

**A short treatise of metal and mineral waters; viz. those of the Spaw, Bathe, Epsom, Northhall, Barnet, Tunbridge, and the New Wells at Islington ... / by E.P. [i.e. Ellis Pratt].**

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METAL AND MINERAL  
WATERS

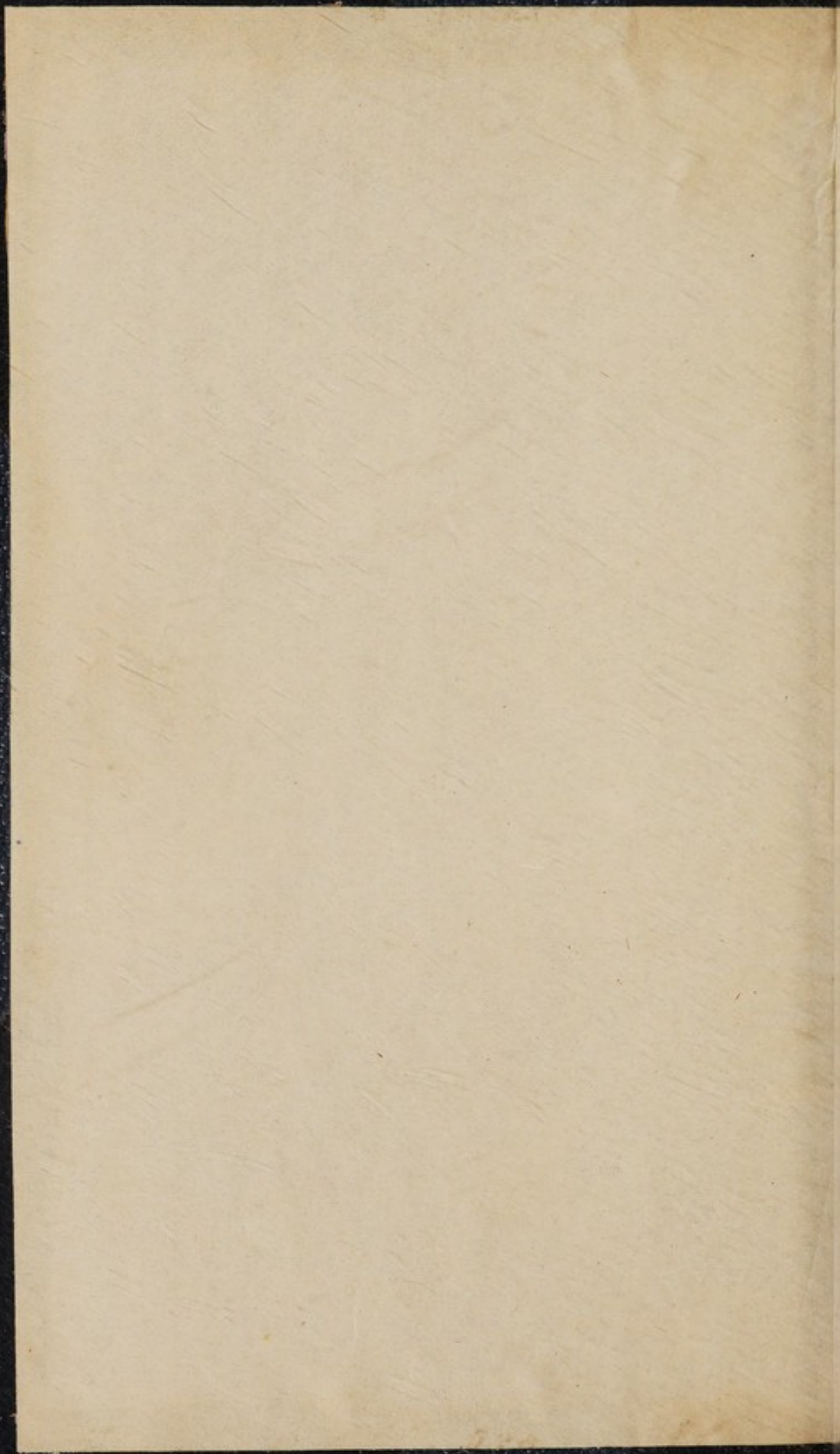


1684









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PRAT, E.



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A SHORT  
TREATISE  
OF  
Metal & Mineral  
WATERS;

VIZ.

Those of the Spaw, Bath, Epsom, North-  
hall, Barnet, Tunbridge, and the New-  
Wells at Islington.

WHEREIN

is described their bad as well as good Quali-  
ties, with the danger of Peoples too frequent-  
and unadvisedly Drinking them.

*Mirabilis in aquis Dominus.*

By E. P. M.D.

LONDON,

Printed by T. B. for Randolph Taylor near  
Stationers-hall 1684.

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TO

His ever Honoured Friend

The L A D Y

VERE BEAUMONT,

OF

Grace-dieu, in Com. Leic.

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Madam,

**P**Ray be pleas'd to accept of this  
small Present ; but not as any  
the least requital, I beseech you,  
for the almost innumerable favours you  
have been pleas'd from time to time to  
confer upon me ; since I fear it can  
scarcely be call'd an Acknowledgment.  
In short, Madam, this short Treatise,  
intended for public benefit in general,  
but

6  
but if it may, in the least measure, be  
serviceable or conducive towards the  
Preserving of your Ladiships Health,  
in particular, I have attain'd my Aim;  
and in an happy hour may then subscribe  
my self

Madam,

Your ever oblig'd

Servant,

E. Prat.

## To the Reader.

Reader,

**I** Am not ignorant that the use of Metal and Mineral Waters are often prescribed by Physicians against many Diseases; as Palsies, Tremblings, Ulcers of the Stomach, Reins, Bladder and Womb, Tenesmus, deprav'd Months, Abortion, &c. and though I know Sacred Writ says, *Mirabilis est in aquis Dominus*; because of wonderful and almost divine virtues given them by the Almighty Physician; for the cure of many rebellious and contumacious Diseases; and that as Vitruvius says, there's seen no more miracles of nature than in Waters: yet I would first advise all diseased Persons, that they would not be too hasty, and run hand over head, as they say to drink those Waters, because it may be some of their neighbours, &c. told them they found benefit by them, without consulting the Physician, whether they may be proper for them? forgetting the old saying, One man's Meat may be another's Poyson.

Next I would have the young Physician, chiefly be prudent and cautious in prescrib-

## To the Reader.

ing them, and not, as too often, to send their Patients, after they have put them to great cost, and wearied them with multitudes of Medicines, to the Wells, as their last refuge, without considering the nature of the Waters or the Sick; and not to send the intemperate, and full of foul humours, or that have hot entrals, or that abound with stinking, sharp malignant rebellious dregs, and who are full of obstructions, the notorious Parent of most Diseases, which are scarcely ever to be remov'd; For these Waters are all of hot and dry qualities; some more then others, as proceeding from hot and poisonous Minerals, as you will see in this Book; so that 'tis impossible but there must remain an Empyreuma, or collection of filthy matter, which in an intemperate and dispos'd boay will beget a new kind of Disease, and augment the hot disposition of the Stomach, Liver, and other Entrals ordain'd for nourishment, if there were any; and this from Hipp. de aere, aquis & locis text. 13. Aristot. lib. 2, Meteor, c. 3. Galen. l. 1. c. 6. de simple facult. They may work miracles in some Diseases, but *rara non sunt artis,* and

## To the Reader.

and that will not warrant a dogmatical Physician, instituted in the sound, safe and Orthodox doctrine of Hipp. and Gal. promiscuously and immethodically to prescribe them almost to all People and Diseases; as your Diabolory, I had almost said Diabolary Empirics, and wretches in Town do their Family Pills, their Friendly and Popular Pills.

Then as for Ulcers of the Stomach, I cannot but think them improper, being too hot, as proceeding from Nitre, Sulphur, Vitriol, the last of which is altogether of a contrary nature to Man, as being of a poisonous quality; as for Gold, Iron, &c. the Learned Fallopius, who understood the nature of Waters certainly as well as any man, believes they impart not any of their quality to the Water. The same may be said of Ulcers of the Reins and Bladder, which, for the most part will admit of no cure; by reason of continual afflux of sharp, watrish humours, whereby their detersion, and desiccation is hindred; so for Ulcers in the Womb, and preventing Abortion; these Waters are not of so drying force to work such effects.



## To the Reader.

So that I cannot in reason see how these Waters should be so proper for so many Diseases for which they are extoll'd, for they are all famous for their potential, as they call it, and hidden heat, in an eminent degree, whereby they destroy the native œconomy and temper of the Entrals: and imprint in them an extraneous heat, and so cause Dropsies, as Hipp. noted in a peculiar Example of his, and a 1000 other dire diseases, which prove incurable, and hasten death.

