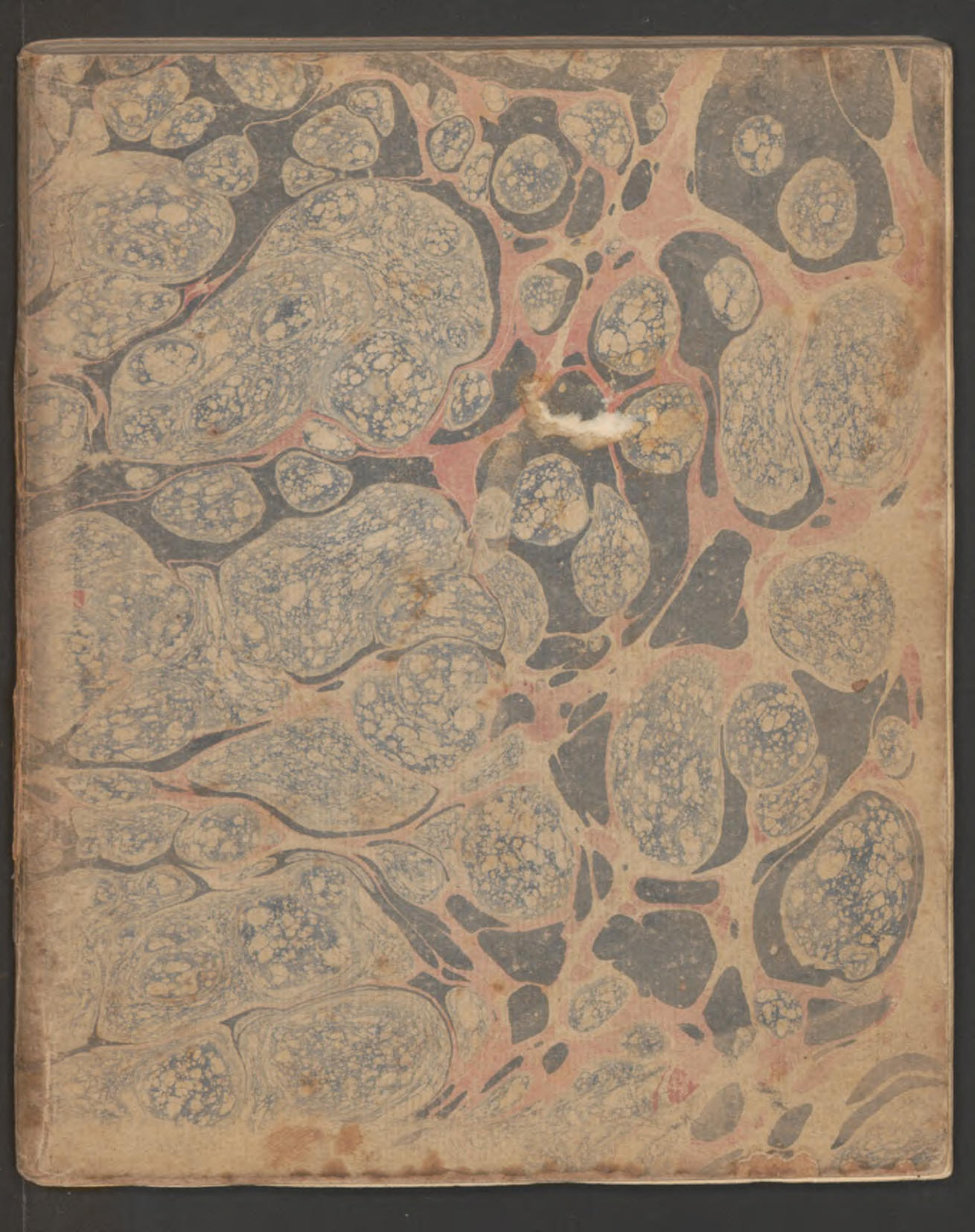

Dr Dorsey,
No 4.

Phila. 1816-17.
Enlarged
1817 & 18.

B. Hodge.

Notes on the Materia Medica

Being the substance of a course of lectures

delivered in the

University of Pennsylvania

by.

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Taken during the winter of 1816 '17 and enlarged during that of 1817 '18 - by Hugh L Hodge.

Vol: 4th.

We will now notice those substances which when taken into the stomach, excite diaphoresis. The several emetics are perhaps the most powerful in this respect. They all, when taken in doses not large enough to excite vomiting, promote the exhalation by the skin, but none of them are so effectual, as the preparations of antimony, especially the tartar emetic. When the diaphoretic operation of this medicine is required in fevers - I prefer the antimonial powder already noticed. Besides the nitre, there used the tart. emet. is given with other salts - frequently with the Salph. Sodæ - ℥j of the salt & grs. of the tartar emetic being dissolved in ℥viij of water or in Seltzer water - ℥j to be given every hour or two hours. The Antim. Wine is much used & is often very convenient, especially for children. It was formerly prepared by dissolving the glass of antimony in wine which was a very uncertain preparation, its activity depending on the quantity of acid in the wine, as now prepared from the tartar emet. it is uniform in its strength & possesses an advantage - that the dose can easily be graduated. But as there is great variety in the irritability of different persons we must always begin cautiously - we must feel our way in the administration of the tartarized antimony - Within the mouth gtt. i of the wine will be sufficient to excite a sweating - Under 5 yrs we may give gtts ij. iij. or v. & for an adult - gtts xv to xx. gtts xxx is a large dose as a diaphoretic. The wine will answer in usual cases of fever - in violent cases however where acting very is required I prefer the solution in water - gr. i being dissolved in ℥viij of water for an adult - ℥j to be given q. 2 or 4. h. This is necessary in irritable cases, in bilious fevers - in dysentery in which I. Pring he gives it a decided preference & thinks, that there is nothing equal to it.

Antimony acts no doubt on the stomach directly & sympathetically on the skin; as it produces its effects sometimes very quickly - I have in a

2.

tion also of the patient facilitates the action very much, so that, when you wish to ~~excite~~ promote sweating only, it is often necessary to conceal from the patient what you are given him, as otherwise it will be very apt to produce vomiting. In Rheumatism the antimonial powder is often very useful one being given every hour or so; by it the skin becomes moist - the pulse is reduced, & artificial crisis is induced, the fever abates. The powder is known by the title of Jame's powder was formerly much employed; its composition is very similar to that of the oxide of antimony with the phosphate of lime. It is insoluble in water. It is ~~not subject~~ to be given with a little syrup, or in the form of a pill in large doses it ~~purges~~ excites vomiting. Dr Pearson has seen it much employed in one of the Edinburgh institutions & he states that it is very uncertain - sometimes producing no effect, & sometimes acting very powerfully, & moreover that all its advantages can be procured with equal benefit & more certainty by the emet. tartar. He has also employed it in his private practice with a very similar result - so that in a short time he entirely abandoned it. A very common & excellent sudorific is the combination of laudanum & the antimonial wine in nearly equal proportions from gtts 20 to 30 of each. The emetic tartar is not to be given to gouty or dyspeptic persons, subject to cramp of the stomach, or to tormina of the bowels - as it frequently in such cases produces unpleasant effects. Ipecacuanha has also been much used as a diaphoretic - it is to be ranked as a relaxing medicine. - With the view of exciting sweating only it is given in doses of gr ß. to gr i or ij. every hour or two. with nitre it is often conveniently used - ℥ij of nitre to ʒ grs of ipec. divided into viij powders. The Dover's powder is another formula in which it is often prescribed - as also the ipecac. wine: of this ℥iss is the dose for its emetic ~~for~~ operation, as a diaphoretic - gtts xxx to ℥i every hour - Besides the ant. & ipec. the other emetics are useful as diaphoretics - the use of which may be understood from what has been said; they should not be given when the stomach is irritable - or where there is debility - as they all must be considered as relaxing & pa-

4.† Of the Potash in union with the nitric acid - is much employed in London - in this city also it is a good deal employed - When prepared it is termed the neutral mixture - when taken during effervescence - it form the anti-emetic mixture or effervescing draught, as commonly employed to stay vomiting.

‡ When you are employing nauseating articles as diaphoretics - it is useful occasionally to interpose the saline mixture - as by the emetic articles the stomach becomes so irritable that the smallest dose cannot be exhibited - in such cases the neutral mixture is very pleasant - tranquillizing the stomach & restoring tone to this organ so that the former articles may be resumed.

• It does not excite the pulse as the other ammoniacal salts -

The Neutral Salts are employed as diaphoretics. [illegible] provided especially in the form of effervescing in the formation of the citrate. This operates both as a diuretic & diaphoretic & is often useful in destroying acid in the stomach. It is used in this place also but I think should be more frequently employed, than it has hitherto been, as it is very useful in many cases of irritable stomach, especially in fevers producing at the same time a gentle diaphoresis. # It is prepared by adding the ℥ij of lemon juice a sufficient quantity of the pot ash to saturate it. sweeten it with sugar & add ℥iv of water. To this a little laud. amon. or some volatile oil, as the al. cinnamomi is sometimes added. Done ℥ss. Lo. equiv. ℞: or ℥ ℞ss. Vitre is a useful diaphoretic. It acts not only on the skin but also on the kidneys & bowels being a general evacuant. & it is in this manner that we must explain its power of diminishing the pulse. It forms an ingredient in the antim. pow. so often referred to. The dose by itself is from grs x to ℈ v. The mur. of pot ash & mur. of ammonia have been employed, but are now neglected. The acet. of ammon. or the common Spt. Mindereri, is entitled to a place on our list. It acts as a gentle diaphoretic & has been much employed in fevers, especially intermittents, & forms part of the antiphlogistic treatment. The citrate of ~~ammonia~~ pot ash as above noticed is seldom rejected from the stomach & therefore is very useful in those cases accompanied with considerable irritability of the stomach. — The Carb. Ammonia has been employed as a diaphoretic but its powers are too active to be employed under this view alone & I shall therefore more particularly notice it hereafter. Calomel is sometimes said to excite sweating. If so, it is the weakest of its numerous powers, which are generally too important to admit of its being used in this manner. It is often mixed with ant. & nitre, in the antipyretic powders. The diaphoretic powers of which do not appear to be increased by the addition. — Of the vegetable diaphoretics Opium has been much employed but improperly as a diaphoretic only. Ipecacuanha

+ while the sudorific ~~[illegible]~~ powers of the compound are increased.

