

EDVARDUS BERNARDUS *de Mensuris*
 & Ponderibus $\kappa\epsilon\tau'$ $\beta\epsilon\tau\iota\sigma\mu\iota\upsilon$. Oxonii è Theatro
 Seldonio A. D. 1685.

THIS Compendious Treatise, inscrib'd to Dr *Po-sock* the Venerable Sanctuary of Orientall Learning, and also annexed to his excellent Comment on the difficult Prophet *Hosea*, recommends to the diligence of Posterity the Berries and Kernels of fruits, the uniform Cells of Bees, and cheifly the Pendulum of the right famous *Galileo*, to conserve the true models of Commutative Justice. But for the ages past refers especially to the ancient Coyns still kept in great plenty in the Cabinets of Christian Princes: besides the rules of the *Theaters*, *Amphitheatres*, *Temples* and *Aqueducts*, &c. of *Europe* and *Asia* and *Africa*, which have happily born the strokes of time and *Barbarity*, and have of late been exactly measured by noble and skillfull Travellers: as the Pantheon at *Rome*, *Minervas* Temple in her own City, the numerous Antiquitys of *Constantinople*, the admirable Ruine of *Chilmenar*, and the perpetuall Pyramids of *Egypt*. From these and severall other Monuments is asserted the equality of the *English* foot to that of the *Hebrews*, *Babylonians*, *Greeks*, *Chineses*, *Castilians*, and those of *Lisbon* and of *Lyons*. And farther that allowing an intire *English* foot 1000 parts, the Parisian will reach 1066, the Catholic foot of *S^r Jonas Moor* 1089; the old Roman 970; that of *Villalpandus* deriv'd from *Vespasians Congius*, 986; the Rhinland foot of *Snellius* 1033; the Venetian 1140; the Bononian of *M^r Auxout* 1140; to omit the rest. Thus from the foot & most proper rise, passing through the various measures of Antiquity, this Treatise at last gives for one Degree, or the $\frac{1}{360}$ part of the Circuit of the whole Earth, $73\frac{4}{5}$ *English*

glish miles, of 5000 foot in a mile: $67\frac{4}{10}$ Cathôlic miles, $66\frac{2}{3}$ Arabic miles, just according to the old observations of *Hasan, Nodham, Masudy* and other *Arabs*; and little differing from the late Experiments of the diligent and ingenious M^r *Norwood* in *England*, and M^r *Picart* in *France*. As for ancient Weights; the true Hebrew *Sechel*, or *Siclus Argenteus* inscrib'd with Samaritane Characters, is equal to three shillings *English*, or to the Tetradrachm of *Thafus* and the Greek Islands. The Attick Tetradrachm makes two Shillings & nine pence *English*, or four *Denarii Gordianici*. The *Denarius Consularis Romanorum* bears $7d\frac{1}{2}$. *English*. The *Denarius Tiberianus* $7\frac{1}{4}d$. And lastly the *Denarius Vespasianicus* $6\frac{1}{2}d$ c. Hence also is found the value of an Hebrew Talent in Silver to be 450*l.* Sterling, and that of Gold to rise to 5400*l.* Sterling. But for the measures of Capacity from the *Cheme* to the *Achane*, I refer you to the Book it self: only advertising, that the Hebrew *Epha* or *Batus* is so farr from agreeing with the *Væba* of the *Arabs*, (that is the weight of 32 or 34 Rotuls or pounds,) that it contains of water no less then 76 pounds Troy; which is just the Cube of the *English* foot in that Liquid. And also that the Hebrew Cubit, (for this and the *Epha* are the *Jachin* and *Boaz* of a late *Essay to recover the Jewish Weights and Measures*;) falls short at least three inches of the Cubit of Grand *Cairo*, taken by D^r. *John Greaves* the renowned Researcher of Antiquity. In fine the *English* Halfe foot in Brass compared with the most famous of other Countryes, by an Ordinary Care of the Rowling Press may be truly wrought off and represented. See Fig. 11th

Ant. Nuck *de Ductu Salivali novo, Saliva, Ductibus Aquosis, & Humore Aqueo. Lugd. Bat. 86.*