Certain it is some Physitians, for private filthy lucre, promote the Waters, and even discover new ones: And though many out of a good intent, in Books, extol them, yet let none precipitate themselves into danger of another, and perhaps worse disease, but advise with the Learned Physitian.

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(1)

OF THE  
NATURE  
OF  
Medicinal Waters.

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CHAP. I.

*Of the Matter Origine of Fountains in  
General.*

AND here I shall be brief; intending not a speculative Philosophical, but a Medico-practical Discourse, for information and instruction of the unlearn'd, and not for Learned Philosophers and Physicians.

Now'tis clearly my Opinion, with the Divine *Plato*, *Aristotle's* Master, and before him *Thales Milesius*, as also *Philo*, *lib. de mundi opificio*; the great *Seneca*, *l. 3 c. 1. quest. natural.* and others; that the Original of Fountains is from the

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Sea 5

Sea; from whence, through Sinuosities, Veins and *Meanders* of the Earth, water is carried to certain places, where it breaks forth and continually flows; it may very probably be conjectur'd they had this from the greatest of Philosophers *Salomon*, who in *Eccles.* 1. 7. says, *all Rivers run into the Sea, and it overflows not; unto the place from whence they came thither they flow again*, and indeed scarce can there be assign'd any other reason why the Sea doth not redound by such a dayly course and afflux of Rivers; unless because the Rivers do again flow out off the Sea, and return and pay only so much to the Sea, as they borrowed therefrom. Although the Evaporation and Extraction of watry Clouds by the Attractive force of the Sun, is no small help: and other material helping causes are Rains and Snows, which augment (though they do not generate) the Rivers; for these helps being withdrawn, heat of the Sun approaching they become Rarefied, and the neighbour parts of the dry'd Earth

of Medicinal Waters. 3

Earth drink them off. Whence, *Kings* 17. 7. the River *Careth* is said to wax dry by reason of the Sun's too great heat.

But we have one *Cardanus* impiously and Atheistically disputing against *Salomon*, *subtil. c. 2. de Elementis*, whom we shall endeavour to satisfactorily answer and enervate; though God Almighty's Power and Wisdom, might be oppos'd as answer enough, and Sacred Scripture ought to be of more Authority than all humane sagacity.

First then he says the Sea-water, because 'tis heavy, cannot ascend to such an height, as the tops of Mountains; but to this have been several refutations; some ascribing this motion to the operations of the Celestial bodies; and they say this motion is not violent, (though it be contrary to the private inclination of its proper form) if the *Potentia obedientialis* be considered; whereby inferior Bodies are made to obey their Superiors, &c. Others say there is a certain insite,  
B 2                      attractive

attractive faculty in the Veins of the Earth, whereby it sucks Water out of the Sea, as the Veins of Animals suck Blood: others there are but too long for this place, and wholly Philosophical and so not easily to be understood by ordinary capacities and so I omit them.

Then Secondly, he says before the Water could reach the Mountains out of the Sea, there's no reason to be given but it would break forth: But the Earth hath passages in some places and in some none. Then whatsoever he assigns to be the original of Fountains, it may be queried why in some places and Mountains there are Fountains and Rivers, and in some none?

Then Thirdly, he says, if it were so, Rivers would never be less; but it may be answered Rivers sometimes grow less from what portion is lost which comes from falls of Showers and Snows; and when part is suckt up by the dryness of the Earth, and heat of the Sun, &c.

Fourthly, he says the Sea would  
not

not satisfy so many Rivers, when the greatest part of Waters vanish by the heat of the Sun; But it may be answered that the Sea receives only as much as it gives forth; as *Salomon* says, *Rivers flow to the Sea, that they may flow out again*; then if the greatest part of Water should vanish, the Sea would long ago have been wasted; but the extracted vapors are recondens'd into Water which either flows into the Sea, or falls upon the Earth, to augment the Rivers, which at length unburthen themselves into the Sea.

Fifthly, He says, there can be no reason given why it should flow from one Mountain and not from another; But the answer to his second Objection solves this.

Lastly, He says, Fountains and Rivers would taste saltish and brackish. But to this is answer'd that Sea-water, whilst it passes through various Veins, Sinews and Meanders of the Earth, and so being as it were strein'd it sensibly deposes its saltness and bitterness. Hence the more remote

Fountains are from the Sea, the sweeter they are. If any shall say, that the Water was more likely to contract a bitterness by reason of the Exhalations it receives from the Earth: it may be answered, that they are not any sort of Exhalations that produce bitterness, but only adust ones; and all are not such in the intrals the Earth. Therefore now *Cardan*, we may conclude, I hope, hath not got any thing by contradicting *Solomon*.

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## CHAP. II.

*Of the Division of Fountains and of Mineral and Metal Waters.*

**H**AVING in the former Chapter given the Reader a plain account of the Matter and Origine of Fountains, we should in the next place, see how many sorts of Fountains there are, but because 'tis the work of Natural Philosophers and Hydrographers;

phers ; and nothing of an advantage to our present purpose we shall wholly omit it, and only speak of Mineral and Metallic Fountains, as being the subject of our present Discourse. Now those I call Mineral and Metallic Waters, which participate of the nature and faculty of that Metall or Mineral through which they pass in the Caverns and Veins of the Earth. The which are either 1 *Salt*, 2 *Vitriol*, 3 *Allum*, 4 *Bitumen*, 5 *Naptha*, 6 *Nitre*, 7 *Gypsum*, 8 *Arsenic*, 9 *Cadmia*, 10 *Antimony*, 11 *Chrysocola*, 12 *Ochre*, 13 *Lime*, 14 *Asbes*, 15 *Pumice-stones*, 16 *Gold*, 17 *Iron*, 18 *Brass*, 19 *Lead*, 20 *Brimstone*, and 21 *Quicksilver*. Now as I said the Minerals through which Waters pass, bestowing upon them in their journey a considerable part and portion of their good and bad qualities ; I thought it very requisite, before I discours'd of the use of the Waters themselves, to say something of the Natures and Properties of the Metals and Minerals they are mixt with; that thereby you may be the bet-



ter able to judge of the nature of the Waters proceeding from them ; then we will begin with *Salt*.

The faculties of *Salt* are great, many and very useful to man ; but not so necessary in *Physick*, as many think ; such as your Quacking *Chymists*, who predicate many wonderful and vain stories of Salt reduced by their Chymical Art ; for they audaciously assert that their is a Purgative faculty in Medicaments because of Salt ; and when they have got some Extract from any Medicament, then they presently aver that they have got its Salt forsooth ; but these being things above the vulgar capacity ; I shall say *Salt* is very Conservative, of an Astringing, Absterging, Purging, Discussing, Repressing, Extenuating quality, and vindicates the Body from Putrefaction ; yet some *Salt* is better then others ; but us'd immoderately produces very bad effects, as sharp, salt corroding humors all over the Body, Scabs, Leprosie, the Stone, and other dire Diseases ; as Dulness of sight, disorderly

Of Medicinal Waters. 9

Fermentations in the Blood, rendering it thick and earthy by burning it; *Schroder* thinks thus of the Original of *Salts*; the *Macrocosm* he says, as the other two Kingdoms, *i. e.* the Vegetable and Animal, is sustained and lives by its food; in this abounds a salt, answering to the salt Excrements in the Sweat, Urine, and Dejections in Animals; now the Salt of the greater World congregated into the inferior Glob, is of a diverse kind, according to the variety of its Matrix, even as the salt Excrement in Animals is different; hence, *Common Salt*, *Salt Gem*, *Salt Nitre*, *Alum*, &c,

The *Greeks* call that *Calcanthum*, which the *Latines* from its blackness, call *Attramentum Sutorium*, or *Shoemakers Ink*; and from its spendent vitreous *Nitre*, *Vitriol*; *Dioscorides* a man of profound Judgment in the *Materia Medica*, reckons three sorts thereof, two Native, and one factitious; one sort of the Native is found concreted in the bowels of the Earth; another is collected in form of a Water,

ter, out of some Mine, which put into a Vessel soon coagulates into *Vitriol*; as for the factitious we have nothing to say to that here: the Native or Fossile *Vitriol* participates of *Calcitis*, *Misy*, and *Sory*; the Native and White is prefer'd in the Medicinal uses; which the *Metallicolous Alchymists* say is produc'd by their *Sulphur* and *Mercury*; as of Sperm; which they indiscriminately exhibit to all affections, out of which they draw a certain acid Liquor, a few drops whereof mix'd with Syrup of *Violets*, acquire a most elegant colour and taste: But Oyl of *Sulphur* will do the same, and a few drops of one or both of them infused in the Syrup of *Roses*, will make the whole Liquor red; which they call, forsooth, Tincture of *Roses*.

