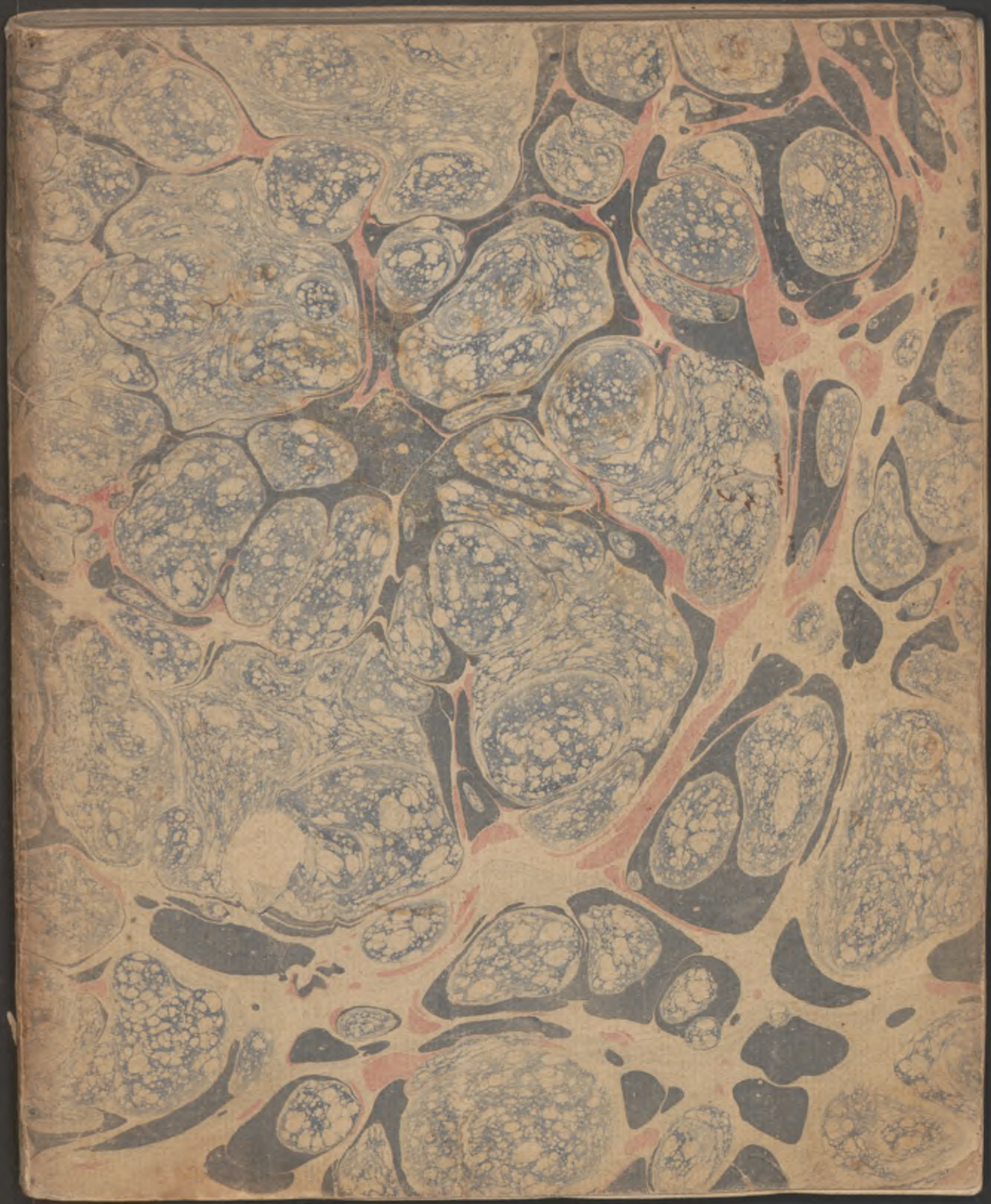

Dr Dorsey.

No 5.

Phila 1816-17.

W. 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. & enlarged

during that of 1817 '18 by Hugh L. Hodge.

Vol. 5th.

Lecture 48th Jany 31st 1817

Of the Epispastic remedies I am now to notice the most important, viz the Cantharis or spanish vesicatories. This insect is procured in Spain France & Italy. Those from Italy are the largest, but the Spanish is considered as the most active. It is said, that an acrid vapour is produced by a large swarm of them, which will blister the skin. They are procured by spreading a cloth under the tree, which they frequent, & by shaking the tree they are thrown down, here they are killed by vinegar. When well dried they can be preserved for many years if kept free from moisture. When they are however decomposed & fall into powder this powder still retains the power of blistering. Blisters were employed by Hippocrates - probably they were not made of the same insect now used, they have been at different times much celebrated but often have often been neglected, this was occasionally their misapplication, by which much harm was produced. Of late years, their proper management has been understood & they have become very universally employed. Many however attribute their effects to the absorption of the flies: this is by no means the case; you might as well say, that blindness could be produced by a worm in the stomach because the worm did not touch the optic nerve.

When used, they are applied near the eyes care must be taken, that some of the flies do not get under the lids & produce irritation. To prevent this the ointment is to be preferred to the common blistering plaster. Various additions have been made to accelerate their action. The best of these is the turpentine, as recommended by Dr Bartholomew. As there is occasionally, when the flies are not finely powdered, some difficulty in washing them from the skin, it will be convenient to cover the blister with gauze which may be stitched to the edge of the plaster. The average time at which a blister draws is from 6 to 8 hrs - on the head it must remain much longer, full 24 hrs - & you must not expect to find large fine blisters on the head - this will not be the case, large quantities of

+ Dr Rush's remarks on their use in yellow fever will shew the principles on which they are to be employed in fevers generally –

serum are discharged, but seldom is there any distinct blister. This serum is very similar to the serum of the blood. In the chief effects of a blister on a ~~healthy~~ healthy person are the local inflam^n & the strangury; but in diseases they have a much more extended operation - their mode of operation I shall consider under another head. The diseases in which they are employed are very numerous; to their use in these we have been led by experience & seldom by theoretical views. In Fevers they form a most important part of the treatment - formerly they were employed in all kinds of fever & in all its stages, & of course were frequently hurtful. Where there is great arterial action they do little good till the vena section has been premised. In yellow fever ~~they are~~ they are always hurtful. In ~~the~~ of great service; when the pain was in a great measure reduced - he considered them as useful, in drawing off the remainder & when there was much action they did harm; when very little they were also injurious; but that there is a ~~blistering~~ point between the two extremes in which blistering is proper. It should be considered as auxillary to the bleeding & purging. I have often, after one bleeding & one cathartic in yellow fever applied blisters with good effect: reduce the high action of the system a little & then you may resort to blisters; from this you may see, that the blistering point is not a point in reality - but includes near the whole course of the disease - except at the very commencement or at the close. It is often necessary, in yellow fever, to make a powerful impression at once; for which purpose I employ several blisters - I have had ~~as~~ 6 on a patient at one time. Dr Rush states their advantages in this disease to be - the following - they concentrate the pain, reduce the force & frequency of the pulse, check vomiting & induce perspiration - he might also have added, that they relieve coma - hemorrhages from the gums & delirium. In general fever, & in Phlegmasia, where the gen^l fever is the chief disease - it is no great matter, to what parts of the body they are applied - local symptoms will yield, as well, when the application is made to one part as to another - Thus in yellow

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fever pain in the stomach will be relieved equally by a blister to the extremities as by one to the epigastric, so also pain in the head &c.

Dr Cullen attributes the whole efficacy of a blister to its antispasmodic power - considering that the evacuation produced by it fully compensates for the stimulus previously imparted to the system. Blisters certainly have this antispasmodic power, but they are useful in many cases in which no spasm exists - as may be shown in numerous cases. I would rather attribute their efficacy to their inducing a new action at the part to which they are applied or on the whole system. To say that they equalize excitement is rather incorrect - as they induce greater action in particular parts. Strangury consists in a desire to void urine even when there is none in the bladder, accompanied with violent & painful spasms of that viscus. In Fevers, they are thought to be more useful, when these occurs - but in general it is unnecessary & should be avoided or be removed as soon as possible. To prevent the accurrence of Strangury, Dr Pudge made an experiment of this kind. He applied blisters to 40 patients, to 20 he gave mucilaginous drinks freely - & it was found that a much smaller number of these had strangury than of the 20 who did not employ the drinks. It is therefore proper to administer them, when a blister is applied; in some cases this cannot be done; camphor may then be employed; an anodyne glyster is however one of the best remedies. In some cases laudanum is very useful, when taken into the stomach; when any of the means are contraindicated, you may at least inform your patient, that it will last but for a short time that his pain & tenesmus in urine will commence. The irregularity in the accurrence of the attack is a little singular - in some persons there is no strangury - & this varies very much with the same person at different times. Mr Percival observes, if a blister be applied to the head immediately after it is shaved, it will be more likely to excite strangury, than if delayed 24 hrs after that operation. I do not know whether this has been sufficiently confirmed. In typhoid cases of fever, the fluid wanted is too great for the patient & in many of these cases of great debility the blister will not rise - or speedily produces a gangrene. Cases also

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+. I have known a case of Scarlatina in which the patient was so low, that sloughing accrd from the applicn of a blister to the neck that life was preserved

occasionally occur in which a gangrene takes place where we have no reason to suspect it. This however is rare & should not deter us in similar cases from pursuing the same plan. When we have any reason to suspect a gangrene, as a consequence, do not apply the blister to the lower extremities but to the arms which is better to the body as the powers of life are weaker in the lower extremities than in other parts. In obstinate cases of intermittents, in tertians & quartans blisters are useful but here it is often very useful to prepare the system by bleeding. Then to blister & afterwards the bark which will operate more effectually. In the Phlegmasiæ all acknowledge their utility. They should be applied as near as possible to the part affected, as they deplete from the vessels of the inflamed parts & in this manner afford relief. In cholera morbus they should be employed early & are often effectual in relieving the distressing symptoms. In diarrhœa also they are useful, in obstinate cases they should be applied to the abdomen. Otherwise the wrists will answer. In dysentery after depletion they should be applied to the abdomen. They are useful in various spasmodic diseases, as colic, convulsions, epilepsy, asthma. In consumption & catarrh they afford great relief & should be applied directly to the part: the wrists are less advantageous.

