1806-07

Lectures on Materia Medica
By
Dr. Barton. &c. &c.

Novem^r 4th

1806. Introductory Lecture.

1. The origin of this science - Has been much disfigured by fable. May be looked for in the existence operations of animals as well as of remotest periods. All Nations have Physicians - The Otaheitans cure of venereal disease by their remedies. The Six Nations have 15 different Emetics. Hot baths common among the Savages of the two Countries. Instinct in the Bear, leads him to eat Skunk-cabbage after hybernating. In Asia the largest portion of

information was first treasured
up. The Egyptians not an indigenous
race of Men. Their Medicines
principally Vegetables - Among
y first acquaintance with opium
Their practice feeble - The Greeks
acquainted with some mineral
medicines - Hippocrates of y
School of Asculapius. The igno-
rance of y Ancients respecting
an appropriate Botanical Science
seem as unable to understand
what medicines used by them -
Not long after Hippocrates, Aristotle
& Theophrastus appeared -
Erasistratus 300 y. after Aris-
totle - A man of much learning
In Dysentery, trusted to eating
Gruels, but seldom, bled -
Cotemporary with Aristotle

was Herophilus - Asclepiades
a sect of Empirics - Their
Founder was Serapion - He
practised as we do in Volumes
Used powerful remedies. This
sect contributed much to the
improvement of medicine
among the Romans medicine
made little progress. Cornelius
Celsus the only Patrician of Rome
of eminence - Devoted
much attention to aliments -
but less to medicine.
His Latin of a superior style
Has been called the Cicero of
Physicians - Layers treats of
the compositions of medicine
Galen says Layers not much
to be trusted to -

Dioscorides lived in ye time of Vespasian. He enumerates 700 medicines Cant judge with respect to ye power of his medicine His judgement questionable Mentions medicines which consume ye spleen & ye like. Some moderns as foolish as Dios Next ye elder Pliny. Is a mere compiler tho' his work has merit. Loonnoyte Galen. Travelled much & for some time resided in Rome. Said ye powers of medicine depended upon their qualities of hot & cold.

This doctrine now discarded
tho' much followed in France
for many hundred years -
He attended to every branch
of medicine studied in his
time - but a great Botanist
Boerhaave says was of great
service as it has injury to
medicine - The opinion of
ye soul's being material or
immaterial, makes no
change in practice - The
system of Galen continued
for a long period more so
than any future doctrine
Avicenna employed active
medicines & bled freely in
malignant fever - He took
lbij at one bleeding -

The Arabians introduced several useful medicines such as Senna, Manna &c. Tho' these y most useful & noble sciences have penetrated into large countries They, y Father of Chemistry. The title Physick in y middle ages was in y hands of the Clergy. In y beginning of y 15th century printing broke y strong chains of barbarism. Phy first printed in 1469. In 1478 Dioscorides printed. Best y chemical Materia medica to be considered. In 14th & 15th c. many began all. Arnoldus first introduced Chemistry it is said. ~~Phy~~

This disputed - Dally could
dispute for a day on a subject
which he did not understand
When he began chemistry
~~his doctrine~~, he said, ~~want~~
he could not use his transcen-
dental art. The Chemical
Philosophers of this Period
desiderated - At first great
Enthusiasts.

Continuation of ye Introductory
Lecture 2.

The Egyptians possessed ye Sciences earlier than Romans or Greeks. These not only collected information from others but by their own industry & genius much improved ye Sciences — but long after ye appearance of Chemical Physicians a Sect appeared who maintained ye life of any man might be prolonged to any age by their medicines The benevolence discovered unjustly

supposed to have been imported from America. The Chemists acquired much celebrity by ye use of mercury in this disease & thereby gained ascendency over ye Schools -
This disease supposes a modification of leprosy. B. Lon notice of Paracelsus - was born in 1493 in Switzerland when 3 years was mutilated & supposed an enemy to women He visited ye Universities of Germany, Spain, France &c Highly appreciated ye writings of ye Ancients - Became Professor in 1527 at Basil while here burned ye writings of Galen &c Died in 1541 at an Inn - ☞ From ye fame of this man much fame must have resulted to his

to his Country. 36 years after John Baptist Van Helmont appeared. Spent 50 y. in distillations. Died in 1544. Was fond of chemical as well as more simple medicines. As a Physician, however, not successful. Could not cure his Daughter with Leprosy prescribed for 2 y. In his own case, a spitting of blood was treated with goats blood. From this, it is presumable not a great Practitioner. He was, however, certainly a man of a sagacious genius. Chemical prevailed more in Germany than any other Country. Sennertus a Galenist & laboured to reconcile y Galenists & Chemists

~~Page 17~~ Early in the 17th century Sennertus was called to England when appointed Physician to King James. ~~In 1666 in Paris a~~ The Doctrine of Signatures as late 1750 if not in this day maintained - Francis Sylvius De Le Boe the founder of the 3d great sect He supposed most disorders were owing to superabundant acid - He accordingly often used absorbents - Attached too much to the hot regimen - ~~John Shade~~ In 1749 Linnaeus published his Mat: Med: It was a small & by no means useful volume - Beginning Mat: Med: good -

In 1789 Cullen published his Mat: Medica - This work good but not so much so as desirable. For y Student preferable to Murray who considers only Vegetables - Within y last 20 y. as much cultivation as any other branch. It now embraces but few specific medicines - Germany has furnished some of y best books on this subject - The present course will be much more full than any previous course - Those on Aliments much more full - A view of y natural history of y human body will be taken

Lecture 3.

Consists of a history of various means of obtaining an acct of medicinal substances
Man is instinctively propelled to use medicines as well as take nourishment
Chemical examination
Botanical —
Sensible qualities

Signatures.

This doctrine much in vogue among our Indians
The Mitchella repens as treated by this people and illustration —

A plants resembling certain parts useful for them when diseased

This doctrine not yet discarded by men of eminence—

This doctrine has been useful by extending our information of vegetables

March 7th

of Chemical Revolution

The study of chemistry

is of greatest importance

in the study of the Mat: Med:

This science conducts

to the student to the

powers of vegetables

as has, erroneously,

been supposed -

This doctrine seldom leads to any virtues of plants which was not before known. The conclusion is that chemical analysis of no use in discovering virtues of plants Gum: Arabic chemically, yields a very same ~~[illegible]~~ as the poison of a viper -

of the Botanical method of discovering the virtues of plants - By Botanical affinity is meant that resemblance between vegetables distinct from each other as it respects their fructification - Ex. The analogy between Mullein & Holyhock. is Bot: affinity -

By simple distillation
Ammonia may be obtained
from ye Tetradynamia. The
different species of ye same
genus of plants have often
very different properties
The Cucumber & Colycinth are
two species of ye same genus.
Observe their difference —
~~Differ~~ One species of Physalis
very innocent the some very
noxious — The Natural
orders are also very excep-
tionable in this respect —
The Gramina have ill simila
properties except ye lolium
temulentum which is very poi-
sonous. The verbascum is
enriched with ye lunace
ple of which a other except
ye Mullein which however

is in some measure active
for it will kill Fish. This
Genus is not a happy in-
stance. The Lurida are al
poisonous or nearly so, tho'
~~some~~ all have peculiarities peculiar
to each. The Digitalis has
been confounded with the Sym-
phitum or Comfrey. Her
Botanical Analogy decides
The Cruciform or Tetradynamia
abound in a watery juice
acid, stimulant, taken in
effect on pulse, kidneys &c.
The Mustard, horse-radish
action, the turnip ~~&c~~ mild.
The ~~Baptisia~~ The root of the
Podophyllum peltatum or May-app.

is purgative, leaves poisonous & fruit esculent - ~~The fruit~~ The seed ~~of~~ Virgil's Viscum Japanese was eaten ~~by the Romans~~ by part of the vegetable -

The Botanical affinity of importance -

Lecture 4.

The effect of climate prevents correct information from Botanical affinity. The juice of a plant has more sugar in warm than in cold climates -

by sensible qualities of substances in pointing out their medical virtues -

The ancient used two sets of means in their discoveries virtues - 1. from their habits 2. from their taste & smell -

These methods sometimes accurate & are natural & have been employed in all countries & by all nations. This method has been attended with much advantage.
Cullen says substances which slightly affect the senses are useless as medicines - This as a general rule good tho' there are exceptions. For some of the most powerful substances destitute of taste & smell.
Fontana says the venom of the viper is insipid tho' not so much so as been spring water. Barton found the poison of the Rattle-snake extremely & rapidly pungent - A portion

of ye same poison in a few minutes Killed Rabbits. Altho' this ye case ye inspection would not lead to its true virtues. The Ticunas, ye produce of different species of plants, is insipid & ye most poisonous vegetable known. A similarity of taste & smell cannot therefore lead to ye real virtues of vegetables always tho' this sometimes ye case. The Lobelia tasts like tobacco & when taken in excess effects like tobacco. This on many tastes as acid, bitter, acrid &c & narcotics which embrace substances of very different powers. Linnaeus says odoriferous

substances act solely on
nerves & rapid on v muscu-
lar system - This B.
supposes groundless. Doubtf
whether any medicines
act solely on nervous or
muscular system - Cam-
phor acts on v nerves
both parts - Both
taste & smell fallacious -
In his Mat: Med: Linnaeus
divides odours into
~~[illegible]~~ him which
I dont know - His pupil
divides in 7. 1. Aromat
2. Hragan - 3 Ambro
siaca 4 Alliacea. 5
Floscina a gotich 6. Tetra
7. Naucosa -

This division not spoken highly of - The three first & Aliacea good - The Flencina also good - The odous Tetra not good - The last not to stand for what is nauseous to one pleasant to another - I add one to Linnaeus class - I call it of piercing or poignant odour as in Vol: alkali & Mustard &c &c

At present this science cannot derive much advantage from this arrangement - The difference of the olfactory system in different persons militates against this system - Linnaeus supposes the colour will give much information respecting the properties of plants - The white insipid he says - The white leaves life active therefore - The green colour is crude in its taste - The yellows shows bitter

This has exceptions - If he had said yellow juice he would have been more correct - The red is acid - Exceptions to this rule - The white indicates sweetness - A few exceptions to this rule - The black colour shows something ~~grateful~~ disagreeable. Upon the whole the colour tho' not an unerring guide somewhat useful -

Books to be read - 1. Cullen. 2. Lewis by Aiken - Particularly valuable in Pharmacy - 3 Murray nearly if not quite as valuable as Murray The Dispensatories not near so useful as these books - Recommends his own Collection of native vegetables

Lecture 5.

The chemical analysis often of importance in ascertaining virtues of medicines - This recapitulates

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Color pallidus insipidus, luteus, amarum
ruber acidum albus dulcis
niger ingratum

Linnaeus aphorism

Color pallidus - indicates Insipidum
luteus . . . Amarum
ruber . . . Acidum
albus - Dulce
niger - - Ingratum

Of the best plan for a
Materia Medica &c. &c.

Linnæus' sexual system
as a foundation for a Mat: Med:
not sufficiently natural tho' several
classes natural - Monadelphia
natural & Diadelphia somewhat
tho not so much - The Pentandria
not natural. The ~~first class~~ ~~Tax~~ or
~~Angiosperm Gynandria~~. Murray has
associated vegetables according to their
Botanical affinity - He places opium
in a separate order from or
Night-shade - Some of his orders among
vegetables very different in their nature
The Liliaceæ among plants thus dif-
ferently - Some form Mat: Med:
upon or different subordinate systems
in or body. There is some founda-
tion for these divisions. ~~The dactyls~~
Cartilage is alive - The Lacteals more
tenacious of life than arteries - Madder
will tie tiny cartilage: a proof of its
vascularity. No one has coloured or
bones of Amphibious animals by madder

& every one knows the same of the vessel - Body considered as a common system divided into sub-ordinate - Mr Bordeaux compares life to a cluster of bees hanging to a tree - so that man is a animal within an animal - Linnaeus had five nervous medicines. Had also muscular med: there are three orders. Visceralia or those which affect ye viscera - have 4 orders -

Dr Rush divides ye body into different systems. Sanguiferous, Lymphatic, Skin & blood

which will serve for an argument in mat: med: Those which affect sanguiferous system would be opium &c but this affects directly ye liver - For animals who take this have an increased secretion of bile - It affects ye brain, lungs &c. This opium affects ye secretions secretions It purges as in colica Pictonum - Promotes perspiration - Thus opium affects 4 of Rush systems - Evidently affects ye nervous system The senses which is an other division of Dr

it affects. The venereal appetite is much affected by it.

Opium stimulates ye lymphatics & promotes absorption - It has produced swelling of ye Parotid - affects ye skin producing abscesses eruptions &c &c. No one medicine confined to one system - Digitalis affects ye sanguiferous system, lowering ye pulse, it salivates & increases flow of urine: it therefore affects ye lymphatic system as well as other. Mercury produces no effect till ye ~~[illegible]~~ sanguiferous system be affected with fever.

Each system is dependent on each other like ye links of a chain - There are however, medicines which affect one system more than an other.

There are certainly somewhat of specific medicines -

Darwin ~~has~~ arranges as follows

1. Nutrientia

2. Irritantia w/ Opium. They increase ye ~~irritative~~ motions & produce costiveness

3. Secernentia - Produce secretion & comprehend diuretics cathartics, blisters, enemas -

4. Sorbentia - Produce absorption Emetics,

5. Incertentia - Emetics. Volent Cathartics Enemas -

6 Revertentia. Musk. Asafoetida Valerian - Vol; Sol. Sempervivum &c

7 Torpentia - Mucilage, water, bland oils -

Lecture 6.

Opium often delineated - The Torpentia might have been called nutrientia Darwin's arrangement involves theories which cannot be supported by facts -

Some arrange ye substances ye Mat: Med: Alphabetically - This not a good method. - Cullen, in his arrangement followed other writers on whom he improved -
Warton destroys some of Cullen's classes & gives place to some not in Cullen: as Anthelmintics & Antilithics - Objects to C's class of Sedatives - A proper arrangement difficult. The greater number of writers overlooked ye lymphatic system which is ye ultimum moriens
Some medicines carried into the circulation
The Mat: Med: divided into Mat: alimentaria & medicinal - Writers not sufficiently attentive to aliments - By aliments is meant those substances fitted to supply ye fluids & solids of ye system - Difficult ~~its~~ say whether some substances are medicines or aliments: such as Coffee & tea - C. says those to furnish fluid & solid are acid, sugar & oil - This idea of ye Acid -
This appears in ye whole of many

vegetables eaten by us. ~~Acid~~
An acid, is not, as C. supposes, a necessary part of our aliment tho' it is a very proper part. It is probable some of ye fossil acids, if sufficiently diluted, will cure scurvy. The Phosphoric acid more nutritious than some others - Possibly ye Benzoic acid, which is in ye urine of ye horse, approaches to ye Phosphoric - Br. Africa, an People who live on only putrid flesh & yet live without vegetables - Dr Cullen supposes his acid formed in ye stomach by acetous fermentation - The solution of our food is accomplished by ye gastric juice - A quantity of acid often vomited by Gouty Patients - Dr Bland in 1763 combated this doctrine of Cullen - Spallanzani often him combated ye same doctrine - To Bland we are indebted for the first correct information on Digestion - An acid does exist in the stomach tho' it does oppose digestion - The Phosphoric acid enters into the composition of ye gastric juice -

In worms the digestive process goes on imperfectly the appetite for food great — In such the breath frequently smells of the Phosphoric acid produced from the bread — Digestion cannot take place in the dead or relax living body — Hunter on this subject is not much relied on by Barton — His reason for doubting is its occurring so seldom

Lecture 7.