++ In different diseases the article employed with the Ol: Ipecac: may be varied — thus instead of nitre — we should employ Chalk — in Dysentery — & in the affections of the stomach & bowels generally: &c &c ——

D. In Gout, it is some^s used — but there is no disease in which we should study the particular state of the system in relation to the administration of our remedies — as in this — remember that in administ^g the Dover's Powder as the stimulating & narcotic powers of the Opium are often injurious ——

always acts as a sudorific. It has been also used to form an ingredient in al-
most all the sweating powders, at different times recommended. It is often
united with antimony & ipecac. It is noticed by Murray that in such combinations
both the opium & the emetic have their powers diminished. The former bei-
ng less apt to produce its narcotic effects & the latter its vomiting.
The prescription of Lind. gtts xxx. & ant. wine gtts xxxx. is much use.
Its also that of op & ipec in the form of Dover's Powder. Of this grs x as
a medium dose. In some cases where its cathartic effects are desired, I
have preferred the sulph. of potash to the nitre. Dr Barton has re-
commended sugar of G. Arab. but I prefer the salts, as being active ar-
ticles co-operating with op. & ipec, & not inert as the sugar &c. As to
the employment of the Dover's Powder in producing sweating & the attention
to be paid during its operation I beg leave to refer you to Dr Cullen.
It need not however be always given in the morning, as he directs; I often
direct it in the evening with no inconvenience. It is used in intermit. & remitt. fevers
with advantage. In several of the Phlegmasiæ Cullen has also proved it
beneficial during the suppurative stage of a phlegmon. It is much em-
ployed in inflam. Rheumatism, but remember that Venæ Sectio be should
previously reduce the system as otherwise your medicine would not only be
useless, but injurious. The narcotic power of the opium, although always
yet always manifest & should be remembered in its administration. In
Dropsy it has been recommended. A case of diabetes has lately been de-
failed in which large doses effected a cure. Dr Ferriar has also mentioned
Camphor as a diaphoretic it is however very little employed. There are
several other articles which may be noticed under other heads, which have been
occasionally employed, but which are not much used or are of only im-
portance.

Lecture 27th Jany 13th

The Eupatorium Perfoliatum has been considered as a diaphoretic. It is a native of the U. States & is known by numerous names. It has been regarded as emetic, cathartic, sudorific, diuretic & tonic. The leaves & the stem are the parts generally used, although the whole plant possesses active powers. Dr Barton recommended the flowers. It is given in infusion, which when taken warm promotes diaphoresis. Our Indians are said to employ it as an emetic to cure intermittent fevers, & also as a diaphoretic in some cases. When however we want an emetic we have better ones, than this & we have also better tonics. By some it has been recommended as a very excellent diaphoretic. Dr Hosack of New York has spoken very favourably of it, as also has Dr Chapman. My experience in intermittent fevers has not been very great, but from what I have seen of this disease we do not want any new remedy. I have always succeeded by emetics, cathartics, occasional V.S., followed up by the bark, or arsenic. I have seen it employed in the bilious remitting fever & occasionally in the yellow fever, of this, then I can speak boldly & decidedly. In all the cases in which I have tried it it has been of no more service than an equal quantity of warm water, producing occasionally only a slight diaphoresis. Dr Barton was doubtful whether as a sudorific it is equal to the Polygala Senega. It has been employed in dropsy & in various eruptions on the skin, of its employment here I acknowledge that I am sceptical. In Pneumonia typhoides it has done a great deal of good whether from any specific power or from the sweating excited is doubtful. Upon the whole the Eupatorium has I think been overrated, but it does possess some active properties which prove very useful. I shall again notice it under another head.

The Polygala Senega has been employed as a diaphoretic. In the form of decoction & to the point it has been used as a diuretic &

rather of half the strength as a diaphoretic. It has been much used & recommended in a variety of diseases. All its virtues I expect are entirely owing to its diaphoretic & nauseating power.

The Laurus Sassafras is also diuretic & diaphoretic - it affords a fine essential oil which is useful & agreeable - The Sassafras is given in infusion. The oil is fragrant & pleasant, is cheap & will answer as an excellent substitute for more expensive oils; I have already mentioned it as containing the taste of the Spirits of turpentine. - Guiacum. Of this both the wood & gum resin is employed, the wood is commonly known by the name of lignum vitae, & is exceedingly hard & solid. It is procured from the West Indies & was first introduced into Europe as a remedy for the venereal disease. A decoction of the wood proves stimulant & diaphoretic. The resin is a stimulant diuretic & diaphoretic. The decoction of the shavings of the wood is boiled in 3 quarts of water to ~~one~~ two quarts - one quart may be taken during the day. It is however not always given in this simple form. The tincture is prepared with the carb. of ammonia & forms the Vol. Dr Judice - This prepared by adding to ℥iv of the resin of Guiacum to ℥ij vi of the ammoniated alcohol. This improves its stimulant & diaphoretic powers. I have called it a gum resin but it has lately been shown by Mr Brande to be a peculiar substance differing either from Gum or Resin. The dose of the Dr to promote diaphoresis is from ʒij to ℥iv - 3 times a day, after bleeding & other evacuations have been pursued - Dr Chapman gives it in large doses, in that of ℥i repeated as the other, he gives it in this manner, in chronic rheumatism & other chronic complaints. In many cases where diaphoretics ~~have~~ are necessary, the spirits ~~are~~ are rendered ~~[illegible]~~ too stimulating; for this purpose the powder therefore ~~[illegible]~~ is employed in doses of 10 or 20 grs. Cullen has given it diffused in mucilage - The resin is first pulverized by the assistance of sugar or other friable substances & then mixed with a mucilage - Of this Dr Cullen gives grs x v or xxx. every night

which he says will open the bowels. I have not found this effect to be produced in less quantity than from ℥ss to ℥i. In Gout it is undeserving the attention it has received, Cullen thinks that, as all other remedies which prevent the attacks of Regout will finally prove injurious, so also condemns the guiac. But there are cases of gout which are closely allied to Rheumatism in which it is useful these cases are whether gouty affections of the stomach & bowels alternate with pains in the limbs. The diffusion in mucilage, I do not like, as however the guiacis allowable, the quantity of spirits forming the tincture will not be hurtful. If I wished to pass an eulogium on Guiac, I would tell you that it has been useful in colica Pictonum. but as in this & in many other cases its ~~effects its~~ virtues have been magnified, I have confined myself to what is better known to be matter of fact.

The **Mezerion**. This comes from the North of Europe & has been noticed by Dr Cullen as an active stimulant. It is more stimulating than the Guiac. It is sometimes given by itself or with a little liquorice root in decoction, it diffuses a gentle warmth over the ~~stomach~~ system in doses of ℥ij. but in larger doses prove emetic. Late writers have recommended it in chronic Rheumatism & especially in venereal cases, & have imitated in these diseases the celebrated Lisbon diet drink by variously combining the Mezerion the following I prefer. ℞ of the shavings of Guiac. ℥ij. of liquorice & Sassafras root each ℥i. water 10 lbs. To this some Sarsaparilla may be added to obtain a little mucilage for it possesses no active powers whatever. I have employed gallons of this medicine in chronic rheumatism & in the venereal cases & in my opinion it is inert as an antivenereal remedy; but on this subject I will give you the experience of Mr Pearson which is rather more favourable. He states that sometimes it appeared to remove as once second any symptoms & to alleviate others; but that there was no satisfactory decisive evidence that in any case it had eradicated the lues venerea. The patients would sometimes be apparently well; but always returned, even

with the same kind of symptoms as before - if he had blotches on the skin - he would return with a renewal of these. This is saying very little for it in the general way.

The Savine. This comes from Siberia & Tartary. It grows in this country & has been recommended for the cure of chronic rheumatism. Dr Chetman has found it serviceable in many cases, I have not used it much but can state that it is a stimulating medicine exciting the pulse, producing redness & itching of the skin, eruption & sweating.

Sialagogues are those medicines which produce an increased discharge of saliva from the mouth. They are devided into external or masticatories & internal. The external are those articles which when taken into the mouth excite an increased flow of the saliva - In a certain sense all our food & various substances would be sialagogues - but this is confined to certain stimulant powers which have a more direct effect on these glands. The most useful & the only one to be noticed is tobacco - this certainly excites the flow of saliva - but this increased discharge can have no effect in a curative point of view - no one would think of employing these medicines unless they produced some other effect - We will therefore only consider the internal ones - & indeed only mercury, as all the others have very slight effects in this way. Hydrargyrus or Mercury is then the only powerful sialagogue - powerful because it adds to this virtue, many others which we are now to investigate - From its diversified effects by means of its various preparations in numerous diseases, it has received great attention - It was not known to Hippocrates - first noticed it as an anthelmintic - but it was at that time looked upon as a poison & fell into disuse - About the 15th Cent it was again revived as an anthelmintic & to facilitate parturition - Since this time its virtues have been gradually unfolded

many of them are now known but I believe we have yet much to learn on this valuable medicine. In its crude state it possesses activity, by its weight it was formerly employed to overcome obstinate constipation — as also in cases of ileus & hernia — but it was soon found to be useless. The preparations however are very active & valuable & much are we indebted to the Chemist for their introduction into our Science.

Lecture 38th Jan 14th

There is an account given of the effects of mercury, whether in a crude or oxidated state I will not determine which is rather singular. A British man of War during the siege of Calais had a keg of quicksilver burst in the hold — the consequence of this was, that the whole crew were salivated — What effect the rolling of the ship & the consequent motion of the quicksilver might have, we cannot decide; it was however manifest that from some circumstance it proved very active. The miners, who procure the quicksilver, are seized with many morbid affections & live but a few years; it is said few live more than 4 yrs. after they have entered the mines; they are affected with tremors, palpitations, convulsions & various nervous affections. Crude mercury, when boiled gives a particular taste to the water, but Pure Silver maintains that it has no active powers. There is no loss of weight in the metal — yet the water no doubt possesses this peculiar taste.

