

to have found it a much other thing, than they imagined, though related to them *viva voce* by those who had formerly been there.

I shall add, that the whole country from the very Walls of *Catania* to 20. miles on this side is full of those old *Sciarr*i, which former Eruptions have cast forth, though the people remember none so big as this last, or that burst out so low. This Country is notwithstanding well cultivated and inhabited; for length of time hath either mollified much of those old *Sciarr*i, or new mould or ashes have overgrown them; though there still remains much Country, which, it may be, will never be made serviceable.

What is the perpendicular height of this Mountain, I cannot learn. It cannot perhaps be rightly taken, being so subject to alter its height and shape. But it is a very goodly Mountain to look upon, as one passes by Sea to the East-ward, standing alone by it self, rising from the very shore; and at shortest passage is reckoned 20. miles up to the top, though from *Catania* it hath 50. miles, as before.

An account of two Books

I. DISCOURS de M. STENON sur L' ANATOMIE du CERVEAU. A Paris 1669. in 12.

IN the beginning of this Discourse the Author represents, that those, who search after solid knowledge, will find nothing satisfactory in all that hath been hitherto written concerning the *Brain*: that all, which Anatomists agree in, is only, that it consists of two Substances, a White and a Grayish, and that the former is continued with the Nerves, that are distributed through the whole Body; and the latter serves in some places for a kind of *Cortex* to the *White*, and in others, severs the white filaments from one another. But that they are yet ignorant, what those substances are; in what manner the Nerves are Joyned in the *White*; and how farr their extremities advance in it; from which disposition yet depends all the diversity and variety of our sensations and motions. And as for the *Ventricles* or Cavities of the Brain, he affirms them to be no less unknown, than its Substance; some Anatomists lodging

ing in them the Spirits, others making them the receptacles of the Excrements of the Brain; and both perplex in assigning the source and Issue of the Excrements, and the Spirits, and the manner of the production of the latter.

Besides this, he finds a great defect in the way of dissecting the Brain, and having shewed the imperfection in the common ways, he proposes and recommends that (though difficult one) of continuing the filaments or threads of the Nerves through the Substance of the Brain, to see, where they pass, and where they terminate.

Next, he entertains the Reader with an Enumeration of the chief Errors of Anatomists touching the brain. And here he examines particularly the Systemes of Dr. Willis and Monsieur Des-Cartes. In the former he takes special notice, that the Author thereof lodges the *Common Sense* in the *corpus Striatum*, the *Imagination* in the *Corpus Callosum*, and the *Memory* in the *Grayish Substance* which encompasses the *White*. But then he declares, that these assertions are very obnoxious; for, whereas Dr. Willis describes that *Corpus striatum*, as if there were two sorts of streaks or Rays, some ascending, some descending, he finds, that a separation being made of the *Gray body* from the *White*, those Rays will be found to be all of the same nature, that is, they make part of the *White substance* of the *Corpus Callosum* which passes towards the Marrow of the Back, separated in divers Layers by the intervening of the *Grayish Substance*. Which being so, saith he, with what certainty can we be made to believe, that those three Operations are performed in those three Bodies? And who can tell us, whether the nervous Fibres have their beginning in the *Streaked Body*, or whether they rather pass through the *Callous Body* into the *Gray Substance*?

In the latter of M. Des Cartes, he finds, that that Philosopher hath rather devised, in his *Treatise of Man*, such an Engine, that performs all the actions, Men are capable of, than described Man, as really he is; which he undertaketh to prove by divers instances, taken from the *Cartesian* fabrick of the parts of the Brain: in the doing of which our Author shewes great dexterity, skill, and accurateness. And from hence he proceeds,

To observe the want of exactness in the *Cutts* or *Figures*, hitherto given of the *Brain* : and although he acknowledgeth, that the best *Figures*, hitherto made of that part, are those of *Dr. Willis*, yet he finds several faults committed here and there, and conceives, there are many things to be added for making them perfect : which certainly this able *Anatomist* will consider further, and according to his Ingenuity, as he shall see cause, rectify, if the Author of the Book, reflected on, prevent him not.