The gastric juice does not change food into finished chyle This is not done in the stomach — If the pylorus be tied the lymphatics swell with a transparent fluid very different from that in the lacteals The business of digestion goes on in the whole of the alimentary canal — No chyle is absorbed from the stomach — The Mesenteric glands may be con-

sidered as a digestive appendage - Digestion, in some animals, goes on largely in ye Asophagus -

Sugar

The second kind vegetable matter to furnish animal fluid & &c Professor Murray erroneous in his opinion - Sugar, unquestionably nutritious - Fig most nutritious of all fruit - This owing to its mucilage as well as sugar. Fig gives great strength as well as nourishment - Fig has been beneficial in nephritic affections - Apple best affoded Fig sugar - The nutritious nature of this vegetable depends on its sugar - Cullen supposes sugar convertible into farina & vice versa. Sugar good remedy for those emaciated by mercury - Sugar highly antiseptic - Herodotus says ye people of Babylon buried their dead in honey -

The plague has never been known among a people who used much sugar according to some. The leprosy however, which is closely allied to plague, accurs among such people. All of this doctrine appears erroneous. Leprosy has disappeared from Madeira when it was common formerly. Stark found less liquid prevented thirst, while eating sugar & bread than when eating only bread. Sugar exists, perhaps, in all vegetables. It has not been found in fungous plants. In lichen, Hodgen says no sugar. This not a fact for sugar has been obtained from some species of lichen. It is obtained from many vegetables viz parsnip, carrot ~~&c~~ sugar cane & Indian corn. From species of juglans. It is also found in the animal world viz milk &c. It is supposed the blood contains sugar. Because it does not taste of it, no objection. Barley does not taste of it lent.

contains sugar - In Diabetes arteriae action often high. In this disease animal diet highly injurious - A case related where for 90 days 40 lb of urine were daily discharged - Here ye sugar must have been great - Sugar, upon analysis, yields carbon, hydrogen & oxygen - It is a vegetable oxyde - 64 oxygen 28 carbon & 8 hydrogen. Their proportions are different in different vegetables - Sugar of ye maple does not differ from that of ye cane -

Lecture 8.

Sugar exists in ye mineral kingdom as ye emerald - In Diabetes an animal diet, by some, highly useful - Sugar does not injure ye teeth - The Inhabitants of ye West Indies chew this. It whitens ye teeth.

when yr teeth begin to decay
sugar hastens it –

of Honey -

There is much honey of an animal nature - This less analogous to sugar than has been supposed by authors, among whom is Dr C. Honey less nutritious than sugar & has medical properties ~~not~~ found in sugar - In Asthma honey has been highly useful - B. relates 2 cases in point.

of Oil -

This extremely nutritious. The expressed oil of vegetables truly nutritious. In Scotland ~~pea~~ bread much used & bulk for ~~bulk~~ more nutritious than other farina. Pure oil constitute one of ye fundamentals of ye animal. This oil, when taken in, does not remain long separate -

The torpid state of hybernating animals an accidental circumstance depending on climate &c. Haller on this subject erroneous in saying there is no circulation & they are completely frozen - B says some animals of ye frog serpent kind are white in ye torpid

state, respiration completely ceases, all of them, however, capable of being revived. In this state of interrupted life, oil may not be absorbed.
The lymphatics continue to absorb for many hours after all the usual signs of life have disappeared.
The lymphatics of ultimum moriens.
Several observations relative to the hybernating animals, absorption of fat ~~&c &c &c~~

. . . . . .

. . . . . .

Dr Stark lived 16 days on olive oil & gained in weight 4 lbs 4 oz.

These three aliments of C. Lymphs means of entrée of elementary principles of aliment. There are many others. Man is most omnivorous of all animals.

Lecture. 9. Thursday

Of Mucilage -

This C. has not enumerated among his aliments - This very nutritious - Almost all vegetables which are insipid & colourless have generally Gum & mucilage - Gum: Arab: & Tragacanth are to be noticed - All gums coagulated by litharge Gum: Arabic nearly is only food of the Inhabitants of the Niger: Africa C. says mucilage ~~a simple substance (Debate)~~ The gums are 4. 1. Gum: Arabic, 2. Tragacanth, 3. Cherry Gum & 4. Mucilage - found in the leaves roots of many plants - Doubtful whether mucilage & Gum precisely the same - Those trees which yield gum are generally astringent This not the case with those plants yielding mucilage - This however has

exceptions viz. of Tilia A-
mericana which yields much
mucilage, Its astringent -
Cultivation appears to destroy
the astringent quality of many
vegetables which yield mucilage
The Chemical analysis of gum:
carbon, hydrogen, oxygen & azote
" " " "
dyetic by nitric
acid dropped in a solution
of gum.
Fritanner supposes opinion
of most nutritious of vegetable
substances because it has a
great affinity for oxygen. This
foolish - Relatis of case
of a Catarrhus vesica when
of smallest quantity of ~~nu-~~
~~tritious substances~~ meat increased
of disease on this acct gum:
Arabic was used as a diet
for 6 weeks & of Child increased
in bulk; but at length died

Lime nutritious Lime
or Calcareous earth, is, con-
trary to the opinion of Dr
Hordsen, nutritious. Lime
combined with phosphoric
acid is found in ye blood,
semen & widely diffused
in ye vegetable world - ~~This~~
100 semen contains one of phosphate
of lime - B. suppose calcareous
earth an original substance
not at all depending on animals
for its formation - Calcareous
earth ye principal nourish-
ment of some sea fish, as ye cod
fish - Cant explain how this
earth nourishes: but there is
no doubt of ye fact. Lime may
act as a manure by suddenly
decomposing substances suited
to increase ye growth of vegetables
It attracts powerfully moisture

Lime increases ye quality
of ye crops as well as quantity
Thus resides in ye vessels of plants
a power of forming substances by
an inherent action - The same
plant growing in carbon, lime &c
shall give the same results
that is ye same mucilage, gum
&c. To conclude. no doubt
but that calcareous earth is
nutritious & is no mean agent
in nourishing the system
Baron Humboldt saw many
Inhabitants eating regularly
at their meals, calcareous earth
Light is one of ye nutritious
vegetables sicken & die without
this choicest gift of Heaven -
Animals deprived of it be-
come white - Our Brethren
eternally shut out from ye
influence of heavenly light

line & subsist - It is an universal stimulus - By this ye sugar of vegetables is more abundantly evolved - The want of light is ye reason Fungi have no sugar -

Lecture - 10.

Of Milk -

Considers Human, Cows, Asses & Sheep's Milk - It is uniform consistency greater than that of water - More cold to freez it than water - It boils tho' at different temperatures in different Milks - Specific gravity greater than that of water - When rest it separates into Cream, Curd & Whey - A large surface separates more quickly its cream -

If Milk be boiled more
oil separates & air is given
out - Milk exposed to the
air soon becomes acid -
After a time it coagulates
Cream always greater in
cold weather

Thunder hastens acidity
In Mountainous countries
animals afford more milk
Cattle in the Western require
more salt than the Eastern
tract of our Country -

Sometimes w milkin
proportion to w colour of
Cows - The Milk of hal-
haired women, thinner than
that of other women - Milk
of young animals not so
oily as older - The quantity
of cream in proportion to
w dryness of w pasture
Cream always contains a
portion of w two other parts
The formation of Butter does
not depend on simple agi-
tation for there is an extri-
cation of gas (perhaps carbonic)
& w temperature is increased
Butter, therefore, is not simply
particles of oil compacted -
This oil in its recent state
resembles w expressed oils of
vegetables - Butter sale mild

oils liable to rancidity (40
which is owing to an acid -
Butter melted becomes more
difficultly rancid - The
rancidity of butter is produced
in part by a fermentation
which is aided by the muci-
lage found with the air -
The rancidity may be cor-
rected by alkohol - The juice
of a certain plant found on the
Nile, prevents rancidity - The
Sebacic acid has nothing
to do in producing rancidity
of Curd or coagulable part
of Milk -
This perceived in a few
days after the Milk drawn
after the formation of this por-
tion of whey separates
Runnet coagulates Milk

The power of rennet in producing coagulation of milk, depends, not on an acidity existing in the Calf's stomach, but some peculiar quality. The internal stomach of Birds powdered is excellent to coagulate milk. This power of coagulating milk is not confined to the stomach: the lime or a lime first will do the same thing. Certain vegetables, as different species of Galium, will do the same thing. These will do it only when put into cold milk.

The alkaline salts in their caustic state dissolve ye cheesy portion of milk. Lime water occasions an imperfect coagulation.
Coagulated milk never seen in ye duodenum of an animal. Chyme becomes putrid & in this approaches animal matter. This gives out ye Vol: alkali & has therefore been supposed a proof of animal matter. This no proof — for vegetables give out ammonia. This furnished in abundance by ye vegetables of ye class Tetradynamia. The Lunida also furnish it. The Fungous plants furnish more ammoniac than any other vegetables.

No doubt but that milk
affords animal matter -
An animal ~~matter~~ confined
to animal food - affords
milk different in its sensible qualities
as well as chemical analysis
from that afforded by animals
restricted to ~~a~~ vegetables -

of Whey or Lime lactis

water enters in large quantities into milk. Water 7/8 of the whole bulk of milk. The proportion of water different in different milk. This aqueous different as the state of the milk when this watery part was separated. In churning the watery part is separated in butter-milk. The whey of Goat's milk contains more oil than that of Cows. There is in whey, sugar. Whey contains sugar of milk & acidum saccho-lacticum muriate of Potash & Phos: Lime are in whey

butter, is made up of
sugar, gelatin, mucat of soda
& potash &c — Ass's milk
furnishes most sugar
Man's next & human
meat — Phosphate of
lime in all milks —
Milk is one of the animal
substances that undergoes
vinous fermentation —
From Mare's milk
the Tartars obtains a wine
or chamis made by 6
parts of M.'s milk, one
water, & one of very sour
~~[illegible]~~ Cow's milk
& beat ~~[illegible]~~ —
Agitation must be employed

before its use – In its preparation heat, boiling & agitation are necessary – Man's milk is not ye only milk susceptible of fermentation Cow's milk will ferment –

~~Cheese~~ Cheesy part of milk greatest

S
C
M
Ms
a
A

Cheesy part of milk greatest in ye ruminant – The non-ruminant has less serous part of ye milk The cream greatest in E & Goat

The cream of women's milk lasts when they live on vegetables - Milk of the whale contains more cream than any other animal known - Milk of woman contains less curds & it will not yield butter The curd increases with the time after delivery - Vinegar, Begins Lays, coagulates the milk of a woman restricted to vegetables entirely - The nature of the food has great effect on the milk

How milk secreted in the human kind -

Chyle & milk has great resemblance

Lower saw chyle swimming on the blood of a mare & it resembled milk

In Diabetic Patients chyle is frequently seen on the blood This appearance of chyle by no means common - Barton thinks this chylous appearance of blood

is ~~due~~ morbid ~~owing to disease~~.
He supposes it occurs in
Persons with vertigo or some
affection of the head - He has
obtained from ℥xx of his
own blood ℥j of this chyle
It became hard by a less heat
than is sufficient to coagulate
serum -

Purgatives given to a Nourse will purge ye suckling child you does not think so. When ye child is purged ye purge must have laid some time in ye bowels & ye Mother & therefore absorbed. In Hydrocephalus internus ye alimentary canal torpid. When this disease occurs in children at ye Breast might not ye child be purged by giving purgatives to ye Mother. B. throws this out as a speculation not yet verified by experiment.

Medicines absorbed. The Milk of a salivated nurse will salivate Children at the breast. Cooper relates a case which occurred in this City. This method of salivating Children not of great practical importance. Children at the breast may be salivated by inhaling the breath of the salivated nurse. Mercury absorbed as has been proved by several Gentlemen. Children seldom intoxicated by drunken nurses. There are, however, cases of intoxication of Children under those circumstances according to some. Milk always, almost immediately increased after taking in nourishment either fluid or solid. Drink affords most milk. Many women during giving Milk are constantly costive this at other times not so. The oily & coagulable part of Milk secreted. The sugar of the milk afforded by

of saccharine part of vegetables taken in - This saccharine, Lawrence Barton thinks has been assimilated with the blood. Herbivorous Animal's Milk always coagulable by vinegar - Carnivorous not so.

The milk of carnivorous animals it is probable, has but little sugar. Abernethy found sugar taken in increased the quantity of sugar in the urine of diabetic Patient - After the use of wormwood the milk bitter - Milk is coloured by madder taken into the stomach - Indigo colours milk. Mr Astley saw the milk green in a woman labouring under Bilious fever - B. says the nature of our fluids different in different diets - Animals under animal diet yield most phosphoric acid in their urine -

Milk is ye proper nourishment of all ye class Mammalia. ~~The~~ Milk is adapted to ye human species for between 7 & 11 months according to Cullen. Among ye Indians ye children seldom leave ye breast before 2 years. Among some Indians ye children return from hunting & call for ye breast - Rarely under 12 months do their children cease to suck. This would seem to disprove Cullen's observation that children who suck long are disposed to rickets. Long suckling does not dispose to rickets. How long should ye child suck? About twelve months. rarely under.

Medical Properties of Milk.

Milk is a restorative. When ye fluids are vitiated milk good - Milk not so plethoric. In Scrophula a milk diet not very serviceable. This is a disease of ye absorbent system - It is more common ~~in countries~~ among ye Indians than many others

These people have domesticated no animal that gives milk - This disease more common in ye country than in Towns -

Lecture 13.

It has been supposed a adapted to Phthisis pulmonalis - It is always in ye first instance attended with increased action - when milk is improper - Lydenham did harm in always recommending milk diding. in ye flow consumption milk injurious. After milk has been supposed particularly adapted to Consumption - This is in general not ye case.

Gout being founded in a plethoric state of the system, milk may be a proper remedy tho not so useful as Cullen supposes Gout is a hereditary disease. Lom of ye Egyptians, 'Alpenus says' are very commonly affected with this disease altho their diet consists almost entirely in vegetables - Milk improper for those leading a sedentary life

Milk in Nephritis has been used tho of no great efficacy -

women driven with idleness
alone. ~~[illegible]~~ —

Of ye

Materia Medica properly so called -

Difficult to arrange ye substances of the Materia Medica Dr Cullen & others have given plan to a class

Adstringentia or Astringents

This B. retains: tho' he thinks at some distant period this class he will reject. Some of them astringents might readily be arranged under ye head of Tonics but others would be more difficultly disposed of. ~~Phlo-giston~~ B. thinks ye French nomenclature ~~of~~ Chemistry will not stand Darwin calls astringents & Tonics Lorientia This wore title - A class of Tonics will always be retained & it will be divided into 3 heads. The 1. Astringents without bitter 2. Tonics without astringents & 3. comprehends bitter & astringent both. Adstringents produce a contraction & condensation of animal fibre. C.

Cullen supposes astringents act chemically on ye body somewhat like they do on dead matter - The tannin principle exists in ye greatest state of purity in ye nut-gal & Catechu - This Tannin is astringent, its solution brown & more soluble in alcohol than in water - The raw hide extracts ye tan principle & extractive principle & hence ye brown colour - Hides absorb 1/3 their weight. The living skin admits none of these principles - Therefore these substances cannot act on ye living as on ye dead skin - The Lizard will absorb one half its weight of water - If we were to infer from such experiments human absorption by ye skin ye inference would not be good - Astringents are antiseptic A gangrenous leg or arm would not be affected by astringents - If a hide begin to putrify & in this state is thrown into ye tan-vat ye dead parts will slough off - ~~Astringents~~

Some astringents when externally applied as on ye tongue a contraction will take place all over ye mouth - Darwin explains ye fact by absorption

Zij decoct: lena lini men in-
jected into an animal's sto-
mach with ye effect of contracting
ye pylorus, so that no food would
pass. The lunar caustic has
no effect on dead matter but
quickly decomposes living
matter - On this account ye
lunar caustic has been pro-
posed to ascertain when an
animal be dead -

Lecture 14.

Astringents act on vegetables &
animals. Witness ye three species
of Sponge, which are lactescent.
In Hæmorrhagy Dr. Heberden M.D.
says not much stress on astringent
except in that of ye bowels. In
this however ye other is unknown
Madder is an astringent & its
astringent colouring principle
is absorbed. Lemon sugar of lead
will stop a copious hæmorrhagy

from ye uterus. This effect
not produced by absorption of
ye medicine
The astringent principle is
soluble in alkohol & on
this acct have been advised
to be they administered
This, however, is a bad
vehicle. The matter of
astringent according to some
consists of acid & earth. The
combination, however, of
these substances does not al-
ways produce astringency
B. think by astringency does
not depend on acid & earth.
The astringent principle is
of an acid nature. The
root of ye Tormentil, alum. rad.
has astringency

galls have much of this
astringent principle & is
called the gallic acid -
It is soluble in Æther -
Cultivation deprives many
plants, as alum & cinchona, of
the gallic acid or astringent
principle. W. thinks this astrin
principle is a gallic acid
& alumina - B. thinks not,
B. thinks with Walker that
the astringent principle is
not only a gallate of alumina
but of other earths as the gall.
of magnesia &c &c
The astringent principle is
discovered by tartar - by
a solution of sul: or oxy-sulphs
of iron when a black colour
will be found

The common sulphat: of iron will not produce ye black colour it must be ye oxy-sulphat: of ~~some~~ iron - This ye opinion of a certain Chemist

Astringents best taken in substance. Some resinous astringents, which are not soluble in ye gastric juice, will become soluble by a mixture with gum. The gum resins are therefore among ye Inertia of ye Mat: Med:

Astringents give out their virtues to water by infusion They may be treated by decoction & by this a stronger astringent is produced —

Astringents have been recommended in cachexia or general debility. Iron in ye hypinuty of drops from

debility very good. when this
arises from increased action iron
not good - Bleeding & depletion best -
In remitting & intermitting
Fevers. A case of hydrocele,
~~for~~ ~~w~~ from Gout, related - This
Patient was cured by ye Gout
being translated to the extremities.
Astringents in restraining ca-
cessive evacuations - In Hæmorhage
of ye Passive kind, these good -
In hæmorhage from ye Intestines
when attended with increased
action, bleed ~~ev~~ even if blood is
at ye same time discharging
from ye anus - Astringents in ye
management of many hæmorhages
are indispensable - Ipecac:,
altho' not an astringent, is
equal to most astringents in
ye management of hæmorhage -

Lecture.