Lecture 49th Feby 3rd

Blisters are also useful in croup. They should be applied to the larynx & trachea but not till after depleting. Cupidies have been freely employed. In all the other angina & inflammations they are very useful. In the swelling of the testicles as a consequence to the mumps, they are very useful. Dr Rush used them in Scarlatina. It would be useless to enumerate all the diseases in which they are employed. Indeed there is hardly a disease in which blisters are not employed. Dr Physick has the credit of first employing them in a to stop the progress of a gangrene. There they are indeed very effectual, without fail, to arrest the further progress of mortification. This I consider as one of the most useful in prac

† & sometimes superior to that of the Spanish Ply — I believe they may be equal but not superior — the superiority he attributes to their being used in a recent state — the Spanish Ply being generally employed ~~in~~ after being kept a long time, but age does not influence the acty. of this article —

ments in Modern Surgery. There are other insects which are employed as vesicatories besides the Spanish fly - The only one, which I shall mention is the Cryptha vittata. In N.J. & G. they grow very numerous, infesting the potatoe vines in large numbers. Their vesicating power was accidentally discovered by their inflaming the skin, upon rubbing upon it - they are often called the Meloe Americana - For their history I refer you to Dr Coxe's Dispensatory. Dr Schott in his inaugural thesis has published many experiments on this subject - He found, that the fly although it had been kept for a long time produced vesication in a less time than the Spanish fly: That on an adult a blister would be raised in 5 hrs & a half & on children a fine one in 2 hrs. He concludes, that it is more certain & active than the Spanish meloe vesicatorii - Dr Guard from its employment in disease & more extensive experience comes to the following conclusions - 1st Powder of these flies on the skin will raise a blister - 2nd That their activity is equal ~~to that of the Spanish fly~~ - 3rd That a saturated tincture possesses the vesicating power - 4th That both the powder & tr will induce strangury - 5th That this acts in rather a shorter period 6th When given internally it exhibits the same effects as the Spanish fly. & 7th That they eventually induce a purulent discharge from the skin in the same manner as the common fly - I have also tried this insect & I think that there is very little difference between the two - & the meloe Americana is worthy of employment - but probably cannot be obtained in sufficient quantities. As to the mode of application of blisters I will make a few observations - When to the head the hair should be shaved close in some cases some of the hair may be left in front to prevent the unpleasant appearance of a bald head - the blister should be large & circular - & cut so as to lie smoothly on the head - A common hard horsehair will be sufficient to retain it. To the back of the neck the blister should be lunar shaped - with

†. It is now seldom resorted to for stopping hemorrhage — the ligature has almost wholly supplanted it — yet there is one case in which ~~it~~ it is still absolutely necessary — & that is for a ~~bleeding~~ for bark in the fauces — for such a case I have seen it employed — & with immediate success &c.

‡ Issues discharge more pus — are more extensive & are on the whole most effectual —

concavity upwards - the extremities should be perforated & strings passed through them to be secured to the night cap. In children the ear should be excavated so as to receive the ear. Here they are to be secured by a handkerchief around the head & throat. In applying them to the eyelids it will be most prudent to close the eyelids by adhesive plaster. To the epigastric region they may be angular, so as to adapt them to the angle formed by the ribs. To first & third shoulder straps should be joined to a circular bandage - one also passing over the perinaeum will be useful. To a bubo a compress & T. bandage are necessary. To the scrotum a suspensory bag is best. To other parts of the body, their shape is immaterial. A square or a long form is preferred.

I proceed now to the third division - viz - Caustics. The actual cautery is a very old remedy - it was long employed for surgical purposes especially to stop hemorrhage; till the discovery of the ligature by Ambrose Pare in some degree brought it into disrepute. For medical views it is occasionally employed - Dr. L. Valentine, a French physician has lately recommended it in various cephalic affections of a chronic nature, in chronic opthalmia also & says that he cured one case of blindness with it. I however do not think that it has any advantage over the common caustic; - As to the burning of moxa, it is still employed by the French & Indians - but it is as barbarous a remedy as the scalping knife - & should be considered in the same light.

I will not detain you with specifying the several modes of performing setons & issues but refer you to practical writers. Setons are generally applied to the back of the neck - they are preferable to issues, in the position as they are cleaner & can be more easily attended to. They are employed in various diseases of the head. Issues are also very much employed in diseases, after inf.n has been subdued; thus in diseases of joints they are made after the violence of the attack has yielded to depleting remedies. In chronic diseases they are usually applied at the insertion of the deltoid muscle

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on the left arm as being the most convenient situation. Particular
Escharotics. Van Helmont long ago held, that nothing acted on the liv-
ing body on chemical principles - the life of a particle in some instances
however so quickly destroyed, that I do not think any other cause, than a
chemical action can be assigned - sometimes a draining appears to be
the result, which terminates in gangrene - The Common Vegetable caus-
tic is one of our best ~~caustics~~ articles under this head - When made it
should be kept in close bottles which should be of a size proportioned to the
quantity of caustic as it is very deliquescent - The advantages of this are
1st By its deliquescent & penetrating powers, it is adapted to the formation
of Eschars - take care that you do not go too deep, especially in the neigh
bourhood of large arteries, of which there is some danger
2nd From the same property it is adapted to remove the callous
edges of old ulcers but it will not answer for healthy ulcers or for
the removal of chancres - as too much of the surface would be destroyed -
3rd In open abscesses it is also well adapted -
4th In tumours & ulcers of the throat it is much employed as
it can be neutralized very quickly by vinegar -
The mineral acids are often employed as caustics, but their fluidi-
ty is a great objection, as their action cannot be confined - They are much
in use to destroy vermin as they accumulate in hot weather - 3j of the
nit. acid to ℥ij of water is a convenient proportion -
The Lunar caustic or nit. argenti - is the best caustic we possess
In healing ulcers it is admirably adapted; it stimulates the granulations
so that cicatrization is quickly produced; frequently in 24 hrs the part
touched by the caustic is covered by a cuticle: as it coagulates animal matter, it does not spread
as the vegetable caustic - A convenient method of applying it to
sinuses is to dip a silver probe into nitric acid, which forms the caustic
& can easily be passed into the fistula - There are numerous escharotics
in use, which I will not detain you with - but refer you

14 + The citrin ointment is very excellent — there is perhaps no article which will succeed so generally in eruptions on the skin —

to the dispensatories & The savine may perhaps be ranked under this head & is very useful to keep up the discharge from a blister, here it is preferable to the spis: partic: ointment which not unfrequently produces a troublesome strangury; — From what has been said, it will be seen that the class of Epispastics is very important & deserving of much attention — It would be unnecessary to be more particular in this place upon their practical application, as you will receive abundant information on this head from other sources — let me however remind you of the necessity of making yourselves well acquainted with the general principles in the use of blisters, guided by which you will be able to adapt them to the circumstances of your patient.

Lecture 50th Feb 24th

I now proceed to the second grand division of our remedies, or to stimulants — I have already explained my views of the nature of sedatives & shall not now enlarge on this subject — I shall consider under the head of incitants those remedies which excite the system gently & which are commonly employed solely for this object. After all acute inflam: diseases, little else is required, than a more generous diet — & a greater latitude in the choice of foods this may therefore be considered as the lowest order of stimulants — this however I would not resort to, until all morbid action had ceased — there are however some cases of disease in which these stimulants are to be ordered — As to their mode of operation little need be said — some appear to act on mechanical principles, others on chemical — & others influenced by neither of these appear to be adapted to make an impression on certain organs; as odours & vegetable substances on the nose — hence in cases of asphyxia all of them are brought into action — — Heat & Cold — besides a stimulant operation appears to possess other properties, which

+ I today read a case of asphyxia - from the fumes of charcoal in which the man was round by the long continued use of the cold water thrown on his face -

have been already noticed, but they are employed purely for their stimulant powers in the fluid & other low states of fever. A precursor of death in many cases is cold feet & legs. warmth to these is of great importance & often prolongs life for a considerable time. In asphyxia from submersion heat is a very valuable remedy. Cold is not much employed as a stimulant, except in syncope where it is a very common practice to sprinkle the face with cold water. Frictions have been long employed as a stimulant the ancients used them very much & in modern times they are found very useful. They are made best with a flesh brush or piece of flannel. In syncope, in asphyxia in chronic rheumatism palsy &c they are very advantageous. Electricity & Galvanism are much resorted to in tumours palsy, amaurosis, chronic rheumatism, gout & in some cases with advantage. In partial palsy from contusion & in swellings about joints they are very useful. I have known the deltoid muscle completely paralysed by a blow, which was relieved by electricity. Of the two I decidedly prefer electricity to galvanism in all cases as being more powerful & efficient.

The diffusible stimulants. These are very improperly I think classed under the head of sedatives by professor Chevers, as although their final effect is more or less narcotic yet they are always administered with a view to their stimulant operation. As the purest specimen of the class I shall first notice the volatile alkali. This is procured chiefly from animal substances; although it is found in some vegetables. The solid carb. ammon. the acid ammonic & the aqua carb. ammoni. are all employed but I prefer the concrete ammonia, the common vol. salt. I prescribe it in the form of the volatile julep. ℞ Vol. Alk. ʒij. Tinct. Asab. & each aa ʒi. Aq. ʒvi M. Laudanum is sometimes added. gtts xl to the ℥iv. This is given in doses of ℥ss every ½ hour, 1, 2 or 3 hours according to the urgency of the case. It has the effect of exciting the heart &

+ It is the report of all our stimulant articles - & may be resorted to, when other ~~ot~~ stimulants would be improper. After inflam^y action is nearly reduced - & before we employ Tonics - or when we cant wait for the tardy operation of these articles - the vol: alk^i is a very appropriate medicine - There is no febrile disease in which it may not be employed during the convalescent & but it is contraindicated in the early stages of all diseases.

arteries. Its operation however is very transient, perhaps there is no article which is more so; from this circumstance it must be given frequently. It is employed in all febrile diseases, but not in the early stages or previously to proper evacuations. In Europe it is used in intermittents but in this country there is too much action in the system to allow of this. The same observation will apply to remittents in bilious fevers certainly not till late in the disease. In the Phlegmasiæ it has been employed in chronic rheumatism in some cases it may be allowable but not where there is any fever or inflammation. In certain cases of retrocedent gout it is very useful & powerful, where it attacks the stomach. It is one of our most efficient remedies.

