

monumenta , unde omnem hujus Inventi rationem haurire licet Astrophiliis. Amplexus eandem Reverendis. *Seb. Wardus*, primum ostendit, paria facere cum linea æquabilis motus circa alterum Ellipseos umbilicum gyrata; deinde & Calculi directi methodo ornavit eam, quam paulò antè recitavimus: Ita ut nil amplius desiderari posset, quàm ut *Urania* felicibus cæptis annueret. Cujus quidem nomine suscipere ausus fuit Illustris. Comes *Paganus*, edito, *biennio post*, ejusdem ferè tenoris scripto, adeò veram esse Hypothesin, ut deprehensam circa Octantes discrepantiam, Astronomorum insectiæ tributam mallet. At *Cl. Bullialdus*, audiendam potius ipsam Astronomiam ratus, Observatorum ore loquentem, secundis curis, adhibita prioribus Inventis limitatione quadam, discrepantiam illam exterminavit. Unde porrò intelligitur, Hypothesin illam, cui *Cl. Cassinus* investigationem Apogeorum & Excentricitatum superstruit, tantundem ferè deficere à vero, quantum *Cl. Bullialdi* limitatio poterat, atque ab illo defectu pullulare eum quem supra notavimus, Calculi à Cælo dissensum.

Tantum vero abest, ut de Eximii Viri Inventione vel minimum delibatum velim, ut quicquid hujus lucubratiunculæ non hausi ex Reverendiss. *Wardo*, vel *Herigono*, id omne Ipsi libentissimè acceptum referam, qui ansam nobis præbuit hæc altius considerandi. Nec dubitamus, quin omnia ista multò uberius ac luculentius in promisso *Traçtatu* exposita propediem reperturi simus, cujus Editionem maturam, pro eo quo flagramus divinissimæ Scientiæ amore, perquam avidè expectamus.

An Account of Three Books.

I. *Esperienze intorno alla Generatione Degli' Insetti, fatte da Francisco Redi, Accademico della Crusca. In Firenze, A. 1668. in 4o.*

**T**HE Learned and Ingenious Author of this Book, lately come to the Publishers hands, though not yet (which is much disliked by the curious) into our Stationers Shops, doth with much industry undertake therein to evince, that there is no such thing as *Æquivocal Generation* but that every Animal is generated by the seed of another Animal, (its parent,) or, at least, from some Living and un-corrupted Plant, as out of Oak-Apples, and several Protuberances and Excrecencies of Vegetables.

*First* then, in the asserting of the *Universal* and true Generation of Insects by a peculiar and paternal Seed, the Author positively affirms, that he could never find, by all the Experiments and Observations, he ever made (of which he relateth a great number, by himself made upon all sorts of Animals) that ever any Insects were bred from Flesh, or Fish, or *putrified* Plants, or any other Bodies, but such, as Flies had access unto, and scatter'd their seed upon; he having taken extraordinary care and pains to observe, that alwayes on the Flesh, before it did verminate, there sat Flies of the self same kind with those, that were afterwards produc'd thence; and again, that no Worms would ever come from any Flesh in Vessels well cover'd, and defended from the access of Flies; so that to him there is no generation of Insects from any dead Animals, but such as have been fly-blown.

And least it should be objected, that the reason, why in vessels exactly clos'd, no Insect breeds, is the want of Air, necessary to all Generation, He hath carefully covered several vessels with very fine Naples-vaile, for the Air to enter, though Flies could not; but that no worms at all were bred there, notwithstanding that many Flies swarmed about them, invited by the smell of the Flesh inclosed therein.