Now Nature 'tis true hath enrich'd *Vitriol* with eximious faculties, which skilful Physitians have both experienc'd and left describ'd; as *Galen*, *Dioscorides*, *Paulus Aegineta*, *Aetius*, *Oribasius*, &c. who have very much nobilitated it: it heats, binds, dries, kills  
broad

brood Worms, helps against Toad poy-  
 son, preserves moist flesh, and drys up  
 humors, drives away Putrification, robo-  
 rates the inward parts: outwardly it  
 binds, purges Ulcers, causes Wrinkles  
 like *Alum*, with whom it hath relation;  
 But besides these excellent qualities *Vi-  
 riol* hath also its bad ones: for it is ill  
 for the Stomach, acrimonious, corrosive  
 and vomitous; and therefore ignorant  
*Quacksalvers* and *Women* give it some-  
 times in *Wine*, and sometimes in *Rose-  
 water* in uncertain weight, against  
*Quotidian* and *Quartane Agues*, and ma-  
 ny other Diseases, and indeed the Fe-  
 ver is often resolv'd by vehement Vo-  
 miting, but this Medicine being un-  
 skilfully Administred proves most of-  
 ten more formidable than the Disease.

*Alum* is, as it were, the Brine of the  
 Earth; whereof *Dioscorides* makes  
 three sorts; the Round, the Liquid,  
 and the Jagged, or Scissile, the last is  
 often call'd Plumecous, for they are so  
 like in form that they can scarce be  
 distinguish'd, yet they differ both in  
 nature and qualities, for the Scissile is  
 manifestly

manifestly binding, and may be burnt  
 but the other is Acrimonious, and su-  
 fers not by fire. *Mathiolus*, says he saw  
 and tasted a Liquid *Alum*; of which he  
 asserts, that he never found any thing  
 more Astringentive. Now when *Alum*  
 is simply mention'd, we mean *Roc-*  
*Alum*, which is a saltness of a Miner-  
 Earth, of a Leadish nature, consistin-  
 of an acid spirit, and a caustic  
 Earthy salt; and all *Alum* is of Cra-  
 parts, binds much; whence 'tis call'd  
*Stypterion* in *Greek*, because it is Sty-  
 tical, it heats, cleanses, amends putri-  
 Ulcers, dries humid ones, absumes  
 superfluous flesh, takes away itching,  
 cures the Scab, and very useful in  
 many Medicaments made for the Cure  
 of Ulcers.

*Bitumen*, which the *Greeks* call *As-*  
*phaltes*, is as it were the fatness of the  
 Earth swimming above the Waters  
 which being cast upon the shoar  
 thickens and becomes hard, tenaciou-  
 and inflamable: As long as it swim-  
 on the water 'tis soft, but when 'tis on  
 it becomes thicker and harder, and  
 resemble

resembles dry Pitch; yet easily melted at the fire. Many Lakes are bituminous, but especially one in *India*, thence call'd *Asphalites*, and the dead Sea, because of its vastness, and because its Water remains almost immovable; not stormy, but heavy, salt, thick, and stinking; wherein neither Plants nor Animals breed; neither doth it nourish such as are put into it, or admit them into its bowels.

All *Bitumen* is not solid and hard; but some is perpetually fluid and liquid, call'd *Naptha*; which is the refining of *Babylonian Bitumen*, white of colour, and most capacious of fire; for Fire and this are so near a kin, that it will presently leap into it, when near it. There is also black *Bitumen*. For its Virtues all *Bitumen* discusses, mollifies, glutinates, defends from inflammation, by olfaction, suffumigation, or imposition; mends the strangling of the Womb. *Naptha* extenuates, incides, digests, penetrates, absorbs frigid and thick humors in all, parts of the Body, and cures the  
Resolution

Resolution of the Nerves, Palsies, and diseases in the Veins and Arteries from cold cause.

*Nitre* of the same nature with the *Salts*.

*Gypsum*, is a kind of *Talk*, of the nature of *Lime*, whose hot, fiery, caustic quality every one knows.

*Ratsbane*, or *Arsenic*, is between a *Salt* and a *Sulphur*, 'tis of such an acrimonious, corroding, hot quality, that it will burn to a crust; dissolving, destroying and preying upon the Principles of Life; malignant, and an Enemy to all Natural parts; and to the Radidical moisture, and innate heat; and therefore was very ill advis'd of *Nich. Alexandrinus* to prescribe it for an Ingredient in the great *Atharasia*, says the great man of skill in the *Materia Medica*, *Johannes Renodeus*; for by permixtion with other Medicaments it doth not depose its malignity. The Learned *Schroder* says: 'tis one of the highest Poysons; for besides its acrimony, it is an Enemy to our Natural Balsam of Life, so that it brings

brings strange symptoms, not only taken inwardly, but apply'd outwardly; as Convulsions, numbness of Hands and Feet, cold Sweats, Palpitations, Faintings, Vomiting, Corrosions and Torments, Thirst, &c.

*Cadmia*, Metallic, 'tis the Stone out of which *Brass* is drawn, and is call'd *Brass-Ore*, which Artificers use in making *Yellow Brass*, which the Shopmen call *Aurichalcum*, or *Orichalcum*, and 'tis probable this is the Stone which *Albertus Magnus* calls, *Didachos*, or the Devils-stone: *Cadmia* disiccates gently, absterges and helps humid and putrid Ulcers, and draws them to scars; *Schroder* says 'tis Caustic, and that it ulcerates the Hands and Feet of the *Miners*, and taken inwardly kills all Creatures.

*Antimony*, or *Stibium*, or the seventh Metall, which some say is *Mercury*, others *Ambar*, but neither of these are more than in a potency to be Metalls; a grand *Alchymistical Quacksalving Idol*; the sole Empyrical, Chymical Cathartic; whereby they boast to

cure



cure all Diseases ; but it most devilshly disturbs mens Ventricles by moving upwards and downwards ; others it miserably torments by vigorous Purg- ing ; some it kills and restores very few to perfect health. One *Cornelius Gemma*, a Physitian of *Lovain*, relates, how a *Paracelsian* English *Quacksalver*, being himself and his Wife sick of a Fever, took himself and gave too his Wife, that which they call prepared *Antimony*, whereupon she fell quickly distracted, and changed her Life, yet valid, with death ; and he complaining of Dreams and continual Watchings, seven days after his Dejection, began to Rave ; from that he became Epileptical ; from his Epilepsie he fell into a Lethargy, being therewithal somewhat Apople- tical: when he had been three days in that sopor, he fell again to his raving, and was so agitated with fury, that not long after he expir'd and pass'd from his conjugal Bed to his conjugal Tomb : and howsoever the *Chymists* cry up their Preparations of *Antimony*,

tye

yet as able Physitians as any in the World forbear to exhibit them because they have much better Medicaments wherewith they may more securely cure any Disease. And I could give a large account of the dismal Accidents that I have known happen by the administering of *Antimony*: and my ever honoured Master Dr. *Patin*, *Regius Professor* in Physick in the Famous University of *Paris*, wrote a Book which he call'd the Martyrology of *Antimony*.

*Chryfocolle*, which the Shopmen, following the *Barbarous Mauritanian Idiom*e call it *Borax*, is found in the *Golden, Silver*, and sometimes *Brazen Mines* in *Armenia, Macedonia, and Cyprus*; it heats, checks superfluous Flesh, and is mordacious; it produces Ulcers to sanity, but taken at the Mouth 'tis perillous, says *Renodens*.

*Ochre*, is a kind of Yellow Earth much commended in *Africa*, not lapideous, but friable, clayey and smooth, it binds, corrodes, discusses Tumors, and represses Excrecences.

*Gold*, is the greatest Cordial in the Pocket ; most certainly ; for *omne cardiacum debet esse humidum & Calidum : aurum autem est frigidum & sicum, i. e.* every Cordial ought to be moist and hot, but *Gold* is cold and dry, *Ergo* *Gold* is no Cordial at all ; and nothing indeed is Cordial but what nourishes ; a Glass of generous *Wine*, and nourishing Broaths, and such Diet are the greatest Cordials under the *Sun*.

*Iron* is an ignoble Metal, consisting of *Mercury* and *Sulphur*, not so meltable, cruder, or rather of *Sulphur* and *Salt* ; mixed with the Cruder parts of the Earth : it binds and opens, as the *Chymists* says ; the opening Virtue is chiefly in its more Volatile part, and so in the *Salt* ; the Astringent virtue lyes in the more fixed part, and so in the Earthy.