In Pleurisy it was formerly the custom after one or two free evacuations to resort to the vol. alk. but now evacuations are carried to a much greater extent, & the alkali is seldom resorted to. It is however a very excellent expectorant & is to be employed, where the system will allow it. In the said Pleurisy it is very valuable & in the tremors, debility & mania from intemperance even when there is local inflamn. & there it is of immense benefit, especially in conjunction with opm. Where there is a diuretic effect on with intemperance it relieves the pain cough, promotes expectoration ~~[illegible]~~ excites sweating & strengthens the pulse. In Pertussis there is in the early stage too much phlegm but afterwards it may prove useful. In Hooping Cough arising from errors in diet it is useful but in no other case. So also in Dyspepsia. In spasms of the stomach in Hysteria it is very valuable. Many have used it in diarrhœa & dysentery. In the clap & neuroses it has been employed. The French direct it in Apoplexy but certainly this is wrong, unless in that case which depends on indigestion, which always produces a determination to the head. Lately it has been recommended in Cancer, but here I

+ Perhaps longer, when induced by alcohol than when brought on by any other stimulus

+ The quantity should gradually be diminished — Abstraction here is in reality a powerful sedative & hence by diminishing the daily allowance of our patient we actually deplete. thus in acute inflty dis. accur & in persons habitu & intemperate we are compelled to employ moderate stimulants.

cannot believe it to be of much service. ~~Said~~ It is maintained by some to be useful in poisoned Wounds, but by others this is denied. The accounts are very contradictory. The late Dr Ramsay of S. Carolina recommended it in cases of bites from the Rattle Snake. In Asphyxia & Syncope it is much employed especially as a stimulus to the organs of smell. In the low states of biliary & yellow fever it is of great service & is employed to a great extent. I have given in yellow fever upwards of ℥i in two hrs. Dr Rush speaks very highly of this article. He says that he never knew it produce an unpleasant symptom & that the excitement it produces is superior to all others. — I have not placed the Vol. Alkali at the head of the diffusible stimulants, because it ~~is~~ is the most powerful, but because it is the purest specimen of the kind which we have. There are many articles, whose powers, as stimulants, are greater; & I will notice some of those which are employed for this end independent of their narcotic effects. Alcohol is one of the most powerful. It is the product of the vinous fermentation & is obtained by distillation. It is a powerful stimulant. In a small quantity it accelerates the circulation, strengthens the muscles, invigorates the mind, increases the secretions & stimulates most of the corporeal powers. These effects continue for some time & are succeeded by a corresponding depression. In a larger dose, it induces intoxication or a temporary mania which goes off in stupor & sleep. In still larger quantity it instantly kills without any previous excitement. In prescribing it, the habits of the patients are to be attended to, as some who are accustomed to it will bear large quantities & others very little. When habit has rendered it necessary we should not suddenly take it away, as the patient would quickly sink. When much activity is required we order brandy or Rum which contains about 52 parts

+ It is also less violent - & more permanent - Malt liquors also contain alcohol - ~~&c~~ are sometimes to be preferred, as they ~~[illegible]~~ contain some bitter vegetable matters & have considerable pungency from the carbonic acid they contain —

nourishing articles should also be introduced. as essence of mutton - of beef &c - Sago - Tapioca - arrow root - yolks of eggs - &c &c - When these powerful stimulants - induce heat - flushing of the face - restlessness &c - they should be omitted for a while then resumed — Alcohol also is much employed in some nervous diseases, particularly in Tetanus - which is usually trusted to the free exhibition of wine & opium —

of alcohol. In most cases, wine is employed as being a safer stimulus. There are also other effects produced by wine. It is a much better tonic, than any of the other articles. Where there is any inflammation, wine & alcohol are not to be employed, except in cases of intemperance, where it will be necessary to keep up the usual stimulus, as otherwise the patient would be carried off by various nervous affections. All agree, that wine or alcohol is not to be used in remittent fevers, as the bilious & yellow till the last stage of them. but I think that it is seldom safe while any inflamed action remains. In intermittents, it may be sometimes the employed during the apyrexia. but often there is too much action even for the bark. The Port Wine is usually preferred. It certainly possesses considerable astringency, but it is so often adulterated, that other wines are usually to be chosen. In the Spanish plague of wine has been much used in very large quantities. In those low states we begin with the White Wine; then wine, or diluted brandy; brandy toddy; afterwards raw brandy; sometimes with pepper & other condiments. When administered in this manner, it acts as a narcotic & therefore should be frequently repeated. The patient should not be allowed to sleep too long. but should be roused to take his stimulus at regular intervals. even delirium does not prohibit their use in these cases.

Lecture 51st Feb 7th

Ardent spirits, are much employed in chronic cases, but this should be done with caution as by excess it becomes more injurious, than the original disease. They have also been recommended in the Phlegmasiæ, but I am often noticed the circumstance that it is only where the inflm. has subsided that they are proper. that I shall not insist on it, at present. in some cases of great powers they may be used.

Alcohol & the mineral acids, when mixed & distilled, form the Ether.

+ I have also given it in Ounce & a half doses beat up with eggs —

+ This is a common remedy in the ~~East~~ West Indies & is said to have effected cures after the accurrence of the black vomit —

The sulphuric Æther is most used, in many of its properties it resembles the alcohol, it is very prompt in its effects but proportionably transient. It is employed as an antispasmodic & a stimulant, but has less of a tonic nature than alcohol. It is used in various spasmodic diseases, in doses of gtts xx, repeated to ℥iss by measure; in extreme cases ℥ss is often given. We have from various modifications of it. Hoffman's anodyne consists of Æther with an addition of quantity of alcohol. It might be called diluted Æther, the dose is from gtts. xx to ℥ss, it possesses powers which are peculiar, it is preferable in some cases as not being so volatile as the æther, it is more easily taken.

The Oil of Turpentine powerfully excites the system; the dose is ℥ss to ℥ij when given as an anthelmintic, but as a stimulant ℥ss is the usual dose. In the typhoid states of yellow fever, it is given both by injection & by the mouth. In spasmodic affections of the bowels it is given, especially in the flatulent colic, by injection. Dr Bayham has recommended it in Epilepsy this is natural where there are worms; but in other cases its use is not so clear & it must operate by the general impression on the system.

Of the Vegetable Stimulants. The Capsicum is more active than most of the usual ~~stimulants~~ spices, but they all are more or less stimulating. It is much used as condiment in the W. Indies & other warm countries, not so much so in our own country. It is ~~much~~ used more frequently as a medicine. I consider it as one of the best of our active stimulants, as being more free from any narcotic power. I prefer given it with the Ford. or in pills. I have never used it in decoction. In dyspepsia it is of great service; here it is preferable to ardent spirits, as not likely to prove injurious. In protracted intermittents it is very useful with the sulph. of copper, but this combination is not to be employed to the exclusion of the tonics. The proport.n is 1/8 of a gr. of blue vitriol to grs v. of the capsicum. In yellow fever I have much used it with great service. In 1808 I gave grss. xx. ℞ As it appeared in Charleston brandy ~~was~~ & Cayenne pepper were sue-

+ This is to be employed as a gargle - & is said to be very effectual in accelerating the separation of the slough.

H - a good treatise on the disorders which are counterfeited by flatulency ~~on~~ would be very acceptable - there ~~is~~ is hardly any disease, the symptoms of which it does not sometimes induce - which will ~~do~~ ~~to~~ often deceive not only the ~~out~~ inexperienced but also the experienced practr

cessfully employed as an external application. Lastly also it has been recommended in Cynanche maligna. The prescription in this case is to take ℥j of the capsicum - ℥ss of common salt - & to infuse in ℔ss pt. of boiling water after which ℥ss of vinegar is to be added. This however ought not to supersede the use of emetics. Whether it is ever proper I cannot from my own experience determine. It is proper to remember, that in prescribing the capsicum, some parcels will prove very active & others are inert. It varies very much in ~~[illegible]~~ activity. The black pepper possesses similar virtues, but is not so active.

Ginger is an excellent carminative. Flatulency is a common symptom in ~~[illegible]~~ disease & is often very troublesome. The following is very useful in this case. ℞ - rhei, rubig. ferri & zingib. ā ā ℥i. m. ft. div in ch. xij.

Dr Cullen has, as I think, very correctly classed all the aromatics under this head. His description of them is very valuable & to it I refer you. The alliaceous plants as the garlic should also be included.

I proceed now to Narcotics. These are medicines exhibited with a view to their sedative operation; they are known by the name of ~~[illegible]~~ Anodynes, Sedatives &c but I prefer the above. Look at Murray's account of their operation. At the head of my list of narcotics I place Opium. This is the produce of the P. somniferum & is procured in Europe & Asia. It is not native in the U. States but is often raised in our Gardens. From Egypt & Persia it comes in flat round pieces of a reddish brown or liver colour. The Turkey Opium is the best. It is considered as a gum resin. It burns like resin & part is soluble in alcohol. Portions are also soluble in water. The resinous part however possesses most of the narcotic power. & diluted alcohol is considered as the proper menstruum. The Vinous tincture is also in use. Heat impairs its

† Opium is the purest specimen of a Narcotic – At one time the contest was very violent between those who maintained its stimulating operation & those who magnified its narcotic powers – The disciples of Cullen & Brownance arranged upon the opposite sides –
I consider it — &c

powers, in what way is not ascertained, as neither is the condensed vapour the residuum ~~actions~~ powerfully narcotic. I consider it as a gum resin, containing other principles, little known. The taste is somewhat astringent & the colour of a dark brown or black. The whole plant is to a certain degree active, but the extract is the important article prepared by boiling & evaporating. Rush prefers it better to have the poppy head wounded ~~two~~ & white liquor will exude, which when dry forms the opium. Opium is very often adulterated by the inhabitants of the East, before they sell it. ~~This powerful diffusible stimulant & diffusible narcotic~~ I consider its first effect, stimulant, but afterwards it is narcotic & one or other of these effects may be obtained according to the dose. That the primary operation is stimulant is shown by the pulse being excited in the first instance, almost invariably. This excitement is various & powerful & consists chiefly in an increased frequency. Dr Cramp found that gr. i. of ext. op. would in 5" raise the pulse from 70 to 74 - in 10" - to 76 - in 15" it was the same - in 20" it was reduced to 74 & in 45" it was brought to 70. This power is shown also by the action of the skin which becomes moist. The patient is merry & sprightly & happy. It then produces its narcotic effect. In a fatal case, in which life is attempted by the exhibition of laud.m, the pulse is for the first 20 minutes, full & bounding, not frequent but quick. This is the opiate pulse which when once felt will always be recognised.

Lecture 52nd Feby 7th

Professor Murray has observed that opium in a large dose proves fatal without any previous excitement. This I cannot absolutely deny but I have never seen it, although I have attended persons who have swallowed large quantities, many who have taken ℥ss others ℥i & one case in which ℥iv were swallowed. Now in many one of these

+ when the mercurial is given alone Divisions are necessary.

I find that this method was recommended by Dr Monro of Edinburgh - in his inaugural Thesis - Feby - 1815 -

If I arrived within 30 minutes I found my patient highly excited after which stupor the more produced. Now, as opium is more frequently taken than any other article, with the view of committing suicide, I will detail the proper practice to be pursued where poison have been swallowed –
When opium has been taken in sufficient quantity to destroy life the first effect is stimulant – you find your patient happy & contented sometimes but not often repenting of his purpose & frequently in a state of apathy, this will often last for 30 minutes – in all these cases you are to exhibit but very promptly a powerful emetic. The sulph. of zinc is the best – but it should also be given with ipecac. ℥ss of the white vitriol – to ℥ss of the ipecac. If it does not operate in a few minutes it should be repeated & the fauces at the same time be irritated with a feather. No diluent drinks should be exhibited – as they serve only to spread the poison over a more extensive surface & to hasten its passage into the duodenum. When vomiting is induced then diluents may be resorted to – as also free bleeding after the ℥xx. This relieves the head – & prevents apoplexy.
In the 2nd stage there is diminished action – this is said to come on suddenly in some cases. I have never seen it so soon than 30 minutes here there is a total want of sense & motion – the breathing is stertorous the pulse slow being 30, 40 or 50 strokes only in the min. but quite full – there should first alycit should be to remove the poison – but the patient cannot swallow any medicine – there Dr Physick has afforded us the means of relieving our patient – He has proposed to pass a tube into the stomach through the mouth or nose in order ~~to~~ fluids through it & then by suction extract it – thus washing the poison out of the stomach – It is not always necessary to wait for the 2nd stage before you resort to these measures I was the first who put this suggestion into execution in the case of a woman who was apparently in the article of death – she recovered – The 2nd case I tried it was in a young man who had taken ℥ij of laud.m emetics did not operate & I resorted to the flexible tube & after using it vomiting came on

& my patient recovered. In the administration of medicines in these cases it is very useful. In the cases of two children who had accidentally swallowed a large quantity of Laud.m Dr Physick injected brandy & water. This had the immediate effect of exciting the phenomena of life. The pulse became evident, but these symptoms soon ceased & the Dr became fearful that the brandy would hasten the event. By gradually however diminishing its strength he succeeded in restoring one of them, the other died.