Many preparations of mercury are in use & however different they are in some respects yet they all possess the power of salivating. This consists in dependant of the more flow of saliva, of an inflammatory affection of the gums, mouth, tongue & fauces; this, in children especially, sometimes terminates in Sangrene & sometimes from the swelling suffocation has been threatened, or actually produced. Salivation is indeed sometimes with great difficulty & sometimes with great ease. I have seen it freely brought on by 1/2 a gr of corr. sublim. In one instance death

take place from the fetid air brought on by the antimonial powder.
The effects of mercury are first a moderate fever & fetid breath among the first symptoms of its effect on the mouth is paleness of the gums at the roots of the teeth. — Of the preparations of mercury, some are made by trituration with some unctuous substance, where also according to some a union with oxygen will take place. Of these is Plenck's solution prepared by rubbing one drachm of the mercury with ℥ij of S. Crab. & ℥i of water. This was recommended by its author as procuring the good effects of the mercury without salivation, this however is not the case - it is very similar to the blue pill, but is not so pleasant. The blue pill is also made by trituration with several substances as - S. Crab, manna, rhub. &c &c. I prefer chalk as facilitating the trituration & as being serviceable when the bowels are very irritable. The mercurial ointment is another preparation of the like kind - made of different degrees of strength according to the different proportions of fat or lard. In all these it has been disputed whether the mercury was oxidated, minutely divided only or what is altogether imaginary whether it was dissolved in the sebacic acid of the lard. Fordyce declares, that the mercury is simply divided, as with the aid of a microscope, the globules could be seen - the experiments of Dr Blumber however seem to prove that a portion of the mercury is oxidated - whether oxygen is really united or not, does not appear to be accurately determined. The activity at any rate depends on the mercury & not on the oxygen. With acids & with oxygen, mercury forms compounds certainly more active than those already mentioned. Before noticing these it will be proper to say a few words on the modus operandi of mercury.
Little was known of the operation of mercury previous to the discovery of the circulation of the blood - at that time it was maintained by the mechanical philosophers, that mercury by its great weight was carried through the capillary vessels & thus removed every cause of disease - Paracelsus, Cullen & others considered it as an evacuant - so more

late writers have affirmed that it cures the venereal disease by neutralizing the venereal virus; which is certainly not true, mercury has no such power, the matter of chancre will produce chancre however ~~diluted~~ mixed with mercury. Mr Jn.o Hunter's opinion on this point is in my opinion, the only true explanation. It is accurate but it is deficient - as far as it goes it is certainly true. This explanation is founded on the doctrine, that no two morbid actions can exist at the same time in the same place or in the same constitution: & therefore that mercury cures the venereal disease by inducing a new disease, which is curable or which subsides when the cause producing it is removed, & which as it were drives out the prior disease. Dr Adams has illustrated & confirmed this opinion in a very satisfactory manner. In curing the venereal then mercury must act on every part of the body. Is mercury absorbed from the skin, stomach &c when it produces salivation? In all cases, we cannot (as has been maintained) suppose that any medicine acts before it is actually formed, this at present is self evident. In the living body, there are certain properties one of which is irritability - this is that property by which action is produced from the application of a stimulus; A second property of every living body, is the Capability of propagating this action to every part of the system - this is Sympathy. By these two properties are all actions both healthy & diseased performed. Now it must make no difference, whether the stimulus is applied to the skin, stomach or blood vessels: by saying, that it is applied to the inner coat of the blood vessels this has no solution of the difficulty; it is not here in contact with the solids, upon which it acts - it is only bringing it nearer, than when it is in the stomach, but the action on the solids must be explained in one instance, precisely upon the same principles as in the other. But is the mercury absorbed?

This has been said to be proved, by globules of mercury having been found in the milk, in the bones & in the blood, Walter relates numerous cases of this kind, collected chiefly from other authors; it has also been advanced by Mead - B Boerhaave, Boyle; & now it is very difficult to set aside the testimony of such men, yet we may say, that men are very liable to be deceived on points, in favour of which they are prejudiced, & besides, the experiments & observations of all late writers have never giving the least sanction to these opinions; these persons have never found mercury in the milk, bones or blood. Dr Physick was taught to believe that mercury was absorbed into the system, but meeting with a case, where salivation was induced, during the continuance of a prevalent purgin, which he had been told was impossible, he was induced to make some experiments on this subject in the year 1798; which were published & which completely satisfied him that mercury was not absorbed into the system - or at least, that it did not appear in the blood or secretions, & that salivation could be induced by an impression on the alimentary canal by the mercurial preparations.

Lecture 39th Jan 7th.

I now proceed to the combinations of mercury & omitting the long list which you will find enumerated, I shall select those which are the most useful. With Sulphur Mercury forms two combinations - the first is the Sulphuretum Hyd. nigrum or Ethiops mineral made by triturating equal parts of sulphur & mercury together - it is not much used: sometimes as a purge in doses of 6 to 10 grs. The second is the Hydrar - Sulphuret - Rubrum which is prepared by adding 5 parts of mercury to 1 of melted sulphur - which is then powdered & sublimed. This is very inert when taken into the stomach & is now only used in a vaporous state - in which it is more active.

With muriatic acid mercury forms two of its most valuable preparations calomel & corrosive sublimate. These names I prefer as they are less apt to be mistaken for each other, than the new ones of muriate & sub muriate, although these last are very properly given. In these salts the mercury exists in two different states, although formed of the same materials. But of their chemical history I shall say nothing as on this point you will receive ample information from another source. Calomel in my opinion is the best preparation of mercury we have - indeed it is equal to all the others. It acts as a cathartic, for which it is very often employed - & also as a sialagogue: with this view it is given in small doses of gr sixth ij. twice a day or 1/4 gr three or four times a day. The first doses usually produce some purging & on this account many have objected to it but it should be remembered that after the first or second dose it has no effect on the bowels; if it should have the addition of a little opium will prevent it. In febrile cases where we wish not only to salivate but also to evacuate the bowels gently - calomel is undoubtedly the best medicine we possess.

The corrosive sublimate is irritant & in large doses poisonous, inflaming the stomach & quickly destroying the patient. I do not know what would be the best antidote to this when taken in too large a quantity - the stomach should first gently be washed out, as when other poisons are taken & large quantities of lime water or solution of pot ash be swallowed which would probably decompose the article. The dose is from 1/8 gr to 1/6 or 1/4 twice or thrice a day either in the form of pills or of a solution - the former is very preferable - care should be taken that each pill contains the due quantity.

Oxidum Hydr. Rubrum is prepared by boiling mercury under exposure to the air - It is seldom used. The dose is gr sixth ij twice a day.

Oxidum Hyd. Rubrum per ~~nitratem~~ acidum nitricum, the common red precipitate of the shops is prepared by dissolving mer

every in nitric acid - evaporating the solution & exposing the powder to a great heat, till it becomes of a bright red colour - This contains a small portion of the acid united to the oxide of the metal, & is more active than the red oxide just mentioned - it is seldom given internally but is much used as an external application, as it possesses considerable escharotic powers.

Oxidum Hyd. Cinereum is prepared by precipitating the mercury from its solution in diluted nitrous acid by means of the water of the carb. ammonia. its dose is gr ij ad iij.

Sub. Sulph. Hyd. flavus, commonly called the Turpeth mineral is prepared by dissolving the mercury in sulph. acid & throwing the powder obtained by evaporation into boiling water. This has been used as an emetic, cathartic, & alexipharmic, but possessing no peculiar advantages at any rate to be discovered.

Hydrarg. precipit. albus prepared by precipitating mercury by means of the muriat ammon. It is used sometimes in ointments but except by its white colour has no advantage over the red precipitate.

These are the preparations of mercury at present most used & the only ones which I have ever employed or indeed ever employed. I refer you to the Dispensatories for a number of others, if you should wish to employ them.

I proceed to the employment of mercury in the cure of diseases & first in Fevers. In the treatment of these it was introduced about the beginning of the last century by several of the West Indian Practitioners & with considerable success - Dr Chisholm however has the credit of its introduction. He undoubtedly was the first who employed it with any fixed object & who publicly recommended it. In the years 1793 - 4, 5, & 6. he made numerous trials of it in the fevers of the W. Indies. These he considered under 2 heads - the first he called a malignant, pestilential, & contagious fever - & the second a mild, yellow, remitting fever. He did not employ any previous evacuations but prescribed the mercury in very large doses 5 grs every 4 or 5 hrs till salivation was induced - by ~~the~~

some 10 grs have been given every 3 hours, so that salivation has been excited in 24 hrs, & with success. This bold practice has been sanctioned by many others & they observe, that when the mouth sores becomes sore, the patient always recovers. But, as in every other medical subject some respectable practitioners are opposed to the practice. —— Dr Warren has drawn up a very able account of the fevers of the W. Indies well worthy of much attention. In this country, mercury has been much used & the experience here is very favourable. Dr Rush has published the results of it, which is, that salivation is a most certain remedy. I have not yet lost a patient who had been salivated. Sometimes however salivation cannot be produced. When the mercury acted on the bowels Dr Rush added opium. Dr Duffield of this city went still further & always gave opium with the calomel. This I do not approve as in many instances opium is contraindicated. In all the cases in which in this city we employ this or indeed any other remedy, we consider it as auxillary, & at the same time employ other methods of cure.

In typhus fever its advantages are not so well determined. It is said to have been successful in some trials in the W. Indies, but in the jail & hospital fevers it does not appear to answer. It is certainly not to be employed where there is great prostration of strength. In the typhus epidemic of New Engd which prevailed during the years 1798, & 1802 Dr Warren employed it very extensively & with success, in large doses of grs. x. aa x v. of calomel but he used at the same time tartar emetic & powders, blisters &c. In typhus mitior Dr Rush has employed it with advantage. He states that it renders the pulse stronger & fuller. Dr Hamilton has pointed out that the system bears evacuations better than might be supposed. —— In the phlegmasia it has been much employed, ~~in many of the~~ especially in the local inflam. affections. In small doses the mercury proves very useful in many chronic cases, without throwing

the reason why altogether, it does not salivate or produce any sensible vacuation. I think I have it is called an Alterative. Chronic ophthalmia is very often benefited by it after every other remedy has failed, in cases also of opacity of the cornea I have often known it successful. In phrenitis after powerful evacuations as V. S. purging &c - salivation is very useful - In mania it should also be tried as it often restores the patient - although it is often as every thing else is, to lately insufficient, but it has succeeded oftener than others. In Pneumonia after evacuations it is very useful - In New Engd. where V. S. has been less employed in pleurisy than here, the physicians speak very highly of calomel as producing a most valuable expectorant & relieving the difficulty of breathing. In this part of the country however we do not depend as much on calomel we trust more to the lancet - we are not altogether guided by the pulse, but we bleed for pain & oppression of breathing & then resort to calomel & not before. ——

In Consumption Dr Rush has highly recommended it. He relates many very many cases of success in his own practice & in that of others throughout the U. States. I remember believe that Dr Rush never in reality, cured a patient of consumption. He & I & many others who adopted his practice cured chronic inflammation of the lungs, attended with hectic fever &c. but no case, the time of great tubercular affection - In the former, mercury will often effect a cure, but in the latter it will only relieve the symptoms & render the patient's exit from life more tranquil & pleasant - By some it has been recommended in cynanche maligna. Dr Douglas thinks that in the cases under consideration, it is advantageous, in producing the alvine evacuation by mercury - Dr Barton also advises that we should puke with tartrite of antimony & purge with calomel - The mercurial fumigations have also been employed. In croup Dr Hulme has employed calomel very extensively - & Dr Hamilton has succeeded him, who has given

to a child of 2 yrs of age 100 grs in 24 hrs to operate as a purge. Dr Rush also gives it in large & repeated doses, although not equal to Mr Jeffers theory of its operation is very simple that by a powerful action on the glands of the intestines, a new action is produced which is incompatible with the primary disease. He uses in conjunction with it the usual remedies, blisters, leeches & emetics. & then calomel. Purging with this should be continued so long as any of the effects of the croup remain as hoarseness, cough &c. & we should remember that this disease is subject to remissions, so that we must not anticipate too soon that our remedies are successful. Bronchotomy has been performed in some instances of this disease. I once tried it without success. In another case in which the patient was apparently dying with a livid countenance, loss of sense &c, I was requested to make an opening into the trachea. I made an incision through the skin, a small vessel was divided, in an instant the patient began to breathe & in 5 minutes she injoyed this faculty with perfect freedom. How this operation is not very clear whether by fright, by the pain, by the bleeding or all united, is doubtful.