*Brass*, was formerly dedicated to *Venus*, from her *Island Cyprus* where great plenty was dug ; 'tis either of a Golden color call'd *Anrichalcum* ; or redder, and then call'd *Brass* absolutely. *Brass* was of more use among the Antients

Antients, than either *Gold*, *Silver* or *Iron*; for the first money was *Brass*; and hence we meet with *Aerarium publicum*, *Aes ali num*, *Quistor aerarius*, their Warlike Arms also were not of *Iron* or *Steel*, but *Brass* as also their Statues and Temple doors.

*Lead*, according to the *Alchymists*, is both dedicated to *Saturn* and called *Saturn*, and in their opinion 'tis generated of impure *Quicksilver*, and a little impure *Sulphur*, and 'tis thought that not only under the Earth, but in the open Air also it augments, and therefore *Cardanus*, thinks it endamages houses by its weight: for its Virtues, it refrigerates, binds, and thickens, &c.

*Fossile* or Native *Sulphur* is naturally generated out of a certain fat portion of Earth; much whereof is in *Lipara*, *Melos*, and such like places, it is much in quality a kin to fire, for if be cast upon Coals it will burn, and not be extinguished, till all its oleous and fat substance be wasted; that *Sulphur* whereof your *Quacking Chymists*

tell many vain and ridiculous stories, is not common *Sulphur*; yet 'tis mixed, though they assert it to be a principle of mixture. But no more of that here. It heats, cooles, resolves, cures Coughs, and difficulty of breathing, taken in an Egg, or burnt and its smoak catch'd, moves Spittle: mixed with Butter or Swines-grease, it mittigates and kills the Itch over the whole Body; and mixed with *Turpentine* it cures Tetter.

*Mercury* or *Quicksilver* is the prime Idol of the *Alchymists*, which they pronounce to be the principle of things and Sperm of Metals; and indeed so true each, that nothing more false; for if Metalls have any Sperm, 'tiss within themselves, not else where to be sought; nor will ever mixt bodies naturally resolve themselves into *Salt*, *Sulphur* and *Mercury*, though these *Chymical Vulcans* will be hammering them out, as the Learned Philosopher and Physitian *Riolanus* hath proved against them. This *Quick-*

*silver* its as it were, the Monster of Nature, which will not be subject to

Natures Laws; 'tis more fluxible than *Water*, more permeable than *Vinegar*; tho it moistens not; sometimes cures cold diseases; sometimes hot: when it seems cold it induces hot effects; when hot then cold ones; it sometimes hurts in small quantities, always in great; it easily loses it proper form, and easily reassumes it, and in this 'tis miraculous, that it often profits being taken inwardly; and often causes Palsie, trembling and other sad effects when apply'd outwardly; *Falop. de Lue Vener.* 'tis such a Beast that can scarce be tam'd by any Art; So that *Galen* the Prince of Physitians, next *Hippocrates*, durst not use it; having learn'd of *Dioscorides* that it was Poysonous. Its qualities are yet under debate; for some, from its effects, say 'tis cold; others as *Avicen* whom *Palmarius* and others follow, say 'tis cold and moist; *Fracastorius*, *Tomitanus* and others, who attribute a corroding faculty to it, contend for its heat. But *Renodeus*, with *Trajanus*, thinks it to be of a mixt quality, participating of many other

faculties, but consisting chiefly of subtile parts; for it incides, attenuates, penetrates, melts, resolves, loosens the belly; and what is most to be admired, partly by an attractive quality attracts humors from the superficies to the Centre; and excludes them by stool; and partly by an impulsive faculty drives them from the Centre to the habit, and ejects them by salivation; and it often works by seige when it should salivate; and often salivates when it should move downward. Thus much of the nature of all the Metalls and Minerals from whence the Waters proceed, now a few words concerning the manner have the Waters acquire their virtues from them.

Now all these Waters are of a mixt, not simple nature, for they proceed and pass not from and through one Quarry or Vein of the Earth only but from divers; and therefore acquire diverse faculties according to the diverse substances which they draw along with them: as for Example, if a Water arises where is generated a Quarry or  
 Vein

Vein of *Sulphur*, from whence it passes where *Iron's* generated, or *Lead*; this Water more certainly shall acquire mixt faculties to it self; and yet it shall attract more of the substance of the one than the other, according as any one quality makes more impression than another: and many times so comes to pass that the Water proceeds from and passages through passages where the Metall or Mineral is not yet perfectly generated, then you must expect it to be of an hot Nature, but not so much participating of the Metall or Mineral; the reason is because all Metalls and Minerals have heat for their efficient cause, and therefore if the Waters pass by while the Metall or Mineral is in generating, and where there is the cause of their generation, which is heat, they will consequently become hot; whence they will prove to be actually hot, and of a fiery quality; and this shall be more or less according the more or lesser acting of of the Heat; or by reason of the longer or shorter stay of the Water, or



by reason of the nature, quality and substance of the Matter which is more or less permiscible. For that the Waters do effectually attract the Virtue of the Quarry or Vein, there are three things requisite (*viz.*) that heat perform it parts well; that it acts opportunely, and those things which ought to be mixt, be fit to be mixt. So that since these three conditions are required to the compleating the work, it comes so to pass that although Waters do sometimes participate of more Quarries or Veins; yet it shall retain the faculties of one more than another; either by reason of one of these causes, (*viz.*) either because heat was more active, or from its longer stay, or from the Matters being more apt, or lastly from all these causes conjunct. Now a Quarry or Vein doth not impart its substance or faculties to the Water one manner of way only; but either it so imparts it, as its substance, is truly and really mixt, with its and those Waters and retains their faculties for a long time and to some purpose.

## Of Medicinal Waters.

pose : or else they are mixt not with a true and real mixture , but are only confounded ; and when they are mixt by such a kind of confusion, the Waters of the Quarry are not all one, neither are they truly mixt, for one may separate one from another : sometimes lastly they are mixt, not because of the substance of the Quarry is mixt with Water ; but only vapors elevated from the matter are permixt ; And since it happens as you may understand that mixtion is perform'd by these three manner of ways , 'tis no wonder if Water mixing it self in several Veins, shall attract and contract to it self the faculty of one more than another. As for example ; if Water that shall be perfectly mixt in one Quarry , with another confusedly only , and with another, with the vapors only, and not with the substance, it shall retain much more of the nature of that wherewith it is perfectly mixt, than the other.

CHAP.

## C H A P. III.

*Of the Waters of Bath, and their Causes.*

Concerning which there are likewise divers opinions: Now these Waters being of so hot a Nature, that if you throw but a Fowl therein and it shall immediately deplume it; put Fish and Eggs therein and it will presently concoct them; that these Waters are so hot of their own nature, I cannot believe; for all Water is always, and of its own Nature cold in quality; and if it become hot by accident take away the heating cause thereof, and it shall return to its prestine cold temper of its own accord, without any thing of an altering nature being adhibited: For there are Rivers in hott Countries that are not very hot from the heat of the Sun: So that I conclude these Waters to be hot in the Caverns of the Earth from an outward

ward cause: which that it may be made more plainly manifest, we shall briefly inspect into the causes of Baths.

Concerning their efficient Causes their are likewise various opinions; omitting the whimsical frothy conceits of the *Chymists*; let us see what the more sound and solid sort of Learned Philosophers say to the business; some ascribe this virtue to the Rays of the Sun with *Thermophilus*, who held that the Sun penetrating the pores of the Earth (for certainly the Earth is porous and Spungy,) was in its bowels there fortified, and made more active in heat; so that like Fire it heats Water, and what ever it meets with, and even burns what it meets with combustible; but if this were so, these Baths would be so hot in Summer only, not in Winter; or at least it would follow that these Springs would be less hot in Winter than in Summer, contrary to all experience; for every Idiot can tell you the Springs, &c. are hotter in Winter than Summer, the cause where-  
of

of the Learned Philosophers ascribe to  
 that they call *Antiperistasis*, that is, in  
 plain English; the Earth is hotter within  
 in *Winter* when the Sun's absent, than  
 in *Summer*; and so they'll tell you  
 that their Sellars are hot in *Winter* and  
 cold in *Summer*. Secondly, I cannot  
 conceive how the Sun should penetrate  
 into such deep Caverns of the Earth as  
 by force of its heat, to make the Wate  
 ters therein to become so hot; where  
 we see, it cannot effect the same on  
 Lakes in any hot Region: Then gly  
 We know that there are Baths found  
 in the most cold Countrys, as *Island*, &c.  
 Some with *Mileus* will have a Wind or  
 a Spirit vehemently tosse'd and mov'd  
 up and down, and so penn'd up grows  
 hot, and so coming to fall upon the  
 Waters overheats them. *Democritus*  
 says, they receive their heat from *Asbes*  
 and *Lime*: others think these Waters  
 grow hot by reason of vehement mo-  
 tion and beating against the Rocks  
 and not a few there are which say that  
 the matter through which they pass  
 heats them, which they say is the rea-

form

on that some smell so strongly of Sulphur, because they flow from Sulphury Veins. Others, o'th other side, will have the cause to be an extream heat within the Earth in those places, which overflow with hot Waters; and learned Dr. Fordan our Countryman I mistake not, thinks they derive their heat from the fermentation of Metals in their Generation; to which is required an actual heat with a certain humidity; and some affirm that Thunder heats the Waters, as may be seen from *Maenius*;

