its proper Place. And in fuch Cases where the first Passages are not the Seat of the Diforder, but some other internal Part; yet, as fome Defect in them may first have given occasion to it, the same good Effects may follow in this, as in the former Case. And if it shall so happen, that the Stomach and Bowels are not concerned in any respect, which is feldom the Case; yet, as the Strength of these is the Strength of the Man, and as the first Passages are the natural Organs, through which the Body receives its Supplies and Support, be it either of Food, or of Physick; the Strengthening of these, is the grand Means of strengthening other Parts, and ferves, tho' not in fo immediate and direct a Manner, to answer the Purpose of amoving the Gout from the internal to the external Parts.

True it is, that neither the regular nor irregular Gout, are so plain and simple, either in their Causes or their Cure, as not to admit of numberless Varieties arising from different ferent Constitution, Age, Sex, Manner of Life, &c. which may render the Bath-Water in some Cases improper; and it is well known, that the Gout may be complicated with almost any Distemper, and that it is frequently accompanied either with a radicated Scurvy, or venereal Taint, or hypochondriacal or hysterical Affections, and sometimes with a Complication of these; but as I do not undertake to provide against every possible Case that may happen, I shall avoid entring into Difficulties, which when once I am got in, I see no Way of getting out again.

Having finished therefore all I have to say, in regard to Bath-Water taken inward-ly in Gouty Cases, I am now to explain the Benefits arising from the external Use of it.

The external Application of the Bath-Water may be confidered either as total, or partial; by total, I mean bathing the whole Body; by partial, bathing or pumping any particular Part.

The Virtues of Bath-Water applied to any particular Part, will in some measure appear, from the two following Observations: First, That it is of fingular Service in old Pains and Aches, where there is an Occlusion of the Pores, and a Fixation of cold phlegmatic Humours. Secondly, That Sprains and Relaxations of the membranous or tendinous Parts, are cured by it. From the first, we conclude, that it is a powerful Discutient: From the second, that it is a great Strengthener. What then does Experience teach us, concerning the Gout? Will it either discuss the Humour, or strengthen the Part? Not the former, because all warm Discutients exasperate the Gout, and increase the Flux of Humours upon the Part. Not the latter, because no Strengthener is proper, during the Influx of Humours; and in this Cafe if it takes Effect, will be apt to act as a Repellent; and accordingly we find, that if any one puts his Feet into Bath-Water, whilst the Fit is upon him, he either enrages the Gout, or strikes it in.

When the whole Body is bathed in Bath-Water, we learn its Virtues; first, from the Effect it has on stubborn cutaneous Foulnesses: Secondly, on cold phlegmatic Obstructions. From the one, we conclude, that it is of a very subtle searching Nature, so as to reach the minutest Pores; from the other, that it stirs and brisks up the Humours in every Part.

But upon Experience we find, that the Gout is so far from being benefited by bathing the whole Body, that it is generally made worse, in that, as I conceive, the Exagitation of the Humours caused by it disturbs Nature in her intended Criss; the Consequence of which is, that instead of a salutary Lodgment on the extreme Joints, you will sometimes have a dangerous Instammation on the Vital Parts.

We may therefore conclude in general, that Bathing in Whole, or in Part, is never proper in the Gout, during the Fit; and the same may be said as to the near Approach of it, when Nature is about to throw off her Recrements in a natural Way, and so must not be disturbed in her Work.

But nevertheless, Bathing is found to be of great Service in most Gouty Cases; for though it may be hurtful in the Fit, yet during the Intervals, it is of great Use, in that it enlivens the Circulation, and fo prevents the Retention of acrimonious Humours. Bathing the whole Body, opens the Pores of the Skin; fearches and cleanfes the glandular System; promotes the Distribution of the transudatory Lymph; lengthens the Intervals, and lessens the Degree of the Gout. But then it is to be acknowledged that this is not to be expected in all Cases, and that great Judgment is required in the right Management of this Affair; but this does

does not affect the general Truth, only refers you to the Physician for Advice; and perhaps there is no one Case that comes to this Place, in which it is more necessary.

Bathing the Part, though dangerous in the Fit, may be of great Service upon the Decline of it; as it prevents the Fixation and Concretion of Gouty Matter, and strengthens the Part: And for the same Reason, it is highly serviceable to those whose Sinews are impair'd and crippled by severe Fits, and frequent Returns; only observing not to make too free with it, when there is any Apprehensions of a Fit approaching.

In irregular Gouts it has fometimes been thought proper to bathe the Part, with a view of bringing down the Gout into the Feet; and this Practice has been built upon a Notion that the Bath Water relaxes, and fo disposes Nature to deposite her Humours on the bathed Part.

But if the Bath-Water, so applied, will fometimes repel the Gout, when it is actually in the Foot, as it certainly will, how are we by this means to excite, and draw it down? And if lame crippled Limbs, are bathed with a Defign to leffen the Gouty Matter, and strengthen the Part, how is it that the same Application is to increase the Influx of Humours, and weaken it? What may be done by a warm Application ex accidenti, I will not difpute; but furely these Things do not hold well together, nor can I think that the relaxing Quality of the Bath-Water is of that Import and Significance, as we are generally made to believe; for although it must be allowed that warm Water is relaxing, yet furely it may be fo impregnated as to have a contrary Effect, as may be feen in any common aftringent Fomentation; and that this is the Case in Bath-Water appears from its wonderful Effects on Relaxations of all Kinds, either from

internal or external Causes, and also from the Effect it has on the Stomach, taken inwardly, where it is acknowledged not to relax, but to brace and strengthen; and if it does not on account of its Heat, relax there, I see no Reason why it should do it so powerfully elsewhere. A total Immersion, may possibly relax more than a partial Application, because of the greater Increase of Heat; but I shall venture to conclude from Experience, that the Bath-Water used externally, is by no means to be looked upon as a Relaxer, but a Bracer of the Solids.

And thus much will suffice for me to observe, concerning the Gout: All I have to subjoin is, that as what I have said is hereaster to be revised and corrected, I hope my Reader will be so good as to excuse any small Mistakes and Inadvertencies that may have escaped me for the present.

internal or extensal Causes, and also from the Fifth it the on the State States, taken interestly taken interestly, other in is actional digit and the rake, but to brace and trangulers, and it is actional digit in door not on account at its from the state. It is no no Reader why it from the state it is possibly the should at the greater approved the greater should depend on the state of the greater there are not the state to conclude them. Experience that the greater the conclude them Experience that the greater the state of the greater the state of the greater the state of the greater than the state of the greater the state of the greater than the state of th

And thus, much will felice for me to chieve, centroning the the Chat : All I have to inhipin is, that as what Lahaye have fold is hereifter to be revised and corresped, I happe my Reader will be for good as no to certain his for my Reader will be for good as no transfer to the court into the for good as no transfer will be for good as no transfer and that early hard and and the the form that early hard and and the the

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