

Apparuisse in Germania Cometam audivi, mense Decembris; nusquam tamen ipse conspexi, nec à nostris alicubi visum intellexi.

Hesternâ nocte monitu tuo exeitus, Cælos infra Procyonem perlustrans, Nebulosam offendi, latam, & Stellulis confertissimam. Hanc eandem credo, quam Tu observasti; certior essem, si quanta ejus fuerit Declinatio vel Altitudo meridiana, indicaveris. Novam etiam in Pectore Cætis sæpius ante octo menses vidi, nec minorem quàm Tu innuis. Sed de Mercurio nihil pronunciare possum, siquidem nullas circa ipsum circumpositas fixas intra tubi capacitatem inveni; & ampliora nondum confecta sunt Instrumenta, quibus ejusdem à Stellis remotioribus distantie ritè capi possint. Vale, Vir Clarissime, & si quas Occultationum futurarum Observationes Cæli indulserint, perge, ut cæpisti, me earum facere participem. Ego meus vicissim lubentissimè semper concedere paratus sum. Grenovici, A. 1676. Martii 4.

An Account of Books.

- I. Ἀρχιμήδους τῷ Σπυερκισίῳ Φαυμίτις, καὶ Κύκλῳ Μέτρησις: Εὐτοκίῳ Ἀσκαλωνίτῃ εἰς αὐτὴν ὑπόμνημα, &c. Cum Versione & Notis Joh. Wallis S.S.Th. Doct. Geometriæ Professoris Saviliani. Oxonii è Theatro Sheldoniano, 1676.

THough this Tract of *Archimedes* his *Arenarius* have been formerly twice printed in *Greek*, and thrice in *Latin*. yet did the Learned Dr. *Wallis* see cause enough to publish another Edition, therein presenting us with many emendations in the Original, and with a new Version in *Latin*, and adding some short strictures serving to illustrate the sense thereof. And the Book seemed to deserve these pains, as being not only an elegant and acute piece, worthy of *Archimedes*, but also an excellent Monument preserving both a piece of remote Antiquity, as is that of *Aristarchus Samius* his Hypothesis, revived by *Copernicus*, and that of the *Dorick Dialect* in Prose. Besides, it exhibits the foundation laid of the *Art of Numbring* or rather *Noting of numbers*, now in use amongst us, with *Saracenicque* or rather *Indian* Cyphers. And it accommodates those numbers *a, b, γ, δ, ε, &c.* not only to numbers proportional in a *decuple ratio*; but also to any others, in any *ratio* whatsoever, that are in a continual proportion from the Unite: And they are the same with what is commonly call'd *Unit, Root, Quadrat, Cube, Biquadrat*, to wit,

$$a \quad b \quad \gamma \quad \delta \quad \epsilon \quad \zeta \quad \eta, \text{ \&c.}$$

$$1 \quad a \quad aa \quad a^3 \quad a^4 \quad a^5 \quad a^6, \text{ \&c.}$$

As to the argument of the Book, 'tis well enough known to the Curious, that it Geometrically shews a number exceeding that
 E e e e which

which is equal to the number of the Sand, capable to fill up not only the whole Earth and its cavities, but also the whole World.

To this Tract of the *Number of the Sand*, is added that other of the same *Archimedes*, touching the *Dimension of a Circle*, because 'tis several times quoted in the former, as the foundation of his *Calculus*; nor did it want emendation. To it is annexed *Eutocius* his short Commentary upon the said Dimension, which exhibits a *Specimen* of the form and manner, wherein the later *Greeks* were wont to write their Comments upon their more ancient Authors; and shews withal, how laborious it was to make Multiplications, Divisions, and Extractions of roots before the use of the *Indian Cyphers* was introduced, as a so after what manner they were performed.

II. *Observationes Medicae circa MORBORUM ACUTORUM HISTORIAM ET CURATIONEM*; Auth. Thoma Sydenham M. D. Londini, in 8^o.

The Author of this Treatise, aiming principally in his Practise of Physick to contribute what he can to the real and constant cure of all Diseases, and being well aware of that great *desideratum* in Physick of faithfully recording such Medical Observations and Methods of Cure, as by candid and careful Physicians are made, and with success employ'd, resolv'd at length, after many solicitations of those of his Friends that knew his Practise, and his constant endeavours of improving the same for the common benefit of Mankind, to publish these his Observations, relating to the History and the successful and certain Cure of *Acute Diseases*, waving therein all Philosophical *Hypotheses*, and delivering nothing but genuine matter of Fact; distinguishing withal the peculiar and constant *Phaenomena* of Diseases from those accidental and adventitious; and very carefully observing the aptness of the several Seasons of the Year to occasion the several sorts of Diseases reigning in them.