Lecture 40th Jany 17th

The calomel should be continued in all cases of protracted catarrh from croup. Dr Archer of Maryland has recommended the carbon. sesquioxide in such cases. In Rheumatism it is often employed with advantage after other evacuations have been premised. In chronic rheumatism it has often succeeded where every thing else has failed, but it is frequently unsuccessful: in what has been called syphilitic rheumatism, it has been forbidden by some authors who imagined this disease to be produced by mercury previously taken. This is not the fact. & the best proof of it is, that mercury will cure it. I have always succeeded in rheumatism following protracted syphilis by salivation. It is therefore not

the cause but will even the cure disease — In gout it has not been much employed — In hepatitis it is deservedly considered as very valuable, first in large doses as an evacuant & afterwards in small doses to salivate. In India where this disease is very common, it is used in all the stages, & is found useful where the organization of the liver is not destroyed — Fairbon, who practised considerably in that country, considers it as indispensable in the last stage of the disorder. Dr Baillie's morbid anatomy proves, that many diseases after a certain period become incurable, & ~~[illegible]~~ This is very true of hepatitis. There are several states in which it is found by dissection — enlarged simply; enlarged & scirrhous — containing tubercles — destroyed by suppuration, containing hydatids &c, now in the 3 first of these calomel should be used & there is some prospect of success, but in the last it cannot possibly cure & must add to the weakness of the patient. In practice we cannot thus determine the state of the liver & therefore we employ it, whenever the strength of the patient will sufficiently ~~stand~~ bear. In the West Indies they do not prescribe mercury, bleeding & are not so successful as in the East Indies where they employ it in conjunction with calomel & where they are very successful in its treatment. In Icterus it is a useful remedy especially when of long standing — Indeed in all affections of the liver calomel is a very popular & useful remedy & when not forbidden by peculiar circumstances it is to be prescribed. — In the several prosfaria it has been found useful especially in dysentery — This I consider as a case of bilious fever with inflammations of the intestines — Clarke, Reid & Colquhoun have found calomel very useful in dysentery — In the chronic stage Colquhoun confided much in a salivation & in the East Indies they also employed it under similar circumstances. Dr Berton after having used it for

a few days omitted it, if it did not prove beneficial in that time, from a fear that a dangerous salivation might ensue. This however is a very rare occurrence & the remedy certainly ought to be preserved in till some effect is manifest. In Chronic Diarrhoea, & in the opposite affection constipation the mercury has been useful. I have also noticed its efficacy in colica pictonum. In the class of Neuroses mercury is a very valuable remedy. in Epilepsy it has been used but with not much advantage, in some cases it is apparently of service. Sometimes in this disease there is an effusion of water. I have dissected a case where a large hydatid was situated on the basis of the brain & another in which there was an exostosis. In all these mercury promises more than any other remedy from its power of promoting absorption. In Tetanus it has been employed. but in this disease I do not place much confidence in anything but brandy & opium. In hydrophobia it is entirely useless. either as a remedy for the disease or as a prophylactic. Dr Barton recommended that a salivation should be induced just before the attack was expected. But the only prophylactic in which I have any confidence what ever is the excision of the part, which when properly performed & sufficiently early is always successful. I have performed this operation several times & always with success. In hypochondriasis accompanied with dyspepsia. Dr Barton has recommended & I think that it is very likely to prove serviceable & I should undoubtedly try it. In long continued cases of dyspepsia it has no doubt been of service.

Try the mercury in all nervous cases where other remedies have failed & where you wish to produce a change in the system.

In the Cachexia it has been much celebrated. especially in dropsy. In all cases of dropsy it has been employed as an evacuant & whenever there is any internal disease it is given as sialogogue. In Hydrocu-

phalus it has been advised - This disease I believe to arise from a kind of inflammation of the brain, differing from common inflammation but still of the same nature - & therefore that this disease is in the first instance a species of Phrenitis or inflammation of the brain - & that like other inflammation it terminates sometimes in effusion - From this, it appears that the patients may die from the inflammation or from the secondary effect, the effusion which produces compression of the brain - From the inefficacy of our remedies to promote absorption in the brain, we should endeavour to avoid this termination of the disease by the most powerful vacuants as V. S. leeches, purging, blisters &c &c - now in the early stage we administer the mercury as an vacuant - & in the latter stage we resort to it as a sialogogue

In Cutaneous diseases mercury was first employed, generally externally as an ointment, as the citrine ointment for the cure of tetter - In Leprosy it has been employed - I have seen but two cases of this disease, in both of which it was ineffectual; leprosy has been regarded as a modification of the Venereal & mercury has accordingly been thought serviceable - but there is no ground for these such predictions - In deafness it has been said to be useful & perhaps it may have been in some cases but this complaint arises from so many causes to us unknown, that no hope can be entertained of relieving it by our remedies - In some affections of the eyelids, inflam. it has been employed, as in recent opacities of the cornea in which I have seen it of great service in some cases - in some few instances also in opacity of the crystalline lens - It has also been employed in Gutta Serena but with no success. — I come now to the treatment of that disease in which mercury has been so justly & so greatly celebrated. I allude to Syphilis - This disease, I believe from an examination of the various authorities did not exist in Europe prior to the discovery of America - whether it was brought to Europe from America

ea is a matter of very little importance - At this time however it appeared & surprised the practitioners of that period - who could not cure it. They were astonished in finding the disease so loathsome & appearing so especially in such a variety of disgusting forms - It raged throughout Europe & baffled the skill of the ablest physicians & proved more destructive & terrible than the small pox itself - The primary forms of this disease are two, Chancre & Gonorrhœa - to which some have added, Bubo - but this always appears as a consequence, & owes its origin & peculiar affections to the nature of Gonorrhœa & Chancre, I will not say anything at present - contenting myself with observing, that there is no medical fact whatever better established, than the identity of the two diseases - I shall now confine myself to chancre & its consequences.

Lecture 41st Jan 20th

Chancre is an ulcer originating from the application of venereal matter. It is usually to be found on the organs of generation in both sexes, as these are the parts most exposed to infection. Some persons are more liable to be contaminated, than other persons whose prepuce is shorter less liable than those who have a long prepuce - as in the former there are fewer lodging places for the matter, & perhaps also, the parts are more hardened from their exposure - on this account Jews & Mahometans escape the disease more frequently than Europeans - Chancres, do not occur as often as gonorrhœa 4 or 5 cases of the latter appearing to one of the former - In Hospitals the reverse of this might appear to be the case as persons affected with Gonorrhœa seldom are so unwell as to desert their usual occupations & apply for advice. Chancres in men occur most commonly on the frænum, prepuce, glans, & skin of the penis - In women it is usually on the labia & parts exterior to the vagina - but beyond all doubt sometimes in the vagina itself - The time of their appearance after infection varies in different subjects, & in the same person at different times, & also according

to the parts injured. The first appearance of all sore contaminated fluids
is on the frenum, then prepuce, next the glans & finally on the skin which is
the slowest in taking on the morbid action. In 24 hrs. chancre has sometimes appeared
& sometimes it is after the lapse of 3, 4, or even 7 weeks. It is preceded by an
itching of the part; & on the glans a small pimple is observed, accompanied
with slight pain, but very little induration. On the frenum & prepuce, there is
more pain & hardness attending its formation. The appearance of a chancre
is sometimes so well marked, that it can immediately be told, but this is not
invariably the case, so you cannot always decide by inspection. The pimple
soon disappears, ulceration taking place, the itching is changed to pain &
there is a thickened, solid, hard base with thick, prominent edges. When over
the frenum, ulceration often makes a hole through it, when on the skin of
the penis, it forms first a pimple which is often cured with a thick scab,
presenting none of the characteristics of a chancre. When on the prepuce
the swelling & induration often cause phymosis or paraphymosis.
The matter from a chancre varies very much in colour, quantity & consis-
tence. It is sometimes thin, viscid, greenish & sometimes its characteristics
are very different so that you should never hastily decide that it is venereal.
Sloughs sometimes appear & enlarge the size of the chancre & sometimes
it increases by ulceration, as in common phagedenic ulcers. From this they
have been divided into sloughing & ulcerating chancres. They sometimes
rapidly spread over the penis, & have been known the whole penis to be affec-
ted in a very short period. This has been attributed to some peculiar
virulence of the matter, but it is more reasonable to suppose, that it de-
pends on the constitution of the patient. To prevent the contamination
of the system mercury is the only remedy, which should be relied on. The
destruction of the part has been treated by caustics & the knife has
been used to remove the diseased part. & they have succeeded, that also
very quickly. They can also be cured by the specific remedy, which however
is very tedious, in this manner chancres prove more tedious in the
cure than any of the other forms of syphilis. The best practice is

to combine the two methods & resort to mercury & caustic applications. Fever, occasionally attends, which is to be treated on general principles. So also when debility, tonics &c are to be had recourse to. I give the preference to caustics in removing the diseased surface, as the knife removes a very large surface & often produces great hemorrhage. Of the caustic & escharotic applications the lunar caustic & red precipitate are most used. From some experiments I am inclined to prefer the latter as I found that more pain resulted when the lunar caustic was employed than when the red precipitate. When the cure is trusted to local remedies the mercurial preparations have been preferred as they were considered to be capable of changing the action of the part. This may, in part, be the case. But I think little dependence must more generally on their escharotic power. In their use Mr Hunter involved them in a mucilage, as more likely to be effectually then when any dry substance was applied. The red precipitate ointment is most used for chancres, as also the common mercurial ointment, calomel, solutions of the blue or white vitriol, of the corrosive sublimate, the nitrous treatment & various others. To prevent the occurrence of phymosis, or to cure it when present, not a proper position should be studied. The penis should be supported against the pubis, so as to facilitate the return of blood. When chancres are underneath the prepuce they are to be washed by injections of mild fluids & sometimes by solutions of corros. sub. or other articles. gr i of the corros. sub. ℥ij of water is very useful. calomel suspended in a mucilage of Gebrab is often useful, sometimes a little laud.m may be added. When bawnes these injections are too irritating then cleanliness only is to be attended to by injections of mild fluids. The inflam.n of the prepuce is to be counteracted by lead water or the cold poultice & by leeches. The only permanent & certain mode is the cutting off of the prepuce which is best done by the guarded bistoury, when the tension is very great an incision is to be made from without. As the