Whether the opium is taken from the stomach or not, brandy & water weaker or stronger as may be necessary is to be resorted to. Vinegar also, sinapisms should be applied to different parts & stimulating glysters be administered. Dr Seaman of New York in one case employed the rod with success which if ever allowable must be in these cases. Dissections show that the stomach is inflamed which appears in spots scattered over the surface, as is usual. — The largest dose which I have known taken with the view of ending life is grs xxxvi. of opium & yet the smallest dose has been the cause of death. In the case where ℥iv of Laud.m was swallowed I was called at 2, o'clock at night & arriving in a short time found my patient in high spirits. He refused to take my medicines, upon threatening him however with an exposure he consented. I gave him ℥j of white vitriol & ℥ss of ipecac. at the same time bled him freely. He vomited copiously but in 2½ minutes he began to grow & drop. Stimulants were now demanded, brandy & water was exhibited as long as he could swallow but as Dr Physick had not at that time prepared the tube I resorted to Glysters & sinapisms. In 24 hrs he perfectly recovered.

Opium exhibited in small doses & gradually increased has a powerful stimulant operation & induces habitual intoxication which is equally pernicious with that induced by ardent spirits. To obtain the effects of opium for any length of time its dose must be constantly increased. It should therefore very seldom be exhibited in chronic diseases as the quantity will soon be enormous & the article become as necessary as brandy to the drunkard. By its constant use, the system becomes vitiated & can

not withstand the least injury or disease without producing those troublesome symptoms known under the title of mania a potu. The habit must be changed. This can sometimes be effected immediately by substituting the hop tea or some other stimulus. The hop tea is made by steeping a handful of the hops to a quart of water & let the patient drink it as a drink or coffee. garlick &c. are often very useful. But however it is to be accomplished, it should always endeavour to break this destructive habit. Lately I had a patient who for a disease of 5 yrs standing had accustomed himself to take ℥viij of laud. daily. In 6 weeks I was able to reduce it to a few drops. The patient should be kept up by a good diet & by other stimulants if necessary, the laud. should be gradually diminished. By habit large quantities are taken without producing death. Dr Mungo's relates a case in which ℔ ij of laud. are taken daily. An antidote to opium has been sought for but it is not likely that it will ever be found. We must content ourselves with removing the cause & then adhering our remedies to the disease. Purgatives are not proper.

As to the good effects of opium in the cure of diseases, it may be considered 1st In cases of severe pain it is superior to all remedies. 2nd That it is one of our best stimuli when given in small doses frequently repeated. 3rd To induce sleep no article is equal to it, 4th The same may be observed of it in relieving spasm. 5th in checking excessive evacuations. It changes morbid action. In diseases it is a very universal remedy; always remember its properties when you prescribe it & adapt it to the existing state of the system. In Continued Fevers. Cy Rhus, Lignadia & Ignatius, it is to be employed but the inflammatory action should be previously reduced. This is true of Cy Rhus, of which I have never seen a case, which did not begin inflammatory. In the 2nd stage caution is still requisite in employing it. Some have substituted wine for it. This I do not think right, as wine possesses very little if any sedative powers.

+ when there is a hot dry skin & an active pulse - it should not be employed - as it far from inducing sleep - it will render the patient watchful & distressed - in the 2nd stage when these symptoms have subsided it may be employed - but still cautiously - I have known a single grain produce coma - & I believe death - as he was never roused from his stupor -

Opium is very improper in delir.m under any other circumst.s manifestly aggravat.g all the symptoms - & - In all cases of nervous tremors & decay in this disease it is the remedy -

- It has also been given with the bark - but with no advantage - the indications to be fulfilled by these articles are different - & they should be exhibited at dist.t periods -

opium is by no means useful when opium is to be employed. Opium has a specific agency on the brain & should therefore be cautiously used in apoplectic affections of that organ. In fevers it is directed for various symptoms. In gemine typhus it is essential in small doses - where delirium occurs in a low state of the system it is to be used. & then only. diarrhoea often demands its use as also another frequent symptom of fever subsultus tendinum. In cases of great weakness opium with the vol alkali & cordials are the proper remedies.

Lecture 53rd Feby 10th

In intermittents, Opium is not very frequently employed, but this is by no means a modern practice. It was known to the ancients, who gave it an hour before the paroxysm - I am in the habit of using it but never till the system is in a proper state. that is, free from infl. action, which is to be accomplished by the use of evacuations - neither do I employ it to the exclusion of the bark. Dr Lind has recommended it after the commencement of the hot stage. & observes that it lessens its duration, by quietly inducing a general moisture over the skin. Where he has employed it in this way - jaundice, dropsy, or disease of the viscera has never occurred. I have practised this practice - I cannot agree with Dr Lind - it will not produce a termination of the complaint, in some, however it lessens the violence of the symptoms - I prefer exhibiting it at the commencement of the paroxysm - & not during its continuance - To prevent its narcotic effects, a practitioner has recommended it to be given with the vegetable acids or with strong coffee. In our bilious fevers, it is never to be exhibited till after powerful evacuations; when the system sinks in them, & in yellow fever, & there is subsultus tendinum, delirium, hemorrhages from the gums &c. opium is to be exhibited as in typhus in small doses & at short intervals with vol alkali - brandy &c &c

When diarrhoea also occurs as a symptom opium is very valuable. Some practitioners in these low cases of yellow fever exhibit opium & calom. with what intention or theory is not well ascertained – they say however that it is with a view of salivating & at the same time restraining the diarrhoea with it, many of their patients recover – Camphor & opium in combination are also much used, Campbell recommends it where there is much watchfulness – but I do not believe much is gained by the Camphor. In febrile diseases with much action it is often given to ~~relieve pain~~ produce sleep – Now in such cases it is very wrong to administer it – as it will not produce sleep unless the dose is very large & then it is so disturbed & the dreams so terrible that the patient prefers ~~to remain~~ being awake rather than be thus tormented. The stimulant effects of such doses also aggravate the disease – It is much better to bleed in all such cases & let the patient become weary – when he will occasionally have a pleasant sleep. But in cases of local infl.n where pain is the principal symptom & where this is totally disproportioned to the general disease – opium may be allowed – as in Odontalgia, Pyromyelitis, Semicrania – ~~or such like~~ Otalgia &c – In some of these cases very large doses are required – Monroe to one of his patients with a stone, gave grs. XL. & after the operation the same effect was produced by grs. X of opium. Dr Cullen allows it in the suppurative stage of infl.n, but it may in many instances be given sooner – no general rule can be laid down. Good writers has said that it is not necessary in any of those in which we may bleed – but there are many cases in which this rule will not answer. Where large abscesses have formed opium is very proper – In Gangrene it becomes very important especially in that species ~~recommended by~~ noticed by Mr Pott as occurring in the feet of old persons. As to Surgical complaints we derive from opium great advantages. In all local inflam.n unaccompanied by much gen.l fever & where the pain

40. + It may often be employed externally in these cases ~~also~~ it always I believe in this way produces some effect on the system — & moderates the pain — I am very much in the habit of adding it to poultices — where there are large abscesses it is useful to cool down the system —

is secure it is very proper & useful. In some instances it would prove too stimulant but you should always consider, whether this effect would prove more hurtful than the severity of pain & then prescribe or refuse it accordingly. In Ophthalmia it is not to be applied internally in the acute stage but in some of the chronic cases of this infl.n it may be proper according to the suggestion of Mr Ware. If this more hereafter. Pneumonia in this country is an highly inflam.y disease & demands copious evacuations. After these opium, is often useful in relieving cough & promoting expectoration. This last effect however is denied by Cullen, but when exhibited at a proper time & in a suitable state of the system it possesses this virtue: it consequently enters into the composition of the various cough mixtures. In the chronic form of Pneumonia it is very useful & by some it has been trusted to even in the acute stage, but this most certainly very wrong. Its employment in catarrh & in the several forms of Glyncanche may be adduced from what has already been said. I use it very frequently in the following cough mixture. ℞ Sacch. gtts xl. Ext. vin. ℥i. Gum Arab. ℥ij Ol. anisi. gtts vi. Aq. vel Solut. Glycyr. ℥vi. m. the dose is ℥ß. Another mixture often very useful is to take equal parts of the Paregoric elixir & of the Sr. Squill. The dose is ℥i. In influenza the prejudice in its favour is greater than in ~~Cough~~ mania but for this ~~there~~ is no particular reason. In Pertussis it is not to be used during the inf.y stage. In consumption it is greatly recommended but should be employed with great discretion. Dr Lobstey one of the latest writers on the subject observes that when we have any expectation of a cure it is not to be employed but otherwise it may be given to palliate the symptoms. This may answer as a general rule, but its effects vary in different constitutions in some it proves very useful while in others the disease is aggravated. In Podagra it is certainly not to be used in the early stages. The celebrated Brown Bell

+ Some cases of Hemoptysis appear to be brought on by coughing, the least irritn inducing a cough which is followed by a spitting of blood. In such cases Opium is useful.

In dysentery it is useful after free evacuations - in the first stage it is generally wrong - but in some cases where the pain & tenesmus are very severe an anodyne injectn is very serviceable - If there is much fever - V.S. is demanded - after which the anodyne injectn. Rhear: & Chalk in combin may be given by the mouth after the fever is subdued. In Cholera - after free evacuatn opium may be administered. Dr Hartshorne has cured many cases of Cholera by V.S.