Diarrhoea & Dysentery often arise from ye same cause; but require a different treatment. Astringents injurious in ye last. B. thinks a febrile & not a constriction of ye Intestines ye cause of Dysentery. Astringents do not act by increasing ye constriction as Cullen says but by their tonic virtues. ~~In Diarrhoea Astringents cure by their tonic~~ power tone

Diarrhoea occasioned by contagion or other stimuli & it is attended with fever. When this astringents wont do. In Leucorrhoea astringents often fail. This sometimes highly useful. There is a distinction betwen different Leucorrhoea. One is attended with fever & gathered out

Darwin calls an leucorrhœa calida & frigida -
Diabetes little known - It has been supposed to depend on relaxation of the kidneys - In this astringents have done harm - This disease is com-pared with thirst, &c &c a proof of disease in the arteries
Upon dissection the kidneys have been found enlarged
B. says he cured it by bleeding, bitters & Tartar Emetic in small doses, & low diet - It is divided into Mellitus & insipidus - In this there are nephritic pains, hot skin, large dis-charge of water, thirst &c
Serous discharges from the ure-thra of the male have often been cured by the immediate application of astringents & even when taken internal

These astringents will relieve pain from calculus. Cullen erroneous when he explains the effects of astringents in calculus, by saying they absorb acid from the stomach - The Carbonic acid will relieve, as alkali or astringents & it certainly cant absorb acid - And we have no proof or reason to suppose there is this great quantity of acid - Not only do Uva Ursi & will relieve calculus but other vegetable astringents -

of Particular Astringents

Barks of some Species of Quercus or Oak-bark.

A decoction of this bark is useful as a gargle & united with alum its virtues are increased. Cullen gave it in ye dose of half a dram & ℥j with effect in some fevers. B. has used a strong decoction of Spanish bark in gangrene both internally & externally applied. The bark of ye Quercus or Quercitron tinctoria, not so good on acct of its purgative extractive matter. In Europe Some have used Acorns & Cups of ye Galls.

Produced by an Insect.

NB. Barton arranges his astringents according to their degree of astringency

It is ye Quercus Cerris
ye leaf being punctured by an
Insect - They have no smell
but a very acrid & astringent
taste The extract of galls ye
most powerful astringents
They have been recommended
in Intermittents tho' not equal
to ye Bark of Peru -
Galls have been recommended
in Alvius - It is said they never
did occasion costiveness - A de-
coction of galls, by way of glyster,
has relieved the disease of ye rec-
tum from relaxation - In Piles
an ointment of not quite equal
parts of Axungia & galls, good.
Two kinds of Piles - low depending
on torpor in ye old & ye other in
ye young & plethoric here galls bad.

Galls in Gonorrhoea & gleet has been good -

℥ vi Gum-Kino

This ℞ produces ℥ two or three different plants. It is soluble in the saliva ℥ ℞ mouth. Both water & alcohol dissolve it. The sulph: & oxy-sulph: ℥ iron will strike a black colour with it. B. employs with Gum Arabic or Sugar rubbed down & ℞ whole dissolved in water. Children readily take it. It has been given in Intermittents. ℞ ℥iss ℥ water dissolve ℥iij ℥ Kino. B. used it in Intermittents in combination with columbo or gentian. Given to an Adult ℞ Kino 48,- 64 Gent. Oz ii in 8 doses take 4 dose, in 24 hours. This has been dissolved in lime water & injected into ℞ Vagina in cases ℥ fluor albus. This practice has been tried with effect in N.Y. They used 4 dr ℥ Kino & lime water ℥viij ~~of lime water~~

B. has employed this internally in fluor albus. In Gonorrhoea ℥ij Kino ℥i alum. & bp: ℥ij add ℥x of boiling water. This Injection useful in Gonorrhoea. It is exceptionable on acct of colouring of linen. This is a cheap remedy.

Lecture 16. Dec.r 4th

Terra Japonica or Extract of Catechu

This is produced of a species of Mimosa. It is of a dark red & bitter-sweet taste. The greatest part soluble in water & rest in alkohol. This Catechu seldom used in U. S. In Europe used as a mild astringent in uterine hemorrhage &c &c. It is used in an ointment of Hindostan. Astringents useful in ulcers. This Catechu is a mulberrant. Peruvian B. good in ulcers of a bad kind.

Unless those astringents act by stimulating w parts

Tinc: Catechu composed of

~~wine~~ ℥iij Catechu Cinnamon

℥ij & Proof Spt ℔ij -

Mistletoe or Viscum

This is a parasitic plant. never found on ye Earth - It eats of ye trees upon which it grows. It is curious as it respects religion - It has been held in superstition - This Viscum ye same on whatever tree it grows - It is a powerful astringent - It has with its astringency a bitterness - Good in Quartan Fevers - In Epilepsy proceeding from

increased mobility, good.
Its virtues principally in ye
bark in a dose of ℥ss to ℥j -
In Chorea St Viti, with Asafetida,
this V. good. Hom employed
V. with advantage - B. never used it.
The V. album, in Del.m moderates
paroxysm of Epilepsy. This V.
shows that plants absorb colouring
& other matters, & its virtues ye
same upon whatever tree it grows
Hence its properties formed by ye living
powers of ye plant -

Geranium Maculatum -
It grows within ye vicinity of P.
It is called Crow-foot - In Cholera
Morbus, ye root boiled in milk
is taken with advantage by Children
In Chol. B. has not much experience
He thinks Astringents & Tonics
too much neglected in Cholera
In Nephritis this G. entitled to
attention - The G. Robertianum in N. has been
used with advantage

E. Wilson has used it with success in Epistaxis. It is common in any part of U. S.

Heuchera americana

Called American Sanicle or alum-root. The root is one of the most intense astringents. In the belief it has been said to cure cancer. ~~It was one of a celebrated cancer-powder of Dr. Martin~~

Orobanche Virginiana

This used in cancer therefore its name cancer-root. It is a Didynamous Ord: Angiosperma. It grows under the Beech-tree. It is ~~of~~ a part of Dr. Martens

celebrated Cancer powder - ~~It is called~~ This vegetable is called Virginian Broom-rape - This powder was used in y P. Hospital in a case of Cancer with great effect -

Tormentilla Erecta -

or

Tormentil

It resembles y Cinque foil - not native in America - It pass as T. Before P. B. in organic used in Intermittents - It is recommended as a substitute for B. It is recommended to prevent abortion - This depends on relaxation This T. may be used in abortion - Digitalis has been used with help for y same purpose - -

Agrimony laid aside - Al. ~~[illegible]~~ laid aside

Quinquefolium or Cinquefoil The root very astringent The root of y rose astringent - The Apiifolium & Rubium or Madder none very astringent tho' y both Emmenagogen - Lobathum in ulcer

Felicis not used here –

The herb wines rejected as not important

The Bark & ye Pomegranate good tho' inferior to those already treated of at large –

Lecture 17. Dec 5th #71

Of Alum.

This Argilla Sul: or Sulphate of Alumina - Has been found in Virginia - Formerly deemed a conscious ingredient in mineral waters - This erroneous It is sometimes found in them but it is not very common - This a powerful astringent - It is an internal & external medicine - More frequently in ye latter way - As a gargle excellent - In ye Tonsillitis Superficialis Darwin good - Has been used as g. in putrid sore throat - In inflammations of ye eyes - The solution in gr ij to Aq: ℥ij - as good as ye aqua aluminosum - The Coagulated alum is made by mixing alum with ~~[illegible]~~ white of eggs. This in chronic inflammations good

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In hæmorrhagies good. In Hæmoptysis Cullen thinks it not good. In this disease however Lac: Saturni is good - Cullen has found Alum good in Menorrhagia & other uterine hæmorrh. It must be given in large doses beginning with grs xx or to ℥j In Scorbutic hæmorrhagies good ℥j alum Galls ℥ss mixed & divided into dos: x - give five every day - If it purge add opium in Menorrhagia - The frequent Menstruation is nice to manage - ~~Often~~ Vegetable diet, conveyance in carriage & c good - After every thing has failed issues have been attended with success.

In Fluor albus or whites often exists with consumption & other affections of the lungs - Darwin ~~tal~~ divides them into fluor albus calidus & frigidus - Injections of alum good - In Gonorrhœa & sanguin

joined with oak bark in aq: ℔xx (74
Boil ℥j oak bark in ℔xx aq: to
& add alum ℥ij.

~~Q. How alum Polvis~~

Mead used alum in Diabetes with success. In this C. says ye serum aluminosum not used with success - Mistar cured an obstinate case with this serum Dover gave 1/4 pint of this as strong as ye stomach would bear it with success. Dover thinks it need never fail. How does alum act? in this disease - Darwin says by exciting ye absorbents of ye Kidneys into proper action. B. says this remedy adapted to Diabetes of long standing - In Intermittents, it joined nutmeg, good. This remedy apt to disagree Cullen says - Lind says he never prescribed any remedy, except ye bark, with such success

In the putrid bilious fever of Lauth C. is recommended a preparation of Alum - B. says he has given alum in Intermittents but not to his satisfaction - It acts in ye cure as Cort: Peruv: Darwin says it cures those Intermittents seated in ye Intestines & cures by promotion of absorption - This refuted by B. Alum frequently purges - B. has found it almost always to add Laudanum to alum when given in Diabetes. The Dose in substance is from 1s to gr xx - Good rule to give small doses often repeated - In large doses affects the stomach - Alum, no doubt, stimulates ye arterial system - Flom of Edb found it to quicken ye pulse - Darwin places it among his Sorbentia but thinks ye doses when large purge -

of Lead -

Difficult when to arrange this med: ~~[illegible]~~ -

1. ye principal preparations
2. in inducing abortion & 3 in curing them

When oxidea has no medicinal operation, when united with acids powerful - ~~The acetate~~ Oxygen with lead forms ye ~~cerusse acetate~~ white lead - This formed by ye steam of vinegar on ye lead - The Sac: Saturni is this white lead dissolved in Vinegar - The only prep: used internally - The ex of Sat. is a ox of lead - It is made by boiling ~~Fiji~~ is of vinegar with it differs little from solution of lead when read by ax is minium

If melted by this process is called litharge - They employ to make ointment - Cosmetics of lead hurt ye constitution -

The saline prep. externally applied do not affect ye system - B. says ye lead when applied to an ulcer may be absorbed -

It produces ye Colica pictonum

Devonshire Colic - It 77
often terminates in Palsy of limbs
It is often introduced in cyder.
In Amsterdam was an Epidemic
then ye houses were coated with
lead upon which ye leaves fell &
their acid united with ye lead
& run down into ye cysterns in a
fluid state - In Venice a Wine-
Merchant Killed 90 persons -
In 1793 Bark mixed with lead was
sold in Delaware & produced much colic
~~Lom~~ Painters in this City often affected
with this - Potters often affected &
hence it is called colica

It is cured by purging & bleeding
& ye blood sometimes shows a buff
this Cullen has erroneously denied
or asserted is not ye case - Oil or
Ol: Ricini ye best purge. Opium
should not be given till ye bowels
opened & this remedy sometimes
purges. Warm bath & Semicupium
good in large doses. In the produc-
tion of this colic ye Volatile particles
enter ye system - It is said that

1. Dr. Dewey informed his class that he had given ℥ss of Sac: Sat: every two hours without inconvenience to the patient - He seems to think a certain determinate quantity of Sac: Sat: is necessary to produce a good effect & if carried beyond this point the good effect will not be increased - If the stomach will not bear this medicine (& this is frequently the case) he has succeeded by injections - ℈j of the sugar of lead dissolved in a gill of water with a teaspoonful of Tinct: Thebaic is his formula

large quantities of Acuugia taken internally, will prevent the effects of Lead. The Malic acid will sometimes produce the same effect as when a portion of lead is added. Cyder will frequently induce gouty pains in gouty habits. To many persons lead is by no means so very deleterious. Shippen's Patient drank gr XX without injury or inconvenience. Lead is by no means unfavourable to the growth of vegetables. To inflamed parts, inflammation of the eyes &c &c Goulard's extract, most highly excellent. In the Erysipelas of the old good. Cullen says sometimes induce gangrene. Darwin says lead in Erysipelas good. B. says be careful in its use in Erysipelas. In burns often used it must not be continued too long. Lead & Mercury in Scrofula has been said good. In the plethoric scrofula this remedy not very good.

In Gonorrhoea B. seldom gives more than gr viij to Aq: ℥viij.
In general does not give so much as this. This R. in an incipient f. gives gr iii or 4 to aq: ℥viij.
An infusion of Boheta, rosemary or geranium good in incipient f.
In fluor albus gr Sac: Sat: used internally with advantage. B. advises by all means to begin in Gonorrhoea with weak injections lest we produce hernia humoralis —

Lecture. 18.

Of ye diseases in which lead has been internally exhibited. The Sac: Saturni appears endowed with a tonic power as in Intermittents. B. has no experience in this respect. This has been used in Epilepsy & in this disease is an old medicine. In one case after the lead induced disease of ye bowels it cured ye epilepsy. B. thinks this medicine not so good as some other medicines. The long continued use of it bad. In Hooping-cough it has been used. This practice not recommended. Hunter recommended it to Patients in Tetanus while ye Patient was in an Ice-House. B. thinks not favourably of this practice. Mr Clutterbuck gave this medicine in a case of Tetanus in ye quantity 1/4 or four times a day for three weeks. ~~This~~ ~~It~~ with advantage

It has been recommended in different grades of Mania - B. has in this respect, no experience -
In gonorrha lead internally has been used with advantage provided the gonorrhoea was of long standing
B. gave it in combination with opium
In Leucorrhoea it has been used with advantage - In Diarrhoea, by some, with advantage.
The Sac: Saturni is said to moderate arterial action in doses of gr iss at once by
A lowered pulse in the hands of a Practitioner not far from Phila.a -
In Hæmorrhagies of red blood -
Pb in this Sac: Sat: no new remedy -
Hardy says he never saw a case of Gout but what might be traced to the lead taken in by drinking wine -
~~Hoberden~~

~~Epistaxis mayt cure~~

The internal use of lead infinitely less dangerous than has been supposed - The first case in which B. gave this remedy was in a discharge of blood from the bowels after a Dysentery - In a case when a gallon of blood was discharged from the anus it was soon cured by lead -

In 97 a man was attacked with an hæmoptysis & discharged ℔iij The sac: sat: was given after a bleeding in doses of grij every hour & cured his Patient. In Epistaxis has given sac: sat: grviij with ℥j: grs at one dose & cured his Patient.

B used it in hæmorhagic uterine & discharge of blood from the stomach -

In 1795 - a man labouring
under a grade of yellow fever which
was attended with great discharge
of blood (℥100 in h 24) from ye
Intestines - The Sugar of lead ~~&c~~ ~~gr iij~~
op: gr j & Pulvis: gr iv divid in
Dos: iv - Give one as symptoms
indicate - This man was cured
This combination of Pulvis: & Sac: Saturni peculiar to Barton
Never employed Sac: Saturni
without doing good -
In a case ~~of~~ of discharge of blood
from ye uterus, which is almost
always to be considered active,
ye Sac: Saturni was prescribed
with great advantage & but without
effecting cure: the injures were
employed with advantage - In a
case of this kind ye Pulvis: ~~with~~
was used in junction with ~~Sac~~ Sac: Sat:

This lead excellent in Abortions
Relates ye case of a pregnant woman
who was flooding dreadfully
of lead ~~th~~ was saved from death
The pulse was soon raised & ye
Child was born alive & is
healthy now 3½ years old —
This lead & even Specac: will
stop hæmorrhagy but that pro-
ducing sickness. Mr Burns is
of a different opinion — Recom-
mends this Medicine as among
ye most important remedies &
particularly in hæmorrhagies of
ye Uterus & Bowels — This
Medicine acts by reducing ye
activity & tension of ye pulse
This is in some measure proven
by its being ~~to~~ particularly successful
in active hæmorrhagy.
Lead, however, must act in some
other way besides reducing ye
pulse —

The Modus operandi of Lead is, its astringency & its power of lowering of Pulse it is probable: tho' its precise mode of action we are ignorant of.