*Secondly*, to make out the other part of his Position. *viz.* That those Animals that are not bred by the seed of other Animals, are produced from some live Plant, or its Excre-

Excreſcence; This Author eſteems it not abſurd to affirm, that that *Animæ* or Power, which is able to produce Flowers and Fruits in living Plants, may be alike capable to breed Worms in them; ſince that Soul is ſo powerful, as to cauſe Plants to feed, to grow and to produce ſeed, as it doth in Animals. For confirmation of which, he obſerveth, that both the generation of Worms in Vegetables is always and conſtantly the ſame (not at all caſual,) and that all *Galls* grow conſtantly in one determinat part of the branches, and always in the new branches; as alſo, that thoſe little *Galls*, which grow on the leaves of the Oak Holm &c. do all grow conſtantly on the fibres or ſtrings of thoſe leaves, not one of them being ſeen to grow on the ſmooth part betwixt two ſtrings: Farther, that there are found many leaves of other trees, on which grow *Veſicles*, or ſmall bags, or ſome wrinkled or ſwell'd places, full of worms, ſpringing forth with thoſe leaves. Beſides, that there is nor one *Gall*, but it hath its proper worm; and that each ſort of *Galls* hath its peculiar and determinate race of worms and flies, which never vary: Where he takes notice of the ſingular Art of Nature both in forming the Egg, which is found in the center of *Galls*, and in preparing its place therein, furniſhing it with many filaments, that paſs from the *Gall*-apple to the Egg, as ſo many veins and Arteries, ſerving for the formation of the Egg and Worm, and for the nourishment requiſite thereto. To which he adds this Obſervation, that there being certain ſorts of *Galls*, which breed more worms at a time than one, Nature hath carefully provided and diſtinguiſht places for them, as ſhe doth in thoſe Animals, that are multiparous.

Having eſtabliſht this ground againſt *Æquivocal* generation, he proceeds to particulars, and refutes the opinion of thoſe, that will have Bees to be bred of the putriſied fleſh of Bullocks; *VVaſps*, of *Aſſes* or Mules fleſh; *Drones*, of *Horſes*; *Scorpions*, of buried *Craſſihes*, or the herb *Baſilica*, or dead *ſcorpions*: *Toads*, of *Ducks* buried in Dung; *Mites*, of *Cheefe*, affirming, that none of theſe Inſects have any ſuch origin mentioned, but that all theſe ſubſtances have been firſt blown upon by ſome Fly: or other.

He interpreteſh through the whole Book many curious and conſiderable Obſervations, relating to this Subject: As, that ſome Flies are viviparous, others oviparous only, yet not denying, but that the ſame Flies may ſometimes breed live worms, ſometimes lay eggs, according to the more or leſs heat of the ſeaſon. 2. That Humane bodies breed worms, but not immediately, but by Inſects blowing on them. 3. That Fruit and Herbs, crude or boyled, kept cloſed up, breed no Vermin, but in an open place, do breed ſome. 4. That there are no Animals partly animated, partly yet earthy, nor Animals half animated, and half wood. 5. That worms breed in the Livers of Mutton, and the Heads of Staggs, he having ſeen divers of them in both theſe kinds of Animals, and eſteeming, that the ſoul of the ſuperiour animal was able to breed thoſe inferior animals. 6. That Lice are bred of Eggs or nits, laid by their Femal-parent; he having diſcerned by a Microſcope ſome nits yet pregnant with young ones, others, emptied of them. 7. That all living Creatures are ſubject to lice or ſome ſuch kind of Vermin; the *Aſſe* not being exempted from them, as *Ariſtotele*, and upon his authority, *Pliny*, *Mouffet* &c. would have it: And that all ſorts of fowle (except *Oſtridges*, in which he never could meet with any Vermin in any ſeaſon,) and fiſh, have each ſort their peculiar lice: Of which he hath repreſented divers of ſeveral ſorts.

N B. The Author promiſes in this Treatiſe a very particular *Hiſtory* of the various Fruits and Animals, that are generated of Oaks and other Trees.