~~H. In acute diseases of the Head as a general rule opium is not to be employed - in Acute Phrenitis never -~~

D. Opium is not likely to cure Mania - but may be employed in many cases very advantageously. In Melancholy our medicine is invaluable - In Mania a Patient I place my chief reliance on Opium - often alternating it with the Hyos.

a victim to his own theory. He died of a apoplexy induced by the free use of stimulants during an attack of the gout. When however the disease attacks the stomach it is to be freely employed in conjunction with the various cordial & stimulant articles. It often great relieves the spasms but must be exhibited in very large doses, & often given ~~opp~~ of laudn with no effect whatever; but it is necessary here to feel your way & to begin with small doses as in all other cases. In Acute Inflam.^n It is not generally to be employed. In some few cases however it may be proper as where there is a stone in the bladder or kidneys. In Hemorrh.^d its use is to be directed upon gen.^l principles that is it is not to be employed in cases of active bleedings but in those only where there is but little action & where the system is depressed. In eruptive fevers it has been recommended but in the first stage it is not allowable. In Small Pox the cool regimen & purging is preferable. Sydenham altho' every kind of depletion has recommended it in Scarlatina but in this country it is altogether inadmissible till after proper evacuations. In the various bowel complaints it is much recom.^d & with proper caution is very beneficial in diarrhea & colic, ~~cat~~ cholera. In colica pictonum it is very advantageous & is a little formidable cathartic which must depend entirely in relieving the spasm by which the contents of the intestines have been detained. In the bilious & flatulent colics, it has also been useful. one dose in the latter form often proving completely successful. — In the Acute stage of Mania, it is certainly improper but in the chronic form it & other stimulants become necessary. Dr Physick after evacuations exhibited opium in large quantities in recent cases & in one case succeeded but in others it has failed. In the traumatic cases of Tetanus opium is very valuable, it does not always succeed, but it is much more successful than any other article. it should be given in large

44 t. Idiopathic Tetanus is, I believe, very rare. I conceive, that the cases usually termed such are hysterical. many Rheumatic cases are also confounded with it. ~~The~~ W.P. & Ind. Opius are the most important remedies in such cases

tt. Where the fits return periodically, opium given just before the expected paroxysm is said to prevent its occurrence but this is rarely the case.

ttt I have often seen W.P. tranquillize all the symptoms. So that a much smaller dose of opium will be successful. The habitual use of Opium in these cases is to be avoided —

quantities to induce its Soporific effect. ✕ In that terrible disease Hydrophobia which has hitherto resisted all our efforts I am anxious to see Opium carried to a much greater extent than it has hitherto been — It is certainly our duty to make use of powerful remedies in a very free manner in diseases which are invariably fatal — Do everything boldly in all such diseases, you cannot do much mischief & may be the happy means of vanquishing what has hitherto been triumphant

Lecture 54th Feby 11th

Opium has been recommended in Epilepsy, but with very little success — we at present know too little of the Pathology of this disease, to expect any advantage from our medicines — Dr Chapman considers it as arising from a depraved condition of the digestive organs, but this is certainly only one of the remote causes of this disease — & remedies addressed to the stomach often, very often prove totally inefficacious. Dr Rhyne has maintained that low diet is the most successful, which might appear militate against the use of opium, but it must be remembered that the op. is to be given in such large quantities, that it would conduce to the same end. ✕ In what is called the aura epileptica — where the patient feels a sense of coldness as if a cool air was blowing upon him which in some cases amounts to a pain — Dr Cullen considers the opium as very valuable — In Hysteria it is of great service; where there is great arterial action, bleeding should be premised — which renders its effect more certain. ✕✕✕ In Asthma its effects are various — sometimes it is successful but often it has failed — experience must direct you in these cases. Palpitations of the heart are very often symptomatic & therefore are only to be cured by opium where this medicine agrees with the primary disease — When they are caused by Dyspepsia I have found the vol. alka. very successful & in a majority of cases palpitation arises from the state of the digestive organs & is to be cured by remedies addressed to them —

46 I very seldom prescribe it in this disease - as it is of a chronic nature & therefore would demand its long continuance. In Bayonis Cullen considers asa as the only remedy - this complaint is very rare in this country - but is said to have appeared in some of our Western States. It is not clearly understood when it is idiopathic I have no doubt it is hurtful when it is symptomatic ~~of~~ then the remedies for dyspepsia are demanded - particularly an attention to diet & when it appears in the intemperate & debauched a complete change of ~~living~~ the manner of living should be injoined

In Dyspepsia it often palliates the symptoms but does not cure. In Lues it was at one time much esteemed, but it is now believed to possess no antisyphilitic virtues - but is very useful in relieving many of the symptoms, arising from it or produced by the mercury. Dr Dawson recommended a decoction of the Poppy heads, as a gargle in severe salivations - In all surgical cases opium is employed with great advantage in relieving pain. ——— As to the best method of exhibiting opium I must say a few words. There are various formulæ in which it enters as a chief ingredient: but I shall mention only the most simple ones. It is given in substance either in powder or pills. The dose on an average to an adult is gr j. the pills are considered as acting more permanently & slowly - but I do not like them, as they are often so hard that they are with difficulty dissolved in the stomach, & sometimes become so enveloped in the contents of that viscus as to produce no effect whatever. Whenever we wish the operation to be speedy the powder is much preferable - However you should wish to exhibit a pill, let it be made of the powdered opium with the conserve of roses. In this way it will be more easily dissolved in the stomach & be applied to a larger surface - In some cases however where you are desirous of a slow operation the solid opium may be given - Laudanum - or the Tr. Opii is a very common mode of exhibiting the opium - there is ℥j of op. to ℔j of spirits. So that ℥j of the Laud. contains about grs xxx of opium & there is about grj of opium in gtts xxv of laud. which is therefore the average dose for an adult - When Laud. is long made & kept very closely in a vial there is a deposition of the opium, so that the Laud. becomes weaker, & more dangerous circumstance is - that when it is not kept closely corked a portion of the spirits is volatilized - & the opium not being volatile remains by which the laudanum becomes much stronger - I am very anxious that you should remember this circumstance as I have known gtts ij of such laud. produce death

you should always therefore be very ~~careful~~ careful, that your laud.m is in a proper condition — The average dose for an adult is x xv gtts, always bearing in mind the age of the laud.m & the habits & constitution of your patient. To a person 15 yrs of age gtts xv is an average dose & so for the age of the patient regulating the size of the dose to a child one year old gtt j. is the dose — within the month gtt ß. only should be given — Paregoric is considerably used — it is aromatic & stimulant & more agreeable than laud.m but it is not more effectual & I never employ it as the dose is much larger there is a great difference in preparing it — In our Dispensatory ℥j contains grij of opium — but in one of the English Dispen.s ℥j contains no less than grs viij of op.m which immense difference is of itself sufficient to condemn the article as we cannot tell what we are prescribing. The Vin.o ℞ of opium is very little used in this place; it is less certain & effectual than the laudanum — The watery solut.n is not much used internally but often as a glyster. In many instances we cannot exhibit the op.m internally by the stomach — in which case we must resort to external applicat.s & to glysters — The opium plaster is prepared by softening the opium in spirits & spreading it on leather — The Peria plaster I generally employ — not as formerly composed of 30 ingredients — but of a few active articles which are to the found among our apothecaries, as I always use it as an anodyne plaster, I generally dust a little of the powdered opium on its surface which renders it much more effectual — In acute inflam.n no punctures with laud.m or a solut.n of opium — in some cases it may be useful but I usually prefer the sugar of lead — When given by the rectum it is in very many cases of the greatest advantage & is very frequently employed — about 3 times the quantity of laud.m is to be used as when exhibited by

the mouth - it is employed in colic & various spasmodic affect of the bowels - in strangury from a blister it is very useful - & also in tenesmus - Sometimes the spirits forming the laudanum is too stimulating to the rectum & it is nauseated - In such cases a pill formed of the powdered opm & some soluble substance may be introduced into the rectum & will prove of great service - Before dismissing the subject of opium, I must remind you of the necessity of attending to the state of the system in administering this article - do not give it indiscriminately wherever the patient is desirous of its pleasant effects but always keep in mind its peculiar properties & never administer when there are incompatible with the state of your patient -

The next article on our list is the Hyoscyamus Niger or black henbane. This is a plant of great activity. It is not a native of the U. S. but is easily cultivated - The leaves have a disagreeable fœtid smell, but are insipid - all parts of the plant are narcotic - but the extract is the part employed - This has been long known as a poison & is very similar to the opium - as a soporific it is, next to opium, the best article we possess. Its first effect, is to increase the heat of the body, the pulse &c - but in a short time stupor, coma - &c ensue. It is said, than when death is produced yet the body is covered by numerous petechiæ - It is a very ancient medicine, & has been used freely in numerous diseases - The dose is at first gr. iv. it may be gradually increased to ℈i. It differs from opium in having less tendency to induce constipation. It is employed very much in the same diseases as the opium, but the above property renders it in some cases preferable - The seeds are said to have been useful in lumbago - but it could not be of the active kind. Gr. j or ij seem too small a dose - it produces no effect. Than

given grs xv. here slight vertigo was sometimes produced, but I obtained its full narcotic powers. In Pertussis it has been much used but it possesses no advantage over the laudanum - as a general rule Bromine is useful where from some peculiar circumstances opium is contraindicated & a narcotic is wanted.

Lecture 55th Feby 13th

The Prunus laurus cerasus does not grow in America but is very poisonous & therefore have placed it among the narcotics; but it is not much used in medicine - When given to animals in a large dose it is said to kill immediately & therefore has been mistaken as a good nostrum of a pure sedative - but this does not prove it to be so - as we can conceive that a powerful stimulus may destroy life immediately. In a certain dose it invariably proves fatal to animals - & in all doses it produces violent convulsions - finally coma & death. But altho I have placed it under the head of narcotics I have never known it exhibited so as to produce sleep - The distilled water is generally used - & the chemists have thought its active properties were seated in an essential oil. But it appears ~~many~~ by later experiments to ~~[illegible]~~ depend on the presence of the Prussic acid - Besides the distilled water, the infusion of the leaves & the ℞ are employed - Cataplasms of it are also said to be very useful in relieving pain. It has been employed in Intermittents & in Consumption: it is said to have proved useful in Gonorrhœa which I very much doubt. The dose is from gtts v to x of the water & from 30 to 40 gtts of the ℞.

The Atropa Belladonna or the deadly night shade - is a perennial plant growing in Europe - The leaves berries & root are used - the berries have a sweetish taste & are generally the most active; but the leaves are preferred as being more uniform. In a moderate dose it imparts a sensation of warmth fardness headache nausea &c & in a large dose acts

as the more powerful narcotics - Dissection shows that there was inflam^n & gangrene of the ~~intestines~~ stomach as is produced by opium - When any large quantity of it has been taken you should act as in case of other narcotics - 1st The stomach should be evacuated - 2nd The apoplectic symptoms be removed - & 3rd The sedative effects are to be counteracted by stimuli - By gradually increasing the dose a large quantity may finally be taken - It is used to promote the secretion by the kidnies as by the skin in several diseases. It has been used in Epilepsy, in chorea Sancti Viti - & other nervous affections. In Mania it has totally failed. Bouchet has recommend^d it in Cretinism - In dropsy I have no confidence in it as any other narcotic. Its diuretic power is very trifling - & it should never be used with this view only. Like Opium it has been given before the paroxysms of an intermit^t. Cullen has said that it has been useful in Scirrhous & in cancerous ulcers - He mentions some cases - but from my own experience on this subject I am very much inclined to believe that those cases were not genuine cancerous affections. It has also been used in Hydrophobia - Saunders employed it with a view to dilate the pupil of the eye, gently as an external application - The dose is grs j or ij of the dried leaves.