Lecture Decem^r 9th

~~Bronf^t Daffield gave lead in~~ in Lead, when there is a profuse salivation, which is always accompanied with a peculiar fever may be useful? In cases of this kind tho' opium is most depended on. B. recommends a trial of lead in violent salivation.
The largest quantity B. ever gave was gr viij dos: gr j in a case of Epistaxis.

The sugar of lead when in large doses purges & vomits - In general lead exerts its effects in small doses. This subject of lead is by no means completed - Lead salivates -

B. thinks Bole, Creta &c do not act by an astringent property

Most of Cullen's astringents ought to be referred Tonics -

B. considers every astringent somewhat Tonic - All Tonics somewhat stimulant

Tonics -

Darwin considers them as Lobeliaceae - He does not approve of bracing as tonics - By Tonics or Roborants are a set of Medicines, or means which give partial or general strength without greatly increasing the heat of the body -

The Tonic effect of stimulants
much less lasting than that
of Tonics strictly speaking
The Tonic quality of ℥i in ℥iv
Bark is felt for many days.
This not of cor. with strictly
As of stimulant quality of
Tonics increase their Tonic
power decrease
The ~~particular~~ Tonic power
is supposed to reside in their
Bitter by Cullen. B. thinks
with C. many of our bitters are
tonics; but does not think it
resides exclusively in Bitter
~~Prop~~ that bitters are our only Tonics

Tonics.

Some intense bitters & opium
Digitalis, & lactucarium vegetable
have no tonic - Some have
no bitter quality, as Preparation
of Iron, Zinc, Tin, & Copper, & an
immense Tonics - The Gallian
distinctive of bitter but an Tonic
Cold air a tonic It is not bitter
In what then does of tonic
consist? This Mr. says
he cant answer - It cant be
exclusively attached to astringents
for there are astringents which
are not Tonic. The different
properties of different bodies
put together enhance their tonic
The tonic of Bark may be in-
creased by camphor &
all Tonics stimulant

Cullen says bitters do not stimulate - Every tonic stimulates the living fibre & Cullen says the bitters do not increase the force & the pulse - Some as Columbo do not exert a very evident force upon the heart & arteries. Uva Ursi raises the pulse - The Yellow Gentian is one of the purest bitters - This stimulates More attention has been paid to the effects of medicines on the pulse in this School than all the world besides. ~~Walker says~~ Cullen is refuted & consigned to the tomb No medicine acts by a sedative power - Digitalis & squill act in this way but it is a secondary operation - Contrast this opinion with Bartons observations on Lead in the cure

of active Hamorrhagy.
Bitters & Tonics cure, in part, by a stimulant quality.

Lecture 19. Decr 11th

The First Head of Tonics is called ye Tonica Astringentia
2. Tonica Amara
3. Amara astringentia Tonica.
The astringents which have been considered, included ye first head.

of ye Tonica Amara.

The chemical nature of ye bitter principle is not well understood. It is not affected by iron, alkalis, mineral & lime &c. The Nitrat of Silver, & acetate of lead with precipitate ye bitter principle & so other agents known. This knowledge, in practice, of great utility. Bitterness is a simple quality.

Some of our purest bitters are destitute of odour - The deleterious effects of bitters depends not on the bitter principle but some other accidentally attached - Bitter quality does not depends on essential oil or any other volatile principle. Bitterness, however, is frequently combined with an essential oil - Nothing saline in the composition of bitters say Cullen

of the conditions of the system

in which ~~Medicine~~ bitters may be employed -

Bitters increase the appetite for & digestion of the food - Dyspepsia depends on the gastric juice being either of a bad quality or in too small a quantity - Darwin says they increase digestion by the absorption of chyle being promoted - Stimulants will promote digestion

Bitters have been recommended in ulcers & used with advantage Bark in ye hands of some has done injury in gangrene — The Tonic bitters have done much good in some cases of costiveness — Some pretty pure bitters purgative This militates with Darwins Lobelia — In some cases ~~ye bitters may~~ of Dropsy bitters may also act as diuretics. The greater part of ye 19th class or Lypgenesia are diuretic — Opium diuretic often & bitter — Professor Rogers found ye almost secret — good tonic In ye inflammatory stage of fever ye bitters injurious — First bleed & purge & then bitters proper — Bitters frequently sudorific — Bitters sometimes Emmenagogue When it is attended with debility, as in Chlorosis, more properly speaking febris alba, bitters with iron good

C. says, somewhat deleterious
or poisonous is to be suspected
in ale or bitters - Gregory says almost
ale or bitters, especialy those of vegetable
are when taken largely are injurious
Haller said many years ago, bitters
possessed a narcotic quality -
The Zanthoxyla Piperita &
other natives have a vinous smell
The red Peruvian bark valuable
but more injurious than good pale
Barks - This Bark has induced
Palsy - Bitters no doubt possess
a narcotic quality - B. believes
however, that Bitters are not ne-
cessarily narcotic - This principle
is accidentally attached to bitters
There is however sometimes
an intimate connexion betwen
bitters & poison -

Bitters relieve gouty affections -
These however will come to be
spoken of under the head of Antilithics
as B. considers lithontric affections

almost always gouty

Lecture 20. Decemr. 15th

of Particular Tonics

Cortex Peruvianus or Peruvian Bark. The most important of medicines it was unknown to ye Ancients. The Potato, Turkey &c were unknown to ye Ancients. There are 14 species of Cinchona. 1. Cinchona lancifolia by Linnaeus C. officinalis. This Lancifolia or common Bark is a native of Peru near Loxa. Humbold called it C. Condaminesia. after Condamine. It grows to ye thickness of ye body if not distributed. 2. Pelletierifolia. The leaves are broader

9. C. Spinosa : G. C.

10. C. Corylifera

11. C. Lemata

12. C. Floribunda Hooker

13. C. Brachycaba

14. C.

in proportion to its length & it grows to 120 feet - This supplies with the red Bark - It was first used 1779. Lydenham did not know this Bark The red Bark is preable

3. C. Cordifolia - Grows 15 to 24 feet - Professor Call called it C. Pubescens It has been long known as in 1740. It is not readily distinguished from the ~~Yellow Bark~~ Common Bark The Yellow bark is obtained from the Cordifolia

4.

5. C. excelsa 6. C. Caribaea

7. C. Longifolia of Lamark

Peruvian Bark

~~Jamaica~~ Mrs Pa
y ye cant Cinchon was
adviced in 1638 to take
this Bark for a fever Hence
its name Cinchona -
Lewis 14th was cured ~~of~~
a fever by this Bark
S. America was known
100 years before this in
valuable medicine was
discovered - The Europeans
did not first discover its
power - The Natives first
discovered it - An Indian
with agen drank water
when ye ~~Fit~~ Bark was,
& they discovered this great
& wonderful remedy.
We have no good analogies
of this Bark -

oblongifolia 98

The Red bark or C. R[redacted]
folia was analysed by Saun-
ders but contains more
resin & is more astringent
& antiseptic – The Resin
communicated a red
colour to blue paper –
Fourcroy found citric
acid in it – The analysis
however of little consequence
The peculiar principle called
cinchonism has been supposed
a kind of glue. Lyell & author
Dr Duncan gave it name
cinchonism. The same principle
has been found in Kina
This cinchonism is found
in black pepper – The Barks
~~to be preferred~~
most efficacious from the
oldest trees, from their trunks,
not branches &c

It should be kept in
Chests when its virtues daily
increase so that ye older ye
Bark ye better - Large fra-
ments more liable to spoil
than smaller portions - In
ye Peruvian Bark there is
a bitter & an astringent
principle united. Sequin
cures fevers by glues & pellies
Bark operates on ye stomach
demonstrating its power - In
dyspepsia good - This
disease may arise without
ye fibres being affected - The
fibres however may some-
times be affected - Intermittents
cured by the Tonic power
of ye Bark - Better almost
has no astringency Lemmy
& Landon says it acts in
a way not known -

By ye use of ye Bark
in Diseases -

He will take notice of
ye practising Physick in
his lecturing-

Of Intermittents

In ye greater number of them Bark
will effect a cure - The Stahls
always opposed to ye Bark
At what period of ye disease
may ye Bark be given - Vansweet
inculcates Boerhaave's rule "give
ye Bark after ye disease has been
on for some time"! B. says
give the Bark as soon
as possible lest ye Se-
cond fit kill - Wait
for no repetition of
paroxysms - Sydenham
a faithfull observer
but a wilde Theorist.
The Stahlians supposed
ye Bark would ~~suppress~~
suppress excretions

Lind advises early administering of Bark. This an excellent practice. Lind has much experience in simple Fever. The indiscreet exhibition of the bark may induce dropsy & jaundice. Is the body to be prepared for the reception of the Bark? Cullen says, it may sometimes be prudent to vomit & purge previously to exhibition of the Bark. When there is inflammatory symptoms first bleed before giving the Bark otherwise it will do not good. In the Intermittents of our Country it is often injurious to exhibit an emetic for it will produce irritability of the stomach. B. does not aspect the emetics as improper for preparatory ~~for~~ to the Bark except when

there is an affection of the head, an approaching intoxicating. When there is a diarrhoea an emetic is often proper. B. thinks a purgative more proper — as 6 or 8 gr. Calom. or Rhubarb & 3 or 4 gr. Cal: or the Dialyphthum Pittatum with Cal: B. thinks unfavorable of Jalap & Calomel in those cases. When the administration of the Bark somewhat doubtful unite with it a little Rhubarb — particularly the first doses.

Lecture 21. Decr 16

Subject of Bark continued
The C. Lancifolia or Pale bark
was used by Sydenham.
2. Species C. oblongifolia furnishes ye red Bark. 3 C.
Cordifolia affords ye yellow
Bark.
The C. Brachicarpa affects
ye hand with palsy occasionally.
Some say when there
are obstructions in any
of the viscera ye Bark
improper. B. does not
think obstructions in ye
viscera during ye cold
stage, are formed & think
when there obstructions
not very great ye Bark
may be given. B. thinks

Cullen carries ye use of ye Bark too far when there are obstructions - Fothi & some others of ye Bark just before ye time of ye paroxysm - Cullen is of ye same opinion -
B. says ye practice of giving bark just before ye time of an accession of fever is improper: for at this time ye stomach is highly excitable - It is however, sometimes proper immediately to give ye Bark & particularly when ye intermittent is violent.
& in some cases ye second fit will kill

Bark continued

Flom says give the Bark directly after ye fever has gone off. May the Bark be given during the hot stage? Dr Clark gave ye Bark during the hot stage. Other Practitioners of hot climates give ye bark as Clark. B. does not agree with those Gentlemen. B. thinks during ye hot stage it produces deadfue effects. Flomholatt says ye Physicians of S. A. give ye Bark always during ye hot fit & not ye cold. The climate of that country must favour this practice. In some Intermittents there are apoplec-

tic symptoms & depressed 106
pulse - The Remittents
& Intermittents arise from
the same cause - The one
passes into the other.
Morgan gave the Bark in
remittents - In our re-
mittents bleeding, purg-
ing or sweating should
always be premised be-
fore giving ye Bark &
not then unless a complete
remission appears -
The Typhus fever is
produced by stimulus
hence ye first instance is
phlogistic: here then
ye bark improper - Some
cases of Typhus approach
to Remittents & Typhus
is contagious - B. does
not think yellow-fever con-

tagious -

Lecture 22. Decr. 18th

Subject of Bark continued.
Dover, about 70 years ago, bled
180 persons to 100 ounces
each & afterwards ordered
dilute Sulphuric acid
& only 8 died. They would
drink spirits - The Marsh
plague killed 40,000 - Bark
& acids were used here
At Smyrna those who
bled most or most sec-
cessful - The genus
Synocha of Cullen is
an inflammatory fever
Then is Bark improper
Senac gave it Bark in
pneumonia when it
assumes the type of an
Intermittent -

In general when ye
blood presents a buff ye
Bark improper tho'
there are exceptions to ye
rule - In Dysentery, if
complicated with an
Intermittent, ye Bark
is highly useful
Cholera. Bleeding only
sometimes, relapses
Opium highly useful
Chronic Rheumatism
give the Bark
B. has not seen it
in this form - Rheu-
matism treated
to advantage
with Bark.

Bark in Rheumatism & was given by Hayzett with advantage -
In Pneumonia of persons much debilitated & when complicated with Intermittents not to be managed by bleeding but with Bark - Hemicrania returning periodically treated to advantage with Bark & valerian combined - Dr Lind gave Bark to ye prevention of an increase of Dr Apsey
In Hydrocephalus, assuming the shape of an Intermittent, Bark good -
In Phthisis Pulmonalis ye Bark has been recom-

mended - In ye beginning
when a phlogistic diathesis prevails Bark
improper - Dover bled
a Patient fifty times
& always with a buff
Jacket thinks highly of
Bark & uses it in genuine Phthisis - In persons
who have Phthisis succeeding an Epidemic
& Intermittents ye Bark
may be useful - When
violent chills when in
hectic ~~the~~ Bark ~~[illegible]~~ -
was in one instance
serviceable
When Hamoptysis returns
periodically ye Bark may
be good - In Hamoptysis
that on passive ye Bark goes

The Mictus cruentus or bloody urine may be treated to advantage by Bark - Wilman mentions a case of Scurvy cured by Bark which is a good Dentifrice
Erysipelas has sometimes been used with advantage in London but ~~tho~~ in Scotland it is treated as an inflammatory disease - Then also B. thinks there are three kinds. 1. when it demands no attention 2. Inflammatory 3. as a Typhus or low fever - Then the Bark would be proper -

Rickets generally in
Atmosphere & is called
Morbus Anglicus which
appeared about the reign
Charles the 1. Boots took
their rise from rickets
which disfigures the
legs —

Epilepsy is sometimes cured
by the Bark — Cullen thinks the fossil
Tonics preferable — Periodical Epilepsy
cured by Cullen with the Bark — This
also useful in Tetanus according
to Rush. The Jamestown weed
will bring on Tetanus. The poison
of the Dracontium & a species of Rattle
Snake will bring on Tetanus —
The Chorea St Viti treated usefully
by Bark. Stahl relates a case
cured by the Bark.

In Scarlatina anginosa or Malignant sore throat for they are the same disease - ~~Dr Hutt~~ if the Bark has been useful -

The Measles which have often appeared in this City, have been treated by B. by large bleedings.

Scrofula is common among the Indians but Rachitis unknown among this people - A proof of the difference of their diseases.

