Michaelis Ettermulleri opera omnia Theoretica & practica, &c. Quarto Londoni
ni 1683.

This Author (for whom his former Treatises had prepared a welcome in the world) divides the Practice of Physick into ordinary and extraordinary; the former he looks upon to be defective in these two things; first in sufficient Experiments on which to ground a theory, and secondly, in generous medicines as well universal as specific, which should have their effect without Nature's too hard labour, the former to be supplied by Anatomy, the latter by Chymistry. In curing any disease he observes these five heads, the history of the distemper, the part affected, the causes, prognosticks, and method of curing. He looks upon it to be of the greatest consequence to distinguish between the Animal faculty placed in the spirits and Genus Nervo sum; and the vital, whose seat is in the blood, and Viscera. He allows in the blood two motions, the circulatory, and fermentative, to this he supposes the concurrence of an Acid and an Alcali, the foundation of which motion is that Sperminal crafts, which is preserved by a due use of the res non-naturales, and reftored by proper medicines.

In the Animal faculty he considers its nourishment, which is Chyle; and its structure, the delicate Fibres of which are the instruments of sense and motion, on both which Scores it is subject to convulsive motions, when irritated; or Paralytical impotence when obstructed. These foundations being laid, he recommends Sylvius, and Willis to the Reader, and gives the necessary cautions for their Reading, looks upon Sennertus to be sufficient among the Antients, as containing the sense of all of
of them, & looks upon Helmont to be very faithfull where intelligible; and to be imitated as far as possible, since he suggests the best method of curing à priori; upon this Theoræ his whole work is founded, and consists of an universal praxis divided into three parts. The first treating of the loss of appetite, and its consequences and cure of them; the second of nutrition vitiated, &c. The third, of the diseases of Women, to which he adds his Chirurgia medica, & Collegium Consultatorium.

To all this is added an appendix consisting of several Tracts, the first is Valetudinarium infantile in which he gives an account of the nourishment of Infants with milk and pap, as also of the diseases incident to them while in this state, the general causes of which he reduces to these two heads, viz. the retention of the Excernenda, especially that Meconium, and insensible transpiration; and secondly the ill giving of bad nourishment, or vitia lactis & errata pullis. Hence springs that Acid juice, the different condition of which is the cause of that succession of distempers, infancy is afflicted with; to which he opposes those general remedies which shall destroy that Acid, incide, attenuate, and evacuate it, of which nature he gives particulars, in briefly handling each particular disease.

The next is his Treatise de vi diaphoretica Opii, which being already well known I shall give no farther account of, but pass on to the third which is De Coralliorum Tinctura, in which first he treats of the nature of coral, and after arguments on all sides concludes it to be a stony concretion in form of a Shrub, generated from a nitro-saline mineral juice impregnated with a sulphureous clammynefs elevated by the subterraneous heat, through the pores of the bottom of the Sea where by the cold and faltnefs of the Sea-waters, it is congealed. After this telling us that only is a true Tincture in which there is a portion of the proper substance of the body from which
which it is extracted, with a concentration of the colour and virtue of it extracted and exalted by a proper Menstruum; this he applyes to the pretended Tinctures of Coral, the laft of which he mentions is of a certain Chymift at Paris, who with the phlegm of the distilled water of the Air gathered at a certain time, can extract not only the Sulphur but the Salts of Coral, which appear in a Cubick form upon evaporation in the Sun, the rest of the tincture swimming over it like juice of Berberry’s, the conclusion is of the use of it, which he allows to be great in strengthening the tone of the inward parts, quelling the effervescencies of the blood, &c. which effects are alterable by the Mensstruum with which they are drawn.

The fourth tract is De prescriptione Formularum in Genere, in which he considers the matter which consists of the ingredients of all three Kingdoms; the form is nothing but the order, proportion, manner of prescribing, and the certain texture into which the matter does by mixture combine.

Concerning the ingredients, respect is to be had to their quantity according to its three dimensions, longitude in their number, latitude in their dose, profundity in the mass or confisence; their quality is that apparent similitude and contrariety both in respect to one another, as to the body of the patient, so that he requires as previous to the writing a receipt the exact knowledge of the Materia Medica, and an exact skill in their preparation; and having laid down necessary rules and cautions to be observed in prescribing, he gives examples under several classes of Powders; Pills, Mixtures, Infusions and decoctions, and ointments; as to these latter he gives these two cautions, 1. that they consist of a volatile matter, and easy to be dissolved. 2. that nothing be mixt which will not admit of a total and equal solution.

Next follows his tract which he calls Parva Magnorum Morborum initia, where having proved by induction of several
several instances that Nature produces great effects from small and invisible causes, witness the Animal Spirits, the objections against whose existence he first removes, and then demonstrates, he discourses of the effects of imagination, of Poisons, of contagion, and other preternatural ferments as inconsiderable for their bulk, as monstrous in their effects, as also of the least prick of a Nerve, he concludes that as great diseases have those minute causes, so likewise their true Remedies are of small quantity, but of great efficacy.