*unt autem cunctis permixti partibus ignes, qui gravidas habitant fabricantes fulmina nubes, Hec penetrant Terras, Aethnamque imitantur Olympo, Et calidas reddunt ipsis in fontibus undas.*

Lastly, the *Chymists* will have the Waters to wax hot from a mutual combat and conflict of divers *Salts* or Mineral Bodies; after the same manner, as we see

see in the conjunction of Spirit of *Vitriol* or Salt of *Tartar*, as from the two fires the Glass becomes so hot,

*Ut multo accensis, fervore exuberat undiss  
Clausus ubi xusto liquor indignatur ahermo*

Now among so many disagreeing opinions, when there can be but only one right one; *Aristotle* the great searcher into the Secrets of Nature, in my opinion hit the Nail on the head, who following *Empedocles*, the Disciple of *Pythagoras* when he saw these *Therm* or Baths, so call'd from *θερμους*, *Calidus*, to be so hot, thought they could become so no other way, than from a most fervent cause, because all Waters of their own Nature are cold, and could think the efficient cause to be no other then Fire included in the inmost parts of the Earth, and there, as it were, primogenially residing; of which the *Epicurean* Poet and Philosopher,

*in principio tellus habet in Corpora prima,  
unde mare immensum, vo ventes flumina  
fontes*

*Assidue revomunt habet ignes unde ori-  
antur,*

*Jam multis succensa locis ardent sola  
Terra.*

Now that there is Fire under the Earth, besides the hot fiery water springs; the *Lime, Ashes, &c.* which are omitted and dug out of the Earth, may confirme and persuade us; as being the genuine effects of fire; to say nothing of Smoak and Soot, breaking out of the Earth; and in some places fire it self; therefore subterranean fire, which *Kirkerus* calls *pyrophyllacia*, i. e. a Prison for fire, is the most certain cause of the heat of the Waters, For while those springs of Waters upon the Mountains, are carryed by the Veins and newy bendings of Metalls, in manner of Dragons and Chaldrons in the paths of the Antients, writhed and twisted



twisted with circles of *Brass*; like a Meander; and from thence attract the Virtues and Vices, as I may so say, cold *Metalls*, wherewith the Water is tempered, they wax hot from the natural fire Subterraneous to those windings, even just as Water in a Pot is heated by Fire; and *Bartholine* says expressly that Fire doth not heat the Water after the manner above related from *Aristotle* and *Empedocles*; but that the Pipes or Veins of the Earth contain Fire it self within them,

Now the Water becomes more or less hot, here and there, First, as the matter is found more or less apt for heat; Secondly, as that Fire is nearer or farther off the Water; whence in some places Fire breaks out together with Waters, in some places Water without Fire to be seen. Thirdly, as there is a present quantity and proportion of matter, as for example, a great quantity of Water would extinguish a little Fire, so that we see no River to be so hot, much less a Lake, least of all the Sea.

But since so much and lasting a Fire cannot continue without some food, or maintenance, therefore it must necessarily have some *Matter* to nourish and renew it. Now this matter must be something that will burn, either dry, or oleagenous. Lands taken from the Fens and dryed, they call it roasted, cannot be the fires continual matter; for it is soon consum'd by the Fire, and it burns only by reason of the Roots and Herbs and Grass which it contains; wherefore it must be oily, fat matter; Now the fatty things which are begot in the Bowels of the Earth, are chiefly *Marle*, *Bitumen* and *Brimstone*; now *Marle* burns not, nor any Earth, unless it be Sulphurous, or Bituminous; so that we may certainly conclude that *Bitumen* and *Brimstone* and *Oyls* are the material cause of the hot Baths: hence Baths are call'd Sacred, because they abound with *Sulphur*, with which the Ancients us'd to expiate their offences, whence the *Grecians* call it *Theion*, i. e. *Divine*; For whatsoever is annointed with *Oyl* or

D

*Bitume*

*Bitumen* and *Brimstone*, it presently takes fire: For moist and fatty, by consent of the Philosophers, is the genuine food of Fire;

As for the nature of our Baths in *Somersetshire*, Physitians are divided among themselves, some saying one thing and some another: *Dr. Turner*, who hath wrote concerning them, says they consist of *Sulphur* and *Copper* mixt together: *Dr. Fordan* and *Dr. Venner*, Practitioners at the Bath, will have them impregnated with *Sulphur*, *Nitre*, and *Bitumen*, *Dr. Venner* becausse he judges *Sulphur* to have the dominion; but *Dr. Fordan* is for *Bitumen*. Others will have them consist of neither; as *Loffius*, who in his counsell concerning these Baths, when he hath given his opinion, that the material cause of Baths in general was *Sulphur*, *Oyl* and *Bitumen*; tells you afterwards that the Baths in *Somersetshire* contain neither *Brimstone*, nor *Bitumen*; as having neither taste nor smell of either and says if you distill them in a *Glaasse* or *Alembeck*, you will not find the least sign

of either, but a certain substance like  
*Salt*, such as is found in Pipes, through  
which Water runs into Cysterns; and  
this he takes to be a kind of Nitre,  
wherewith that ground he says doth  
much abound; mixt with a portion of  
*Vitriol*: and the Learned Dr. *Meara*,  
in a Letter to Dr. *Prujean*, (before  
*Loffius* wrote) concerning the cause of  
the Heat in these Waters, tells him;  
as a certain person of Quality was  
riding out of the City one day to take  
the Air; he by chance espies a certain  
kind of Chalk, or Marle as white as  
snow springing out of the Earth like  
Mole-hills, brings some of it home and  
shows it to him and Dr. *Maplet*;  
which he says, was of a crumbling  
nature, and almost turning to Powder  
of its own accord; affording a mani-  
fest sharp, sour taste without astringency;  
but biting; and begetting an inflamma-  
ry choking or stopping in the Throat;  
that he did not doubt, but that it ab-  
ounded with much *Vitriol*, and that  
was not altogether void of *Arsenic*:  
put into cold water, it presently pro-

duc'd an ebullition, as if it had been  
*Quick-Lime*, and the water by degrees  
 grew vehemently hot; and since this  
*Marle* or *Chalk* was found in the neigh-  
 bouring parts of *Bath*, he very pro-  
 bably was induc'd to believe that the  
*Bath* water grew hot from this Fire.  
 And he says, though he is not igno-  
 rant that Authors every where ascribe  
 the heat of the *Bath* waters to *Brim-  
 stone* and *Bitumen*; and though it can-  
 not be deny'd but that there is great  
 plenty of *Bitumen* in those Springs, and  
 that they are abundantly impregnated  
 therewith, as the Cure of Scabs, Lepro-  
 sy, Ulcers, &c. may convince, yet  
 doubts whether either of them has the  
 nature of a Ferment apt to heat the  
 Waters; since both are destitute  
*Acidity*, the chief promoter of *Ferme-  
 tation*; neither can either of them  
 cast into water, produce Fermentati-  
 on or Heat, and whenas they are of a  
 clammy consistence, and especially the  
*Bitumen*, so that the Water cannot  
 insinuate or penetrate it self into the  
 particles, it must be concluded that

they are unapt for such a Fermentati-  
 on; whenas the contrary is seen in that  
 crumbly, powdry and not gummy con-  
 sistence of the *Marle*: and so con-  
 cludes leaving it wholly to *Dr. Prujean*  
 to be judge, in so obscure a case. And  
 I likewise shall not trouble the Reader,  
 with tedious Philosophical disputes  
 upon this subject; being as I told thee  
 at first, I intended a plain and practical,  
 and not an hard, difficult contempla-  
 tive discourse, and so shall pass on in  
 the next Chapter to shew you the use  
 of these and other Waters, or as I may  
 say, their Virtues and Vices. But  
 something first of the preparing the  
 Body.

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 CHAP. IV.