Now this History and Cure of Acute Diseases here described, comprehends his Observations of the fifteen last years of this Age; a competent time, for rendring an account of the distinct *species* of Epidemics, which not only fortuitously invade us, but are in one year, or in a certain *series* of years, of one and the same kind, and in other years different from one another.

To descend to the particular Matter here performed, our Author hath observ'd, that from the years 1661 to that of 1676. there have reigned *five* several Constitutions of the
Air,

Air, which have produced as many *species* of Epidemical Diseases and Feavers severally named.

Of these he calls the *first* the *Continual Depuratory* Feaver, lasting from 1661 to 1665, which he esteems to be the principal Feaver of *Nature*, forasmuch as therein she doth so regulate all the Symptoms, as to dispose the Febrile matter, when duly digested and prepared, to be discharged either by a competent sweat or a liberal transpiration. Here he records divers important Observations of his, and notes the several symptoms of the Disease, the Method of cure, and the Diet of his Patient, both during the Disease and after it; concluding this Head with describing the nature, symptoms and cure of the *Intermittent* Feavers bred in this first Constitution.

The *second* Epidemical Constitution of another kind he observes to have been in *London* in the years 1665 and 1666 This kind he calls *Inflammatory*, of which nature the *Plague* or Pestilence was in the highest degree, sweeping away, when it was in its height, 8000 in one week, more or less. Here he takes notice, that for rendering a rational account both of such wasting Diseases as this, and of such that are very gentle, it may be supposed, that sometimes the constitution of the body of the Air is such that it breeds Diseases that carry away innumerable People; at other times it afflicts but a very small number of them; though it be yet very obscure to us, wherein that different texture of Air, that hath such different effects, doth consist.

Now of this *second* sort he very particularly describes also the several symptoms, and the difficulties occurring in respect of those Physicians that advise and use *Venæ-section* in the *Plague*: Where he relates a strange example of the good success thereof here in *England*; as also his own use of bleeding in this distemper for a while, together with his reason of desisting from it, and the method by him employ'd afterwards, and the success thereof.

The *third* Epidemical Constitution, described by him, did obtain in the years 1667, 1668, and part of 1669; and it was that of the *Small-pocks*, and of a *Variolous* Feaver, resembling (except the eruption of the pustuls) the *Small-pocks*, in symptoms and duration, and vanishing with the *Small-pocks*. This was accompanied with a *Diarrhœa*, especially at the later end of it; & it approached so near the nature of the *Small-pocks*, that it seem'd to be nothing else,

but the same turn'd inward and incumbent on the *viscera*. The Phenomena, symptoms, and cure of this Feaver, and the difference between the Distinct and the Flex-pox, and the slaughter of thousands sick of these Pox for want of a due Method in treating the patients, and many other considerable remarks, are with great care and skill deliver'd by the Author.

The *fourth* Epidemical Constitution here discoursed of, was here in vogue An. 1670, 1671, 1672, and is by our Author call'd the *Dysenterical* Feaver, accompanied with the Measels, and the *Cholera morbus*, and follow'd by a Bilious Colick: All described as to their effects and method of cure, with the like care and caution, as the fore-going.

The *fifth* Constitution that obtained here was An. 1673, 1674, 1675, *viz.* A Feaver of a very Anomalous nature, to which the *Dysentery* and *Diarrhea* were only symptomatical, not essential, and upon which surven'd Epidemical coughs, with Pleuresies and *Peripneumonia's*; as these five constitutions were *Stationary*, so they had some *Intercurrent* Feavers, as the *Scarlet-feaver*, the *Bastard Peripneumonia*, the *Rheumatisme*, the *Erysipelas*, and the *Angina*, which are also accurately described by our Author, both as to their *Phenomena* and Cure. See the Author himself both for his Observations and manner of the Cure.

