in the Contraction of some, & Dilatation of others, at the same time, & it shortend much the Indications of the Dogmatists, this was an easy Practice & was called by way of Eminence the Method. This simplification has been hurried since, the Followers supposing that most Diseases are reduced to a few simple ones. Dogmatising, thro' the whole immensity of Particulars into which men are naturally led, is on the one Hand unsafe, and, on the other, as few men can abstain from Reasoning altogether & be pure Empirics, it is better with Regard to the Bulk of men calculated as they are neither for the one nor the other Business, to give them such a Method, than to leave them to their own Opinions, wch will be ever precarious.—

This arose in the Reign of Augustus, was in some degree changed by Thessalus, under Nero & was the prevailing method when Galen appeard.

The Pneumatic Sect, Ariteus Cappadox the Dogmatist has given more of the History of Diseases, & experienced Practice, The Eclectic, which Celsus seems to have been, was a Sect, & likewise another was the Episynthetic, but we have so few accounts concerning them that I can say nothing certain, the their Name seems to indicate that they were the same as the Eclectics.—

Lect: 8th Nov: 18th

We have now come to the fifth Period & shall give some Account of the Revolutions produced by Galen who made a Change much more considerable for its Effects than Importance. His Father Lycon gave him an Education upon a general Plan, hence he, after passing thro' all the schools of Philosophy, studied Medicine under many Masters; he travelled to improve his Materia Medica, & was also learned in Anatomy & therefore came to try his fortune in Rome. He here found every Art in the Physicians to raise themselves and discredit others, hence he was obliged to leave Rome. He had however here gained the Favour of some men of Sense & Rank, by which means he was brought back in triumph by the Emperors M. Aurelius & L. Verus to Rome. He then gained the Empress Faustina to his side & consequently the Lady Practice. He continued to love Study among his Business.

We can now perceive how he attain'd & supported
his Character; by disparaging his Adversaries
with Virulence, & praising him self, not with=
out vanity; by this means he greatly contributed
to suppress all the other Sects. The Empiric Sect was
almost extinguish'd, but he declaim'd against
the Ashes of Thessalus & overset the Methodics
then prevailing. The great Reputation of Galen,
his high Rank & great Authority, & his employ'g
that Authority to suppress them besides he wrote
more than any had done before. He was as sys=
tematic as any writer before tho' disclaimed against
as pernicious. Hence Galen & Hippocrates were one=
ly named. He did hurt by checking the lazy & re=
pressing the ingenious. Galen also lived at a time
when science was declining at Rome & over the
whole world, & the Inundation of the Northern Bar=
barians afterwards put a long & effectual check
to its Progress. No wonder then if Galens Sistem
was not retaind in that Dark Age. The Empire
was divided & his only remains in the East, hence
the Sistem of Galen prevail'd; & Aribasius in
the 13th Century is as much Galenic as himself.

In the middle of the 15th Century the Turks tak=
ing Constantinople ended the Empire of the East
In the Year 101 Mahomed & the Saracens
spread their power over great part of Asia & the
north of Africa; they Burnt the Library
of Alexandria the most valuable in the World
It is said Mahomed had some Partiality for
Physic & wrote on it himself, but there is no
Evidence or appearance of its Culture till a new
Race of Califs took possession of the Throne,
who sought for the Greek writings & caused them
to be translated. they fell upon Aristotle & the
Physic of Galen which was diffused over the Saracen
Empire. We are not to enter into Rhases &c
or speak of their Works, their time is from
the beginning of the 9th to the 13th Century
They improved Chirurgery & touched upon
Chemistry, but their aversion to dead Bodies
prevented their cultivating Anatomy. By
the Arabians Physic was restored to the Western
Parts of Europe, passed over to Spain where
Schools were Established as also in the south of

France & Holland. Literature & Physic was revived & spread over Europe from those very Schools

The first School of Physic was that of Salerno, the Book intitled the Sch: Salernitana gave their Doctrine, after that in many others till the end of the 15th Cen: it was then in common to them all to follow Galen who was not read in the original & tho' little known, the Lessons were given in Arabic. Hence Galens System continued as the only one till the End of the 15th Cent: We shall mention the Particulars that prepard for this Revolution; the Roman Language began to be learnd, & the Taking of Constantinople spread the knowledge of the Greek in the West. This & the spreading of knowledge was favoured by the Invention of Printing which increased from the year 1460. By the Marriage of Ferdinand & expulsion of the Moors all Spain came to be united, & so in France also some Events happned very favourable to exert Liberty Col: Cambes discovrid the West & Vasta de Gama the East. From the Beginning of the Study of the Greek it increasd & Galen & Hippocrates began to be more & more improved, some studied for the Arabians; The famous Controversies about Bloodletting agitated them in the beginning but could not long exist.