THIS Ingenious *Anatomist* divides this little tract into two parts; in the first whereof he gives us his discovery of a new Gland, with its proper *Ductus*; his observations on the *Saliva*; with an historical account of the *Ductus Salivalis* when disordered. This Gland is seated in the Orbit of the *Eye*, just between the *Musculus Abducens*, and the uppermost part of the *Os Jugale*; it is of no certain figure, being sometimes oblong, sometimes almost round, or oval, and sometimes triangular; it exceeds not the bigness of a small Nut, or the weight of half a *drachm*, or two *Scruples* at most; it hath four sorts of Vessels beside that peculiar to it; an Arterie from the Carotid; a Vein from the Jugular, and its Nerve springs from the third pair called *Motorii oculorum*; and he does not question, but it has Lymphatics also; There are many small sprigs rise from this Gland and meeting together joyn all in one *Ductus*; which crossing the *Ductus Stenonianus* passeth directly downward on the outside of the *Os Maxillare*, and opens upon the last tooth but one of the *Dentes Molaris* of the uppermost Jaw. Our *Author* gives it the name of *Ductus Salivalis Superior alter*, in opposition to that of *Steno*. He ascribes no use to its *Saliva* but what is common to the other, *viz.* to Moisten the parts; to quicken the taste, and by its more intimate mixture with meats, &c. to promote fermentation, as also upon extraordinary occasions to facilitate Salivation.

In the second part of his Book, he gives us an account of certain *Ductus*'s, that carry water to the Eys; having the first time accidentally happened upon one in the *Galeus*; he traced it along on the outside of the *tunica Sclerotis*

Sclerotis, till it entred that part of it called the *Cornea*: it easily admitted a Probe; but nothing issued forth after the Probe was out, because as he supposes (tho' there be no valve to be found in any part yet) the extremity of the *Ductus* serves as a Valve, and discharges its matter after the same manner as the *Ductus Communis*, the *Ureters*, &c. doe into their respective cavitys, without admitting regurgitation. He has found in Dogs and Birds two in each Ey exactly opposite one to the other; in some Sheeps Eys five, in others six: but he can by no means discover their rise, being able to trace them as far as the optick Nerve, but very little farther; he assures us Mankind also are not without them; all which he confirms by Experiments made both on Men and beafts.

The Generall Bill of *Christnings* and *Burialls*, according to the report made to his *Majestie*, by the Company of Parish-Clerks of *London*. 1685.

Christned	{	Males. ————— 7484.
		Females. ——— 7246.
		In all. ————— 14730.

Buryed	{	Males. ————— 11891.
		Females. ——— 11331.
		In all. ————— 23222.

Jo. Con. Peyerii, *Merycologia, sive de Ruminantibus & Ruminacione Commentarius*, Basileæ. 4°.

THE Learned *Author* observing that *Rumination* has not been handled as it ought, and that many of those creatures which *Ruminate* are very serviceable to Man-kind, (but especially to his Country-men the *Swissers*;) is pleas'd to make this matter the Subject of a Treatise consisting of 3 Books; in the first of which, after a Division of Animals into *Ruminantia* & *non Ruminantia*, he reckons up those of the former kind; some of which he says, may more properly be said to *Chew the Cud*; others *imitate* that Action, and are here call'd *Ruminantia Spuria*, as the Mole-Cricket, Bee, Beetle, Crab, Lobster, Mullet, and several Birds: but the creatures which *Ruminate* in a more genuin sense, are, among Quadrupeds, the Ox, Deer, Sheep, and Goat kind, the Camel, Hare, and the Squirrel; also some Men; of whom he gives several instances.

In the Second Book, he treats of the Organs subservient to *Rumination*; as of the several Stomacks belonging to some of the *Ruminantia legitima*; and of them first in general; then in particular of the *Paunch*, *Reticulus* (Κεκρόφαλος) the *Feck*, the *Reed*; of the single Stomach in Hares, and Rabbits; all which are described with great exactness, and after a very satisfactory manner.

As to the Stomacks of the *Ruminantia Spuria*; he affirms they all have spiral muscucose Fibres, by means of which they do (as it were) grind and work their meat, up and down, after a manner somewhat analogous to *Rumination*; for the better effecting of which, in some of them the Stomack is extremely rough in the inside, as in the *Mullet*; in others it is very hard and callous, as

in

in Geese, Hens, &c. in the Stomack of others, (as of the Cricket, and Lobster,) there are Teeth.

After this he passes to the *Oesophagus*, as it is in the *Ruminantia genuina*; where rejecting the account which *Petrus Aponensis*, *Amylianus*, *Aquapendent*, and even *Fallopianus* has given of that part, he describes it (according to *Steno*) to consist chiefly of 2 spiral muscles form'd like screws, crossing one another. Which sort of make he thinks conduces much to the strength necessary for the carrying meat up and down in that part, in so quick a manner as is requisite.

From the *Oesophagus* he goes to the *Mouth*; of which he mentions such particulars, as seem to be instrumental in *Rumination*; for example, the volubility of the Tongue, rowling the meat up and down in the mouth; the viscosity of the Spittle, keeping it together; the admirable contrivance of the Teeth, &c.

He also reckons up those parts, which assist more remotely in *Rumination*, as the muscles of the Breast and *Abdomen*, and the *Diaphragm*.