Lecture 23. Decr 22^d

Hooping-cough is often a febrile disease. Asthma often depends on a mobility of the system. It is often however a febrile disease here w^r Bark improper. Has used Bark with advantage in arthritic asthma tho' it should be used with great circumspection. Bark in Hysteria often good. Bark in gangrene often good. ~~Hus~~ Inflammation often precedes gangrene but not always. Gangrene in w^r sinks from cold was exasperated by w^r Bark. In w^r case to which B. relates bleeding & purging were more proper. The Opium bite induces gangrene & w^r Bark has been

The following Species of
Lentiscus, Lucapia, Chiococca
& Plumeria should succeed
the gestura & follow Bar-

had recourse to but with
no very obvious & great advan-
tage — The external ab-
lication of the Bark has been
unique Poultices of Bark
made with wine have been
applied with advantage
The Limitia Bark [redacted] jacket
excellent —
In many cases of Syphilis
Bark is necessary — Mercury
combined with the Bark is
frequently good —
Bark will retain a lasting
reputation

Of the Angustura Bark
This first carried from the East
Indies to which it came from
S. A. to England — This
Bark is a species of a tree
very nearly allied to the Magnolia

The sulph: or oxy-sulph: produce no change on this Bark
The alkalies effect it.
This Bark may be given in doses of ½ every three hours
This Bark has been used in Dysentery & Intermittents
In low fevers the Angustura preferable to the Bark according to Brown because it is not so apt to run off by the Bowels
In a gangrenous affection & ulcerations of the throat this Bark good — Dr. Pearson of London, thinks this Bark excellent in affections of the stomach
As a general Tonic infusion to the Bark when good —
In Chlorosis this combined with chalybeates is good

In Hooping-cough when there is weakness & yet this Angustura may be good - For Children this Bark good - It does not disagree with Children who take it with less difficulty than many medicines

of the Magnolias

They resemble the Bayes - The Mag: Tripetala or big leaf or Indian Bark It is more bitter than the Angustura & is by no means inferior to the Angustura

Lecture 24 - Decr 23 -

The Angustura stands near to Cinchona tho' not of the same genus - This Magnolia glauca treated of by Prior It is a valuable medicine It is called Laurel The Mag: grandiflora

Lecture Tonics Feby 21

The Chironia angularis has bitter flowers - The Gentiana Centaurium flowers are not bitter. Zi of Quassia to Zviij of boiling water is sufficient - The Q. Simaruba is the weakest species - The narcotic principle of the Hop is same as that of Op: Twenty drops of Laud: equal to 60 g of Tinc: Hop

Menyanthes Trifoliata - This a native of Europe & North America growing in marshy grounds It has been used in Gout - It is a strong bitter tonic & super sulph. iron It strikes a black colour with diij Perch - Dr. Haller says Boerhaave used this ~~in~~ The ~~aqu~~ recent juice has been used - A watery infusion preferable - This M. has been recommended in hypochondriac affections, Used in Tania, Ptis & - In fomentation has been useful -

Centaurea Benedicta
sometimes Carduus benedictus.
This plant possesses some of the
extraordinary powers of Ipecac.
This is frequently used by families
Rhubarb. This is a bitter
An infusion is the best mode
of exhibiting it. The Portuguese
use

Faba Sti Ignatii or St Ignatius
bean - The seed of the Ignatia
is one of the most intense bitters
It has a narcotic quality to a
great degree This has been used
in Epilepsy

Nux vomica - Considerably
allied to Ignatia. This of the
genus Strychnis - It contains
gummous resinous matter - It
is highly deleterious - Animals
which have taken this may
be cut & mangled without
feeling - This has been re-
commended as an Anthel-
mintic

Columbo. This was used
long ago — The Frazera of Ken-
tucky is much used there & is
a good tonic — The vegetable
C. which yields C. is not known
It was first carried to Columbo
a city. B. thinks it nearly allied
to the genus Gentiana — The
active property resides in
a resin more than the gum
Dr. Percivac took 2j of Columbo
without increased excitement
& concluded it was not stimulant
B. says Both Columbo & Gentian
are stimulating —
Percivac says in the beginning
of Dysentery Columbo left injurious
than many other bitters —
In diseases of the stomach &
bowels C. supposed very useful
In Cholera Morbus Dr. Johnson
used this medicine —
In Nausea & vomiting C. used
C. in large doses, in substance
as indispensable medicine in
Dyspepsia —
Its dose gr X to ℈i

A work by Mr Mead on
Tabes Dorsalis

Watery infusion of C. should not be used because it directly runs into fermentation —

Lecture — Feby 20th

Tonics continued

Gentians. All the different species are more or less tonic —
1. Gentiana lutea — It is native of the old world — root seven feet long — Haller supposed there was something somewhat deleterious — Water & spirits extract its virtues — An infusion is antiseptic. This has been recommended in every species of debility — It aperits digestion. A person affected with a hair in the stomach for 15 years was cured by ℥ij per day —
Elixir Stomachicum compound of Gentian, orange peel, & Port wine — Tinct. Stomat. of Lobyt compound of Bark, orange peel & gentian & Port wine. Lobyt recommends this in Hysteria. Its virtues depend more upon the Bark than the gentian

Gentian one of the component parts of ye Portland powder

~~Dr Aiton says the root of Gentian with~~

Plenck cured a scrofulous Patient with Gentian. It is probable. It is sometimes used in cases of worms.

Tinctura Amara is ye Tinc: Gentian: composita

Gentiana Centaurium.

This ye lesser centaury & is a native of E. & L. It is a very bitter plant. This to be distinguished from the Chironia angularis.

The L. Cent. has been used in intermittents.

In Jaundice has been used.

Chironia Angularis -
This sold in our Market &
is used by every family -
This among the best bitters

Quassia - There are three species
1. Q. Amara - This grows
in S. America ~~in~~ This is
distinct of astringency - It is
written in w bark of w ~~wo~~
root in a most eminent degree
Bark preferable to w wood
which is generally used in
this city -
In remittent fevers of Surinam
it was first used & by Black
Dr Lisapy - In w Amenitates
Academica it was treated on
by Linnaeus - It has been re-
commended in Dropsies
Boil 3ijss in lbj to Ibij - Add
to this a little ℔ to prevent
its spoiling - Dr Lettsom
has found it useful

In Hypertrophy this is particularly adapted
~~A Teaspoonful of the mixture~~
~~℞. ℥iij~~

Dr Chaucette's prescriptions seldom contain less than 10 ingredients ~~than 10~~ & sometimes 23 –
Practical medicine intended by such long prescriptions –
Dr Lettsom has a prescription or ~~the~~ principal ingredients of which are Sulph: of Zinc & Lucepia –
In Calculus this remedy has ~~also~~ been used –
In Dyspepsia & laxity of the bowels after Dysentery & the like the ℞ has been very useful
This one of the most important bitters used –
℞. Polygala. This grows in the United States. In taste & virtue is nearly equal to the ℞

of Surinam - This has
been used in what is called
Dirt-eating - This disease is a
vitiated appetite - It is called
Pica Dogs & Cats are affected
by this disease - Pica -
The wood is stronger -
2. Simaruba - This grows to
a large tree - By taste or smell
no astringency can be detected
Cold water extracts more of
its virtues than warm -
This has been used in Dysentery
It should not be used in the
first stage of Dysentery -
Dr Monro has often used a
decoction of this medicine in
Diarrhea & Dysentery -
Common Hop or Humulus
Lupulus - To prevent Malt
liquors other bitters than this
might be used -
We know but little of
the medicinal virtues of this

Infuse ℥iss of flowers of
Hop in ℥viij Spt. Vini

The Hop agrees with many
who cannot take Opium
Dr. Willis used the Hop-
pillow for his Majesty &
he had a good night.
The continued use of Porter
was injurious than good
wine

Mr Ray says since Hops have been used in fermenta liquor stone has been less common B. differs from Ray ~~because before the~~

Darwin says Hop may contribute in some degree to ye formation of ye stone tho' perhaps this is more owing to ye alkohol –

Cephicus cut in public Hospitals 1400 for ye stone & they men drinkers of wine B. thinks malt liquors favour the formation of calculus – B. has had distressing gouty affections in the hand after taking malt liquor in Porter Linnaeus thinks Hop has a narcotic principle ~~[illegible]~~ & on this depends its beneficial virtue

Liriodendron

Salix alba is most astringent of any other species. The older it is the greater the astringency. The Bark & leaves have been recommended in different diseases as gout, hemorrhage. In the cure of Intermittents it is certainly a tolerable remedy. In Dysentery has been recommended with Bark.

Aesculus Hippocastanum is a native of the Northern parts of Asia. It has been recommended as a substitute of the Peruvian Bark. The Buccii. The Swietenia or Mahagony has been used in Intermittents. The S. febrifuga has been used in Intermittents with great advantage. Barton has used this & thinks highly of it. Cornus florida & Linnea trifolia by Walker & is a good substitute for Cort. Peruv. The old Bark best. The latter most powerful & best

cannot be procured in
sufficient quantities

of Metallic Tonics

They are Iron, Copper, Bitter & Arsenic

Iron in substance or Hematite ferri

Æthiops Martialis

Carcus Martis

Rubigo Ferri

The Sulph: & ox-sulp: Iron -

Tartarus Martialis - The Mars Solubilis or Ferrum Tartarizatum

Flores Martiales Ros: gr iv to ℈j

Lixivium Martis - The Ferr: Martis in spiritus salis - ♃j dose ℥ss 4x or twice well diluted - The Matte mates in England resemble very much a large proportion of mats to a small quantity of Ferr: Martis

Viz: Ferri is a good Tonic

Att dos: ℥j to ℥ss — In the Mineral waters Iron is frequently held in solution by carbonic acid & sulphuric acid. Cullen erroneous in accounting for the operation of Medicine. B. thinks iron for ye most part is dissolved by ye gastric juice with great rapidity.

Lecture 25 Dec 29th

Iron is supposed to act as an aperient — This term B. does not approve of.

The Diseases in which Iron is used. Stahlians did not like the Bark. They therefore used Cascarilla, Iron &c.

Iron is a slow Tonic. In obstinate Intermittents by some ye Iron has been found useful. In plethoric albus ye preparations of iron are indispensable. Conjunct with gentian good.

In gleet which is a general affection, w Iron has been found most useful –
Cullen labained under a gleet 40 years – It orginated in a gonorrhea – As an Emmenagogue Iron when combined with a little oil of Sabina most excellent – When Iron proper use animal food porter &c
Iron has been much spoken of as a remedy for piles by Pliny In some hæmorrhagies it has been highly commended

In Hemorrhagy of the Kidneys where there is no hope after a venesection, Iron has been found useful - In bloody urine of Cows sixty Grains of opium with iron dissolved into a ball with flour is good.

When Persons are predisposed to Phthisis of the lungs Rubigo with chalk is excellent - For Consumption in which riding is proper the Iron is [illegible]

In 1793 there were an unusual number of cases of hemorrhoids The same thing has been observed ~~the~~ succeeding Epidemics -

The Hemorrhoids in the declining of life may be beneficially treated with Iron.
In Dyspepsia which calls for different modes of treatment in different cases, the Iron has sometimes been highly useful.
In Dropsy the Iron has been used this in many cases it is a very mischievous.
In some obstructions the Iron has been highly useful.
The Martial Tonics more safe in Gout than any of the Vegetable Tonics. The Anthelmintic power of Iron great.
Iron exerts its effects principally on the Stomach
Iron volatilized in Urine some say.

B. had experiments made on the occasion but no iron could be found in the urine.

~~B. [illegible] to the [illegible] Power~~ ~~were taken into the system of~~

The Powers of assimilation greater in man than any other animal B. thinks some portion of iron may be absorbed. Some vegetables absorb iron readily. From the circumstance B. thinks his opinion of the absorption of iron in man is in some measure strengthened. The Iron in the blood is united with the phosphoric acid. B. thinks this iron was formed by the living powers of the animal & not taken in by absorption. This opinion derives strength from the fact that the blood of all animals but their food

what it may, contains iron

Lecture

# of Copper.

This soluble in the human stomach. All metals soluble in like manner.

This metal soluble in ye gastric juice out of ye body.

The effects of copper on ye body are numerous & dreadful

People employed in working copper mines are perfectly healthy but they never eat without washing & once every week wash their whole body. Copper affects other animals besides dogs: Birds however are not affected by this metal.

Fools with Prussian water

Copper trans to clear water

The first preparation is

the Cirrhosis - This formed of copper & acetic acid. This has been used internally in Syphilis - Injections of Cudgrin in Gonorrhoea useful - B. thinks Bili & Hunter use them too strong - W - Blue vitriol, ~~vitriolum~~ ~~album~~, or sulph. Copper This in Intermittents is highly spoken of - Give small doses gr 1/4.

Cuprum Ammoniacum Take of Blue Vit: ℥iij - Vol. Sal: Ammon: ℥iii Volatilize together & put in a piece of paper to dry - ~~[illegible]~~ is ~~[illegible]~~

Has been given in Epilepsy, Chorea &c - Begin with gr 1/4 & increase Cullen thinks favourably of it Dose has carried it to gr 10

In combination with
ginger or opium & when
stomach is full give this
medicine - The Tincture
of Copper has been found
highly useful in Dropsy
Copper sometimes salivates
The open ulcers of Scrofula
or Keys are with Basilicon
have cured - This is Chaus
good - In different affec-
tions of the eyes or different
preparations of copper good
The Gall of Animals useful
in the same affections -
The Argentum Nitratum
or lunar caustic is
the only preparation of
Silver used - B. touches
the chancre with a pencil
dipped in a solution of
caustic - This made
gives left hair

Flamm on ulcers of the legs speaks highly of the caustic - The use of warm may be cured by corros: sub: also the fluid nitrate of silver

This nitrate of silver has been used in Epilepsy - This medicine keeps the bowels open - Dr Wilson gave gr 2½ three times a day - This however often fails in Epilepsy. B. has tried it in five cases but without much effect

Lecture 2 - Jan 7.

Nitrate of silver deserves attention from Physicians when Epilepsy is attended with increased excitement low diet has done much good Tonics as necessary in Epilepsy as in Intermittents - if the mind be not at all impaired -

Case had Epilepsy.
The Argentum Nitratum cures Epilepsy perhaps by its tonic power but of this we are not certain

of Tin.

Tin in powder is still retained. The Aurum Musivum was formerly used. Dr Lewis says Tin contains a portion of arsenic. Dr Alston gave ye powder of tin without inconvenience to ye Patient. Tin is soluble in ye gastric juice of ye stomach tho' not so clearly so as iron bottles. This Tin excellent for worms. The common dose ℈j to ℈j Some have given it in much larger doses. Cullen omits the

As a tonic tin is a feeble medicine - Tin is destroying worms act mechanically -

Of Zinc.

There are different preparations Sulph: of Zinc or white vitriol There are two varieties - 1. vz Sulph: & super-sulph: Zinc: This is what we call sulph: zinci bis in common use among us - so that we have not been using vz sulph: Zinc but super sulph:

The white vitriol has often been used as Tonic - Enters into vz Lucifia draught which derives its virtues from vz lactuca B. grains gr ij with 6 or 8 of columbo.

The white vitriol often used in Gonorrhoea & Gleets. This injection is often too strong. B. seldom gives more than gr v vitriol ℥ss iij Sac: sat: to water ℥viij. When ye Patient has had a discharge on former occasions ye injection may be stronger. As a collyrium some of this vitriol dissolved in an astringent solution of vegetables good.

Saunders has known ye white vitriol given to children in Hooping cough with more advantage than any other Medicine. They gave it not as an emetic or nauseate but as a Tonic.

B. gives his Hooping cough Patients, on an empty stomach a watery solution two or three

times a day & in winter
nal of gently or internal gen
or Pectoral mixture

or XXV to water 1V ℥ - given
two or three tea spoonfuls
in ye 24 hours This impairs
ye appetite less than other
Emetic medicines

Flowers of Zinc have been
given in Epilepsy in doses
of from 1 to V gr in a day
Dr Monro says he has
seen them flowers given to
℈j & ℥ss but without doing
any serious or lasting
The Acetate of Zinc
This has a bitter taste dissolves
in water does not alterably
exposure to ye air

It may be given internally
as a safe emetic in doses
from 10 to gr x – Dr Gardner
gives gr viij a x to water ℥ij
or a decoction of Quinine
This Mr Henry's practice
To a solution of white vitriol
in 6 or 8 times its weight of
water add a solution of
Acetate of lead in twice
its weight of water & a
precipitation will take
place – Evaporate or water
containing or acetate of
Zinc & crystallize –

Barytes or Terra ponderosa
It is found combined with
sulphuric acid & carbonic
This last combination is
poisonous to animals –
When united with Muriatic

acid it forms a medicine for Scrofula. Its dose from v to xx gtt. – The Muriate of Baryta has also been used in ulcers of the legs & has been supposed to cure venereal disease.

Muriate of Lime – Pure lime is partially soluble in water hot as much cold as warm. The Muriate has been highly praised as a remedy in Scrofula: the dose ℥ss to ℥j of the saturated solution – Dr Bronchard Wm. used this in doses of gtt xx twice in 24 hours with the effect of curing the disease. The Lime water much used in ~~the~~ vomiting – A weak infusion of Mustard & a little Asafœtida have also been used with great advantage

B. saw a case of black vomiting cured by lime water. The Physician however thro' a mistake gave white wash or cream of lime. The Patient recovered. B. thinks this practice might have been ye means of curing ye Patient.

Lecture Jany 2

Of the Oxy- & Muriat. Potash

This formed by passing oxymuriatic acid gas thro' Potash. In this process the salts are formed. B. has never employed this article.

Of the Bitters

These should have come in immediately before the Bark.