object is to expose the chancres you should always examine, whether this is at
tained - When this operation is omitted nature attempts it by producing ul-
ceration or sloughing of the prepuce - The operation of the surgeon is imperfect, as it leaves
the large irregular flaps which prove troublesome after the cure, in such
cases circumcision is to be performed. Sometimes the prepuce has firmly uni
ted to the penis forming one solid mass. In Paraphymosis the glans is
denuded & a stricture is formed behind ~~the~~ it. This is to be divided as
the former but it is oftener necessary to cut from ~~it~~ without; when this is not
done gangrene of the prepuce chancres & sometimes of the glans - but the vita
lity of this last being greater than the other - it generally remains.
In every case whatever of chancre mercury is to be given - grs ss or gr j
of calomel are to be administered twice a day, the first doses will often
purge - but this effect soon ceases - if it does not - a little opium is to
be added - The blue pill is also very excellent & of late the Phosphate of
Mercury has been recommended. This last I have not much employed - in
one case however in which I found great difficulty in salivating I
gave the phosphate which was quickly efficacious - The mercury is
always to be continued during the whole of the cure unless the chancre be
very large, when it may be desisted from when the process of skinning com-
mences; when very small it should be continued a few days after the chan
cre has healed. As to the ptyalism - this is a great inconvenience & has
been on this account much objected to by patients, if the system can be sa
tisfied without it, let it be done; it is sufficient to keep the gums a little
tender - till the chancre assumes a healthy granulating surface - when its
venereal disposition is destroyed. Among patients & also their physicians
great fear is entertained of exposure to cold or wet - I have employed mer-
cury under all the vicissitudes of our climate - & I have never seen
those effects - Wet no doubt will produce effects sooner on a patient under
the influence of mercury - than on a healthy ~~patient~~ person, but there is nothing

peculiar in their effects. Cold is one of the best styptics we have to the further prepar.n of mercury. When the chancre occurs on the lips, caustic may be speedily applied & a cure. In women the chancre is easily cured, but as dressing cannot easily be applied washes are more used than in men. In inflam.n of the labia very analagous to that producing phymosis in ~~wom~~ men, sometimes occurs this will soon be dissipated by the usual measures for relieving inflam.n in other parts. When chancres occur in the vagina, care should be taken that adhesions of its sides do not take place. Whether from absorption of the virus or from a sympathetic action, bubos result frequently from chancres & of course are generally found in the groins. The system is not necessarily affected in this disease, & can be cured as well ~~without as with the~~ when the bubo is present & when it is absent. Mr Bell considers bubo in some instances as a primary form of the disease; in this he is opposed by many writers. Mr Adams considers such swellings in the groin as are not preceded by the other forms already noticed as not venereal & maintains that no constitutional symptoms ever result from them & that no mercury is required for their cure. I have had several cases of a similar nature. In one lately I gave no mercury whatever, my patient recovered completely. The lymphatics going from the chancre to the gland are not always inflamed, a hard cord can sometimes be felt & sometimes a red line can be seen marking the course of the inflamed vessel, but this is held on the case. In some cases these vessels inflame & ulcerate. Sometimes a bubo will be formed after the chancre has completely healed.

Lecture 42nd Jan 27th

A bubo is the inflam.n of a lymphatic gland, accompanied with considerable pain & tumour. It quickly ends in suppuration, & ulceration takes place rapidly, or that it quickly heals, sometimes

however it is slower in its progress — The skin is of a florid red colour — & the quantity of matter discharged is very large. The dimension of bubo is always to be attempted. At first, the disease is local, but the constitution will become contaminated, & mercury should therefore always be given. All the remedies for inflamn are to be had recourse to. Friction is to be employed on the inside of the thigh, that the mercury may pass through the gland; if this proves too tedious, it is to be administered internally. Leeches are to be employed, & stone all bleeding, as often as is necessary, even after suppuration has taken place, & in this manner the whole is generally dispersed. Sometimes however we cannot prevent the suppuration. In such cases it must be opened, but we should not cut through any depth of parts. The question has been agitated whether caustic or the lancet should be employed. I think that when small, the lancet is to be used as there is no soft living skin which will form a tedious sinus, but when the abscess is large & there is a considerable portion of skin, which must be removed at one time or other, the caustic is preferable. A poultice should afterwards be employed. When the system sinks we must look to the bark & other tonics. The sea bath is also very important; when this cannot be commanded I have resorted to a salt bath with great benefit. Half a peck of salt being thrown into a common bath; in all scrofulous dispositions especially, this is serviceable. & when this taint is suspected pure cicuta only must, & I think, with advantage. — I combine it with the corrosive sublim. ℞ extract. cicut. gr. xxiv. corros. sub. gr. viij. m. et div in pil. No. xxiv. ——— If not interrupted in their course chancre & bubo will inevitably produce what are symptoms, which are called constitutional symptoms, as phlegmasia, lues venerea, corporis Boreis &c. The secondary symptoms appear on the skin or in the nose mouth, fauces, on the tonsils & sometimes on the tongue. The parts first affected are generally ~~the~~ the throat & mouth. These are very easily

cured by mercury although, this medicine will not prevent its accurrence in
of the other parts have acquired a predisposition to disease – Mr Hunter relates
several cases sufficiently illustrating this doctrine. See Hunter
usually six weeks after contamination pustules on the skin, or with
ulcers on the tonsils, sometimes one & sometimes the other has the prece-
dence. The ulceration of the tonsils is far different from that of common
inflam.n it is preceded usually by languor, loss of appetite, some fever
headache, when the skin is affected similar symptoms precede & are
succeeded by a copper coloured spot having a whitish appearance
frequently invests centre, owing to the desquamation of the cuticle. The
size of the spot does not increase but the number of them does: when
they are exposed to friction ulceration sometimes takes place & in other
parts also there is often a slight collection of matter under the cuticle.
The cure of these symptoms depends on mercury, & is generally speedily effected. Nitric acid has been recommended & is of service in
affections of the throat but I suspect more from its local application
than from any power of destroying the venereal poison; as I have sometimes found it
serviceable as a gargle simply – when taken into the stomach the
following is the formula. ℞. Nitric acid ʒij. Detract. ʒij. Aq. ℥vi. m
ʒ ss is the dose two or 3 times a day. As to the quantity of mercury ne-
cessary, Mr Hunter formerly directed it to be continued a fortnight after
the cure – The practitioners in London advise 3 months, which is proba-
bly necessary. As a local application the caustics are useful – the vege-
table is the best as it can immediately be neutralized with vinegar
& thus prevented injuring the contiguous parts. The diet & regimen of
the patient should also be attended to. The second stage of syphilis consists in swellings of the periosteum, tendons, fascia & liga-
ments. These are slower in their progress & require several weeks for
their developement, so that it is always doubtful whether the
patient will have them or not. The cure is to be accomplished

in the same manner as the former, only that the treatment is to be continued for a longer time. Frictions here are preferable, as the long use of mercury internally would impair the tone of the stomach. In general no local treatment is necessary; when any obstinate nodes may be opened by an incision or be blistered. When a node suppurates, the bone as a laminae of the bone ~~so~~ exfoliates, after which, it readily granulates & heals. Often indurations remain, these are merely the effects of the disease, the disease itself having ceased. — This finishes what I have to say of Syphilis & of mercury as employed in its cure. I have still to notice some of the particular effects of mercury. Any substance, which, when applied to any part of the body, produces irritation, differing from healthy action, may be considered as the cause of disease: in this way emetics, cathartics & all medicines produce a temporary disease: in this way, mercury, also, may be considered as effecting a morbid condition of the body, producing an inflamy affection of the mouth & fauces & also some fever. It also in some cases produces injurious effects. This inflam state of the mouth is aggravated, the cheeks swell, the tongue enlarges so as to prevent deglutition even breathing ~~could not be~~ especially performed through a tube, ~~it~~ luxation of the lower jaw has also been produced by the swelling of the tongue. The cheeks become gangrenous & slough off. This is a most dreadful condition, the teeth all gone, the whole mouth exposed, deglutition almost impossible & the chin nearly reaches the ~~breast~~ breast, the bones are affected with deep & lasting caries. The health of the patient gives away, he sinks & dies. From these circumstances violent prejudices prevail against the remedy & there is only one ~~case~~ case in which it should be exhibited so as to endanger these symptoms & that is where death is otherwise inevitable. In such cases you must employ it, you are bound to use it. These direful effects do occur, but they are rare. I have never had a case in my own practice, but I have seen them several times

X an objection to the use of mercury is that it acts not under your control - when you induce a sore mouth, it is at a venture not knowing how far it will go -

H damp & cold air is prejudicial -

⊕ - The use of mercury in some cases injures very much the digestive organs - producing various dyspeptic symptoms -

Yellow Fever is one of those cases in which mercury is sometimes indispensable. To stop the progress of the mercurial effects in the system many remedies have been tried on chemical principles & some on medicinal; of these last evacuants have been freely employed, but all without effect. To diminish irritation opium may be used & a decoction of poppy heads may be employed as a gargle; the linen of the patient the cloths & every thing likely to be soiled with the mercury should be removed & the patient be washed clean. He should be placed in a cool, dry air & if able to walk about he should exercise himself. By this manner all the unpleasant symptoms will gradually disappear.

These are nearly the actual effects of mercury on this country. But in Europe various diseases have been recorded. Mr Hunter long ago noticed its effects as of two kinds on the constitution. in the first, there was considerable increase of irritation, the pulse became accelerated, sometimes small & quick with restlessness, anxiety, loss of appetite & sometimes the mercury acting as a poison produced great debility & exhaustion. Mr Pearson has lately described a disease originating from mercury. There is great depression, anxiety & sighing. From a slight exertion the patient has fallen down dead. He has considered as arising from Mercury & has called the Erethismus mercurialis. This disease thus dignified by a long name has all the symptoms of hectic fever. It is merely an aggravated state of those symptoms mentioned by Mr Hunter, when mercury acts as a poison. I have never seen this disease of Mr Pearson's. He states that it is to be cured by a generous diet & free exercise in the cool air. By the 10th or 14th day the mercury may be resumed without any ill effects. Mr Pearson has also noticed a rash appearing on the body sometimes from a single dose of the calomel or a drachm of the ointment, generally occurring however in 8 or 10 days, & sometimes not till the course is finished.