III. *De CONSENSU VET. ET NOVÆ PHILOSOPHIÆ*
Libri IV, seu Promotæ per Experimenta Philosophiæ pars prima:
 Authore J. B. Du Hamel P. S. L. & Regiæ Scientiarum Academiæ
 à Secretis, in 12º.

In this second and considerably augmented Edition the worthy and Learned Author performs four things in so many Books.

In the *first*, he gives an account of the Principles of the *Platonick* Philosophy, and shews the difference between it and the *Peripatetick*; delivering in the same the Natural Theology of the *Platonists*; and discoursing fundamentally, from their Principles, of the Existence of God, and his Providence and Concourse; then of the Origine as well as the Spirit of the World; not forgetting to shew, how that Philosophy endeavours to raise the Mind to the consideration of Eternal and Primæval notions, and having diverted it from immerging it self into unstable and perishable things, converts it to such as are only perceived by the Intellect; which our Author, duely pondering the dignity of Humane Nature, esteems to be of exceeding

exceeding great importance, especially since the world now swarms with those that are so very sensual as to contend, that nothing can be understood but Body.

In the *second* Book he explains *first* the Principles of *Aristotle*, and discourses at large of the nature and origine of *Formes*; yet without determining here, whether the Forms of living substances or the qualities of Bodies are things different from matter, or not. *Next*, he treats of the *Epicurean* Philosophy, as less difficult and more obvious; discoursing of Atoms, their nature and figures of continuity, and the manner of the cohesion of Atoms, as also of vacuity, &c.

Thirdly, he explains the *Cartesian* Principles; where he hath *first* a large discourse about the nature of a *Physical* Body, endeavouring to evince, that the essence of it consists not in a trine Dimension, & to shew, that the *Idea* of the three dimensions, (than which *Des Cartes* contends we can have no other of a Body,) is the *Idea* only of a *Mathematical*, not a *Physical* Body. *Secondly*, he treats largely of the Nature and Law of Motion. *Thirdly*, of the *Elastique* motion, and the causes of that motion, and of the manners in which it is communicated; as also what difference there is in the configuration of the parts in Springy Bodies, from those that have no Spring; inquiring also, in the Appendix to this Treatise, into the efficient causes of Elasticity, concerning which he delivers the sentiment of Mr. *Perrault*, after he had alledg'd the *Materia subtilis* of *Des-Cartes*, and the ignited Atoms, and the *Fffluvia* of Bodies, which as so many wedges do dilate the constricted passages of the inflected Body. As to the opinion of Mr. *Perrault*, he supposes, that the ambient Air is of two sorts; *one* thicker, composed of particles of Earth, Water, &c. inspired by us, not pervading glass nor any other solid body; the *other*, far subtler and more penetrant, intermingled with the thicker, almost after the manner that quick-lime is mixed with sand, both swimming and moving in the *ether*, and mixed with it as lime is mingled with water. Moreover, that as the thicker Air, which extends it self to some miles, hath its weight, so the more subtle hath a greater weight (many Experiments evincing both.) Now to this subtle Air Mr. *Perrault* ascribes the *Elastique* power and other affections, as the firmness and cohesion of Bodies; forasmuch as the corpuscles, which compose every thing, having plain and flat and manifold superficies's,

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cannot be pull'd afunder, but they must remove the neighbouring parts of the Air from their place, and by doing so somewhat raise the mass of the Air incumbent, they being every where pressed from the environing Air, no otherwise than a Body immersed in water is on all sides compressed by water. Wherefore as often as a firm body, *e. g.* the branch of a tree, is bent, the convex parts thereof are somewhat forced afunder, but when that exterior force ceaseth, than every part recovers its proper figure and scite; and this, he saith, is mainly effected by the weight of the subtiler Air, &c.

In the *third* Book he treats amply of the four Elements, commonly so called, *Fire, Air, Water,* and *Earth*: where occur many considerable Observations concerning *Fire* and *Air*. The *Epicurean* notion of *Fire* is here explained, and the *Cartesian* likewise; and those particulars discussed, that seem difficult in the later. There are also recited many *phenomena* of *Flame*, and the latent fire in *Lime* and other Bodies ingeniously discoursed of: Moreover, what is the nature and use of the Air, what the nature of the *Aether*, together with the many Experiments about the Spring of the Air, made in the *Machina Boyleana*, in *England* and elsewhere, &c.