Anthemis Nobilis or Camomile

The flowers are principally employed

Hoffman thought highly of ye

ther flowers

given in large quantities they readily run off by stool. They must therefore be conjoined with astringents &c. As excellent Bitter.

Tanacetum Vulgare or common tansy — It is a powerful bitter. Tansy tea has been used for Gout. Dr. Gardener thinks this an innocent medicine. Rosenstein combined tansy with anthelmintic medicines.

Artemesia absinthium — wormwood. Milk of cows that eat this, is bitter. A woman who took this had bitter milk. This absinthium gives out an oil which is not bitter. The leaves are more bitter than the flowers.

h having wormwood in it has been supposed to have its intoxicating power increased.

A deleterious property is not necessarily attached to vegetables. Haller was gouty. This wormwood

has been used in Intermittents
This has been used in nephritis -
Aristolochia longa - It a native of the
Southern parts of Europe. The root is used
It is not a good emmenagogue - This
one of the bitters celebrated in Gout
This plant very like

The tops of Gentian

the leaves of the lesser centaury
the aristolochia longa
two species of ground pine

of each equal quantities - Take
3j for a dose This Portland powder
has done much mischief. It receives
the name from the Duke of Portland
Murray says More than 450 persons
killed by this medicine. The
Aristoloche appears to have great
eminence in producing the dread-
ful effects of this Powder - It de-
stroys the coats of the stomach
The Aristolochia Serpentaria
This generally used has a fibrous
root. This is supposed to possess
many of the properties of the longa
This out of the body antiseptic - It has
great powers - Cullen says none of the bitters

stimulant. This Serpentaria is stimulant. Hillary on Yellow fever excellent. Sydenham used this medicine with great advantage with men in Intermittents. The Tincture may be used from ℥ss to ℥ss

citrus aurantium or common orange - This oil of this vegetable is peculiar. The peel has been used in Intermittents & Quartans particularly usefull in Scandu in doses of ℥j
Formerly q-leaves were much celebrated for Epilepsy - The decoction was used - & combination of different parts of q-body some found them usefull but not in Epilepsy.
Johnson used the orange peel for Chorea St vitti & Epilepsy to which diseases he was subject

Lecture 30th Jany 5 -

The Ingredients of the Portland Powder are

Of Arsenic -

This a dreadful poison & invaluable medicine - This is opaque ponderous brownish brilliant when black it is distinguished by its great weight - burnt throws on coals emits a smell of Garlic Pure arsenic - is of a blackish grey colour ponderous, & pulverulent most volatile. It is not decomposed by volatilization in its reguline state does not affect the system - but when united with ~~oxygen~~ oxygen violently poisonous - of Fowlers Mineral Solution - It is prepared by boiling gr 4 x 16 with pure vegetable alkali so that every ℥j of the solution contains gr j/16 - Darwin says a saturated solution is preferable to Fowler's solution

Ten drops twice a day is a full dose

for grown persons It is better to begin with gr. v - B. gives 1/16 gr & 1/4 gr opium in substance as a preferable method - B. seldom gives more than three pills in a day The pill most certain in its effect. The opium is added in order to prevent any inconvenience from purging ℞ v - vi — B. has seldom gone beyond the third grain in curing of Intermittents - Fowler is not sufficient in his directions for giving the medicine - This is to be given in gr ~~[illegible]~~ intervals - If torn throws its effect If arsenic ~~to~~ gr extent of 2 gr do not produce some effect it should be laid aside - This remedy is peculiarly adapted to recent cases of Intermittents This medicine in curing Intermittents B thinks does not act by means of its Tonic power. This he thinks because gr strength of the Patient is not at all increased The Patient after being cured of his Intermittent by arsenic is attacked with a new disease. In one of Patients could not walk

13. Caution in preaching

The Patient sometimes becomes
oedematous after using this medicine
B. has known this medicine to
fail in one case of periodical head
ach – Arsenic does not increase
the heat of the system & fancies
the tortor of the system contrary to
the opinion of Darwin – B. says
this medicine acts by inducing
an other disease.

1. This is a safe remedy
2. It cures in a fever
3. It cures the intermittents to
which the bark is adapted
4 – It cures when the bark fails
5.
6.
7. Arsenic & mercury not
8. Arsenic not on a footing with
Peruvian Bark when the dis-
ease is of a typhoid nature
9.
10.
11. More effective in subtile
12. Most safe in the opinion

Arsenic continued -
When there is a tendency to Typhus the Arsenic will be unavailing - Foundation of Phthisis is often laidby Intermittent - B. never knew Arsenic produce any permanent injury - The recurring hectic fever ~~has been po~~ ~~sitively~~ when complicated with Intermittent B. exhibited Arsenic with advantage ~~& when the~~ w. Arsenic has been useful in obstructions of the Spleen & Liver This has been used with advantage in Angina Pectoris This an important fact & worthy remembrance -
In Cancer this medicine has often recourse to - Martin's powder which is nearly the same as Plunkets, was composed

in part of arsenic - The
application of this powder has
induced ~~etc~~ apoplexy. What this
powder certainly often produces
a good effect - The vegetable
matter in this powder no doubt
regulates its force & this vegetable in ale probably it
was of Erobanche Virginiana
One part was arsenic & 39
Erobanche Virginiana.
Hooper says cancer is removed
by arsenic & that bleeding is
a specific -
Arsenicum Soluble is made
of white arsenic & Chem: Tartar.
This produced an increas-
ed action of urine - ~~This is~~
Same Constitutions are seem-
ly not ale affected by this medicine
which at the same time will
produce a cure -

Incitantia
or
Stimulants -

This the most important class.
Papaveraceo N. ord.
of Opium.

This prepared in several Countries - In Egypt &c - This & Thebes have been much praised for ye quality of their opium hence Thebaic Tincture - That used here is generally imported from Smyrna Persia &c - Opium is procured from the seed vessel of ye Poppy by boiling according to Lom-
Wr Ker, who is correct, says the capsule is macerated & the juice is inspissated to cakes as they appear in this place. The seeds of ye poppy are inert & may be eaten with impunity to any quantity.

Opium is generally, as it comes to us, is adulterated with Lactuca vireosa & the Dr Cox obtained a tolerable opium from Garden Lettuce.

Lecture 32. Jany 8th 1807

B. considers Diuretics & Diaphoretics as subdivisions of Incitantia - Opium belongs to the head of Narcotica & is placed at the very head - This derived from the Papaver somniferum. The dark colour of the opium is owing to iron instrument used - When a copper instrument is used the colour is different, Opium has been manufactured in this country. Opium dissolves sensibly. This in solution having entered the eye inflammation was induced - Opium in the form of laudanum externally applied produces good effects.

his opinion effects the vital, animal & natural functions –

1. The pulse is increased & towards ye conclusion of ye effects of the opium there are apoplectic symptoms – B. mentions a case when laudanum had been taken & he thought ye patient had ordinary apoplexy.

Boerhaave had correct notions respecting the action of opium –

Prior to Boerhaave in 1703 Bergius says opium unknown with fever.

Lecture 33. Jany 9th 1807 145

Crumpe clearly proves by numerous experiments that opium is a stimulant. Haller, who used opium pretty frequently for his complaint, found his pulse excited. The pulse has been raised in 9 minutes from 76 to 86. Cullen one taught that opium is a stimulant. Opium not only increases the frequency of the pulse but enlarges their diameters & increases the heat of the system.

It produces a burning of the palms of the hands & a tinnitus aurium. Opium kills by inducing genuine apoplexy. This allays ye cravings of the appetite. Giitanner says opium is very nutritious & by uniting with oxygen.

Opium impairs digestion & induces sickness - Opium applied to ye body affects the stomach. Stoll says the opium he gave in colica pictonum very often purged - Opium might be considered as a carminative - It sometimes acts as a Diuretic - Diuretic power of Digitalis increased by opium. B. never knew opium salivate - It increases perspiration which is preceded by a pruritus - This may be prevented in some measure by a bowl of tea or the like - Fallen says opium is sometimes perceived in the perspiration - Ram Bauhaan found in ~~a~~ ~~diarrhoea~~ a dog bile was increased in quantity by opium Darwin says opium & alkohol increase all the secretions but at the same time absorption is increased.

In the animal Functions
The hilarity of the mind is in
creased & there is a jocund
delirium & with a disposition
to venery. If the opium is in-
creased tremors, convulsions &c
succeed – Some say these con-
vulsions are of a peculiar kind
& somewhat like of tonic – They
are somewhat like Tetanus &
will be increased by a person
walking a crop of floor.
The Turks enter marching
to battle take opium

Lecture 34 – Jany 12th – 1807

Opium has inflamed the Intes-
tines. This aqueous solution,
milk warm, has produced
contractions of the heart which
had ceased to pulsate
Camphor introduced &c.

into the mouths of Dogs
& found the pulsations in-
creased - Workington, ~~as a~~
experiments on the stimulant
operation of Opium on mor con.
clu. in than Crumpi-
tion increases the fulness
& frequency of the pulse, heat,
redness, disposition to vomit
stupidity, coma, coma,
apoplexy, delirium & mania
as well as the stomach -
&c &c. Opium does all
this - Opium is diuretic,
diaphoretic as well as sedative
~~[illegible]~~ The same dose of
opium on different nights
produces different effects
To conclude: That opium
is an incitant, has, by
a number of experiments,

been incontestibly proven — On this head no more need be said

Cullen supposes Opium a sedative. Hygan it in Gout of the stomach — Cullen says Gout in the Extremities is always preceded by affections of the stomach. This Barton says, from experience, ~~this~~ he knows is not the case — In Pneumonia, Opium is injurious says B. Dr Young says Op: hurtful in every disease which requires bleeding — B. cant go that far — for in some diseases ~~the~~ as Rheumatism &c, Opium is proper & also bleeding —

Lecture 35 - Jany 13. 1807

Pain returning periodically have been relieved by opium. Does this give relief in inflammatory pains? It does. After the effects of this medicine stop Torpor comes on - In inflammatory pains relief is not given the debility from opium becomes - This op: first increases the pain - Upon the whole op: is to be considered as pernicious in inflammatory pains. Nervous pains are attended with weak pulse &c.

If the constitution be little accustomed to this remedy stupor &c with convulsions may be induced. Many articles are much higher stimulating than opium.

Subject of Opium
continued -

By repetition a stimulus loses its ~~f~~ original force - If the body be exposed to 120° & then to 80° the body will feel cold. If this latter be arrived to gradually there will be no coldness felt

Opium contains, according to chemistry, ~~several different substances~~ resin, a narcotic principle, an extractive matter &c -

~~[illegible] on Opium [illegible]~~

1. Vinegar one of the best remedies for counteracting the bad effects of Opium -

The Analysis of Opium is a gum, a Resin & a feculent matter according to Crump

The bitterness attached to the gum & the astringency to ye Resin - This Crump opinion

This analysis not good.

Lecture Jany 16th 1807

Subject of Opium continued
of its use & abuse in disease
1. In Intermittents – 1600 years
ago the preparation of opium
was used in Intermittents
An opiate one hour before
the expected paroxysm has
been given with advantage
Dr. Lind has given opiates
half an hour after the
formation of the hot stage
This he says shortened
the fit & produced diaphoresis
& easy sleep from which
they awake nearly well –
Since his use of Opium he
says no dropsy has succeeded
the Intermittent – This Op:
never increased the violence
of the fit.

If he be delirious wait
till it go off before giving
the opiate - Lind gave the
opiate in ℞ij Succ: Sacra
when the bowels were bound
B. from his own experience,
cast condemn Lind's practice
B. however would not wish
to follow L's practice in
our climate.
Stark found opium of no
advantage but injurious
in Intermittents when the fever
had come on. Stark, however
practised in a very cold climate
& cast judge of the propriety of Lind's practice
~~The~~ Bowel's powder has
been given before accession of
~~fever~~ or paroxysm of an Intermittent, with great advantage
A cup of strong Coffee ~~prevents~~ prevents the
operation of Opium -

In 1784 the Red Bark was first introduced into this city. This was more gratin than other species —

Opium does not, in the general, affect the head when given in strong Coffee
The Narcotic quality of Op: much diminished by Coffee so that sixty drops will not produce greater effect than gr" ++ when this is an accustomed dose of the person
Opium in Coffee does not produce itching
The Coffee loses some of its virtues by burning -
Opium joined with the Bark makes it sit better on the stomach -
Continued fevers are cured by Cullen into Synocha, chus & Typhus. There is the beginning an often inflammatory St. hence of course the Bark is improper

B. says the yellow fever is a synocha - In the beginning of most of the fevers of Scotland there is inflammatory action. The stimulus which induces plague is of a most powerful kind - Plague & yellow fever two varieties of the same species - In Typhus Carcinum attended with delirium opium highly useful - Dr. Gibbons first used wine & opium in Typhus - This Cullen acknowledged. By this practice the night is passed with rest & ease -

Lecture Jany 19th

Opium combined with Camphor famous for a determination to the skin. Some have given this formula ℞ 4x Laud & ℥ss of Camphor Julep - Cullen gave this with great judgement in Typhus.

In the inflammatory stage of ~~an disease~~ Typhus Op: is injurious. The bowels of Typhus Patients should be gently opened — Four hours ~~or~~ is a sufficient interval of time between the doses of Opium. B. says he has sometimes desisted in giving Op: by reason of its great diaphoretic effect. Opium not good in Yellow Fever. hah! Vomiting in this disease has been allayed by other Opium pernicious in Phlegmasia — In ~~some~~ acute ~~rheumatism~~ when inflammation exists to a considerable degree. In Jaundice, from a biliary stone, ~~inf~~ bleeding is often necessary & Opium highly proper at the same time.

In the suppurative state of inflammation Cullen says opi: good. Hamilton has written an excellent paper on a disease ~~on~~ disease of ye Manly parts of Britain & he is the first who ~~gave~~ introduced Mercury into ~~Britain~~ that ~~in~~ country, in Hepatitis. Paregorical elixir Jine: Opii camphorate of ye Dispensatories – The Cassia ~~oil~~ might be left out as it does little or no good & is expensive – The flowers of Benzoin very good –

till the document appear –

Lecture Jan 7. 22

Opium continued – In hysteria op: can be taken in great quantities without any injurious effect. Rheumatism. It is divided into acute & chronic. In the former bleeding when carried too far lays a foundation for ye chronic rheumatism – Acute rheumatism is to be treated by sweating after ye reduction of the pulse by blood-letting – Dover's powder excellent in acute rheumatism – It is formed of Pp: & Sulphate of a ℥j – Sulph: Potash ℥j – Mix them well & of this give gr X ad XV – every hours

B. uses instead of Pot.
Tartar, Sugar or Gum: Arabic
Nitre added to them fre-
quently produces additional
good effects. This Medicine
is to be given in the morning
after sleep: B. gives it in the
evening — The Patient to cover
in flannel — This an impor-
tant rule — The powder to
be taken in a bolus. No drink
to be taken till the sweat
break out. 50 minutes after
taking the medicine drink in
the general may be taken —
after the sweat some gruel
may be taken — The Patient
by no means to take the least
quantity of ~~too~~ drink till
the sweat appear —

Baked bricks best to apply to ye parts that do not sweat. After sweating wipe ye body dry & let the Patient continue in flannels ~~[illegible]~~ ye next morning. This morning ye Patient may come out of bed but must not leave his room. Sydenham condemns ye use of opium in rheumatism. This Practitioner did not give it before the fifth day. B. has used it in the beginning of the disease. If this medicine do not induce sweating in acute rheumatism it will injure the Patient.

It has been supposed Ipecac: counteracts the effects of the opium. This Brocklby's opinion. Ipecac: in this respect, is upon a footing with Coffee.

The acute rheumatism with irritability general succeeds acute rheumatism treated by bleeding - This kind of rheumatism to be treated by Bark. Dr. Hamilton advises Op: & mercury in rheumatism succeeding to Syphilis. Opium, as long as the extremities are affected, in Gout is injurious - Gout is an opprobrium Medicorum B. had this disease at 19 years of age & Randolph in Congress had it between 14 & 15 years of age - Brown considers Gout as a light of indirect debility - & stimulates accordingly & accordingly killed himself. Dr Thompson says, Gout is an ordinary inflammatory fever - This B. does not believe

Gout in the stomach has been treated with gr XX Op: in one day - In Arthritica Colica B. has given ℥ij of Laud: in 24 hours. Ginger is a most excellent remedy in gout - It is to be boiled in milk - It is usually given infused in warm water & sugar is added B. has taken ℥iss in 24 hours - This method however is frequently to be aided with opium. Hemicrania is often a gouty affection - Who to be treated by Op: Valerian & Bark - The sick head-ach is a form of gout - This frequently relieved by Op: & Copper -

In small-pox Op: often employed -

Op: is not safely exhibited before the 7th day of Small-Pox. Sydenham recommended Op: in Measles. If inflammation be present this practice improper. B. says of children born Measles in the Spring or Winter they are apt to be severely handled with cholera Morbus.