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+ by Mr. Allen — & Eczema mercuriali by Mr. Pearson

Lecture 43rd Jany 23rd

This eruption has been termed Hydargyria & itching it commences with pain in the scrotum, thighs, groins where in a short time there appears a number of eruptions, which are red & painful appearing chiefly on the exterior part of the body & in the lower extremities & finally extending. It is always a vesicular disease, the vesicle however is very small & ~~always to be~~ sometimes only to be seen by the aid of the microscope. It is surrounded by a small red circle, the tides the vesicle is as large as a pins head; the fluid is often thick ~~&c~~ & always acrid, so that when the vesicle is broken, it excoriates the ~~other~~ contiguous parts, & in this manner the whole body becomes one continued sore. There is considerable variety in this disease & it has been divided into 3 stages by Mr Allen according to its violence. In treating this, the remote cause is to be removed, all mercury is to be entirely omitted. Mr Pearson advises ~~opium~~ the saline draught, the Apt. Minderei, opium to relieve irritation, & sometimes opium & camphor. For a more particular account I refer you to Mr Pearson & to Mr Allen. I have seen only 2 cases of Hydargyria & as I have seen many cases, in which mercury has been employed I may say that, it is very rare. But an opinion has of late years been advanced, that this & many other mercurial diseases are very frequent. Mr Matthias is the chief author on this subject, who has drawn up a long list of the direful effects of mercury on the body; some altogether peculiar to itself & others resembling the venereal. Mercury will produce some injurious effects, as I have already informed you, but there are ~~no~~ very few effects analogous to those of a venereal nature. It is true, that chancres have been seen in the throat & on the skin ~~become stationary~~ & do not heal under the use of mercury, but it does not follow that it is the cause of the disease, as the chancre, because the mercury will not cure, it ~~cannot~~ produces no effect, it acts injuriously on the system & consequently concluded. Now mercury produces no effect, it acts injuriously on the system as a poison according to Mr Hunter. All that is to be done here, is, to omit it for a short time, when it is again to be resumed. For mercury only will cure these eruptions, & I have succeeded often very often in ~~them~~

these supposed mercurial diseases by mercury itself. They are in reality nothing but venereal. The venereal disease is absolutely now considered as a rare disease, & that most of the ulcers on the penis are not of this nature. This in my opinion is wrong. Syphilis is a very frequent disease. No doubt, there are many cases of ulcers on the genitals, which are not syphilitic, & these can often be readily known, but in many cases of doubt I think mercury ought to be given, for the only inconvenience to the patient will be, a slight salivation for a short period & he will escape all anxiety on the subject. I have seen several cases of this kind which no doubt might & would have got well by themselves, but I have found that the cure was greatly expedited by mercury. But, at any rate, always be very careful that you do not omit the proper remedy in genuine chancre. There is often on the penis especially around the corona glandis a collection of little vesicles, which contain a thin matter, & are very different from chancres. There is a small vesicle, raising the delicate epithelium only, containing a straw colour thin pus. These are to be washed with lead water, when large, they are to be punctured & when almost healed it should be washed with brandy. But, for one case of these, that you meet, you will have 20 cases of the opposite kind.

As to the proper administration of mercury I must say a few words. The saline preparations are not now ready to produce marked effects, than the other preparat.ns. This is the result of the experience I have had in this country. I prefer for calomel to the blue pill, the corros. sublimate. I have used it in obstinate cases, in such cases I combine with it iceat. or op.m or Dr Logan of Vienna has lately published that corros. sub. can cure a chancre without inducing a salivation & it is also proper to state here, that Mr Addington proposes its use in Gonor.a 3grs being dissolved in ℥i of alcohol one half of which is to be taken at a dose at bedtime, a profuse salivat.n is induced the next day some salts are to be given, after the operation of which the remainder of the medicine is to be exhibited, & in this manner gonorrhœa is often cured in 48 hrs. This requires further confirmation. 2nd Mercurial ointment, is the next method of exhibiting mercury. It should be rubbed in, if possible, by the patient himself & not merely laid on the thigh, in other cases it may be applied to other parts of the body, than on the inside of the thighs. 3rd The patient

is to be confined to the house, as cold greatly diminishes the action of mercury & not ~~under the in~~ sometimes induces disease. This may sometimes be dispensed with in cases of chancre - but never in syphilitic eruptions. 4th The blue pill is to be employed, ~~&c~~ when the calomel purges too much; Plenk's solution I have never used, but suppose it may be useful in similar cases.

5th Fumigations. Mr Abernethy employs the fumes of cinnabar collected around the body - This is much used on the continent of Europe, & as topical application is very useful. Mr Abernethy states, that by them the venereal sore throat has been cured in 60 hrs. Mr Pearson thinks that when there is any great urgency in the case they may be employed with advantage as a local remedy but they are not sufficient to secure the constitution - in this I agree with him & think that mercury should also be administered in another form.

6th Rubbing Calomel on the Gums & fauces, 7th When the disease remains stationary we should examine whether it is owing to cold - to a change of weather, indigestion of any other cause inducing ~~slow~~ fever - if not then the mercury is to be omitted, the proper remedies to be administered, & again it will be necessary to resort to the mercury to effect a cure -

Lecture 44 Jany 24th

Emmenagogues are those medicines which excite the menstrual discharge. They are so uncertain in their operation that doubts have been entertained of the existence of such remedies. But although not always effectual, there certainly are such medicines. Females are constantly resorting to them & the practitioner stands in many instances inactive ~~my~~ not, because he has no remedy, but, because he does not enquire into the nature & causes of the disease. I need not enter into the Physiology of the uterine system - Menstruation is now allowed to be a secretory office of the uterus - & the periods, at which it commences & at which it ceases, are important epochs in the female life. Dr Rush has well observed, that in children we should always regard the progress of dentition in treating their diseases & in females the state of their

+ cold bath - mineral waters - stimulating embrocations, dry cupping &c -

menstrual discharge. Amenorrhœa arises from two conditions of the system. When the discharge does not commence at the usual period & there are present various constitutional symptoms, it is termed retention, when, after it has once commenced, & at any time, from any cause, except pregnancy, it is called suppression. As to the time at which the menses should appear it varies greatly in different climates & individuals, but the non appearance is not considered as a disease unless marked by certain marked symptoms, constituting the disease called chlorosis. A correct Pathology of this disease is much to be desired. Dr Cullen has entered very fully into this subject & considers it as depending on a diseased state of the ovaria but can go no farther. Dr Hamilton refers it to a depraved condition of the alimentary canal. I cannot agree fully with either. The opinion of Dr Cullen is confirmed by dissections as the ovaria are usually found in a diseased state. The theory of Dr Hamilton is founded on erroneous premises. He concludes that the disease depends on the condition of the alimentary canal, because there is a torpor in their action & it is relieved by purgatives. Now there are many diseases, by no means depending on this canal, which are accompanied by these symptoms & are cured by these remedies. Purging is used in a variety of complaints having nothing to do with the intestines. This practice is better than his theory. Purgatives are useful & necessary to relieve constipation & to prepare the way for tonics & other remedies. In the treatment of Amenorrhœa or retention of the menses various general remedies are resorted to. Dr Rush frequently bled his patients. But the pulse will seldom bear this. Emetics are also used. Electricity. fomentations warm bath. friction to the lower extremities, pediluvium &c. but the most certain remedy is matrimony. Particular symptoms are to be counteracted by the usual remedies. Change of climate is often very useful. Sometimes also the action of emmenagogue medicines to be presented by notice.

Suppression of the menses arises from various causes as fever, cold, especially to the feet, anxiety & sedentary life &c. When any

† These are Hooper's pills.

other disease is present in the system, this function is more or less interrupted. Suppression is too often considered as a cause of disease, when in reality it is only a symptom or an effect of the ~~prevailing~~ general affection of the system. I have often seen the health remain very good after the age of puberty, although the menses did not flow & in such the presumption that mere suppression must be the cause of disease.

Of Particular & Emmenagogues. These are very numerous & possess a very diversified action on the body. In using them we should always attend to their properties & adapt them to the existing state of the system. All classes of medicine in one view may be considered as possessing an emmenagogue power, even ~~the~~ bleeding, as they all in some cases may be useful in promoting the discharge. But there are certain remedies which appear to have a more particular effect in this way. The first I shall mention is Aloes. This we have already noticed as a powerful cathartic. As acting chiefly on the rectum, it is considered as superior to other cathartics as an emmenagogue. It is administered by itself in pills or tincture, also frequently in combination with other remedies. Dr Gallagher of this city, long before the appearance of Hamilton's work employed it in combination with rubigo ferri & with very good effect. In combination with the sal martis it is much employed. ℞ Salph. Ferri ℥ss. jalap ʒi. Myrra pura ʒss Gum. Myrrha. ʒi. m. make into pills of a convenient size & take 3, 4 or 5 a day. Calomel is also occasionally combined with the aloes. Helleborus nigrum is also used chiefly in the form of tincture ℞ Hellebor. ʒiv. Rothineal ℥ss. Alcohol ℥iss. m. dose is gtts xxx to a teaspoonful. Dr Cullen has no great confidence in the Hellebore & his opinion considerably lessens its popularity, but it has again revived in some measure. Dr Barton recommended it as also Dr Chapman. I am very willing to agree with them. Dr Why sick uses it very much he gives gtts. xxx every day for several days before the menses ought to appear. He increases the dose if the stomach will bear it. In conjunction with

these he employs semicupium or pediluvium, fritions &c. but however it is often ineffectual & sometimes excites the discharge. Purging is not necessary for its action. Stimulants are often demanded in amenorrhœa. Dr Dewees dissatisfied with the usual remedies, employed the vol. tr. quiet & in many cases with excellent effect. He gave a dram every 2, 3, or 4 hrs. He was very much pleased with its employment. I am sorry to add that in my hands it has produced no effect whatever. The Peruvian Lacinea has been introduced as an Emmen.g by Dr Hartshorne whose judgment is too sound to easily deceived in any practical point. Dr Chapman has employed it in the Alms House & speaks favourably of it. It is employed in powder or decoction usually in the latter form. This is prepared by boiling an ℥i in a pint of water to ℥ij. the dose is ℥ij every hour or 2. Dr Chapman gives ℥ij & Dr Hartshorne as much as the stomach will bear. I have been successful with it in one instance, but in several others have failed. The Ergot has been introduced lately & some experiments have been made on the subject, but these have not been sufficiently numerous. Dr Erskine in his thesis has shown that it has a strong action on the uterine fibres, inducing abortion in pregnant animals. He tried it in 4 cases of amenorrhœa with evident advantage. I have tried it in 3 cases one of which it cured. The dose is gr.xx every night, for several successive nights. — Sabina or Savine, this is an evergreen plant having long narrow leaves the powder of which is emp.d Some have supposed it a specific. Dr Barton related a case of a woman who applied to him in a consumption, which she attributed to the abortives which she had induced by the Savine. Some recommends its use as an Emmenagogue in doses of ℥ss twice a day. Dr Chapman has tried it in chronic rheumatism also with advantage. Where a stimulating medicine is required it is useful. The Ol. Sabinæ is said to possess the virtues of the plant in doses of gtt viii to x. Pressing the cervical arteries has also been employed, but at present is omitted. There are a variety of other vegetable medicines employed besides those I have mentioned.