Galen had scarce been established when an Attempt was made to pull him down by Paracelsus.

In the 14th & 15 Cent: the Chemical Pharmacy made some progress in the Hands of Alchemists & Quacks. Hence the virtues of Antimony were found out & recommended. Paracelsus was bred by Chemists & spent his younger years in quest of Chemical Remedies. He performd remarkable Cures, & was hence made a Professor, boasted & made high Pretensions, & tho he may seem a very odd Character, yet he threw a Lustre on all his faults by some Effectual Remedies

Lec: 6th Nov: 15th

The Regular Physicians condemnd not only the Chemists but also their Remedies, & they trusting to their Medicines neglected the History of Diseases. First Gaul & after him but in

Spite of the Efforts of his Master Silvius he gave a great Shock to that great writer. The Authority of Aristotle in the 16th Cent: was opposed by Patricius &c but more effectually by Galileo & Lord Bacon & these laid a Foundation to endure as long as any System that is sound. Next De Cart endeavourd to establish the Epicurean Philosophy but still the system of Galen tumbled down the Operations of the Chemists, & rendered the Galenists vigourous, wherefore it was necessary to explode it all together, & hence in the Beginning of the 17th Cent: it was annihilated, & the antient Fabrick of Medicine receivd its finishing stroke

We observd that Galileo & Ld. Bacon laid a foundation, the effects of which were not very considerable till towards the end of the 17th. Century. Gassendi revivd the Epicurean Philosophy. In England Mr. Boyle & Doct. Wilkins &c held meetings for cultivating Natural Philosophy & at last were changed into the Royal Society. We may assert a Greater Knowledge has been

made within these 100 years than since from the beginning of the world till that time. Newton led in the Nat: Philosophy & Bacon in Chemistry. The Epicurean Philosophy of Gassendi & System of De Cart were favourable first to the Chemists & Cartesians next. Hence the System of Regius Sylvius de la Boe & Etmuller, & the Discovery of the Circulation of the Blood, particularly, gave the Hydraulic & the whole System of the Animal Economy. tho matters were hardly yet prepard for the Study of the Hydraulic. Borelli gave it a specious Appearance, & after prevailing in Italy it was brought into England by Dr. Pitcairn, spread into France & Germany. The Mechanical Physicians were always declard Friends to Observation & Experience. It can hardly be supposd that their Speculations hinderd their Dilligence. Dr. Sydenham, who was bred in the schools of England deserted them almost entirely, & gave a work so far as it goes the most useful of all that went before, & his Country-men Willis &c neglected his Doctrines or opposed them. The Mechanical Theory is not sufficient towards a compleat system; the Facts, when they were

introduced more than ever. The Mechanical Doctors wanted to explode Chemistry, & spoil their own knowledge, as without it, there are several parts of the system of the Human Body not to be explained. Boerhaave combined Cartesius & Chemists & also admitted Nitre the only Remains of the Galenic. There was still a necessary part of your system that he had overlooked. viz: the Doctrine of the Nerves. This also in some degree supplied, Vanhelmont ascribd the various commotions in the system to an Archeus, & the judicious Hoffer admitted such a sort of Agent in the Body. What—

First it gives a particular explanation of the autocratia in the Power of Nature & in the Cure of Diseases. The Italians have been remarkably against Anatomy. they have had always a Fibd Practice & are noted Enemies of the Bath, & their Remedies that might hinder the Operations of Nature. you might then expect that they being in this Train would have stumbled on the Nervous System. Willis studied the Brain & Nerves & made a Pathology accordingly. & his Doctrine was soon after cultivated. D. Boerhaave entered into the same views, & said that the Nerves laid the Foundation of many Diseases. But Hofman came but late into it. It has now got over all Europe from Boerhaaves Schools & Van Swieten, Baauw Boerhaave, Gaubius & Haller have allowd the Nerves a great share. — Therefore our system is to be considerd as a Chemical History, Hydraulic Machine, & animated system.

Lec: 8th Nov: 1776.