II. *Pharmacopœia Regia, ſive Diſpenſatorium Novum locupletatum & abſolutum, cum annexâ Mantilla Spagyrica, & gemino Diſcourſu Apologetico contra Ott. Tachenium, & Franc. Vernis. Auth Joh Zwelfer. M. D. A. 1668. in folio.*

The Author of this Volume, after he had publiſht to the World his *Animadverſions* upon the *Pharmacopœia Auguſtana*, and after that, a *Pharmacopœia Regia*, and then, an *Appendix* ſuperadded to both, pretends now in this vaſt Work to deliver ſomething compleat of this kind, following the Experiments and Operations made in his Laboratory, by which he affirms to have given us the Compoſitions and Preparations of the choieſt Medicaments, performed by a genuin and accurat Method, according to the

19. *Classes of the Augustan Dispensatory*, and directing all to the principal parts of the humane Body, and the particular Cases of Patients, so that in almost each *Classis* there may be found ( he Judgeth ) precious remedies described for every sickness, un-common ones, and confirmed by Natural and Medical Reasons, and Experience itself. Where he ingenuously cautions his Reader, above all things to examine, by whom Medicins are prepared; and particularly instanceth in a Preparation of *Antimonium Diaphoreticum*, which, though himself had used it, when duely and by himself prepared, with very great success against the Plague, yet had found almost fatal to himself; upon occasion taking it, when prepared by a Pseudo-Chymist.

In the annexed *Mantissa* he describes the Medicins, that may be made of all sorts of Metals; as also of Antimony, Vitriol, Sulphur, Niter, and Tartar; among all which (to note that upon the by) he declareth the vertue of *Aurum fulminans* for an excellent *Diaphoretick*; and teacheth, how its fulminating force may be taken away, viz. by a little Spirit of Salt powred on it, or by some distilled Vinegar boyled with it.

Farther, our Author in his *Defence* against *Tachenius* ( who with some sharpness had attacked all his former Writings ) makes it his business, to refute *Tachenius* his way of *Fixing the Volatil Salt of Pipers*, which, it seems, he had formerly communicated to him when they friendly conversed together, but, upon tryal, proved false: Where our Author takes occasion to evince it not to be true, that Animals contain none but Volatile Salt, and that Vegetables likewise have not a grain of fixt Salt, except it be produced therein by the Fire; both which *Tachenius* seems to have asserted. To which he adds an examination of the Doctrine of Salts, delivered by the said *Tachenius* in his *Hippocrates Chymicus*, nor at all approving, that he confounds the Lixiviats and Alcalys with the Salts of Minerals and Animals, in that he gives to these two latter kinds of Salts one general name of *Alcalys*: Where many things occur, belonging to the making of Soap, Glass, Verdegrease; as also to the Liquor distilled out of *Calx viva*, to Fulminating Gold, the Melting of Metals, the Salt of Tartar, the Generation of the Stone in Animals, the Alcalys and Resuscitation of Vegetables; the *Helmontian Ludus*, &c.

Moreover, this Author vindicates himself against the Notes of one *Franco. Verni* of *Montpelier*, written upon the *Pharmacopœia Britii Bauderonii*; published in French A. 1662. at Lyons, in 4°. in which Notes the said *Verni* excepts against our Author concerning the Preparation of the *Compounded Acid Syrup of Mesue*, and the *Consolation of Alkermes*.

In this Work is also contained the Third and Enlarged Edition of the Authors *Animadversions* upon the *Pharmacopœia Augustana*, and its *Mantissa*; wherein, by a genuine and dextrous Method, the Preparations of Simple and Compounded Medicins are so delivered, and the Errors of the Ancients in such a manner detected, that from thence, by preserving and exalting the Vertues of the Simple Medicaments, they shall become much suter means in the Hands of Physicians, suddenly, safely and pleasantly to remove the distempers and Maladies of Humane Bodies.

To all which is also annexed his *Spagyrick Appendix*, wherein, what may seem in those *Animadversions* to be somewhat obscure and imperfect, is pretended to be so much farther explained and perfected that it may not only render them far more clear, but also enrich them with divers uncommon Considerations and Remedies: Where the Reader will meet, among many considerable Observations, a very necessary Caution concerning the *Oriental Bezoar*, of which the Author notes, there must needs be innumerable sophisticated ones, considering the multitude of them, pretended to be true ones, seen every where, in all parts and places of the World, whereas yet the Creature, whence 'tis taken, being a Savage Animal, like a kid, is not to be had but by Hunting, and that but in one corner of the *East-Indies*: Which Consideration induces our Author to conclude, that most of those Stones are factitious, prepared perhaps out of Magisteries of Alexipharmical Plants, as Scordium, Ruë and the like; which may also be of good use in causing sweat and expelling poysen.