*Of the manner of preparing the Body of  
 such as intend to drink the Waters.*

**B**Ut most Peoples intention of going  
 to the Waters being as I suppose  
 to cleanse their Bodies, and free them

D 3

from

from Obstructions, Stone and Gravel, &c. and put their Bodies in good temper and order; I would advise them by all means to Prepare and Purge their Bodies before they take any of these Waters, either *Tunbridge*, *Empsom*, *Dullege*, or any other hereabouts, or at other places, as likewise at the *Bath*, &c. for if they go thither with gross, foul Bodies, and gorge themselves with the Waters before they have unloaded themselves, of their overfulness of Blood, or bad humours, they had better stay at home, than to make work for the Physitian and damnifie themselves in Body and Purse.

Now if thou art troubled with too much blood, which thou mayst know by the fulness of the Veins, and heaviness and dulness of thy Body, thou hadst best take away some blood, to the quantity of 6, 9, 12, ounces according to the strength of thy body, age, sex, &c. or thou mayst do it at twice; then Purge with this or the like. Take from half an ounce to an ounce of the best *Sena*, and from a Scruple to a dram co

Cream

*Cream of Tartar*, & infuse them all night in some *White-wine* or *Ale* Posset-drink strein it & drink it off early in the morning or thou mayst have *Electuaries* or *Pills* at the *Apothecaries*; if thou hadst rather; a *Scruple* of *Stomach Pills* taken at night going to bed, or after thy first sleep will work finely the next morning, made into three or four *Pills*, and you may go about your lawful occasions: or *Lenitive Electuary*, *Catholicon*, and *Diaprunes* of each two *drams* taken after the same manner, then you may venture to drink the *Waters*, any of these taken twice first.

If thou beest of a *Choleric* nature prepare thy body, by boyling some *Sorrel*, *Borage*, *Bugloss*, *Chichory*, *Dandelion*, *Endive*, *Strawberry-leaves*, *Spinach*, and such like in *Fountain water* or *River water*, with a little *French Barley* and *Liquorice*, and strein it and drink thereof for a day or two; if thou wouldst have it pleasant, add some *Syrup of Violets* or *Lemons*, and then Purge with *Sena* and *Cream* or *Chrystal* of



*Tartar* the quantity as before, infus'd in some of the *Liquor* you prepared your body with, or the *Electuary* above, not *Pills*.

If *Melancholly* abound, prepare thy body, by boyling *Fumitory*, *Balm*, *Maiden-hair*, *Dodder of Time*, *Cetrach*, *Hyssop*, *Scabious*, *Agrimony*, some of these, or such like, as before with the *Roots* of *Smallage*, *Fennel*, *Parsley*, *Polypody*, *Butchers-Broome*, *Enulacamp*, *Orice*, and the like, and *Syrup* of *Maiden-hair*, *Apples*, five opening *Roots*, or such like: then Purge with the *Decoction* of *Epithymum*, at the *Apothecaries*, or with *Sena* infus'd as before, or the *Electuaries*, not *Pills*.

If *Phlegm* abound, Prepare thy body with *Wormwood*, *Southernwood*, *Mugwort*, *Agrimony*, *Betony*, *Centaury*, *Calamint*, *Majoram*, *Motherwort*, *Penyroyal*, *Horehound*, *Sage*, *Savory*, and such like, in whose *Decoction* you may infuse *Sena* as before with *Cream* of *Christal* of *Tartar*; and in lieu of the *Electuaries* use the *Pills*. Now for the manner of using the *VVaters*.

## C H A P. V.

*Of the time, manner and order of taking  
the Metallic and Mineral and Bath  
Waters, and other such like.*

**A**S for the *Time* then, that is two-  
fold here; of the Year, and of  
the day: (proſint;

*Temporibus Medicina valet data tempore  
Et data non apto tempore vna nocent.*

for the Season of the Year, *Sum-  
mer* is the best, when the weather  
is commonly settled, warm and dry,  
and so they are commonly ordered to  
be taken in the Dog days;

*Cum canis arentes findit hiulcus agros.*

but there are other times in *Summer*  
certainly as fit as that (for the Dog-  
days keep not always to one temper)  
as *June* and beginning of *July*, and  
after the Dog-days, many years are  
seasonable, as the Season falls out; and

in

in general when the weather is clear, Ne  
hot and dry, the Water is best; as we: be  
in *Winter* as in *Summer*; nay the VVa  
ter is the stronger in hard, frosty wea  
ther; the cold hindring the Spirit  
from evaporating; for in Rainy o  
Misty weather, when *Jupiter* doth, pe  
*cribrum mingere*, piss through a Sieve  
as *Aristophanes* merrily speaks, the  
Waters must certainly lose much o  
their Virtue.

Then as to the time of the day, the  
Morning about an hour after *Sun*-rii  
sing is the fittest; for when the *Sun*  
begins to get power, it certainly at-  
tracts some of the Spirits of the Wa-  
ters, and so consequently not so strong;  
and then is the best walking.

Now as to the manner and order; 'tis  
best taking the quantity you are to take  
that day, within as small a space of  
time, as conveniently you can, with-  
out oppressing the Stomach; then  
you shall take a gentle walk before  
you Drink, so as to warm your blood  
a little, not to sweat or be ready to  
sweat, and so between every Glass.

Next

Next as to the *Quantity* of Water to be taken every Morning, it cannot be justly defin'd or prescrib'd; in regard of the difference of bodies as to their Age, Sex, Strength, and other circumstances; in which you are wholly to be ordered by your Physitian; for though the drinking of the Waters be a *Quacksalving*, *Empyrical* Remedy, yet it ought not so to be used or administred; and every one ought to remember, that the best direction is from those things that help and hurt: Some may begin the first Morning with three pints, or two quarts, or five pints, and so augment a pint, till they come to four Quarts, more or less as they find agree with their body and so decrease a pint by degrees. 'Tis not good to drink like some,

*Invenies illic qui Nestoris ebibit annos.*

three hundred ounces, according to *Nestor's* years: Some between every glass eat a few *Carraway*, or *Corriander* Seed Comfeits, or Candid *Elcampane*,

or *Angelica*, or *Orange*, *Lemon*, or *Citreo* pills, &c. And certainly 'tis very necessary that they should have some *Electuary*, *Powder* or *Lozenge*, or succ-like, (appropriated to the grief for which they take the Waters) appointed them by their Physitian.

Having drank your dayly quantitt of Water, you will do well to walk or stir up and down, and compose your self to Mirth with some of the Company; for all cares and contrary passions of the Mind and Melancholly must be left behind: this done, in the Name of God go to your Dinner; if you perceive the Waters to be concocted and past through. Now the sign of their concoction is, that your Urine begins to be colour'd; which if you perceive not you may abstain a while longer. If you drink the Water cold, take not any more after the first draught till that be warmed in your Stomach, and no heaviness be perceiv'd.

Now the Waters taken in so great a quantity will force themselves a way either

either by Seige or Urine, yet some add opening Syrups as of *Maidenhair*, &c. or of *Lemons*, or loosening ones; or *Salt*, or *Manna*, and Purging Powders; 'tis better to drink them at the Fountains, than some miles off; Then as for the time of staying to drink the Waters, if you ask me how long it must be? Truly I must answer it cannot be exactly defin'd or order'd; some stay longer, some shorter time, some a fortnight, &c. some a month, some more.

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CHAP. VI.

*Of the Dyet to be observ'd by those that drink the Metallic and Mineral Waters, and for all other persons whatsoever.*

**B**Y Dyet here I do not mean only *Meat* and *Drink*, as it is commonly so taken by the vulgar; for with Physitians it hath a larger acceptation; as comprehending, *Air*, *Motion*,

tion, and Rest, things retained and avoided, Sleeping and Waking, and the Passions of the Mind: all these are to be duly and rightly order'd and observ'd, as most considerably conducing both to the preserving and restoring of health.

To begin then with the *Air*; now wherever you drink the Waters you must take the *Air* as it is, and be contented with it; otherwise if you will chuse for the best, you are to consider two things chiefly, its substance and its quality: its substance must be conspicuous, pure and not corrupted, not putrify'd. A serene, pure, perspicuous and temper'd *Air*, that exhilarates the heart, illustrates the Spirits, and makes the blood apt to be distributed through the whole Body; so that there is nothing almost more healthful for the Body of man than to live in such an *Air*.

Next the *Quality of the Air*, that's from the *Sun* and *Moon*, &c. in the *Spring*, especially in the midst of its extremis, the *Air* is hot and moist;  
in

*Summer*, hot and dry; in *Autumn*, cold and dry; and in *Winter*, cold and moist; and the same may almost be said of the several parts of the day; for the Morning answers to the *Spring* &c.

The *Moon* changes the *Air* with its quarters; for the first quarter is like the *Spring*; the second *Summer*; the third *Autumn*, and the last quarter like *Winter*.