Having thus discussed the hitherto practised way of dissecting the *Brain*, and the little light to be derived thence, together with the defectiveness of the *Figures* belonging thereto, he leaveth it to the Consideration of Judicious men, what faith is to be given to the Explications made upon such unsolid foundations; and that done, he declares, which are the two only ways for attaining the true knowledge of an Engine; *viz.* One, by having the contrivance of it discovered by the Author himself; the other, by taking it in pieces to the very least parts, and examining them all both severally and joyntly. The former not being to be expected, he excites the Lovers of real knowledge to the careful performance of the latter; excusing in the mean time those two sorts of persons, that hitherto have addicted themselves to Anatomical researches, *viz.* *Physitians* and *Chirurgions*, for not having made satisfactory discoveries by their labors, and alleadging on their behalf their want of time requisite for this purpose; the ill consequence of which he represents to be, that they often undertake to cure a Body, of which they know not the Structure, which is no better, (saith he) then if a man would repair or wind up an Engin, the parts of which he is ignorant of. And as for Professors of Universities or other Schools, he Judges them not so proper for that particular application, and the variety of methods of dissecting; both which is necessary for examining every the smallest part, and the observeables thereof; there being sometimes required whole years for finding out one onely thing, that perhaps may afterwards be demonstrated to others in one hour; which he exemplifies by divers instances of Discoveries, made by some of the modern *Anatomists*.

He concludes his Discourse by recommending the method which seems best and most convincing to him, for making true Discoveries in Anatomy; where he adviseth, that for obtaining the true history of the parts, we should examine and accordingly draw them in that State, in which they are found naturally, without at all forcing them, thereby to find, whether the parts are indeed joyned together or separated, and what situation is assigned them by Nature it self. Where he desires, that the Anatomist would not only be intent upon the part, on which he is for the present employed, but also reflect upon all the Operations, he hath made before he came to that part, which may have caused some change or other in the same, as to its situation, connexion &c. Of which he also alleidges divers Examples, especially as to the Brain.

Besides this exact attention on all the Operations, he further counsels the Change of the *ways* of Dissecting, and deduceth the ill consequences of binding ourselves to certain fixt Laws of dissecting each part; this benefit resulting from that Change, that if it doth not always discover something new, it lets us know at least, whether we have been deceived in what we have seen formerly, especially in things dubious and contested. Of the necessity of this Change he brings manifest proofs; and having done so, he alleidges the reason why he says nothing of the *Use* of the parts of the Brain, nor of the actions called *Animal*; it being impossible to explain the motions, that are made by an Engine, if the artifice of the parts be not known, and those Anatomists rendring themselves ridiculous, that discourse so magisterially of the Use of the parts, of which they know not the structure.

Last of all, he observes, that when all this, he hath discoursed of, is done, that is but the least of what is *to be* done; in regard that for the acquiring of some good Knowledge of the Brain, there must be Dissections and Examinations made of as many Heads, as there are different species's of Animals, and different States and Conditions of each kind; since that in the *fetus*'s of Animals it will be seen, How the Brain is formed; and what could not be seen in sound and entire Brains, may be seen in such, as have been changed by sickness.

II, Instead of the *other* Book, of which we purposed to give here
an

an Account, we find our selves oblig'd somewhat to enlarge that which was, for want of more leisure, too cursorily given in *Numb. 49.* of *Dr. Witties Answer to Hydrologia Chymica*, concerning the *Scarbro' Spaw*. To do therefore right to this Worthy person, we ought among other things to take notice of what he saith in his Preface; *That when he first published his Book, he had found the Scarbrough Spaw, even in 20. years Experience, to be eminently successful in the Cure of very many diseases, which had resisted all rational Methods, that had been used either by himself, or others of his Faculty. That now his Practice had been near 30. years, and that now he can add some considerable Cures, which he hath not hitherto expressed.*

Now to solicit this Learned Doctor and others for their farther Discovery's of Sanative Waters, and to add weight to the Argument; we may observe, that A. 1634. *Dr. Thobias Whitaker*, a famous Physitian of *Norwich*, Published in English a discourse Περὶ Ὑδροποιῶν, or *Of Drinking Mineral Waters*; particularly reflecting upon a Mineral Water then discovered in *Norfolk*, and producing the Joynt-advice of all Antiquity (as he pretends,) at least of the best Writers, namely of *Hippocrates, Galen, Avicenna &c.* generally against all use of Mineral Waters either to be taken inwardly, or for any outward application. This Discourse is recommended by the express approbation and eulogies of *Dr. William Clement*, Fellow and Register of the Colledge of Physitians in London, and by *Dr. Alex. Read* Fellow of the same Colledge.