The Conium Maculatum. This is a native of Eng^d & Scot^d & grows abundantly in the U.S. The seeds & leaves are both active but the act^n of the leaves is the most mild. Its narcotic powers on the human species is very great, although goats eat it with impunity: in large doses it produces the most terrible effects of this class. Stahl recommended the expressed juice in cases of Cancer - but in other hands it entirely failed. I have tried the Hemlock very extensively both internally & externally in cases of cancer & am bound to assert that in genuine scirrhous it is absolutely inert: in some instances it relieves the pain, but in this, is not equal to opium - it performs no cures. In Scrofula I have employed it with great satisfaction - where I consider it acting as an alterative. Dr Rush agrees with me & adds that he has used it successfully in a case of lepra - As to scrofula I

have cured ulcers of the ureter which had resisted every thing for upwards of 10 yrs - in two months, by the exhibition of cicuta & corros. subl. Moreover it has been employed in other Ulcers by Home who recommends it in diseases of the joints: in ulcer from bubo. ~~Bath~~ I have used it with great success - In Syphilis connected with scrofula it is very valuable when exhibited both the corros sublimate. In tumours produced by inflamm^n & commonly called Schirrous the cicuta is useful. But these tumours are not genuine schirrous affections, they very seldom terminate in cancerous ulcerations - I are formed merely by the deposition of coagulable lymph - Here ~~the~~ bleeding, with low diet & purging conjoined with mercury & cicuta generally succeeds. In chronic hernia humoralis also improperly called schirrous - it is very useful - this disease in a majority of cases depends on stricture in the urethra, but not universally as maintained by Mr Home. In genuine cancerous testicle the cicuta is of no service castration is the only remedy. In the mortification described by Mr Pott it has been tried, but here I prefer the opium as recommended by that Gentleman & should also apply a blister which in one case I have known very beneficial. In Pertussis I have no confidence in it & in Tic Dolourieux it has generally failed - emetics in this case promise more than any thing else - In chronic Rheumatism it is of no use - In Asthma where V.S. is necessary, it is of no service, but in other instances it is occasionally advantageous - In all the nervous affections it has been found useless

Dr Chapman has found it useful in some cases of Amenorrhoea & jaundice - Cicuta is also externally employed in form of Cataplasm made of the fresh leaves - the extract is used in the same manner by being softened with water - the Hemlock bath is another form - Dr Hamilton recommends this last in cancer of the scrotum

58 I am in the habit of commencing with gr: j. & increasing it till ℥j or ℥ss. are taken daily.

The dose of the powdered leaves is grs v. or viij. which may be gradually increased till large quantities are taken. Dr Chapman has given upwards ℥j. every day. The leaves should be taken while the plant is in flower & the dried slowly - after which it should be kept in bottles well stopped. When good it is of bright green colour & retains its peculiar odour. The extract is prepared by inspissating the juice of the fresh leaves. In the employment of the Cicuta always remember that different parcels vary very greatly as to strength & therefore that the dose should always be reduced when ~~the~~ a new parcel is employed. & it is a good rule never to change the parcel of any active medicine without being very cautious as to the dose. Upon the Whole I do not value Cicuta as much as Baron Stoll & others - but I have more confidence in it than Dr Fuller - it will not cure a cancer, but is often useful in scrofulous diseases. The following prescription is what I usually employ. ℞ Ext. sub. grs xij - ext. cicut. grs xx iv. m et div in pil. No xxiv. — You had better always use the plant of our country which being fresher is superior to the European - & is naturally equally good. The test of its action is a dilated pupil - nausea vertigo &c when it should be omitted.

Lecture 56th Feby 14th

The Datura Stramonium grows very plentifully in the U.S. & is generally considered as a native. It is an annual plant & is distinguished by a peculiar fœtid smell - it has very improperly been called Thornapple as we have another or like of that name - it is known also by names of Thorn apple, stink weed, James town weed or by corruption Jenson weed which in this part of the country is the popular name. On many animals it has no effect, but this is not the case

I have never known it prove fatal

with the human system. Dr Cooper has shown it to be a powerful stimulus, it powerfully excites the pulse, but its sedative effects are soon manifest. It resembles very much the other narcotics, but differs in some little respects. When taken internally it has a more direct effect on the pupil of the eye, than any other narcotic. & the dilatation of the opening is the first indication of its acting on the system & will enable us to determine with considerable accuracy that the stramonium has been swallowed.† Stahl first pointed out its use & he employed the extract in epilepsy & mania & was followed by many of the continental physicians. Cullen does not speak decisively in its favour. & the Baron himself cured but one case of Epilepsy with it. Dr Porter of Maryland has spoken very highly of our medicine in this disease. He observes that in those cases in which the fits recur after stated intervals the stramonium is as useful as the bark in intermittents. He gives grs ij of the powdered seeds every 4 hrs & soon after every 5 or 8 hrs till the time of accession has passed. He then omits it till within 3 days of the expected fit when he exhibits it as before. He at the same time puts his patient on a low diet & occasionally bleeds. Now this success of Dr Porter is greater than that of any other practitioner & no one would accord him in the above operation as to its efficacy. May not indeed attribute more to the low diet & bleeding than to the stramonium especially when we recollect that Dr Cheyne considers a low diet as the most efficacious remedy in Epilepsy.

The seeds are preferable in these cases they should be gathered when perfectly ripe. & then they are of a black or a colour. Flour is usually employed for making it into pills, but I prefer the Gelsat. as by triturating the seeds with it they are more easily pulverized which is by no means a very easy process

+ The patient to whom I here refer has since died of pulmonary Consumption.

‡ Internally it has also been useful in some chronic diseases of the eye; in gutta Serena it has afforded some relief but has effected no cure —

In Mania it has been very extensively employed in our Hospital Dr Barton spoke most favourably of it, observing that it was a safe medicine, & often effected a cure. I however have never found it in my own practice or seen it in that of others, of the slightest use in Epilepsy or Mania. I agree however with Dr Barton that it is a safe article. In Tetanus, I consider Opm as much more powerful & have therefore never resorted to the Stramonium. In Asthma it has lately been resorted to, taken either internally or by inhaling the smoke. Its success has been various. I have one case in which the paroxysm was always relieved by it. It is however less effectual than the opium. In consumption it is said to have been useful, but this could only be from its narcotic effects, acting as a palliative, in which it is certainly not to be compared with opium. Dr Cooper recommended it before the paroxysm of an intermittent. It has been used in palsy, rheumatism, dropsy &c &c but little confidence is placed in it in any of these diseases.

The extract is very useful in dilating the pupil by being applied externally, for the operations of the eye. In its use internally it is necessary to be careful, to begin with grs ij of the extract & gradually to increase it till nausea is produced when it must be laid aside. I have not employed the Ext but the dose is gtts x. xv. or xx. It is prepared by filling a bottle half full of the leaves & filling it up with Spirits. The root has been externally applied in cases of local pain. It often does good, but generally is productive of harm. Has it not unfrequently induces nausea & vomiting it will not be much employed. An ointment of the Stram has been used in cases of scalds & burns, in old chronic ulcers ~~it may~~ from burns, I have used it but merely with a view of changing my prescription, time is the only thing which will answer for these ulcers.

In hemorrhoids in Scirrous tumours it has also been used, but

Volumes have been written on the ill effects of tobacco - as it is commonly employed in snuff & smoke &c. These I think have been very greatly exaggerated as we find so many constantly indulg themselves in the luxury gratification without sustaining any injury to Dyspeptic persons it has sometimes to be forbidden —

to no purpose — In club foot it has been applied with a view to its relaxing effects, than which nothing can be more absurd.

Dr Barton was in the habit in his lectures of narrating some of the bad effects of this article as an external application — I have never seen it produce any effect but nausea which fully counterbalances any good which may be derived from it. In some few cases it may be substituted for the opium as it does not constipate the bowels. Nicotiana Tobacco — I need not say any thing of the history of this plant which is well known — It is a powerful narcotic & Dr Cullen has gone so far as to say that this effect was produced by snuffing it into the nostrils — This I have never can altho I have often seen it used freely this way by persons unaccustomed to its use. When taken into the ~~[illegible]~~ stomach it produces nausea & other effects of narcotics & is attended by a peculiar relaxing & debilitating effect — & by involuntary discharges by stool — As an antiphlogistic it is employed in colic & hernia — it is in these cases given in the form of glyster — which is prepared by infusing ℥j in one pt of hot water — of which only half the quantity is to be injected at once — Its effects are considerably varied in different persons — in one case related by Sir Astley Cooper the patient died — Its narcotic & debil. effects vary in different persons so that much caution is necessary — X It has been given internally in Tetanus — I have seen given ℥ss of the sat. Dr — to a child — it had no effect whatever — In New York One case of Tetanus has been cured by the tobacco glysters — As an external application it may be tried in tetter where other articles fail — This disease requires that the application should be often changed. The citrin ointment cures a majority of cases — if it fails resort to the salted butter, the green ointment to calomel, to carrot, sublimate to the tobacco &c in succession.

F. The Nux vomica possesses similar properties as the above - but lately it is attracting attention as a cure for Paralysis which will render it an object of more importance.

The Digitalis is a powerful Narcotic: but as I have on a former occasion fully considered this article, I now pass it by & take up the Humulus Lupulus or Common Hop. This is a narcotic, but possesses also considerable tonic powers - it cannot however be much employed as a tonic for fear of its other effects. In substance the dose is grss iij - The Ext. is given in doses of ℥ss - the infusion in doses of ℥iv - this last I prefer in Mania a potu, where I have found it very useful, having often succeeded with it ~~when~~ without any other remedy. It is prepared by infusing a handful of the hops in a pint of water the patient may take it ad libitum - The saturated Ext. is often used as a substitute for the opium, but it is not such certain - cataplasms have been employed to relieve pain - & a pillow where sleep the hops has been sprinkled on the pillow - but in these I have not much confidence.

The Faba Ignatia possesses some narcotic power - but it is not of much value on this account - & it prevents the article from being employed as a tonic. X.

Lecture 57th Feby 17th

Antispasmodics. Spasm is an irregular & involuntary contraction of a muscle - & the medicines which relieve this ~~are~~ receive the above appellation. With this view V. S. is often the best remedy, as I have seen in cases of Spasm - but the name is appropriated chiefly to certain Narcotic & stimulating medicines - but there is no one which uniformly proves antispasmodic - I have already considered several of the narcotics which are used with this end & shall now therefore notice those only which are useful ~~with~~ only in this manner.

+ in proof of its stimulating operation —

And first of the Camphor. This can be procured from many plants as the ~~oil~~ sassafras, sage, rosemary &c & also from the oil of Thyme Peppermint & some others. The Laurus Camphora furnishes it in the largest quantity & from it all the Camphor of commerce is obtained. This is procured by exposure to heat, when the camphor sublimes. It is white colour, transparent, possesses a peculiar odour, is bitter & leaves a sense of coldness in the mouth. It is inflam: all the acids act on it, & the mineral acids decompose it; in small doses, it has a stimulant operation, in larger doses it possesses some narcotic powers, but it is a medicine which very often disappoints your expectations.