What is said concerning *Air*, I hope will not displease; for *Air* is of great concern in most diseases; thousands have been freed from deplorable diseases by change of *Air* only; yet change of *Air* may do harm, as if one goes out of a good *Air* into a bad one.

Next is *Meat* and *Drink*, whose substance affords good or bad juice; is of good or bad Concoction, little or much nourishment: to preserve or recover health, *Meat* of good juice is very necessary; for Diseases are produced from Meats of bad juice: light food and Spices beget thin Blood, which weakens and exhausts the substance of the Spirits; gross begets clammy blood, oppresses



presses our natural heat and begetfulness, and bad humours.

For *Quality* hot, cold, moist, drie meats, do affect us with their qualities; the quality of Food when in health must be correspondent to the temper and age of the body; the Region and time of the Year; but in sickness contrary, to reduce it.

For *Quantity*, we ought never to eat more than nature requires; fulness is the Parent of all bad humours; and fasting or a spare Dyet waists the humours and innate heat: and all manner of Dyet is either thin or sparing, or gross, or a mean; the first diminishes our faculties, the second augments, the last preserves them.

*Custom* is to be kept, for 'tis a second nature. For Rustics who are us'd to gross meat, as strong *Beef* and *Bacon* better concoct it than tenderer meats which are rather apt to corrupt in their Stomach: therefore things we are accustomed to, though worse, are better than what we are not.

A regard should be had to the *Order*

of *Dyet*; so that Meats that are easie,  
are to be eaten before those of hard  
Concoction, so moist Meats are to be  
taken before dry.

*Meats* are not to be taken out of  
*Time*; those in health are to eat after  
exercise, and when their former meat  
is concocted; and generally at an ac-  
customed hour: to stay longer fills the  
Stomach with sharp, bad humors, and  
to eat before creates crudities. Nei-  
ther neglect the *Time* of the Year, in  
*Winter* 'tis best to eat more and drink  
less; let your meat and drink be hot  
and drying; as Roast-meat, and stron-  
ger drings; in the *Spring* eat less,  
but drink more and smaller drinks;  
and eat Boyl'd meats rather than Roast;  
and hotter than in *Summer*: in *Sum-  
mer* eat little and often; in *Winter*  
otherwise: let the sickly feed sparing-  
ly, for cold dulls weak Stomachs:  
the same is to be said of the *Regio-  
ns* and *Age*; for we must eat more  
sparingly in an hot, then in a cold  
Country; so Young men require more  
meat than Old; so Childrens *Dyet*

E must

must be moist, lest their growth be hindered by a dry one: to Boys hot and dry, a cold Dyet will be best: Boyl'd meat rather than Roast: much drink, but not strong; Young men from 14 to 25 of a temperate Constitution, require a temperate Dyet.

But here comes a question, *How we are to eat in a day?* which I think general cannot be decided, because of so numerous variety of temperaments: for *Phlegmatic* people, who are best able to fast, once a day may be enough; the *Coleric*, who easily is hurt by fasting, he may eat oftner but little; they may Breakfast, Dine and Supper but soberly: let the *Sanguine* keep mean in all things: let the *Melancholic* may take something thrice a day, whereby they may moisten their dryness. Most certain our forefathers were far more sparing than us; and yet prolong'd their lives, and were active, strong, beautiful, tall: But yet we must not believe they fed only on acorns, as Poetical Fables relate:

all manner of Fruits, Pulles and flesh :  
our Holy Writ tells us , after our first  
parents were cast out of Paradise, they  
filled the Earth , and sacrific'd Vi-  
tims, whose flesh and intrails they  
probably fed upon. And 'tis most  
ertain that *Intemperance is the Nurse  
of Physitians ; and that more perish by  
Gluttony than the Sword.* Our Ance-  
ors says *Galen* more rarely were sick,  
because they liv'd more temperately:  
*Hippocrates*, says, Women, and Eunuchs  
were not troubled with the Gout; but  
either are free from it now ; because  
of their Gluttony. Wherefore 'tis  
best to observe that Golden precept of  
*Socrates* , *we ought to eat to live, and not  
live to eat.*

Again, *At which repast is most to be  
taken, Dinner or Supper ?* This questi-  
on hath been formerly so much con-  
sidered for, that some of the *Italian*  
Physicians have written whole books,  
thereon. I am of opinion *that it is  
more healthful to sup sparingly.* First be-  
cause of the frequent experience of al-  
most an infinite of men, who have

receiv'd the greatest benefits from light Supper; the Stomach is least burden'd, and so sleep must be more pleasant; Secondly, the matter is prevented, whereby they are obnoxious to *IL fluxions, Rheumatisms, Gouts, Dropsies, Vertigoes, &c.* that eat large Suppers. Thirdly, from a sparing Supper follows more alacrity the next day; and concoction is better perfected, and grievous obstructions are prevented with many more diseases.

Another question may be, *Wh* *Meals are to begun with Meat or Drink Liquids or Solids?* And here I am of opinion that we should begin with liquids; because they are soonest concocted; and then the concoction of Meat in the Stomach is performed after the manner that crude Flesh is in a pot; whence, the Prince of Philosophers, *Aristotle*, compares this concoction to the boiling of Meat in a Pot; but we first put water into the Pot, then flesh: which is to be understood of Broths and such liquid things, not Wine, or strong Ale or Beer,

they offend the Nervous parts of our bodies, and so cause *Gouts* and *Scurvey* humours; and *fluctuations* in the Stomach, whence is all coction disturb'd: for this it was that *Galēn* would have meat precede;) drink Broths first then some solid substance, then to drink, that all may be equally mixt in the Stomach, remembering what *Schola Salerni*, says, *Inter prandendum sit sepe parumque bibendum*. But not to eat any crude Fruit after Meals, as 'tis too common, but either boyl'd, roasted, bak'd or preserv'd may be moderately taken.

As for *Drink*, that appeases Thirst, and is the Vehicle of Food, if it be purely drink, as Water; it may be liberally drank, if the bodies be strong and firm; but if weak, sparingly, and the oftner. We here in *England* drink small Beer generally, and the poor sort in the North Country drink *Whey* and *Butter-milk*, &c. of which hereafter.

Thus far of *Dyet in General*; now in particular, the first thing that occurs is *Bread*, the best is made of *Wheat*, even'd better then unleaven'd. Now

as there are several sorts of Wheat; if the *Bread* is of different nature whereof it is made; that which is made of the pure meal is best; the next is that with *Meal* and *Bran*; that made of all *Bran* is for Dogs; always remember to put a convenient quantity of *Salt* into your *Bread*, against obstructions.

*Bread* made of *Rye* nourishes less and is not so easily concocted; but mixt with *Wheat* 'tis better, and affords a moderate nourishment. *Barley bread*, nourishes least of all; yet it dries and cleanses, and is the same with *Oat* by all which you may easily conjecture at the nature of *Miscelane*. The old Proverb is, *An Egg of an hour, bread a day, and Wine of a year*. The *Crumbs* affords the best juice, and is of easier concoction than the *Crust*, which is dryer, and *Schola Salerni* says, *Ne comedes crustam coleram quia gignit adustam*, then cut away the burnt *Crust* yet the *Crust* is not so much to be disapproved as some suppose; for its very convenient Food for those of a strong Stomach. Hitho

Hither are to be referr'd all kind of Sweet-Breads, which in general are but bad Food, except Biscockt; for none of them are without their fault; among which are also Puddings, Pasties, Pan-cakes, Cheese-cakes, Custards, and many such like, *Quellechuse*, hony'd, fugar'd, milky'd, egg'd: all bak'd Meats are hurtful to the Stomach and Liver, seeing they almost manifestly heat, obstruct and offend the inward parts.

The next are *Fruits*; of which this may be affirm'd in general, that they moisten and cool much; nourish little, yet some more, some less. All Fruits almost are endued with some bad qualities, and beget winds and serous, thin humours, and are very hurtful to distempers proceeding from obstruction, and putrid Fevers: of Fruits that will not keep long, and are soon rotten, the moister are to be chosen, and eaten in the first course; such are *Prunes, Cherries, Grapes*, but the more solid and such as bind more, and will not be rotten so soon, are to be eaten at



the second course, among which are  
*Quinces, Pears, Apples, Nuts, &c.*

It is a most certain rule, that all  
Fruits that may be boyl'd, bak'd, co  
roasted, beget bad juice, if eaten  
crude...