A View of the Theorys of Different ages might have been required; but a History of Opinions is perhaps a History of the Follies of Mankind. I shall only mention the few writers in this subject: first, before the Times of the Romans no work remains but that imputed to Hippocrates. Many of which are of a much later Date than him, & are of little use as we can hardly fix the date of any of them. Hardly any one of the Works of the Dogmatists remain, but those of Aretius, down to Galen

 There are likewise no works of the Methodics but that of Celius Aurelianus, which contains much more of the Practice of the Antients than any. You will have it much better from Prosper Alpinus, who in the end of the 16th. Cent: endeavourd to revive that Doctrine. next if we would take Galens own Personal system it is to be had nowhere better his own works. As a great Part of our modern system is derived from him, tho the system is quite Pass'd away, you will have a good account of it in the Writings of Sinertus. Many, as Thracasterus, Mercurialis, & Cesalpinus are learnd. I can only recommend Cesalpinus & Lazarus who translates from him & Fernell.
I can meet with no one of the chemical Systematics that I can read; you are to take their opinions with regard to the Causes in the Encuclopæd: of Doreas who has given the Opinions of Paracelsus & Van Helmont. After that are various Systems, the first of these is the Cartesian; you will find these most fully in Blancard &c. Chemist

and Cartesian, were the systems of Willis, dela Bue, & Elmuller; they then are to be consulted. In the Present Cent: the Sthalian, Hofman & Ruysch: systems are the only ones of Note. Sthal has had many Deciples who have each of them given a System. We commonly take his system from Junker, who is also more full in the Practice; But the System is better from Sthall himself in his Theoria Medica vera which is full of excellent but abstruse Matter. It has been proposed that young People should Study Mathematics or to learn to think, I immagine Dr. Sthall would answer this Purpose. Dr. Hofm: has also had Desiples but his Doctrine is to be had from his own writings. Boerhaave is in every bodies hands fully evolved in Van Swetens Commentaries. One or two Desiples to be noticed, as De Gorter who has hardly made any Addition to his Master has entird into all all the subtilitees wch. are to be avoided even in the best system. Dr. Styrburgh has pushd the same system to the Hights

 of Mathematics. The Sthalians are keen and virulent in disputing against others; they have been usefull in collecting facts w^ch are often influenced by this Attachment to System.
Boerhaave has had a much greater Share in forming a sect & school than Hofman, who is now beginning to be deserted.
Galens System was first cultivated in Italy, continued to be the chief School of Physic, till the midde of the last Cent: when they admitted first Mechanics as Baglivi's system. The Italians have continued to be very mechanical, but no body remarkable, & Boerhaave much followed with us last. The French excited the study of Hipp: but had not the Abilities to get quit of Galen. Then Carthesianism prevailed mixd with Chemistry; in the Present Age they begin to be more purely Mechanical. For 40 years Past they have been Zealously attachd to D^r. Boerhaave. One Man has changed or wanted to change their System, Savage, who has endeavourd to combine the mechanical & Sthalian Doctrines, but

he is not like to have many followers. and in spite of their attachment to Ruysch they are combining the Nervous System. In Germany in the Beginning of this Century the Chemical System forced itself in. The Mechanical has been introduced, but not made considerable, by Heister & M^r. Lurg. Leipsic is one of the most considerable schools. He in his Pathology introduced spasm & Debility for Sensibility & Irritability.
Boerhaave is quite follow'd at Berlin; & in Brittain there is a strong Bias to Empiricism. Sir Theodore M. in James's time introduced Chemistry. Harvey & Glisson were of no system, they have the Galenic & Chemical mixd with many Interspersions of their own. The Members of the Royal Society were Chemical but not systematical. Bennet was, by Boerhaave called the Eteraclit Doctor, so Sir John Floyer &c. may bear the same Appellation. Mead, Keil & Pitcarn cultivated the Mechanical. Winteringham, Huxham & Lobe are Boerhaavians. Pringle, Haller, Senaac, & Morgagni have no system at all —

Lec:

Lect: 8th. Nov: 18th.

Which is the best Plan of prosecuting the Study of Medicine, I will not dictate to you, I therefore shall laydown Reasons, all of which can not yet be known; a full discussion of them must arise from the Nature, Extent & Powers of Medicine: A Plan now may be necessary, that could not have been 1000 years ago: the Plan is also varied by the auxiliary Arts as they are more or less brought into use. I must limit the laying down my Reasons to you as yet; but as all of you are, I hope, acquainted with Anatomy & Natural Philosophy in both its Branches Mechanical & Chemical, I shall proceed to offer you such Reasons, for giving the Preference to this or that Plan, as you can understand. I shall propose two Questions then; first what, & how much is to be learned? Second. how those things proper & necessary may be acquired? The first Question arises from the Dispute between Dogmatists & Empyrics, & this Dispute has from that time subsisted & is not yet removed; I am afraid very few enter into it properly, or sufficiently seriously