In the *fourth* are explained the Principles of *Chymistry*, the mixture and dissolution of Bodies, *Fermentation* &c. This also is full of new Experiments and Observations, made here and in *France*, and other Countries. So that there being represented in this new Edition, as in an Epitome, most of the subjects and enquiries of Natural Philosophy, and they treated with much plainness and elegance, it may be of great use to young Students in Philosophy to instruct themselves in all those matters with brevity and delight.

IV. Of EDUCATION, especially of Young Gentlemen, in two parts, the second Impression with Additions; Printed at the Theater Oxon. 8c.

That eminently Learned and Famous Knight Sir *Henry Wotton*, did long since, at the end of his *Elements of Architecture*, promise, as devoted to the service of his Countrey, a *Philosophical Survey of Education*, which is indeed (says he) a *Second Building* or Repairing of Nature, and a kind of *Moral Architecture*. This he promised An. 1624; and he made many Essays, and began some Chapters, but could never bring his design to so much perfection, as could give satisfaction to his own mind and intentions. This our

Author

Author, who is pleas'd to conceal his Name, is very full and punctual, with Instructions proper for all conditions of human life, particularly for the Generous.

The wisest of all Ages have taken care of Education, as fundamental to prosperous Government, and the best & most seasonable help to good Literature. *Solomon* for the East, and *Daniel*, had there an extraordinary felicity. *Socrates*, *Plato*, *Xenophon*, *Iso- crates*, and the Sententious small Poets, as we call them, are, in their several capacities, for *Greece*. *Cicero* and *Quintilian*, above all others, for sound Wit and Eloquence, and peculiarly for the *Orator*, which should be their perfect, compleat and honest (that is, in their Style, Honorable) Man among the *Romans*. And some of the acutest of our Modern have been free of their *Adviso's* to prompt the Studious: *Bodin*, for History; *Clapmarinus* in his *Nobile Studiorum Triennium*. Also *Grotius*, in one or two sheets; *Sturmius*, with like brevity; *Chr. Colerus De Studio Politico*; and *Cassellius* in a touch: *Joac. Hocani De ratione Studiorum Dissertatio*: For choice or variety of Books, *Drexelius*. And *Gabr. Nau- dai Bibliographia Politica*, and his Instructions for erecting a Li- brary, elegantly English'd by Worthy Mr. *Evelyn*. Many curious *French* have done well for the main; *J. M.* argutely in an English sheet, &c.

But this our Author hath reduced the best of Antient and Mo- dern *Adviso's* into a compact Method, and interlac'd it with a very great variety of his own seasonable suggestions. I shall give no judgment upon the particulars; and the whole is compos'd so suc- cinctly, that it needs not nor admits any other breviat. But I dare affirm it, that this Treatise is singularly worthy to be perus'd by all the Ingenuous, that are or may be concern'd in those Funda- mental affairs; as worthy also to come forth from the *Famous Theatre of Oxford*.

III. *Bathoniensium & Aquisgranensium THERMARUM Com- paratio, variis adjunctis illustrata à R. P. Londini, impensis Joh. Martyn, ad insigne Campanæ in Cæmeterio D. Pauli, 1676. in octavo.*

THe ingenious comparison that is made in this Tract of these two Baths, regards their Antiquity, Scituation, Structure, Cause of their Heat, Minerals that are their Ingredients, and their Medicinal Virtues; further, their Number, Difference, and Form:

Form : To which is added the diversity of Time, when the waters of these Bathes are to be used ; together with the Recreations and Divertisements that occur in both places.

VI. VIRETUM BRITANNICUM, or a Treatise of Cider, and such other Wines and Drinks, as are extracted from all manner of Fruits growing in this Kingdom; with the Method of propagating all sorts of Vinous Fruit-Trees. And a Description of a New invented Ingenio or Mill, for the more expeditious and better making of Cider. Also the method of making Metheglin and Birch-Wine; with Copper-plates: By J. W. Gentleman in octavo.

THis is done by the worthy Author of *Systema Agriculturae* in *Fol.* who, by the Printer's fault, was omitted *Num.* 114, *p.* 322. and only mentioned in the *Errata* at the end of *Numb.* 115, though he deserves Recommendations much larger than I am able to give, for his great merits towards the Publick.

Printed by T. R. for John Martyn, Printer to the Royal Society at the Bell in St. Paul's Church-Yard.