As to its modus operandi in diseases we know very little, it always acts as a stimulant, & should only be used when this effect is desirable. The Old surgeons thought that it acted as a sedative recent experiments prove, that it excites the pulse. but in defendance of these there are numerous circumstances which are satisfactory at least to my mind. In certain febrile diseases it may be given but never when there is any activity in the system; in the typhus stage it is employed with the aqua vol alkali; which no doubt are entitled to the credit of the success. In intermittents none can pay it exclusively. but it is usually given with the bark, but adds nothing to its virtues. When the doctrine prevailed of the occasional putrescency of the fluid it was considered as an antiseptic: but Dr Seybert has fully proved that putrefaction never affects the living arteries & veins. Hahnemann recommends it with aqua as a powerful antisiphilitic. As it is not useful in the first stage of acute diseases, it may be in ~~that~~ the latter, where it assumes the typhus action & a still lower grade where ~~the~~ gangrene is the consequence. Puerperal fever is ~~attended~~ attended by very variety of symptoms, where there is strong,

inflammatory action the camphor is inadmissible & in the weak stage it is inefficient. I believe its virtues in these cases have been overrated. Camphor has also been employed in the Piles mania, but in the active stage of all inflamm. it is injurious, but by some it is resorted to in the latter stages as a stimulant. Dr Barton has termed camphor a sedanarcotic, that is, as possessing slight narcotic powers. It is very useful in a certain condition of the system, where depletion cannot be carried to a further extent & where there is considerable restlessness & anxiety, in such cases it is more beneficial than any other article. In chronic rheumatism it has been used but certainly not with much advantage. In the neuroses it has been favourably thought of. Cullen observed that it has prevented the paroxysm of epilepsy, but has not cured it. He found it most useful with the ex. opium ammoniacum & flores zinci. This is very vague testimony as more is to be imputed to its combinations than to its own virtues. In Tetanus it has at the present day no advocates. Neither has it any supporters in Chorea St Viti. In Hydrophobia with spasm it is not useful. In Mania Dr Cullen records one case in which it was serviceable, but this may be said of almost every article which has been used in that disease, & I believe that the camphor has little or no efficacy. Dr Barton however says that he was completely successful in one instance. In Convulsions of females Dr Hamilton employed it although he condemned opium. The practice in this disease you will learn from another source. ——— In strangury from blisters it is useful although it occasionally produces the same effects as the tr. of exhibition, the dose is on an average grs v. but it has been given in much larger doses. grs x to ℈ss is not an frequently prescribed. even ℈ij & also ℈iij have been taken but

X. Dr. Wallace of Virginia mentioned to me, that it is best given in Seltzer water by which it is dissolved.

H. In this way I use it in cases of strangury — gradually increasing the dose of the tea to ℥j & ℥iv.

O. This is an admirable remedy in that species of erysipelas frequently produced by poisonous vegetables, the watery or spiritous ~~solution~~ preparation is employed.

X. It is soluble — & gives up its virtues to water —

F. That by this formula Tetanus has often been prevented & have often thought it.

in an over dose it induces nausea & vomiting. It is given in the form of pills or of emulsion — lately it has become very fashionable to ~~do~~ rub it up in milk, which makes a very neat preparation. I often give it as a tea; the camphor tea is prepared by putting a lump of camphor in a cup & pouring a little spirits on it that it may be powdered & then adding the hot water. For want of Turpentine, it forms a very useful internal application.

Mosches — or Musk. This is the product of the male of an animal in the East — It comes to us in small grains, contained in bag bags — It is unctuous, has a bitter taste & a powerful peculiar odour. It is easily volatilized & gives its ~~flavour~~ odour to articles distilled with it — It has some of the properties of a resin, but is generally much adulterated before we receive it.

In distances it is not much employed. Dr Cullen considers it as the most powerful antispasmodic we possess. In Tetanus & Chorea not found it of any service, but it is I think an admirable remedy in the tremors & Mania arising from intoxication — in such cases my prescription is the following ℞ Vol. Alk. & Moschi ana ʒ ij, Extract ʒ ij. land gtts L x. Aq. ʒ vj. m — from a number of comparative experiments I am decided, that the above formula owes much of its virtue to the musk. Dr Owen employed it successfully in a singular case of spasms of the muscles of the neck.

In Hydrophobia Dr Cullen has I think committed himself, when speaking of this article for it is of very little service. In Gout of the Stomach it may be useful, but in no other case of this disease. In Spasmodic Asthma it formerly had considerable reputation but at present little confidence is placed in it. In low states of the system it may be useful, & I had recommended it in my pleurisy.

— I have seen narcotic effects produced by this article, the

74.

+ An artificial musk has been introduced by Margraave & is said to be equal to the natural musk – it is prepared by pouring the ~~acid~~ nitrous acid on the oil of amber.

dose is grs x or xx - I prefer exhibiting it in small doses often repeated - grs v. every 2 hrs. It is given in the form of Bolus, but I prefer the emulsion - As an injection it has been employed, but for this it is certainly too expensive. X

Castor. This is procured from the beaver - it is situated in small sacks near the anus - The best comes from Russia, that from our own country is not near equal to it. Chemistry shows no difference between it & the ~~castor~~ musk - Cullen considers it as a powerful antispasmodic - In Epilepsy it has been recommended by the old Physicians, but in every case it is inefficient - Castor at present is very little used in any disease - Its dose is grs x, xx. or xxx.

The same may be said of the various Carbyrumatic oils - ~~as~~ The oil ~~cornu cervi~~ is a preparation of Hartshorn sometimes employed but it is very difficult to retain on the stomach & is not equal to the carb ammonia. — Dr. Luccini - The Amber has no virtues at present, but the oil is useful - In Hysteria I have found it eminently successful - Here the dose is gtts x - I prefer here also the doses small & frequently repeated as more liable to be retained - it is also equally beneficial in Gouty colic - where I have seen it act very promptly: as an exhibration it has also been employed but it has no advantage over the volatile. The most valuable article is the Ferula Assafoetida, which is obtained by exudation through incisions in the barks of the tree. It is a native of Persia - & the gum is brought to us in large masses the appearance & odour of which are well known - Dr Cullen attributes all its virtues to its action as an antispasmodic; certainly much of its value depends on this property - It is therefore employed in various nervous & ~~[illegible]~~ spasmodic diseases - in Hysteria it is the first resort of the practitioner - & is often successful in relieving the paroxysms. It sometimes acts as an expectorant.

× It is an excellent article to resort to, when aperiates are forbidden by any of the circumstances of the case.

I will here take the opportunity of observing that there are no expectorant medicines properly speaking - that every remedy which relieves the disease of the lungs may be considered as expectorant, thus bleeding, purging, blistering &c are powerful expectorants only however as they destroy the inflam^n which prevents the natural secretions from taken place; thus also Asafoetida may be useful as an expectorant after infl^n has been overcome in promoting the secretions ~~&c~~ It is for these reasons that I have not introduced the class of expecto^s into my list - expecting, that the observations which I have made on particular articles, will enable you to adapt ~~your remedies~~ them to the indications which the disease may require. In Asthma it is useful to relieve spasm - & also the flatulency which often prevails here acting as a carminative - I may make the same observation respecting Carminatives as I have of expectorants - all articles providing carminative which overcome the existing disease of the digestive organs. In Pertussis our medicine is equalled by no other - my practice in this disease is to exhibit a dose of calomel every 4 or 5 hrs - till about 3 doses have been exhibited - after which I resort to the watery solution of Asafoetida - in the proportion of ℥j to the pt. ℥j being given to a child 2 or 3 yrs old every 2 hrs. With this practice I am very much pleased, as it always renders the disease mild relieving the violent paroxysms of coughing & probably shortens the duration of the disease - In mania a potu it is useful - & where persons are endeavouring to overcome the habit of intoxication the use of garlic & asafa^d are very useful - The dose of our medicine is from grs v. to ℥j. large doses however are apt to excite nausea & should not be used

I usually ~~combine it~~ dispose ℈ij in ℥iv of Rose water, ℥ss being the dose — as that in this Rose is grss. of the medicine which is to be given every hour or 2 hours. It is also given in Glycerrhiza to a pint of mucilage — half of which is to be administered at a time. This is said to be useful in cases of accidity of the I have no experience — preferring always the turpentine.

Very analagous to this is the Gum Ammoniac — which is perhaps the best expectorant we possess ℥ij being ~~dissolved~~ dissolved in ℥viij. of water — the dose is ℥ss. The following is the formula which I usually employ — ℞ Oxymel Squ.ae ℥ij — Oxycr. Squillæ ℥ss — laud. gtts xl. mix. — Sumat. ℥viij. m. This I have used very frequently & with great advantage —

Lecture 58th February 18th

The Valerian is another Antispasmodic which is more used than most others. It grows in Europe but not in this country. The root is the part used which comes in slender fibres attached to one head. It has a disagreable smell & a bitter taste like all other roots it yields its virtues to alcohol & to water — It is certainly a stimulant article & acts as a diaphoretic & diuretic occasionally as a cathartic & emetic. Cullen thinks it has some power over epilepsy — in this disease many have employed but it very often fails. Dr Barton thinks that it will relieve but that it will not cure — In chorea — in hemicrania it has been tried but unsuccessfully — Ot ardyce in these cases recommends that ℥ss should be administered 3 times a day. Richter used it in Gutta Serena, but I believe that in genuine cases of this disease it is of no service. In hysteric cases it may be

† It is also given in infus.^{n} — but it deteriorates when long kept — its ~~volatile~~ active parts being volatile.

useful when a tonic & diaphoretic power is wanted — It possesses no anthelmintic virtues — although this has been supposed to be the case. Dr Cullen advises it to be given in substance in the dose of ℈i to ℈j. ×

The crocus Sativus, or Saffron, I have so often used without benefit that I am disposed to throw it out of the list altogether — so also the essential oils — these are all stimulant & all carminative & are often given in small doses with other medicines by which their carminative may be retained — this effect is obtained by their stimulant power — Tar & tar water are used as antispasmodics — they act partly in this way & partly as stimulants & are useful in complaints of the chest & in dyspepsia — I have also employed them with advantage in scrofula. The Warm bath possesses very useful properties which I have not time to detail, its greatest virtue however is as an antispasmodic. — The Allium Sativum is another article which we must not pass over — This is much used by the Spanish & French as a condiment, more so than in this country — Cullen has ranked it under ~~its~~ his stimulants, but it is also an antispasmodic & may be properly considered in this place. It has a strong odour & a peculiar taste; the bulbous root is the part employed — the juice of this rubbed on the skin inflames & sometimes vesicates it, but in this respect it is inferior to the siliquose plants. Often in cases of local infl.ⁿ it is useful, frictions with the juice are serviceable in ~~Lep~~ Pertussis. Also in certain cases of deafness it is useful when injected into the external meatus by exciting the secret.ⁿ of cerumen, but I prefer more stimulating articles as the Tⁿ of Cantharid.ˢ In the stomach it acts as a stimulant & promotes digestion

+ denied this - asserting that we have many tonics - which are not bitter & many bitters which ~~have~~ give no evidence of a tonic operation.

but in this country it is not much used. There is no article however that is more safe & useful as a condiment. It is customary to take it by swallowing a clove at a time. it is better however to divide it into small pieces. sometimes the juice is employed internally. In diseases it is not to be employed where there is much fever. it often passes by the kidneys & it is probably absorbed into the circulation. After the reduction of febrile action it may be employed with advantage in many cases. In Intermittents it is not attended with much success. Sydenham used it in dropsy. in the pectoral complaints it has been much used but it is not equal to the squill. in many diseases of the stomach & bowels it has been employed.