**III. Affectionum quæ dicuntur Hysterica & Hypochondriaca Pathologia Spasmodica Vindicata, contra Responſion. Epistol. Nathanaelis Highmori M. D. Cui accessere Exercitat. Medico-physica duæ, 1. De Sanguinis Accensionæ. 2. De Motu Musculari, Auth. Tho. Willis M. D. Nat. Philos. Prof. Oxon, nec non Medi. Coll. Londini & Soc. Regiæ Sodalis. Londini apud Jac. Allestry In 4°.**

**T**HE Learned Author of this Book makes it his chief business therein, to vindicate his Doctrine, which maketh the two Affections, expressed in the Title, to belong to the *Brain* and the *Nerves*, from the Arguments alledged by the other Learned Physician Dr *Highmore*, who makes the one to be a distemper of the *Bloud* and *Lungs*, and the other of the *Stomach*. In the doing of which, our Author first undertakes to shew, by several considerable Arguments, that the affections, called *Hysterical*, cannot proceed from the *Lungs* stufled up to a great degree of stiffness with flatulent *Bloud*; seconding them by some *Histories* and *Observations*, which seem very pertinent to his purpose: Which done, he proceeds to remove the difficulties and *Objections*, alledged by Dr *Highmore* in his *Epistle*, formerly printed, and taken notice of in N. 54. of these *Transactions*.

Secondly, he endeavors to evince, that the *Hypochondriack* passion is wrongfully ascribed to the *Stomach*. Where he taketh occasion, both to deny to the *spleen* the office of *Warming* the *Stomach*, and to assert the *Fermentative* function of the same: Teaching withal, that the *Acidity* is not produced in the *Stomach* alone, nor thence only communicated to the *Bloud* and other humors; and that it proceeds from the *fluor* of the *Salt*, and that that *Salt* is one of the *Elements* of *Natural* things; which latter he attempts to make out by *Experiments* against the *Objections* of his *Adversary*.

To this *Vindication* are annex two *Exercitations*, whereof the *First* is concerned in proving the *Accension of the Bloud*: Where the Author undertakes to shew, that the *Bloud* being animate, that *Animation* or *Life* depends from its being kindled, so far as much as the proper affections of *Fire* and *Flame* belong to the *Life* of the *Bloud*; which is here deduced at large; although it be withal acknowledged, that this *Vital Flame* doth not, as the common *Flame*, appear to view, in regard that its *Form* is subordinate to another superior *Form*, viz. the *Corporeal Soul* of the *Animal*.

The *second* *Discourse* treateth of the *Muscular Motion*, where, having declared, that Dr *Steno* hath been the first that hath delivered aright the *Structure* of *Muscles*, and that the *Figures* described by him are visible in them; and also made out the motions of their *Fibers* by divers *Anatomical Experiments*; besides many other considerable particulars: He asserts, that the *Motion* of *Muscles* depends from a constant *Influx*, both of the *Bloud* and the *Animal spirits*; and that the latter alone, without being associated by the former, cannot perform that moving function; maintaining, that as the *Spirits* (or *Spriny particles*) in the contraction of a *Muscle* rush out of the *Tendons* into the *Fleshy* parts of it, and in the relaxation, skip back from these into those, so those *Spirits*, lying quiet within the *Tendons*, do swell the *Fleshy fibres* by conflicting and struggling there with the particles of *Bloud*. To which he adds the manner, how the *Influx* (as he pleareth to call it) of performing or stopping the *Muscular Motion*, is imprinted by the *Nerves* in the *Muscles*: Subjoyning also divers important particulars concerning two sorts of *Spasmes* or *Convulsions* proceeding from the *Muscles*, with an illustration of the same by a very remarkable case. All which he concludeth with solving the *Objections*, to which this his *Doctrine* of the *Muscles* may be liable, and annexing some *Figures*, very lively representing some *Muscles*, together with an *Explication* of the same.

L O N D O N,

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