+ This State is termed Dysmenorrhea —

tt as ~~the~~ I have always found symptoms of fever — V.S. purging low diet are to be employed in conjunction with the warm bath anodyne injections &c &c

¶ This is the opinion of the French writers particularly of Dionis — who visited most of the nunneries in France & found that the females with cancerous affect.ns a great majority were first attacked at the cessat.n of the menses — Ulcers at this time ~~often~~ occasionally occur in the legs &c when they heal it is usual to substitute an issue or seton These however are very useless as cert.y I prefer a less offensive discharge, as by purgatives — 2 or 3 times a week to be gradually diminished —

but they certainly have little or no power. Of the mineral commonly given mercury has been tried as inducing a powerful change in the system & has been often useful. The various preparations of iron have been celebrated, but they are seldom given by themselves, but usually in combination. Vitriolic spirit in doses of gtts. viii p. with alum. They are all only useful, as tonics but have no specific action. Chalybeate waters have often been thought very useful & no doubt sometimes do good, but much more is to be attributed to the numerous circumstances, attending on excursions to the spring.

Sometimes, notwithstanding all our care this disease is very hard & difficult to cure. There is always more or less derangement of the health with fever & considerable irritability of the system. The warm bath is very useful, diaphoretics, anodyne injections, 60 or 100 gtts of laud: in a little starch, often moderate the symptoms. In some cases there is not actual suppression, but the discharge is effected with great difficulty & pain, and there is great affection of the system. This is generally tedious; in the cure the above remedies are to be resorted to, especially the warm bath, & anod: injection, which greatly relieve the pain — to which may be added fomentations of hot brandy to the abdomen — & to strengthen the system, considerable time is required by exercise, nourishing diet, freedom from care, moderate indulgements of amusements & gentle tonics often necessary. Much attention is to be paid to females at the cessation of their menstrual evacuations — at which period their health is generally delicate; some have supposed that at this period they are more liable to cancerous affections, but this I have not perceived. They are usually more fat than natural & the lancet & low diet is demanded —

+ 2 heads - 1st The round worms 2nd The flat worms - Of the first kind - there are 3 species, the lumbricoid, the ascaris - & the trichuris - Of the second - there are 2 species - the Tape worm - & the Cucurbitane

Lecture 45th Jan. 27th

Anthelmintics. These are medicines united to expel worms from the alimentary canal. They have been a very favourite class of remedies & consequently their number is very great. In the human alimentary canal, there are found various animals some of which are genuine worms, & others the larvae of various insects. The worms are diversified in forms & are situated in different parts of the tube. Their origin is little known. They are of several kinds but may be comprehended under ~~the 3 heads~~ ~~1st The round worm. 2nd The tape worm. 3rd The ascarides. The round worm is a species of~~ The lumbricoides is similar to the common earthworm or lumbricus terrestris, but ~~which~~ is in reality different as will be evident on close inspection. The lumbricoides is long, having a round head ~~& pointed~~ on which there are 3 vesicles, which are arranged so as to form a triangle. On this triangle there is a depression which is considered as the mouth. It is sometimes from 12 to 15 inches long, but gen.ly from 5 to 7 inches. It is about the size of a common goose quill. About its middle, there is a depression which is mentioned as a passage to the lungs. There are two longitudinal bands which are the tendons to which the circular muscles are attached. This worm does not progress like the earth worm in circular lines but moves in a straight line; on this account when once entangled in the intestines, they have not the power of disengaging themselves, but form a ball which no doubt has often been the cause of death. I have dissected one or two cases in which this circumstance was the cause of death. There are a number of little bodies situated around the alimentary canal of this worm, which canal is nothing more than a straight tube, directly passing from the mouth to the anus. When first discharged from the bowels they are semi-transparent & of a light red colour, but soon become of a yellow tinge. They are generally found in the ileum, often in the jejunum but never in the large intestines or in the stomach. The Ascaris vermicularis is seldom more than ½ an inch in

The Trieuris - I have never seen - They are said to be about 2 inches in length - to have a tail twice as long as the body & a proboscis, which ~~it~~ ~~[illegible]~~ but is occasionally enlarged or diminished - It is usually found in the ileum -

The Tænia - & Cucurbitina differ only as to length the latter being merely the jeuite of the former -

length, having the appearance of a thread: the common name is ascarides. They are generally found in the colon & rectum & more frequently in children than in adults. They have been said to have been found in the uterus, vagina & bladder. They are generally very numerous, covering the feces when first evacuated, but soon bury themselves in them, when exposed to the light. They are exceedingly active, from which circumstance they have been named. Their structure is very little known: they are said not to be hermaphrodite, but that the sexes are distinct. ~~There is a species of these which are generally found in the human~~ ~~They are [illegible] to be [illegible] have long tails. [illegible]~~ ~~Pin.~~ ~~The 2d species [illegible]~~ Lumbricus teres is a flat & broad worm becoming sometimes of an enormous length; 50 ft. & in one case 150 ft have been discharged at one time. Generally however, they come away in detached pieces; consisting of 2 or 3 of the joints, which are disposed every half inch or inch on the body; they come away generally very much convoluted. The pieces have been considered as alive, when discharged: with how much truth is doubtful. The tape worm has been found in fœtuses, which have been born dead. As causes of disease worms have received much attention. Some have considered them as the proximate cause of the disease, while others have looked upon them as producing many variety of disease. They generally occur in children from one to 15 years of age. The symptoms indicating their presence are varied & numerous. In general, there is a paleness of the countenance emaciation, derangement of sight, itching of the nose, irregularity of appetite, grinding of the teeth, fœtid breath, great variations in the state of the bowels, sometimes diarrhœa is present & again the bowels are very costive. There is sometimes an œdema of the face of the nose & of the upper lip; this Mr Rowe considers as a certain diagnostic but I have never seen it in the several cases of worms which have fallen under my notice. Many cases of disease have been the consequence of worms; convulsions, epilepsy, mania & other nervous affections. Dr Welsh relates a case of blindness from worms. In October 1775

he had a patient. 12 yrs old; who was affected by a depraved appetite, costiveness, fever. He had his eyes constantly open, the pupils were dilated & there was obtuseness, with a complete loss of vision. This fact he says ascertained with certainty by numerous experiments. I tried a great variety of medicines, & treatment, all to no purpose; at last I administered an emetic which brought up a large worm, all the symptoms immediately vanished — In a case of a child 7 yrs ago — I found on dissection a large plug of worms of the lumbricoid kind, in the intestine — The case had been very obscure, some considered it as enteritis, others a chronic dysentery — in this case &c. &c. The delirium by has resulted from worms, I have seen a young lady who was in the most wonderful state possible entirely relieved by the discharge of ascarides — The febrile symptoms a nosologists is of the remitting kind; with pain in the bowels, headache but there can be no difference between this & an ordinary symptomatic fever. There is a curious idea, that these animals are not apt to be injurious but actually useful, by acting as scavengers in the intestines. & No doubt they have occasionally been sometimes found without producing any injury, but this is seldom the case they are often & very generally productive of great injury. — Many of the Anthelmintics are useful from their purgative properties alone. Hamilton has maintained, that this is the case with the whole of them. This is certainly not true, yet all the various cathartic remedies have been employed to expel worms. The emetics have also been employed. There are however remedies, which act from their poisonous qualities others which act mechanically & others again as tonics. Of the Cathartics the most efficient is calomel. It is much used & should be given in doses sufficient to purge; thus to a child from 4 to 5 yrs — grains vi. may be given — When slow in its operation, it should be followed by castor oil, or some other medicine. Besides this, the various drastic purgatives have been employed, as scammony, gamboge &c — but calomel is the best, especially in combination with the sulphate of iron — gr iii of cal — with gr i of the sulphate, being administered & its purgative operation assisted by the oil or some

x I know of no article which is more useful.

Lecture 46th Jan 28th

Of the Anthelmintics, more properly so called, the first is the Chenopodium Anthelminticum. The leaves & seeds are the parts employed. Of these a tea is made, which is often very effectual. The only objection is the odour, which is very unpleasant. To children it may be given in the morning, sweetened with sugar, instead of their ordinary food. The taste is pleasant: let it be given in the morning, in this way for 2 or 3 days when a cathartic should be administered; after 2 or 3 days let it be resumed, & continued for the same time; in this way alternately for a few times & it will generally prove successful in ridding away the worms. The tea, upon the whole, is the most valuable; lately the oil of the seeds has been introduced as possessing all its virtues. gtt. v. are to be given to a child from 5 to 10 yrs. & perhaps very little more for an adult, as the oil acts on the worms chiefly very little on the system. gtt. i. may be given to a child under the year. To correct the odour some of the essential oils are added. I think the best is the oil of Sassafras. Of the powdered seeds ʒss is given to children. & sometimes the expressed juice is employed.

The Spigelia Marylandica. This is considered as a very powerful vermifuge. ~~This plant~~ The leaves, stems & root are employed: the dose of the powder is ~~grs v.~~ to a child 5 grs and to an adult ʒi. The decoction of the plant is mostly employed, ℥i being boiled in a pint of water & ʒss to a child & ℥i to an adult being given, as the dose. The root is the most active part. Dr Thomson took separate decoctions of the root, stems & leaves. Into each of which he placed ½ of the common earth worms, in the first they became motionless in 5 minutes & were completely dead in 25 min. In the decoct of the leaves, they lived ½ hrs in that of the stems 3 hrs. If this be accurate, the root is much the most active part. From the use of the Spigelia, alarming symptoms are said to have resulted. Various nervous affections - delirium, vertigo - convulsions &c, are sometimes the effects of it. By many these of-

+ The Physicians of this city are very much attached to a formula first employed as a secret medicine - It is composed of equal parts of the Jalapa & Senna - with a small quant^y of the Savine leaves - which last is supposed to possess anthelmintic powers - the Savine however may be omitted. This I believe acts chiefly on the worms - comparatively little on the system.

fects are attributed, not to the spigelia, but to the roots of another plant frequently growing with it. Nevertheless I suspect that it is owing to the Spigelia alone, as it appears by the experiments of Dr Thomas, to the propriety of its narcotic power. If when the pulse is at 78 in the min. ℈ ss of the root be taken, in 3'. it will rise to 98, in 5' - to 30 - & after that, it will sink to 75, in this it resembles most amply the narcotics. Barton gives it, with the serpentaria, which he thinks prevents its bad effects. It is best however to be cautious in its use. Dr Rome of Edinburgh denies its narcotic power; he says that he has never seen any unpleasant consequences, although he has used it very freely. On the whole, it should be employed cautiously & be combined with purgatives. Dr Gallagher gives it with Senna or Rhubarb, & thinks that it is most effectual in small doses. Nevertheless prefer the Senna or dium as being superior in efficacy & less dangerous.