This may give fit Caution against the rash Use of such Waters, when ordinary Medicines may be effectual; and to take the advice of skilful Physitians in the Use of them. And for the Poor, which are not able to retain Physitians, nor to pay Apothecaries, they must abide the adventure of repairing to those kind Fountains, which doe not unfrequently cure, when all other costly and tedious Methods doe faile. And here they may find the Suffrage of many Curious and inquisitive Authors, and the evidence of much Experience: Here they may see the real and great performances of Cures, and what are the particular Cures, what the particular Ingredients, and what the mixtures, together with the several ways of Analysing the Waters &c.

As to the Sanative Properties in general of many Minerall Fountains (besides the numerous Experiments of all sorts of people for many Ages in some places, and of late discovery in other places) *Dr. Wittie* recites the Judicious testimony of *Dr. French* and *Dr. Dean* concerning the *Knarlborough Spaw*; *Doctor Jordan* concerning the Baths in *Somersetshire*; *Dr. Heer's Spadocrene*; *Doctor Frambesarius* and *Dr. Ryetius* of the *Sauvenir* in *Germany*, *Dr. Fallopius de Therm. Aquis* and the Spaws in *Germany* and *Rome*, de *Lalaco Apollitano*, and the water at *Cochua*; Of such waters in general, *Paracelsus* and *Helmont*; And this Doctors Description of *St. Ansgo's Well* at *Cockgrove*. To which we may

may now add *Astrap-well* in Northampton, lately discovered, together with that at *Stall-bridge* in Somersetshire, which last begins also to be in high esteem for extraordinary Cures of the *Scorbute*, *Asthma* &c. which, besides common fame, is (as we were freshly informed by a worthy friend) attested by *Dr. Highmore*, who affirms also upon his own Tryal, that it hath a larger proportion of the Minerals, than *Astrap-water*; but that the force holds not, if removed from the Spring-head. And *Dr. Wittie* hath himself sufficiently asserted the Vertues of the *Scarborough-Spaw*; and particularly, that it cured the *Asthma*, *Inveterate Catharrs*, *Hecticks*, *Consumptions*, *Scurvy*, *Dropsy*, and other diseases, when they seemed incurable: That an Alderman of *Hull* (to whom himself, and the famous *Dr. Primrose*, were, 15. years agoe, joyntly Physicians for the *Asthma*) had in few days perfect cure by the Spaw, and is yet living to vouch the testimony: So that all the neighbourhood are taught by frequent experience to sing the old Song of *Claudian*, which he made for his *Aponus*.

*Publica morborum requies, commune medentum
Auxilium, præsens Numen, inempta Salus.*

And this old Record may put us in mind, that lofty Groves and healing Fountains have been reputed Holy in old times; and we can show the Hospitals, which have been long agoe built and endowed on purpose to entertain the poor pifengers in their travels to such waters. This I had not here mentioned, but to introduce our Authors weighty remark; That these Waters loose all their virtues, yea their quantity and bulk also, though in Glasses, and under the Hermetick Seale, if removed from the Fountain-head; that then they became suddenly putrid, ill-colored, loosing the taste and snt, and being very noxious, and begetting the *Jundise* and worse diseases. The like is affirmed by *Dr. French*, that the *Knarsborough Water* expires through Glas and the firmest Seales. And *Dr. Heer* affirms of his *Spadocrene*, that by such removals, *illas a communibus nihil discrepasse, ut quibus singulis lagenis aqua vitrum* (which is guessed to be half a pint) *decesseerat*. He adds; *Decedit etiam quantitati—si fons hic alio transferatur—quia spiritu turgentia plus loci, quam eo privata, occupare amant*. And *Francisarius* reports as much of the *Sauvenir*, that in bottles well healed up, there wanted to every *lagena* (flask) one Glas of its measure (doubtless through the losse of the volatile Spirits.) Here we want instruction, Whether the decrease was as well of Weight as of Bulk or Quantity.

