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EDVARDUS BERNARDUS de Mensuris ชา Ponderibus หลา 'อิสโอแม่พ. Oxonii è Theatro Seldonio A. D. 1685.

HIS Compendious Treatife, inscrib'd to Dr Pos sock the Venerable Sanctuary of Orientall Learning, and also annexed to his excellent Comment on the difficult Prophet Holea, 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 ancientCoyns still kept in great plenty in the Cabinets of Christian Princes: besides the rules of the Theaters. Amphitheaters, Temples and Aquadults, &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 afferted the equality of the English foot to that of the Hebrens, 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 St 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 Me Augout 1140; to omit the rest. Thus from the foot & most proper rife, passing through the various measures of Antiquity, this Treatife at last gives for one Degree, or the 35 part of the Circuit of the whole Earth, 73 to English

glish miles, of 5000 foot in a mile: 67% Catholic miles, 663 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 Mr Norwood in England, and Mr Picart in France. As for ancient Weights; the true Hebrew Secel, or Siclus Argenteus inscrib'd with Samaritane Characters, is equal to three shillings English, or to the Tetradrachm of Thasus and the Greek Islands. The Attick Tetradrachm makes two Shillings & nine pence English, or four Denarii Gordianici. The Denarius Consularis Romanorum bears 7d₁. Engli/h. The Denarius Tiberianus And lastly the Denarius Vespasianieus 63d c. Hence also is found the value of an Hebrew Talent in Silver to be 450/. Sterling, and that of Gold to rife to 5400/. Sterling. But for the measures of Capacity from the Cheme to the Achane, I refer you to the Book it self: only advertifing, that the Hebrew Epha or Batus is so farr from agreeing with the Vaba 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 Fachin and Boaz of a late Essay to recover the femily Weights and Measures,) falls short at least three inches of the Cubit of Grand Cairo, taken by Dr. John Greaves the renowned Relearcher 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, Du-Etibus Aquosis, & Humore Aqueo. Lugd. Bat. 86.

HIS 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 feated in the Orbit of the Ey, just between the Musculus Abducens, and the uppermost part of the Os Jugale; it is of no certain figure, being fometimes oblong, fometimes 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 forts 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 croffing the Ductus Stenonianus passeth directly downward on the outfide of the Os Maxillare, and opens upon the last tooth but one of the Dentes Molares 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 tast, and by its more intimate mixture with meats, &c. to promote fermentation, as also upon extraordinary occasions to facilitate Salivation.

In the fecond part of his Book, he gives us an account of certain Dullus'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

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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 Dustus serves as a Valve, and discharges its matter after the same manner as the Dustus 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 sive, 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 consirms 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. Peyeri, Merycologia, sive de Ruminantibus & Ruminatione Commentarius, Basilea. 4°.

HE 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 Swiffers,) is pleased to make this matter the Subject of a Treatile confisting 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 fays, may more properly be faid to Chew the Cud; others imitate that Action, and are here cal'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 feveral 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 (Kerpipan) the Feck, the Read; 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 musculose 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 extreamly rough in the inside, as in the Mullet; in others it is very hard and callous, as

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

After this he passes to the Oelophagus, as it is in the Ruminantia genuina; where rejecting the account which Petrus Aponensis, Emylianus, Aquapendent, and even Fallopius has given of that part, he describes it (according to Steno) to confift cheifly of z spiral muscles form'd like screws, crossing one another. Which fort 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.

Healforeckons up those parts, which affist 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 fingle Stomack of the Rabbit, and the Oelophagus 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, releiving 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 preferved a Kid taken out of the Uterus of the Dam upon diffection, and bred it by its felf, observed that when it Rrr

came

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

The cheif motive to Rumination ieems to be the hardness and grosness of the meat, as swallowed at first; the Stomack being not able to master it, unless it be more throughly masticated: hence Cattel chew the Cud more frequently in Winter when they feed on hay, stubble, &c. then in Summer when on grass; 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 preferd 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; fome disease or else an excess, or ill quality of the food; if excess be the cause, the Author saies it will give present releif, 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, austa à Jo. Franco. Aug. Vindel. 85. 8°.

HIS Treatise of the nature of the Castor, being composed many years ago by Joannes Marius, Physician at Ulm, is not only published, but inlarged 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 usefullness to mankind of things common and contemptible, which ferves 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 Curiosi 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 feems to be an intire Fish, which he always keeps wet, fuffering 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 forthits 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 Rrra

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the Epilepfy, inward bruises, hardness of the breasts & the like. The Fur, (besides the mechanical use of it in hats) is aftringent, and stops blood. The teeth are used as Amulets for Children in breeding the Teeth, in the Pleurify, and to prevent the falling-fickness in In-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 Phylick are very particularly enumerated; various receipts for most distempers, backt with the experience of the Physicians who fuccessfully used them, are carefully delivered; which to fet down here fingly 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 feems a contention between two very good Naturalist's, 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 fince 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 Paul's Church-yard London; and Hen. Clements Book-seller in Oxford.

Philosoph. Transact. Wumb. 177.