His discourse De usu & abusu precipitantium is divided into three Chapter's, the first is Historical of the Turgescency and Orgasmus of the humours, to which are opposed Remedies that precipitate and consequently repress that exorbitancy, of these he gives the History, assigning to Sennertus the invention of the notion, and discoursing of them most considerable of them in each of the three Kingdoms. The second Chapter is Theoretical of the nature Use & manner of working of them, & that founded upon the nature of precipitation in general, which he affirms to be found in the fluids of our body as well in a state of health as sickness. His third and last Chapter is practical wherein is discoursed at large how they ought to be given, and with what sort of Medicines most effectually mixed.

To this succeeds De Morbus Viperis, where from the assertion of Celsius that the biting of any Animal is venemous, he easily proves that of the Viper to be so, and having considered and rejected the various opinions about the feat of Poyson in the Viper, and proved that it is by no means Poysonous when dead, but each part of it antitodal, he looks upon the anger of the beast, or the Idea furoris Archai imprinted on its teeth and saliva, to be that alone which makes his biting mortal; to this he adds the Diagnosticks Prognosticks and Method of Curing.

The last tract is Medicina Hippocratis Chymica which has been printed before, & in short is a demonstration of Hip-
crates’s proceeding in his practice upon Chymical qualities, and not at all depending on the qualities of the elements, and at last concludes from specifical tastes that there are specifical remedies not to be found out by the common tastes and which consist in the Crasis of concretes to be found out and conserved by art, and by means of the liquor Alkabest so much commended by Helmont, and confirmed by Starkey upon his own experience.


This curious Author after a short account of the generation of the different parts of the body, out of a seeming homogeneous matter, divides the Brain, taken in a large sense for the whole head, into its outward and inward parts, these latter being the subject of his first book: in which he begins with the Crassa meninx, which he makes to be double, the fibres of each membrane obliquely intersecting one another, describes its cohesion, sinus’s, Vessels, and uses both public and private, and explains how it becomes to exquisitely sensible, and whence it has its motion in those parts where it is movable. Hence he takes an occasion for a very curious digression about the motion of the Heart, and Arteries, these latter he affords to be moved by the blood, and brings an experiment to prove it, and also makes use of it to confute the pulsfick faculty of Galen, and the Animal spirit of Wilks, which by the annular fibres of their middle coat, is to dilate and contract them.

He denies the Pia Meninx to have any gland’s, is very particular in the distribution of the Vessels of it, and will not allow the Rete Mirabile (of which he has a distinct Chapter)
Chapter) to consist of any thing besides arteries. The brain is divided into the cinereous or glandulous part, and the medullary or fibrous, which from its figure and use he calls the oval centre of the brain, looks upon the Corpus callosum to be the true Fornix, and having given the description of all the internal parts of the brain, gives us likewise their use founded upon their structure, and so passes to the cerebellum, in which he describes both the processus vermiciformes, gives an account of the Valvula major Cerebri, &c.

After the Anatomy of the brain, he discourses of the office of the brain and its parts, of the necessity and nature of the Animal Spirits, and Suctus nerveus, and in treating of the Lymphaduits of the brain, describes exactly the Membrana pituitaria, and twelve Sinus's in which the blood before it enters the brain cleanses it, first from Phlegm, then he divides into four forts according to their situation, viz. in sinus Sphenoidaeos, ethmoidaeos, frontales and maxillares. Having discoursed of the matter, place and manner of the production of the Animal Spirit, of its dispensation, and distinct ways by which it moves within the brain, &c. He treats briefly of the Animal faculty’s, and concludes the first book with a short Chapter of judgment and Reason.

The Second Book is of the Medulla Spinalis, where he observes the method of his first book, and first describes the four membranes of it, with their office; then gives an account of its Vessels, and denies that the Sinus venosi vertebrales are joyned or accompanied by the Sinus arteriosi of Willis; looks upon the Medulla to be the brain prolonged, as the Antients likewise accounted it, both as to the generation, and distribution of the Animal Spirits through those thirty pair of Nerves which proceed from it, and upon this account is the fountain of sense, motion and nutrition to the parts below the head.

The third Book treats of the Nerves, where after the definition
finition, and division of them into soft and hard, great or small proportionably to the labour they are designed for, he will not allow any of them to be sensibly hollow, not so much as the optic or olfactory Nerves, and as ascribing all their variety to the disposition of their pores, explodes as fabulous, the Valves some have supposed in them. Discoursing of the use of the Nerves he looks upon the common question, *viz.* Whether the Nerves are different by which motion and sense is made, to belong rather to the Animal Spirit, then to the Nerve, which likewise being uniform, the diversity of Animal action, doth not argue a diversity in either Nerves or Spirit, and having given us the number of the pairs of Nerves in the body, proceeds to describe them singly as they lie in the body. In his last Chapter he gives an ingenious account of the manner of the motion of the Muscles, founded upon the consideration of the mechanism of them, and the *vis movens*, which he makes out to be the Animal Spirit, and the blood, the necessity of both he proves from a palsy certainly ensuing upon the defect of either. All this Doctrine is illustrated by large and fair cuts answering the natural magnitude of the parts described.


FINIS.