Lecture Jany 23 –

Of Opium in Hæmorrhagia. In the active Rise is unsafe. In the Passive useful. It is these are often kept up by irritation & Op: act as a restringent. Hæmoptysis, after the action of the heart & arteries are lessened by bleeding, may be treated advantageously by Opium

This is generally an active hæmorrhagy & yr cause stimulants generally injurious tho' B. has for yr most part used it in the Menalgia mutum — Epistaxis almost always an active hæmorrhagy — The immoderate flux of the LOCHIA yields to moderate bleeding, Opium than any other medicine

Some cases of Piles may simulate to Dysentery & therefore op. may sometimes be imp

Every Physician has used op: with advantage in Dysentery - In warm climate this disease calls loudly for op:

Every body acknowledges the utility of op: in Cholera Morbus

Tinct: Thel: ℥xx have been given in 24 hours in a division of Tetanus - & A negro man took gr 1500 of solid opium in 17 days in Tetanus & was cured -

Dr Mosely seems to think no great deal of op: in Tetanus -

B. has cured Tetanus by a mild excitation from Mercury -

Hydrophobia somewhat

allied to Tetanus - It seems to think this disease has not been cured - This a highly inflammatory disease & has been treated by some by large bleedings - Dr Hillary says Op: has been useful in Hydrophobia - Frank gave Op: in this but the Patient died - Hydrophobia is sometimes a symptom of Hysteria & was cured by Assafoetida -

A man labouring under Hydrophobia was bitten by two Vipers & the man cured - From y letter of y Rattle snake he lys than 15 minutes

Torpor will be induced

Chorea St Viti is ~~apt~~ cured by bleeding, & Gland recommends purging, & sometimes treatment to advantageously op:

Lecture — Jany. 28 1868

Opium in Epilepsy often good. In Hysteria, which is in some measure allied to Epilepsy, Op: is often good. In plethoric states of the system Op: not so proper. Palpitation, when symptomatic is often relieved & cured by opium. Asthma is sometimes ~~relieved~~ cured or at least abated by op: This disease is often a peculiar form of Gout. Pertussis or Hooping-cough is, when bleeding & purging not indicated, relieved by opium. Pyrosis or water brash which is common in Northern countries is mitigated by sweet milk, fresh meats &c & in some cases by nux vomica. Cullen has found nothing equal to Op: B. says it is a symptom of Dyspepsia & is probably to be relieved by Ro-

Medicines for Dyspepsia

B. saw a case which was relieved by Op: succeeded - It is frequently dependent on Dram-drinking -

In Colic, after the blood has been drawn & the bowels well opened, Op: good. Some varieties of Colica may be treated with Op: without previous evacuations - These varieties proceed from hysteria, color, passions of the mind &c - Cleghorn in Colica Pictonum recommends Op: in junction with purgatives - Some have found Op: a purgative in colica Pictonum -

In Mania Op: has often been employed but not always with that happy effect desirable - Cullen found Op: in some cases of Mania useful tho he also frequently found it to fail

That Emetics should produce their effect in Mania a large dose should be given. Ten & even 20 gr. have been given - Op: given before the exhibition of the Emetic the ~~bath~~ operation of the latter is often assisted -
In Mania from drink Op: is often good but is a nice remedy - B. abstains ~~the~~ drink gradually & gives his Tinc: Cahinii made by infusing ℥i Cah: in ℥viij ~~Ap:~~ Vini -
Calomel & Corros: Sub. should always be used in combination with Op: Ap: sometimes salivates -
Opium is often employed as an ingredient in Gonorrhea - B. not any fond of Op: in Gonorrhea -
Op: checks more certainly

the salivary discharges induced by mercury than any ~~other~~ remedy. It is to be employed as a purgative & given internally in doses of 4 to 6 gr in a day & half a quantity in the Night - Opium in gangrene which is describing by Pott & attacks a toes, is most important -

Dr Monro by no means advised Op: in Cancer but low diet be thought highly proper -

of Hyoscyamus Niger
or
Black Henbane -

This herb allied to Op: & is most important - It is not a native of North America It is called the Devil's cabbage in some parts of Virginia This boiled roots of this induced madness in three months -

It induces double vision ~~both~~. This should have no Brain was stimulated — Gangrenous vesicles of the skin have been induced. The Vapours of this Hyoscyamus affected Barton in a surprising manner — This very generally moves laxative tho not always. This is constipating about as often as Op: Is laxative —

Op: Killed a man in Paris his stomach had black maculae on it & w. meninges of the Brain appeared highly stimulated & water was found in the ventricles

Lecture Jany. 27th

Hyoscyamus continued This more nearly allied to Op: than any other medicine known. It is diuretic Dr Stoll of Vienna gave it in many cases of convulsions in doses of gr j bis die

He carried it in one case as high as gr ++ in 24 hours. In general it may be given with as much safety as Op: It opens with some when Op: does not. A young lady slept under the dose of gr vj Extract. Dr Hottenguie has published a case of hearty cured by Ext: Hyoscyami gr vj morning & evening & increased to gr +++ in a day. He gave it also in puerperal mania. Of its great virtues in Epilepsy says Stork. Chorea is frequently treated successfully by Op: & it is highly probable a gr Extract: tid. will also prove useful. This Lather extract, suffer from keeping

Datura Stramonium

It is common about the

this city - It is called by some Henbane - It is an annual plant - The smell is noisonous & extremely disagreeable - ~~Lunicus~~ Goats eat this vegetable as also sheep - Horses & goats will eat Tobacco scarcely any of the narcotics will kill the goat - The Soldiers on Jamestown river eat this vegetable while young & were affected ~~to~~ days with a kind of Mania for eleven days. This has been suppose a sedative but erroneously - It is a stimulant -

In 1765 some British Troops gathered some of this vegetable while young as a salad were affected with genuine Tetanus & other diseases - The man with Tetanus died. Achilles from eating wild Rhubarb

Archer says it is as effectual in regular Epilepsy as Bark in Intermittents. Stramonium has been recommended in Hydrophobia.

under ~~a general~~ Hydro-
phobia - Dr. Cooper has
proved in his dissertation
upon stimulating effects of this
weed - Dr. Stork was advised
to use all the poisonous vegetables
he so much speaks of, by
the celebrated Linnaeus of
Upsal - Light remarkably
affects upon narcotic plants
rendering them less powerful
This has been used in Epilepsy
& Mania - In this country
the medicine has been used
in Epilepsy - Archer of Maryland says he used it in
this disease with advantage
Those who had irregular
returns of the disease were not
so often cured - The gum
grill of you used & low diet
& occasional bloodletting was
had recourse to - They should
be gathered when of a brown
colour -

Datura continued - B. has had a good deal of experience in this medicine - He says it sometimes unquestionably cures ye diseases mentioned. Dr. Cooper ~~cured~~ used this medicine in cases of epilepsy with advantage - In this case there were symptoms of inflamed brain & the disease was for some time suspended but not cured - Epilepsy is frequently preceded by Dura Epileptica - In some cases bleeding, purging & low diet must be had recourse to - In other cases stimulus preferable & opium, stramonium have been used with advantage - This D. Stramonium has been used in Mania - In one case in the Hospitals ye

Patient was discharged cured after taking ~~for~~ for first night gr ij & this increased on every night. She at length took ℥ss dmor at a dose. She was ultimately discharged cured — Bergius speaks highly of this remedy — when the pupil becomes dilated the dose should not be increased. It is only the extract or seeds that should be used — just as the plant is about to blossom select the best looking leaves — These are to be put in a flannel twist then press out & expose this in a lap plate in a room where the sun has been but not in the sun —

Atropa Belladonna
or
Deadly-Nightshade
It is one of Solanaceæ
It is more stimulant than
any vegetable yet considered
It is acrimonious - The berries
& leaves may be used - ~~It will~~
~~take XXXV gr of Tartar: Emet~~
~~than has been taken without~~ effect
Ipecac: preferable as a vomit
in those cases. This vegetable
affects the pupil, produces
dryness of the fauces nose
& an inability of action
in the stomach. This has
discussed cancerous schirrus
& in some cases cured or
at least greatly amended a
cancerous sore — Cullen
says it has not, in these cases,
answered his expectation
Dr Burshill has used this

in Pertussis. The exter-
nal application of a dilute
extract of this Belladonna
has produced dilitation
of the pupil — Upon dropping
a solution of this into eye
previous to an operation —
on it, the pupil will be
dilated & admit the appli-
cation of the eye without in-
juring the pupil — B. thinks
it probable the D. Stramon
would do the same thing

Lecture Jany. 30th

Nicotiana Tobacum

Tobacco — N. O. Luridæ

This was originally used in
religious ceremonies by the Indians
In the reign of Elizabeth much used
In the reign of King James discarded

of the Umbelliferæ

Conium Maculatum or

Hemlock —

This is not a native of the United States - It is common in the streets of Trenton N. Jersey - Dr Withering ~~found~~ knew the common Purple use for ~~Cicuta~~ or Hemlock - Its stock is spotted & its agreeable smell of the bruised leaves - The seed are always striped - This a much stimulant than opium or any of the preceding narcotics - This has produced a considerable salivation - Anst Rags went the effects of this plant better than any other animal The Goat eats this with impunity The juice contains crystals which deflagrat - in the fire ~~etc~~.

This was known to the Ancients Dr Storke says he cured a number of ~~ca~~ cases of cancer by the extract of Conium -

Bergius says the Conium may always hurtful in genuine Cancer - Mr Adams on poisons ~~[illegible]~~ is highly recommended.

Hamilton had recourse to the Hemlock bath with advantage. In 1785 a case of Lepra was treated with the common. After taking a dose of this medicine in the morning a bath full or nearly of cuticular scales might be collected in the bed — Hunter found it useful in Syphilis. It has been used with decided advantage in Scrofula. Dr Kuhn gave Hemlock pills morning & evening in scrofulous cases. The medicine at length could not be procured & the Patient died. This was employed in Greece to destroy the citizens.

Lecture Feby 2d

Dr Stark has recommended the Conium in cancer. To this when not highly irritated the conium has been useful in those of a scrofulous nature

Mr. M. of London speaks highly of a travelling agency of 5s a day in some cases of sous in place.

Hemlock has been used by Dr. Mathewy in

chronic rheumatism. The leaf is most powerful — It has been used by Butler in Gonorrhoea virulenta — It has been used in the Gargrene of old people — Van Swieten was three times attacked with this in his toes & was over saved by the Hemlock — The extract is most commonly used in this city the leaves preferable — They should be collected in Jun & should be kept in phials from the sun — After some time thirty grs may be taken in the day — Pertussis has been cured by this medicine

Of the Sub-narcotics

Of the Laurus-cerasus

The Prunus laurus-cerasus of Linn. — This very different from the Kalmia or Laurel of Linn. B. Brown nothing from experience of this Laurus. Convulsions in 99 of 100 & effect of stimulus — This has been but little employed in practice Darwin has known a weakness of this given to an hysterical woman without injury. The distilled water has done much mischief. The fine taste of milk prepared with it is often given by v. leaves of the Laurus & in this country by v. leaves of Peach

the southerning blast
then when the north-
burning to south
winds increase the
vaporation of camphor

of Camphor.

This an article of much importance
This obtained from the Laurus Camphora
This has been obtained from sage
from the roots of the Laurel. This
principle much diffused among
the vegetables of our climate country
It grows to a great size in Japan.
Camphor is soluble in water
tho' not readily so. The acrid
& nauseating part of camphor
are communicated by something foreign - Camphor in
union with bark greatly
increases the power of the latter
The muriatic, sulphuric
& fluoric gases dissolve this
medicine - The Camphoric
acid readily unites with earths
& alkalies. This C. differs
from every other - It is a volatile
oil in union with carbon.
The vapour of Camphor
destroys almost every kind
of insect except the de-
testable moth - These insects
are more readily destroyed in
summer than in twenty days

Lecture Feby 3

The subject of Camphor continued. Birds & those animals with two ventricles & auricles are preferable for experiments with Camphor. Some animals who took this ~~the~~ came hydrophobic & the stomach was sometimes inflamed - Camphor is sometimes taken into the system - The ~~perspi~~ respiration is frequently ~~smell~~ camphorated. The flowers in the parlours might be much invigorated by throwing into the water in which they ~~flow~~ are, a small quantity of camphor. Plants & animals governed by the same principles - Like the same in a Newton, fly ~~to~~ an insect - vegetables have ~~a~~ nervous system - Dr. Alexander says of Camphor: reduced his pulse greatly - Barton has known Camphor to inflame the eyes & produce other disagreeable symptoms.

Lecture Feby 5th 1807

Camphor continued. This has been employed in Nervous fever & with advantage - This C. antiseptic. Pringle says in Typhus this C.

excellent – It promotes a diaphoresis & acts in some measure as an anodyne – C. with Cort. Peruv. has been recommended by Some. C. has been used in Gangrene – the Gangrena sicca This was the practice of Dr Collin C. peculiarly adapted to the Gangrene which occurs in the termination of Typhus. This disease has been treated by a County Practitioner with a decoction of the Bark & root of Sassafras. It is prepared by boiling the Bark in a solution of lye till of consistence of Mush – In exanthemata C. has been also used – Rosenstein says if the skin be anointed with pomatum in union with variolous matter to which was added C. the disease did not appear but when C. was not added the disease came on –

Hoffman says he used C. in acute inflammatory affections with success –

Collin used Camphor in rheumatism

B. thinks much injury is daily done by the external application of Camphorated liniments & other preparations of that kind - He relates a case of a boy who was killed by the application of the opiodeldock - C. is remarkable above the other vegetables for translating diseases -

C. has been used in Epilepsy & with advantage in junction with Cupreum ammoniacum

This Medicine has been used with advantage Chorea St vit the began with grib tendi & ment on tile sh took gr xviij to die - H

H has been used in hallufa Menstruation -

C. has been used in Nymphomania

H is advisable to bleed -

C. has cured in one instance a case of Mania

Lecture - Feb.y 6th - 1807

Great danger in the external use of the Laurus Camphora
Injections of Camphor with Gum: Arabic have been used in Gonorrhea - Opium & C. combined have been used with advantage in Cancerous sores - The Cam. alone renders the sores worse
C. with Bark, excellent in Gangrene as well as intermittent & low nervous fevers
In the cure of the Scratches an ointment of Cam: & Mercury were used to advantage -
B. treats Strangury by applications of warm water in the bladder or by the warm bath & the application of Sinapisms to the Ankles. C. has been used in Bronchocel - It may be given in dos: of 2 gr to 60 It may be suspended in water by means of Sugar & Gum: Arab.
Best way of giving C. is to rub it down with Myrrh

By ℞ ʒ Myrrh ℥ij ʒ Camphor may be diffused in ℥viij ʒ water This originated with Percivale

Of Moschus or Musk

It is one of the very permanent substances used in Med. It is from ye Moschus Moschiferus obtained ~~the~~ One animal yields one Musk bag – The amount be extremely scanty – Alexander exhaled ye smell of Musk – This Musky perspiration is wonderfully diffused thro nature – This in large doses increases ~~the force~~ ye force of ye pulse – Musk in attacks of Gout in the stomach has been u[illegible] with gre[illegible] advantage – Musk is with Camphor, in hydrophobia by the Chinese – Dr Hillary says it is a preventative in this disease – It has been used in Colica Pictonum – In debility tendinous accompanying nervous fevers –

The best method of judging of good Musk is by the strength of its odour & by its granulated appearance — It may be given in ten grs to grxxx — Every gr of Musk costs six cents — It has been used in Gangrene with great success —

Lecture Feby. 9th 1807.