To this he subjoins Cutts, representing the four Stomacks of such Creatures as are *Ruminantia bisulca*, the single Stomack of the Rabbit, and the *Oesophagus* of an Ox; the muscular fibres of all which are well traced, and their windings exprest in the Figures.

In the 3d. Book he inquires into the Etymology of the word *Rumination*; and defines the thing to be (in Brutes) a *Natural motion of the Stomack, Mouth, and other parts subservient hereunto, relieving one another in this action; by which the meat, which was eaten rudely and (as it were) in hast, is convey'd back to the mouth again, chewed there, and then swallow'd a second time, to the great advantage of the Animal*: that this motion is *natural*, he proves from a *History in Galen*, who having preserv'd a Kid taken out of the *Uterus* of the Dam upon dissection, and bred it by its self, observed that when it

came to eat hard meats, it *Ruminated* like other Goats.

The cheif motive to *Rumination* seems to be the hardness and grossness of the meat, as swallowed at first; the Stomack being not able to master it, unless it be more thoroughly masticated: hence Cattel *chew* the *Cud* more frequently in Winter when they feed on hay, stubble, &c. then in Summer when on grafs; and Calves, &c. do not *Ruminate* at all, as long as they live on milk.

Rumination in Men proceeds, as he thinks, either from the imagination of the Mother being intent on this action, or from some ill habit of vomiting, and swallowing the meat again; the cure of it in men, (where it is preternatural) consists in a small quantity of meat easily digested, chewing it well, and walking gently after eating: liquid meats are preferred before solids, especially at the beginning, to break the habit.

He treats of the Food of *Ruminating* Creatures, and their manner of Feeding; of the advantage they are to Mankind, and this action is to them, and consequently to us, as being that which conduces much to the strength and health of both them and us.

As to the Impediments of *Rumination*, they are generally three; some disease or else an excess, or ill quality of the food; if excess be the cause, the *Author* saies it will give present relief, to thrust in your arm as far as you can, and pull out some of the food, and afterwards to drive the beast up and down, not suffering him to drink.

At last (by way of *Appendix*) the *Author* adds Letters from *Webferus*, *Wagnerus*, *Harderus*, and *Muraltus*, concerning the aforesaid subject.

Castorologia à Jo. Mario, *aucta* à Jo. Franco. Aug.
Vindel. 85. 8°.

THIS Treatise of the nature of the *Castor*, being composed many years ago by *Joannes Marius*, Physician at *Ulm*, is not only published, but enlarged by *Joannes Francus*, who out of several Manuscripts, and his own observations, has put the last hand to this Book. It begins with a contemplation of the great usefulness to mankind of things common and contemptible, which serves for an introduction to the Natural History of an Animal of more real use, than value. It is handled according to the Method prescribed by the German *Naturæ Curiosæ* in single subjects, where after the different appellations in several Languages and pretended Etymologies of them, he describes the *Beaver* (for it is not our *English Badger*, for which the Author mistakes it) to be an Animal about the bigness of a Cat, amphibious and living upon fruits and barks of trees: his forefeet are like a Dogs, and his hinder like those of a Goose; his tail seems to be an intire Fish, which he always keeps wet, suffering several inconveniences when it is dry. Between its hinder legs grow two bags, which contain the *Castoreum*; these many Authors took for the Testicles of the Animal, till *Rondeletius* first undeceived the world, & proved them by Anatomy to be only bags for this very substance; the reasons of this you have here given you. And after an account of the manner of its feeding, building its nest, bringing forth its young, its age, and places where most frequently found, you have the medical use of several of its parts, as of its Skin which is commended in the Colick, Hysterical pains, Madness, and other distempers, especially in all those commonly accounted Cold; as is likewise the Fat. The blood is soveraign in

the Epilepsy, inward bruises, hardness of the breasts & the like. The Fur, (besides the mechanicall use of it in hats) is astringent, and stops blood. The teeth are used as Amulets for Children in breeding the Teeth, in the Pleurisy, and to prevent the falling-sickness in Infants. But the chief thing of use about it is the *Castoreum*, which being first described by its sensible qualities, which direct how to distinguish the native from that which is adulterated, all the effects of it in Physick are very particularly enumerated; various receipts for most distempers, backt with the experience of the Physicians who successfully used them, are carefully delivered; which to set down here singly would be to transcribe a great part of the book. All which is so learnedly and faithfully done, and that alternately by *Marius* and *Francus*, that it seems a contention between two very good Naturalists, to give a just account of one of the best Medicines in Nature: at the end of it is a Catalogue of the Manuscripts which are quoted in the book, some of which have been since Printed, and the rest we may expect from the publisher of this usefull tract.

Printed at the Theater in Oxford for Sam. Smith, at the Princes Arms in Pauls Church-yard London; and Hen. Clements Book-seller in Oxford.