Whatever these Spirits be, which will neither endure to travel from the place, nor will be confined in any bottle, nor under any Seal; *Dr. Wittie* undertakes to evince by good Proofs, and manifold indications, that these *Scarborough waters* have a mixture or tincture of Iron, Allum, Nitre, and probably of a small dose of Common Salt: Nay, he affirms punctually (p. 175) as upon his own Experiment, that 5. quarts of this water contain at the least an Ounce of Minerals, and in dry years, 10. drams; And yet that the usual dose for women to remove the *Green sickness* is 2. quarts of water, and sometimes more,

He further voucheth his own Trial (p. 179.) that *Knarsborough* water hath 2. Ounces of Salt in a Gallon, though it be 40. miles distant from the Sea: And that he hath found also by tryal the 16th part of the Northern Sea-water near *Scarborough* to be a body of Salt (an Ounce of Salt for every pint;) and he conceives the Southern Seas to contain a greater proportion of Salt. Here we must distinguish, that the 2. Ounces of Salt above mentioned, to be found in every Gallon of *Knarsborough* water, belong to the Well there called the *Sulphur-well*: And for the healing properties of the *Sweet well* (as they call the other Well at *Knarsborough*) he refers to the Ingenious and illustrious Experiments of Dr. *French* and Dr. *Dean*.

All which being considered, we cannot but add, that whoever discovers such healing waters, and publicly prescribes the safe and right use of them, does really distribute larger and nobler Alms, than if he built and endowed a *Savoy*. For this prolongs life, and restores health, (which is sometimes better than life) both to rich and Poor, to Natives and strangers, to Neighbors and Travellers.

We cannot take off our hands here, without annexing our Authors related Experiment of *Carps* (p. 25.) which were taken out of Ponds newly drained, and being put with fresh water into a *Copper* Brewing-vessel, to be preserved but for one night, were all found dead in the morning. This he imputes to the poisonous steams of the *Copper* communicated to the cold water.

Among the Causes of *Hot-springs*, he doth (p. 181.) alledge a considerable remark on an Observation, made by the late Lord *Fairfax*, of some heaps of *White powder*, which he found sweat out of the Earth near *Bath* (in *Somersetshire*;) which being put into the water, makes it hot; as my self (saith the Doctor) did experience 5. or 6. years after his Lordship had taken it up.

As to his last Experimental Demonstrations and Observations, How the fall of Rain and Snow may generally and most frequently be the cause of our purest, liveliest and most lasting Springs, they doe all agree most punctually in all circumstances, with the Experiences and Observations of an Antient and very Worthy Gentleman, who lives on the side of *Mendip-hills*, and hath had his Eyes always from his Youngest days upon the fairest and fullest Sources and Amnery's, I lay not of *Mendip* but I think I may say of this *Island*. This Gentleman hath given to a friend of his the Instances and Particulars under his own hand, both for the Springs about *Mendip*, and in other parts of *England*; and hath many other Antient Witnesses to joyn with him in the same Certificate. And yet Dr. *Wittie* attributes much (some will say, more than enough) to the Conversion of Air into Water in the *subterraneous Channels*: For the Illustration of which he himself knew a Sergeant, belonging to *Hull*, who in a *Diabete* did void above 6. quarts or 12. pounds of Urine every 24 hours, for some weeks together, till all his Musculous parts were dissolved into Urine, the measure whereof did far exceed the weight of his whole Body, and of his Meat and Drink: In all this time he drank not 3. pints of drink in a day. I know not whether I dare alleage here Sir *Kene'm Digby's* relation, he recited of the *Nun*, which voided 200 pounds of Water, as from her bladder, every 24. hours, for some weeks together: or that Older record of a sick Maid in *Italy*, who did every day void 36. pints or pounds of Urine for the space of 60. days; during which time there were collected 1740. pounds of Urine more than the weight of all her Meat and a Drink, that she had taken. *Horum & similibus fides penes Autores este-*

ERRATA in Numb. 50. to be thus corrected

P. Ag. 1001. l. 14. read Hippocrates. p. 1005. l. 1. r. as far as the Tropick. p. 1007. l. 25. r. (from the Lizard) p. 109. l. 14. r. are not many. ib. l. 20. r. hints, easily p. 1012. l. 14. r. not very rare.) p. 1013. l. 16. r. this kind ib. l. 18. r. to breed. ib. l. 21. r. first time p. 1015. l. 22. r. their head. p. 1019. l. 10. r. Zwelfer. ib. r. Pharmacopæa.

LONDON,

Printed by T. N. for John Martyn Printer to the Royal Society, and are to be sold at the Bell a little without Temple Bar, 1669.