As for *Melons, Co-cumbers, Pompions*  
they may in some measure conduce to  
hot Stomachs and Choleric persons  
for they refresh and moisten much  
but they beget thick, cold juice, and  
of hard concoction; Historians make  
mention of persons of great renown  
that dyed by eating *Melons*: and *Pears,*  
*Quinces, Medlars, Services, &c.* ought  
not to be eaten by healthful people, but  
after meals; and then but in small  
quantity, to strengthen the Stomach  
*Filbirds* may be allow'd, as being of  
a temperate nature; *Chesnuts* beget  
thick Blood, Wind, and not easily con  
cocted.

No *Pulses* are much to be commended  
for *Beans* green are windy, disturb the  
senses, cause Dreams, and are of  
a thick juice, hard of concoction and  
not much nourishing; *Primrose* say:  
they

they beget ferous blood; &c. but dry'd they refrigrate, dry, and deterge also, apply'd in Pultises: *Pease* are of the same nature. *Rice* and *French-Barly* are the most excellent of all *Pulses*, because they nourish most, and breed fewest Excrements: both moderately strengthen the Stomach, and are not of bad concoction: *Ciches* or *Vitchs*, nourish more than *Pease*, and discharge the reins, by their Diuretic faculty, and therefore are thought to be profitable to those that are obnoxious to the Stone in the Kidnies: But it is best to use them sparingly, nor without the *Physician's* advice; for by the undiscreet using of them, neither few nor light symptoms may ensue; as also from the untimely use of any other Diuretics.

*Herbs* come next to be handled; In general all *Herbs* nourish little and are rather endued with altering qualities; for they heat, cool, dry, and moisten what way soever us'd. *Galen* extolls *Lettuce* above all herbs; as endued with nourishing juice, but very cooling

cooling ; and causing sleepiness : Next in coolness are *Sorrel, Cichory, Porceelan, &c.* which may be profitably us'd daily ; Among hot *Herbs* are *Sagee, Thyme, Savory, Penyroal, Majorann, Rosemary.*

Lastly, *Roots* are by all esteem'd windy Food, some nourish more than others.

Now the Food we receive from *Animals* may be reduced to *Flesh* and *Eggs* in general : and *Flesh* to *Fish, Birds* or *four-footed Beasts.* Of *Fish* those that live about the *Rocks, &c.* are most commended ; *Sea-fish* are better than *River-Fish* ; standing Pools worst. All *Fresh-fish* beget *Phlegm* ; are easily corrupted ; dry'd and salt are of hard digestion, and burn the blood. The best are *Trouts, Pike, Sole, Roach, Carp, Turbot* ; then *Mackrel, Perch, Skait, Eeles* for *Tench, Crab fish, Lobsters,* are of difficult coction ; so last in goodness *Salmon* is to be eaten with moderation. *Fish,* boil'd less good, fry'd better, roasted best because dryest. In general the Male better than the Female  
make

male, young (but not the very least) better then old ; notwithstanding the old Proverb , *Young Flesh ; and old Fish.*

As for *Birds*, &c. young better then old, those that feed upon Mountains and high grounds, are of easier digestion than others ; Tame have tenderer and moist Flesh ; wild harder and dryer: those that are castrated are of a more pleasant taste than others : *Birds* nourish less, though sooner concocted than four footed Beasts. The best are *Partridges* and Mountain Birds, *Cardan* a *Physitian* so highly extolls *Partridges*, if you'll believe him, that of themselves he says they are able to cure the *Pox*, which he found by experience upon his own body, having, as he ingeniously confesses of himself, being infected therewith no less than seven times ; next *Woodcocks*, *Black birds*, *Doves*, *Pheasants*, then *Chickens*, *Pullets* and *Capons*.

For *Four-footed Animals*, *Fawns*, *Lambs*, *Pig*, *Weather*, *Veal*, are best for taste and nourishment ; *Porks-flesh* nourishes

nourishes very much, but requires stronger Stomach; *Galen* prefers before all; *Beef* is grosser, and so begets more *Melancholic* juce then *Mutton*. Now there are several sorts of ways of Cooking this Flesh; *roasting*, *boyling*, *frying*, *baking*, &c. for dry bodies boil'd is best, for moist others: Broaths are of easie nourishment being soon distributed.

To this belongs *Sauces* and succulent things as are used in preserving of Food. As first *Hony*; hot and sharpp *Sugar* comes nighest to it not so hot: more pleasant and familiar to the Stomach. *Salt* is hot and dry; and *Spices* are all *Spices*. *Mustard-seed* is most hot and dry; *Oyl* is temperate: *Vinegar's* temper is not decided; as *Vinegar* 'tis cold; as made of *Corrupt Wine*, it retains somewhat of heat but 'tis more cold than hot; it dries, provoks an Appetite, and strengthens the Stomach.

*Hens*, *Pheasants*, *Partridges*, *Turkeys* Eggs are the best, *Duck* and *Goose* the worst: besides *Eggs*, we have *Milke*, *Butter*

*Butter, Cheese, Blood* from four-footed Beasts.

*Milk* is of a diverse temper, according to the Animal 'tis milk'd from. It consists of a threefold substance, waterish, whence *Whey*; thick whence *Cheese*; fatty and oily, whence *Butter*, *Cows Milk* hath most *Butter*, so it nourishes most, and cools less. *Sheeps* more *Cheese* so worse; *Asses* most *Whey*, so fittest to cool and moisten; *Goats* of a middle temper, *Butter* heats somewhat, nourishes little, loosens and softens: *Cheese* of thick bad juice so stopping, an Enemy to those subject to the *Stone* ith' *Kidneys*: so the Proverb is very true.

*Caveus ille bonus quem dat avara manus.*

All *Blood* is of hard coction and nourishes little, *Beef-blood* the worst. Thus far concerning *Meat*, next follows.

*Drink*, was nothing but *Water* in the beginning of the World; if it be colour'd or smell, or taste, not good; lightest

lightest the best; for weak Stomachs it may be boil'd: and because few drink water alone, Barley may be boyl'd therein and so made *Beer* and *Ale*; stronger or smaller; some add *Wheat*, *Oats* and *Beans*; certainly 'tis the most healthful drink, if people would accustom themselves to it; for so they would free themselves from a world of Diseases got by immoderate drinking *Wine* or strong *Beer*, &c. as *Tremblings*, *Palsie*, *Lethargy*, *Apoplexy*, *Vertigo*, *Pains in the Head*, *Eyes*, *Gout*, *Stone*, *Dropsie*, *Rheumatisms*, *Piles*, &c. for it strengthens the Stomach, causes an Appetite; the *Ægyptian* and *Israelitish* Priests and Kings drank nothing but *Water*; *Aristotle* and *Plato* order Nurses, Children, Students to drink *Water*. *Demosthenes* left *Wine* when he came to the Bar and Pulpit; *Water* preserves and quickens the sight. *Alexander Aphrodisiens* says in his *Problems*, it makes all the Senses more lively, cools the *Liver*, opens the passages, cleanses the *Reins* and *Bladder*. Fountain and River Water are the best. Sleeping

## Of Medicinal Waters.

*Sleeping* and *Waking* ought to be moderated with Prudence: *Sleep* concocts Meat and Humours, corrects distempers of the Mind; moistens; *Labor* for the Flesh and Joynts, *Sleep* for the Entralls; *Night's* the best, three hours from Supper, Day sleep hurts, unless none by Night, or weary; for it makes a moist Brain, and breeds sour Belchings, &c. exceed not eight hours; lye first on the right side, then the left, nor on the Back or Face; *Watching's* also to be moderate; for immoderate produces contrary effects.

*Motion* comprehends all exercise, whereof are several sorts, *Tennis*, &c. for the whole Body; riding for the *Intestines*, walking for the *Thighs*, and Reading and Singing for the *Lungs*, &c. it strengthens, distributes, Meat: Morning and Evening; exercise till the Body be florid, and begin to sweat; the same moderation in *Rest*.

As for things to be *retein'd* and *voided*, they help health, if those be evacuated that ought, & *contra*: things to be voided if they are retein'd hu



as voiding of *Urine*, Ejections, *Spittles*,  
*Hemorhoids*, *Courses*, *Seed*, &c. if sup-  
 press'd oppress and putrifie. So ill  
 things be voided that ought to be re-  
 tain'd, or voided in too great quantity.

As for the *Passions* of the *Mind*, they  
 must not be violent; so of what before  
 as *Meat*, sleep, &c. all must be moder-  
 ate; and thus much for dyet which if  
 minded, there would not be any need of  
 taking such uncertain remedies as *Min-  
 eral Waters*; which have certainly  
 been the utter ruin of many thousands.

As for the many symptoms follow-  
 ing the irregular and unadvised drink-  
 ing the *Waters*, as suppression of  
*Urine*, *Dropsies*, &c. too long here to  
 name, they are to be remedied by the  
 Learned Physitian.

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F I N I S.

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