Melia azedarach, the Spindle of India, - the root is the part used - a decoction of the bark of the root is much employed - especially in the Southern States. Besides these, there are many other anthelmintics, but which have little power - The Helleboros fœtidus & the Delphinium may perhaps be deserving of notice - but they must be further investigated. From the mineral kingdom, we may first notice the Iron. This is very often prescribed with great advantage. The carbonate or Rust of Iron is preferred - ~~the dose is gr. ii~~ the following combination of the carb. & sulphate of iron is useful - ℞ of the prepared rust of iron ℥ss of the sulphate ℥ss mix & divide into 12 powders, one to be given every morning to an adult, half the quantity to a child. This is an admirable tonic & often excites a discharge of the worms. It is thought, also, to prevent their generation by impartingtone to the intestines. Dr Rush speaks very highly of the iron. Common salt is found to be very destructive to the worms out of the body & has therefore been administered internally by the mouth & by injections. To children, a tea spoonful is given every morning given some convenient vehicle. Ascarides. The symptoms of these are detailed by Rutherford, from a

physician who was afflicted with them. They frequent sleep, excite a heat on the body - itching at the anus, tenesmus - & mucous discharges from the rectum. There is a griping pain which often sometimes followed by a discharge of worms; the general health appears very little, but they are very troublesome & unpleasant. I had a patient who was subject to them from his infancy - but would remain free from them for several months at a time. The first symptom he would have of their appearance would be an itching at the anus & soon after he would have a discharge of ascarides. They are often attended with the same symptoms as the lumbricoides viz the general nervous affections as epilepsy, mania &c. The Purgatives are in this case much employed as calomel & aloes - the last is often used with the cornella alba - & dissolved in brandy. ℥j to the pt. - ℥ss being given to a child 3 or 4 yrs. A variety of glysters have been employed, olive oil & castor oil are both very useful in this way - they do not kill the ascarides but promote their evacuation. The tenesmus is best relieved by warm injections of milk & water - Heberden recommends a tobacco injection; but this is too dangerous. Camphor has been found very useful. The Camphor tea is prepared by powdering a ʒj of the camphor with the assistance of a little alcohol & then pouring on the powder a pint of boiling water - It is to be administered as an injection. The powder mixed with milk is also employed. Besides these there are various other remedies - as the bitters - tansy, aloes, glysters of asafoetida - common salt - & also the mercurial preparations - the sulphuret of sulphur is occasionally employed; the Ol. Terebinthina is more useful than most of these. The Tænia is denoted by symptoms which do not much differ from those already mentioned, there is no particular diagnostic symptom. In addition to the remedies mentioned for the other cases, we may add the oil - Corr. sub. in doses of 1/8 of a grain - & the Oxide of mercury - this is not of much service. Iron is a very powerful remedy here - the rust should be given in large doses ʒiij or ʒiv a day; the iron filings are also very useful in large quantities. Tin is also given in a granulated form which is made by throwing the melted tin into water by which it becomes granulated. The filings are

* It is said that by it the tænia is evacuated in large quantities – That frequently by means of a glass – the ~~the~~ hairy opinions can be seen sticking in the worm –

\# After the worms are evacuated – we should then resort to Emics – as it is true that exactly as the digestive organs are debilitated – will be the liability of the patient to worms –

also given in doses of ℥j or ℥ij to be followed by a drastic purge. Dr Fisher has recommended an amalgam of tin prepared by taking 5 parts of tin - 2 of quicksilver &c. The powder is to be given in doses of 15 to 20 grs. twice a day - If it does not open the bowels a purge should be given - It however generally partially evacuates the bowels. Of the vegetables, the male fern is recommended but it is not to be depended on. The Dalechos Pruriens has been much used both in the East & West Indies, the hairy spicule are the parts used. It is much more employed in Europe - ℥j is the usual dose for a child. It is to be increased for an adult. I have not used it. Dr Fisher employs Fowler's solution & recommends it very warmly, he has never failed with it. The Oleum terebinthinæ is one of the best remedies in tænia. The dose is ℥ss to an adult. It produces occasionally some disagreable effects as headache, pain & fever. The worst consequences are pain in the back, belly & bloody urine, but ℥ij have been taken daily without any inconvenience. Large doses purge & are less apt to produce bloody urine than smaller ones. Nauseating will sometimes produce this effect. I have employed it in a few cases, in one it was of great service, the patient immediately evacuating a large mass of the worm he says 27 years no doubt greatly exaggerated. But it did very long. The turpentine is also service able in disease of the lumbricoides. #

Lecture 47th Jan 30th

Epispastics. These I shall consider under the 3 heads of rubefacients, vesicatories & caustics. As to their proper location there is some difficulty. I have placed them under the head of evacuants, as forming a part of the antiphlogistic treatment; but it is of no great importance whether this or another situation is adopted for them. First of rubefacients. These are articles which excite redness on the skin - There are a thousand mechanical & chemical means of exciting irritation of the skin - friction with the hand, brush, woollen clothes &c are much employed. flagellating is sometimes resorted to - In asphyxia from drowning friction & warmth are useful - & here if the birch is ever proper it may be employed - In palsy - in various other nervous affections, in the low typhoid state of fever, in our

+ I usually prefer the heated oats to all the liquid fomentations — as they are light & can easily be borne — they are dry — & will retain the heat for a long time — where we dont hope any advantage is to be gained by foment^n with liquids — we may cover the cloths with a pillow filled with the heated oats — These are small & apparently trifling directs but you will find them of importance in practice —

H usually ℥ij of the Alkali is employed for ℥ij of the oil — but frequently equal parts of each are necessary.

late epidemic the Pneumonia typhoides, they are important remedies. They are also useful in other diseases for which I refer you to another chair. Of the chemical means heat is much employed, as a relaxant or as an emollient; with the view to the last property & to excite perspiration hot bricks - oats - sand & chaff - &c; baths in warm water are very useful - These we have already noticed under a former head - & present have only to notice heat as a rubefacient. Intense heat has been successful in restoring persons from a state of asphyxia - In one case Dr Physick applied clothes dipped in boiling water to a child in this state & had the pleasure of seeing it recover - Dr Rush recovered a person by throwing hot ashes on the a few coals on the forecast. Boiling water has been recommended in Paronychia - but here a blister is preferable - In low fevers life has been protracted by external warmth. In spasms of the stomach, various hot applications have afforded relief - for this purpose I prefer heated oats - other articles have been employed with perhaps equal advantage. A common mode of applying heat is by cloths wrung out of hot water & I do not like as the fluid speedily evaporates & leaves the cold damp rags on the surface. In Hysteria - there is very often coldness of the feet - or at any rate a sensation of cold - this should always be attended to - & relieved by warm applications, as bladders filled with warm water, - this coldness is not only felt in the feet but in other parts also - often at the stomach, this should be relieved in a similar manner. In local pains, external heat is very useful, as in Sciatica - in all the rheumatic complaints & in other cases: thus flannel around the neck is beneficial in cynanche. One of the principal irritants we employ is the Vol. Alkali - usually the Aq. Ammonia, is mixed with olive oil forming the Vol. Liniment as much used. The proportion of the oil may be varied so as to have it of various degrees of activity. When long employed it is apt to excoriate the skin. In common sore throat it is found very useful, an objection to its use in such cases is that the vapour is likely to irritate the nose & eyes, & is often very disagreable on this account. The Ol. Terebinthina is perhaps one of the best rubefacients we possess, answering all the usual purposes for which such articles are employed - Cloths dipped in it & applied to parts often re-

+. Whitehead's Essence of Mustard — has for its basis Turpentine — the smell of which is tolerably well disguised — So also is Tessart's Liniment —

H. This I have found very useful in several pulmonary Complaints —

times inflamm^n & pain. It increases action on the surface, & thereby the parts beneath it is found serviceable in rheumatism & sore throat & other local affections. It is useless any to dissolve camphor in it, ⅓ of the camphor being dissolved in ⅔ of the turpentine; I do not know that much advantage is to be gained by this, the camphor does not diminish the odour of the turpentine. Although when applied to the sound skin, turpentine produces considerable local inflam^n, yet this is not the case when applied to parts inf^d by heat as scalds & burns - it greatly relieves these, changes the action of the part & promotes its restoration to health. In cases of extreme debility the turpentine is much used - Dr Physick immersed an infant in a state of asphyxia in a bath of warm water & turpentine & the child recovered. A superficial irritation was induced which in a short time disappeared. The Ol. Sassafras. comes the smell better, than any other of the essential oils. Tartar Emetic is much employed as an external application. The dry powder confined on a part is dissolved by the perspiration & then induces an eruption. This is not a genuine inflam^n but a inf^n resembling which form small vesicles & are "sui generis." Besides these there are a variety of plasters employed under the name of strengthening plasters. These are of some service & may often be tried; the Burgundy pitch the adhesive plaster the emplas. rubifacients &c are used. There are certain cataplasms which are much used & which every practitioner should well know. The simplest & perhaps the least irritating is rye meal with a little vinegar sometimes with the addition of a little salt. This is applied to the foot & leg, & often with great service in the fever & bowel complaints of children, by producing a determination to these parts. A stronger cataplasm is made of the bruised cloves of garlic, of powdered black pepper, of powdered mustard &c - sometimes assafoetida. These are of the least valuable. The cataplasm of mustard is preferable. It is called a sinapism & is made by mixing the powdered mustard & rye flour with vin^r in diff^t proportions as may be necessary. When the pulse flags in fever, they are useful when applied to the soles of the feet.

In such cases 1 part of mustard - with 2 parts of ~~rye flour~~ made with a paste with vinegar is sufficiently active. I very often ~~apply~~ spread the cataplasm on paper, as it is not so apt to stick, as when on rags. In coma, apoplexy & in extreme Rheumatic cases, I generally make them with equal parts of mustard & flour sometimes with the mustard & vinegar only. In such cases they should not be continued too long - as the patient cannot notice their action & have sometimes produced - they therefore should be examined very frequently & when the skin is red let them be removed. In cases of cold feet - either the black or red pepper may be applied - the best method is to dust it on the stockings These little things you will find very useful in practice -

Vesicatories. These excite a certain degree of inflm & a discharge of serum which raises the cuticle in form of a blister. But the degree of inflm is not the only difference between them & rubefacients - there is something specific in the inflm excited by a vesicatory, which makes the discharge of serum, so although rubefacients often produce blisters it is only where the inflm is very great - Mechanical means - as hard labour will often raise blisters, heat also generally produces them. But the vesicatories properly so called are those articles whose uniform effect it is to excite blisters without much inflm - I shall notice the Cantharides.

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