Every Apothecary will tell you nothing can be Done without knowing the Reason: and that, More easy, will say Reasoning is nonsense. Celsus has given a most elegant Discription of the subject & Monsieur Leclerk is the best I know; at Padua for Auto Empyrics has labourd the Point: in opposition to the Dogmatists. Bonnius of Leipsic is the only one that has said any thing De Sophismatia fallacii. I hope the Discussion I am going to give may be a means of directing your Steps so that you may guard yourselves on both Sides; therefore the Arguments in favour of a Dogmatic or Empyric Plan are to be opposd to each other. — The Empyric Plan consisted of Observation, History & Analogy & hence proposed a simple Imitation in Practice; & when experience failed them they then had Recourse to Analogy, but that very comparison of unknown Phenomina to similar known ones is without Doubt Reasoning; & therefore it is unfair to call the Empyrics Irrationales, as if the Dogmatists only employd human Reason; Further than enquiring how Medicines operated in the curing of Diseases. — On the other Hand the

30 Dogmatists did not proceed by external Appearances, but enquired what were the internal causes or conditions either in change of the solids or fluids that produced them. From knowing the difference between the State of the Body in Health & Disease they formed their Indications of Cure. But you will easily see this resolves into the knowledge of the State of the Body in health & Disease which is Physiology; Hence Physicians have called Physiology the proper Theory of Medicine & it may very properly be so called still. ——

Objections to the Dogmatic Plan —

The Arguments against it have generally been drawn from the Imperfections of Physiology. Such Arguments are not very conclusive, but the Objections laid against the Foundation are much more difficult to Answer; The Foundations are said to be unsound, partly from the present state of our knowledge, partly from their own Nature being as they say, such. The Adversaries have taken advantage of every thing that has been urged both against Science in general & Physic in particular. But Arguments that equally affect every human specu-

31 -lation are not to be regarded, & we shall do well if we can put our Science upon the same footing as the rest; I only deliver to you the Objections against Theory itself.

View of the Animal System

I divided my subject into three Parts. The first is as of a Mixt possessed of particular qualities either in themselves, or with Regard to other Matters, under this Head is comprehended all that touches upon the Fluids of Animals, the Change of the Food into Blood, the Different Secretions, & lastly the Supplying the waste or the growth of the Body in consequence of Change from the same source; Now as all this Depends on Chemistry I shall call it the Chemical system. —— The second view is that as all the fluids are contained in certain Vessels & exist chiefly in motion, we consider these Motions, & the various impelling causes of the Motions. The Structure that consists of Tubes transmitting fluids in this manner is called organic & is in common with Vegitables. It comprehends the Blood, the Arteries, the Secretory & excretory vessels & the Alimentary Canal; which have all Fluids

moving thro' them; these will be called the Hydraulick System. — The third View of our Work, is that of an Animated System, or which is capable of thinking & from this a Variety of Motions are produced. The Organs of it are endowed with Sense; as the Brain & its Distributions thro' the Muscles & muscular Parts. This then to be call'd the Nervous System. —

Linneus's manner of distinguishing the three kingdoms is, Lapides crescunt, Vegetabilia crescunt & vivunt; Animalia crescunt, vivunt & sentiunt. —

A considerable Imperfection does at present, & will for a long time attend our Dogmatic System: I am to act as an Empyric that I may give them all the full weight of their Arguments, & will after perhaps turn tail & espouse the side of the Dogmatists, that I may act as an Impartial Moderator between them. Chimistry gives many Observations the most useful in an Empyrical Way, but it is remarkably deficient in its Philosophical Applications to Medicine; to Illustrate this, we have found the whole Powers of Nature are Attraction & Repulsion or Attraction & Fire; I shall willingly allow that the Application goes further, as to point out upon what Attraction depends (upon elective Attraction) but we don't know what that is, Philosophers are every day disputing about the Theory; they have not determined whether it is not a particular Elementary Matter or owing to certain Affections. But when we find Fire to be the great & prime Agent in Nature & know not upon what it depends, you will readily see how uncertain all our Theory with regard to it must be

Lect: 9th. Nov. 19th. —

The objections to the Dogmatic System lie against it as Physiology & we are not to object to men, but the System itself. Chimistry, as resolved into Attraction & Fire is in that State that what ever we pretends to know of it; but the Doctrine of the Animal Mist is still a more difficult part of Chimistry.

We have found saline Matters in the Humours but the Entire Mist is still unknown; perhaps that Process w^ch we name Fermentation is peculiar to