Tonics. These form a class of remedies which leaves the nervous system stronger, in this respect differing from stimulants which leave the system exhausted & debilitated. But I believe that this is not the only difference, but that they materially differ as much as cathartics & emetics. A certain state of the muscular fibre is necessary for strength, & tonics are those medicines which impart this. The food may be considered as a tonic but we mean to confine the term to those medicines which give tone to the system by a certain impression. As to the nature of tonics Dr Cullen attributed it to some quality which gave them a bitter taste. Dr Barton ~~[illegible]~~ the question however is of but little importance, we may however observe that bitterness generally accompanies a tonic but the power of the medicine is not proportioned to its degree of bitterness. Some other properties of an article may overcome its tonic power & thus render it useless when employed with this intention. Thus the nar-

X. It is in the same manner they act on the alimentary canal.

cotic power prevents its action as a tonic. Tonics do not act only on the muscular fibre, but they permeate every part of the body — They make an impression on the stomach which as in other cases is propagated to every other part — Thus it is in the first place propagated to the muscles increasing their tone 2nd to the brain when that organ is debilitated — 3rd to the Nerves — when these are incapable of performing their usual functions 4th To the absorbents — as in dropsy where they have lost their ~~tone~~ natural activity & power — 5th To the cellular membrane which enables it to retract after the distension water in dropsy — 6 To the blood vessels — increasing their power — Increased frequency of the pulse is by no means an evidence of strength — many other properties are necessary to indicate this state which can only be learnt by experience — 7th To the skin — as is well seen in the effects of the elixir of vitriol stopping the perspiration. + Thus we might trace its influence to every component part of the body — Are Tonics absorbed? This question, I have already in a great measure answered. Some of them may be absorbed, but their beneficial action is not to be explained by this — they operate altogether by the impression on the stomach — Tonics have been called permanent stimulants — how long they continue to act is very doubtful — they have received the above name as they are not followed by the exhaustion which succeeds the stimulant & narcotic medicines. As to the diseases in which they are useful these will be noticed under the individual articles — I shall consider the whole under the two divisions of

vegetable & mineral Tonics — Of the former upwards of 40 are on the list — but I shall content myself with naming the most important — & first of the Peruvian Bark

This we place at the head of our list as being the most important tonic we possess — Dr Barton has eulogized it too highly, maintaining, that it is equal to all others of the class. It is now more than a Century since it has been in general use — in 1638, it was discovered & was named cinchona — from the Countess of Cinchona, in whose case it was first employed; in 1649 — It was introduced into Europe by the Jesuits — who were very successful in its use — they gave 3ij at a dose — it was very seldom that more than 2 or 3 doses were necessary — sometimes one was sufficient — The Botanists enumerate 14 different species — but there are only three species which are generally known & which probably comprise most of the others — 1st — The cinchona lancifolia — being probably the same as it was the first used but the pale bark — we do not see it here — the tree is tall & thin — & is found on the Andes in Peru — The 2nd is the Cinchona Oblongifolia — this grows to the height of 120 ft. it is the same with the red bark of the shops — The 3rd is the Cinchona cordifolia — this is small & has rough leaves; it is said to furnish the yellow bark. Much has been said of the comparative strength of the different kinds — the red is generally the best but it is likely to be adulterated & the preference is usually on this account given to the pale bark which comes to us more pure. The bark has a bitter taste, with some degree of astringency & some aroma — when first taken into the stomach it produces very little effect. The investigations of the Chemist have thrown very little light on this subject — Look at Dr Percival

Lecture 59th Feb 20th

The use of the Cinchona in the treatment of diseases, is always to be directed under the belief of its being a decided & powerful tonic. The case, to which it is particularly adapted is the Intermittent Fever. The first question, says Dr Cullen, is what time is it to be given? Boerhaave directs it, after the disease has existed for some time as he believes if exhibited too soon it does mischief. It should however be exhibited early in the disease, - delay however is by no means dangerous & it is often necessary to resort to some preparatory measures. When there is much action an emetic, a cathartic or even V. S. becomes necessary - It is very customary to commence the treatment of all fevers with an emetic - this is very excellent practice - but it is so disagreeable, as not always to be submitted to - & in most cases a brisk mercurial purge is equally effectual & not unfrequently putt a stop to the disease. On the subject of the Peruvian bark I must beg you to consult Dr Cullen, as he is here very valuable - His examination how far visceral obstruction forbids the employment of the bark is one of the best examples of medical reasoning with which I am acquainted. Where there is visceral disease, the state of the organ affected is to be attended to - if there is much inflam^n bleeding becomes necessary - but these diseases however require remedies not usually demanded by the fever - such as mercury which is very

+ Bird is a warm advocate for its early exhibition
There has no advantage gained by giving it the moment
the sweating has ceased - nearer the ensuing paroxysm
will be better —

useful, the proper time of employing this is after inflam^n has been subdued. Should the bark be employed during the paroxysm or not. I decidedly say during the apyrexia. In this I am in consonance with most of the practitioners of the present day. Should it be employed near the paroxysm or not? Dr Cullen directs it to be used near to the accession. I should direct it at the latter part of the interval, but where it ~~such~~ encroaches on the accession it does harm. In Quartans. Dr Heberden directs it immediately before the attack. But I think that it would be preferable to employ it during the last days of the intermission, & to give it freely before the paroxysm comes on. Dr Barton exhibited it during the whole of the interval. but this is by no means necessary. I do not believe with Mr Hume that it is necessary for the bark to be absorbed. I have however already stated my views of the modus operandi of these articles & need not now enlarge upon it. The usual dose of the bark ℥i. I exhibit this quantity every hour during the last 8 hrs of the intermission. Some practitioners advocate its employment during the whole course of the paroxysm & intermission. Dr Clarke is one of this number who however exhibits it more freely during the intermission. This practice is contradicted by all our speculative notions & what is more important, by the experience of all our physicians. The bark is best exhibited in substance but it is often necessary to consult the taste & stomach of your patients & to prepare it in some more agreeable form. In the W. Indies they usually exhibit ℥i. at a dose. & they speak with

4. These remissions should be well marked - they occur only in the latter stages of the disease ~~that~~ is during the convalescence - During the ~~[illegible]~~ violence of the disease bark is improper -

much confidence of it when given in such large doses. If the bark should be rejected by the stomach - a decoct in may be made of ℥i in a pt of water with a little cinnamon or orange peel, this is to be strained & 1/8 part is to be given every hour or 2 hours. It is often in such cases combined with the Serpentaria - In those cases of intermittents in which there is a determination to the head - R.P. & blisters must be previously used. In Remittents bark has been much used, ~~but~~ in this country they are generally too inflam^tory - but where it is proper to exhibit the bark the remissions are the proper time. In Typhus Gravior - & Nervosus the Cinchona is very valuable - but in general it is too feeble by itself - wine, br. andy, vol. alk. &c - are usually demanded. In ~~the~~ Plague bark has been employed, but this disease we never have had in this country - In the Phlegmasia, it is never to be employed where there is much inflam^tion - in some slight cases it may possibly be allowed - Cullen thinks, that it may be in some instances resorted to after the inflam^tion is subdued - but Morton advises that after one or two bleedings in inflam^y rheumatism, the bark should be exhibited - Fothergill & Haygarth go upon the same plan: the last of these states that out of 121 cases, the bark proved injurious in 4 only - this is more successful than any plan hitherto adopted, but in this country such practice will by no means answer - The disease here requires the free use of the lancet - & no bark whatever - There are some cases of rheumatism arising from or so closely connected with intermit

+. In headache it is sometimes useful - I have lately cured a case of periodical headache - the paroxysms of which had returned every other day for 10. yrs. by exhibiting first an emetic & then ~~[illegible]~~ employing the Bark in small doses.

-tents, that the bark may become necessary, not however if any inflam^y symptoms are present — In hemicrania — it has been recommended by two of my predecessors Drs Barton & Rapsman but of its efficacy in such cases I have no experience — In Gout — Dr Barton thought very highly of it — In dysentery it has been recommended by many high authorities & been condemned by others — Here I shall not quote but content myself with observing that bark is altogether inadmissible in this disease; during the convalescence — after the disease has ceased it may be employed — & then only. In pulmonary complaints it has been employed, but I think there is no case to which it is applicable — In what has been called ~~bilio~~ Pleurisy of the head — where there is cough — pain in the side — dyspnoea — & violent headache, it is said to be useful, but I have never seen any case in which it would be proper — Bilious Pleurisies require the lancet rather than the bark — In typhoid Pleurisy we often resort to the bark — aer[illegible]taria &c — In consumption it has been much used — in the early stages it is undoubtedly very hurtful — & Dr Cullen observes that it is hurtful in 9 cases out of 10 of Phthisis. Morton & others maintain that it is productive of no injury — this I am disposed to deny — & have great doubts whether the bark is not inadmissible in all cases of pulmonary disease. In erysipelas the practice in Europe & this country is very different — there they give bark & tonics — here we resort to V. S. and the antiphlogistic system — Eruptive diseases are to be put on a footing with other in-

In cases, I have never seen it useful otherwise than as a Panic.

Hemmatory affections - if we find an excited state of the system we bleed. if the system is prostrated it is to be raised by the bark & other tonics. In active Hemorrhagies the bark is certainly not to be employed. There are however cases of passive Hemorrhage where the bark from its tonic powers is very useful. In the Neuroses there are many cases in which it proves hurtful, in some it may be useful. In Epilepsy it has not proved of much avail. In Chorea Dr Hamilton has insisted on purges almost exclusively. Yet however will not always succeed. I have a case now under my care in which they have failed. Dr Rush & Dr Hosack have each had a case in which they were successful but it should be observed that each of them exhibited wine very freely at the same time. In Pertussis bark should be confined exclusively to the last stage. Dr Barton observes that it sometimes assumes the intermittent type & then the bark is useful. These cases I have never seen. In Asthma it has not been used with any great advantage, & only allowable where the digestive powers are impaired. In scurvy more confidence is to be placed in vegetables & in Acids. In scrofula when there is debility & the bark is to be employed. Dr Fothergill relates a case of Ophthalmia arising from Scrofula which he cured in one month by bark & by a diet of animal food. I should place more confidence in the latter.