Of the Antispasmodics Musk
It is prepared by pouring
Fifty Pts. Acid upon Fifty
Antiseptics of Lucern
After having stood 24 hours
there is a residuum in the
which is to be frequently
washed & which then has
many of the properties of
Animal Musk - I have
not used this medicine
It is much used in Ger-
many - ~~It is tedious to~~ 12
grs are to be triturated
with some demulcent &
then diffused in water.
Zb - of this given on
two teaspoonfuls - The
Tincture is to be given
in doses of 8 ℥

"

Animal Musk is obtained from an Alligator & other animals - It has been obtained from an Polecat -

Of Castor -

This supposed by some the inguinal glands of Woman This not the case - It is contained in a bag - This has been celebrated as a famous antispasmodic - It has been used as an Emmenagogue It is given in doses up to ~~[illegible]~~ Cullen says he never observed any thing of Narcotic -

The Crocus of the shops is or stigmata of the plant It is a peculiar substance & its powers may be extracted by spirits - Bergius says he has seen Hysterical Patients rendered worse by this medicine Cullen has no favourable opinion of this Crocus - It is much used in the art of dying

of Valerian

It is a native of Europe
It is a stimulant & is not
endued with any narcotic
powers. The taste of the root
is nauseous, acrid, & its odour
most agreeable to Cats & Rats
which, & is used for catching
rats — It is not so powerful
stimulant as some of the medicines
already spoken of. It is purgative
& vomitive — It is diaphoretic —
It has been used for a long
while — The Introducer of it
was cured by it on epilepsy
by T — It is a medicine of
decided powers & a Physician
should blush not to know
its virtues — It has been fep
found particularly adapted
to female Patients in epilepsy
from obstructed menses — Cullen
says it is antispasmodic —
Dr Monro often gave Valerian
in Epilepsy but never cured
Haller gave it in Hysteria

Professor Rutherford says he never saw any medicine do so much good in Epilepsy as the Valerian - B. says in some instances he has cured Epilepsy with this medicine -

It has been used in Chorea St Vitus which frequently is produced by worms - It has been used in hemicrania It is to be given in doses of from gr X to ʒ ij in the day He has given it in dimness of sight - The gutta serena appears in some instances to proceed from an affection of the stomach - It has been used in low Typhus fever - It is given in Tincture by some tho in substance it is preferable It is given in doses of ʒ ss twice a day -

Lecture - Feb 9. 10th 1894

Ferula Afsa Fœtida

It is an Umbilliferous plant
The gum exudes from the
root white but after dam.
root - We have one species
in this country - The F. Cana-
densis - The Asafœtida we
use is a gum-resin &
entitled to attention from
Physicians - This is most
powerful of the fœtid gums
It is stimulating as is
proven from its effects
in colic - Cullen says
it penetrates more readily
the nerves than any other
medicine.

In Spasmodic asthma
of children this is most
excellent remedy

℥ij Asafœtidæ - ℥ij
Mundani ℥ij

have been used -
An injection of Assafœtida has been used in some cases - As much as ℥viij of water will take up for injection
In croup with malignant symptoms injections of Assafœtida & it given in substance has been used with advantage -
Douglas the first who recommended Calomel in this disease - Mr Geoffroy says good for the effects of Laudanum - This prevents or dulls headach induced by Asp:

Dr Lubyett says A. induces sleep - This B doubts except by relieving pain
This medicine ranges from gr ii or iij to milles & bone
[illegible] has been celebrated in cases of rabies
It is given in union with camphor - B. says it acts by producing exfoliation - B. has no experience in this respect -
It is sometimes but to employ it in tincture -
B. often uses a watery solution of this medicine -

Of Gum: Ammoniac

We know not the plant of which produces this -
Collin discovers this erroneously according to Lunta -

This has been used in Scurvy. This Garlic is in some cases a powerful expectorant

In deafness the juice of this might be dropped into the ear. The use of this class of Medicines has been supposed a remedy against Bronchocele. The juice of the Onion applied to the head has a great effect in renewing the hair ~~at~~ fallen out from tinea capitis

of the Siliquosa

Internally they have been used in many diseases - as hemal Intermittents, in chronic rheumatism & palsy when dropsy depends on a torpor of the lymphatics. Mustard may be highly useful — An infusion of Horseradish has cured Scurvy

Of the Alliaceae

These nearly allied in their properties to Asparagus. This family derives its name from Garlic. This & the Leek most powerful of the family. This family nutritious. Those which grow in mild climates are very mild.

Of the Allium sativum Garlic

The red onions are the strongest & retain much longer the purging point. Garlic externally applied to the skin induces inflammation. This shows off in many persons by the perspiration. The Jews eat this largely. The stimulus of Garlick is a powerful one. Dr Sydenham cured Dropsy with this medicine.

The smell of Garlic has been discovered in a fistula of the os humeri

Lecture - Feby. 12th -

Siliquosa

These have been found useful in chronic rheumatism & have cured this disease. In scurvy they are highly useful. Sinapism of Mustard or Horse-radish ~~have~~ applied to the ankles have prevented epileptic paroxysms. This practice is perhaps particularly adaptia to cases of great mobility - The active matter of this class of medicines is carried into the circulation

of ye external application of Sinapisms & Horse-radish

Sinapisms are made of any of ye siliquose & cruciferous of meal or any thing of ye kind

Two parts of Mustard & 1
of wheat or oat meal with
vinegar or milk. The Mustard
prepared for the table is not
as good as the ~~[illegible]~~ flour
of Mustard. Sinapisms act
as blisters from flies.
These are useful in convulsions
from teething & convulsions
from small pox. Strangury
is relieved by Sinapisms
These preferable to Blisters
This practice originated
with Dr Barton. In Inter-
mittents Sinapisms have
sometimes been found very
useful. In fact Sinapisms
applied to the belly have
produced alarming effects
~~In fact, [illegible] [illegible]~~
~~pain from [illegible] [illegible]~~
In general it is improper
to apply Sinapisms to the
bared part. They should

be applied at some distance from the part affected.
An infusion of Horseradish has been used in Scurvy

Of the Stimulant Evacuants

Of the Entheses

These procure a discharge from the nose — The evacuation produced by them is often, but sometimes without, sneezing — They are often found useful in rheumatism & muscular pain of the head — They may operate on the cutaneous branches of the head — Some enthesis produce sneezing when taken into the stomach
It seems some enthesis taken into the circulation will produce sneezing like Ipecac

produces vomiting when
treated in the same way.
These have been proposed in
Hydrocephalus, & used, tho'
without effect. B. has no
experience with Emetics in
this disease & would not
wish to have recourse to
them - The Mercurial Emetics
might be had recourse to
in Epilepsy delirium to
the head - The Tartrate Mercury
& Snuff were used - In
Deafness these might be
used - Inflammation of
the Eustachian tube with
produce deafness - In this
case Patient has a peculiar
noise in his ear - This species
of deafness may be cured
by bleeding, blistering
Mastoid process, & Dr Simon
recommends Emetics.
These have been found useful
in Gutta Serena

Mr Ware uses a Mercurial snuff compound of 8r & Tartrite Mineral & Fij Pulvis Ipecacuanhæ — In Amaurosis Plethorica bleeding purge Sulph: Mercury & common snuff salivate — Dr Monkhouse relates similar cases — When the ordinary means of inducing salivation fail B. recommends a trial of this Mercurial ointment In a Polypus of the Nose Tartrite Mercurial myght be used

Lecture Feby. 13th 1809

Emetics continued

of the Beta Vulgaris

The juice is employed — B never used it.

Asarum or Asarabacca

It is one of the most useful of this class. It is a native of country & the best is of all the Pulvis

Stimulating of the Pharmacopoeia. This is the Asarum Canadense & it is commonly called wild Ginger & Colts foot

Tobacco every body uses as an Enemic - Much of the snuff of this country contains a quantity of powdered glass. Some, after taking snuff are affected with sickness at stomach, vertigo & sometimes colic sweats - Tobacco is frequently the cause of nervous disorders - Maniacs are remarkably fond of snuff & some will eat it. From this it is not to be inferred this article would cure Mania. ~~The~~ B. thinks the use of snuff has not increased our nervous diseases of Mr Lohre - B. does not think our new disease has appeared within the last 300 years - The venereal disease is not a new disease - It was known long before the discovery of America -

The use of Tobacco, ~~B. thinks~~ in various ways, B. thinks, is not unfavourable to longevity -

Tobacco will kill a man destroy
we avoid if it does not shorten life
Dr. Hope mentions the case of a man
who, upon leaving off his snuff
was then seized times affected
with apoplexy.

Euphorbia Officinalis - This
powerful & acrimonious can in its
use - This spread upon Basilicon
& applied as a blister produces
a ~~power~~ blister more perma-
nent than the flies -

Veratrum Album -
Helleborus
~~Helleborus~~ Internal a snuff
used - It is of a powerful enhe
the odour is agreeable - The sneezing
quality resides principally in the
inner part of the flower - This is
a most powerful enhaler -
Sneezing is a common symptom
of some diseases

Lecture - Feby. 16th 1846

of the Salivating Medicines
or
Sialagogues

They are divided into externa & internae - The latter are certain acid medicines which when applied to the mouth produce an increase of saliva - They relieve rheumatic congestions - The principal is the Anthemis pyrethrum or Pellitory of Spain The root is used - Imperatoria is an other Horseradish -

One of the most powerful is Zanthoxylum fraxinifolium The stimulant property resides in bark & seed-vessel - The other species is called

These when taken internally produce salivation - B. Rox used it - The Polygala Senka is mentioned as an external sialagogue - It is equal to any of the above & will answer whenever medicines of this Kind are necessary

of the Internal salivary Medicines

Mercury & its preparations are great sialagogues. This harmless is sometimes an external sialagogue.

This argentum nitrum is inert with respect to the body & is tasteless & without smell. Dr. says Mercury is absorbed on many occasions. It was formerly customary to take morning drasing mercury. It, formerly was taken to assist in dancing & was not unfrequently seen in a drawing room deposited there by some fair one. Monro ~~says~~ saw this himself & something could ~~not~~ tell from what fire it came.

To under this medicine action it must be either mechanically or chemically charged.

Cullen says it may be changed in 4 ways -

1. By vapour -
2. calcination
3. rubbed with vescia substance
4. with acids

Crude Mercury kept in water for some time becomes changed & so water with Bile worms. The water is black from mercury which may probable be deposited. The fumes of Cinnabar or vermilion, have been serviceable. These fumes, drawn up & have salivated very readily. Mercurial fumigations are active applications.

The calcination of Mercury according to Cullen has no other effect than preparing it to be ~~atte~~ acted on by the stomach.

Mercurius Mecapetalis Perfe is nothing more than a oxide of Mercury

B. gives at first 1/4 or 1/5 of
& with opium. It is a very
manageable preparation.
More dependance on gentler
than active preparations of
mercury.
Those prep: by trituration are
readily introduced into the body
by friction.
Plank's solution is made of
Mercury & Gum: Arabic.
White of Egg & other substances
act in this way on mercury.
This solution of Plank is not
so much thought of. For worms
this is highly recommended.
For a gargle & external ap-
plication to recent venereal
sores B. thinks highly of it.
As an internal medicine
not thought much of.
Mercurial ointment is
formed of 2 or 3 parts of Lard
& one of Argent: vivum.

A scheme which has
been blistering may be
advantageously dispensed by
the application of Mercurial
ointment after the cuticle
has been removed.

makes the ung.t Mercur
The Hortis is made of equal
parts. The Ingredient of Tur-
pentine not good. The
ointment made of lard unfit
do for winter & persons
feet is to be added.
Rancid oil is said to con-
sume ~~to~~ mercury by fric
after rubbing good Mercury
salivation is induced in general
in 3 or 4 days. Ox tam in 24 h
This ointment should be rubbed
in for 15 minutes.

Lecture — Feby. 1

Salivating M. continued.
Unguentum nitratum - or citrinum
In tinea capitis, Itch, &c. ung.
The external use of this medicine
has induced a long & continued
salivation - Mercurial soap
B. Rennie used it - The Saliva
preparations are different ac-
cording to the acid used.

The Muriat of Mercury
or Corros: Sub: was not much
used by Cullen — But from my
experience with it, think highly
of Corros: Sub: It is more manage-
able than almost any other prep:
Dr. Hardy which dose is
prepared with nitric acid
Sal: Vol: Ammon & Dwitt
silver, also exposed
to heat — The pure salt is
to be dissolved in rose water
Two drops contain less than
half a grain of Mercury — Two
drops are to be taken for a dose
The French are averse to or
internal use of Mercury with
nitric acid.
Merc: Emet: flavus or Turbith
Mineral is an acrid prep:
& must be given in doses
1 to 4 gr — 4 gr is generally an
emetic & a very manageable
one too — This combined
with Squill excellent in
Dropsy

Turbith mineral with ye decoction of ye woods determines to ye skin

Marc: Phosphorates said to cure rapidly ye sores about the pudendum

Kali a gr sufficient dose - Sugar, Phosphate & powder of Cinnamon a good formula

of the use of Mercury in particular disease.

1. of Hydrocephalus Internus - This is generally a febrile disease - H. comes on gradually, vision is dauble continues considerable, diarrhea sometimes attends as also nausea & vomiting, pupils dilated & ye Patient frequently dies in convulsions - This comes on generally under puberty - A variety of remedies has been recommended - Mercury has certainly sometimes proven beneficial tho' it has more frequently failed - P.

Salivation cannot be induced in Children under 2 years

Mercury frequently produces in children a running at w nose. Prescribed Calom. in 22 Patients & they all died. This acknowledgement cancelled B. never made a cure with mercury. A great acceleration of growth has come on after a cure of Hydrocephalus.

2. In Phthisis Pulmonalis B. has little favourable to say respecting this practice. 100 years ago Calomel is said to have cured in Phthisis in Wale. 3d in w hands of Radcliff. At the expiration of 10 years U. ~~again~~ became affected with Hydrothorax & w legs swelled. Radcliff observed he would not have his Majesty's two legs for his 3 ~~legs~~ Kingdoms & his Majesty soon died.

Lecture - Feby. 19th

Mercury in dicacy - In Dropsy - 100 years Dover succeeded by this remedy in curing abdominal Dropsy. Calomel in comb: with Squills has often been useful in Dropsy During salivation the discharge of water has been great & as soon as ye spitting stopped the water again accumulated - Mercury is peculiarly adapted to febrile Dropsies In these ye lancet should precede ye use of ye mercury B. says Mercury sometimes does much harm in Dropsy & a mercurial course is sometimes followed by Dropsy.

In Jaundice Mercury has frequently succeeded -

In Epilepsy Mercury has often been used but has seldom cured. It has sometimes suspended the fits & this entitles it to attention -

Effusions in the ventricles of the brain of Epileptic Patients have been found – When Epilepsy has been cured Dr. thinks it proper it has been in cases of this kind by means of promoting absorption.

Tetanus divided into idiopathic & Symptomatic – The latter the most dangerous – Dr. Clark says he never cured symptomatic Tetanus He used Mercury largely – After wounds & in like he gave calomel until Salivation was induced – After capital operations he pursued the same plan occasionally giving Bark & opiates – This practice Dr. thinks highly of – Dr. J. Young relates a case in the Medical & Physical Journal in which Mercury had a decided effect. In this case suppression given

1815.

attended & was supposedly
~~wise~~ young owing to opium
This not the case - Not skin
generally precedes salivation
B. had a case of threatening
Tetanus which was completely
cured by Mercury - Has Hydro-
phobia been cured by Mercury?
This has been answered by many
Physicians in the affirmative.
In some light cases B thinks
mercury has cured & as a
preventative it would be
very proper to exhibit this
remedy - Mercury should
be given at a time ~~not~~ sufficiently
early & not before, as to affect
the mouth before the usual
appearance of the disease after
the bite of the rabid animal
In Cynanche Maligna Dr
Duncan exhibited Mercury
with good effect - The Pa-
tients bowels but one evacuation
& that by the mouth -
Ogden pursued the same
practice

Cynanche Trachealis is one of the most formidable diseases. It is divided into Symptomatic & idiopathic. This disease is produced by the same matter as that which produces Yellow-fever. In some instances Calomel may be used when this disease is protracted & when in adults.

In Pneumonia it is seldom necessary to use Mercury tho' it is sometimes. Practitioners have frequently used Mercury when this disease has accurred in Merely grounds.

In Croupula Mercury has often been beneficially used.

In Bronchocele Mercury has been used to advantage. It is more seldom caused by the constitution of his Theory of this disease.

Hepatitis - extremely common in warm climates & B. thinks more common among us than it used to be. This Mercury is decidedly useful after bleeding - In the West-Indies bleeding is not much used - There they have recourse to Mercury almost immediately - There is no disease in which Mercury has done so much good as in Hepatitis syphilis excepted - It is not necessary to carry the salivation far in Hepatitis - The disease is cured without salivation Great care to avoid profuse salivation - A cough frequently attends Hepatitis B. thinks the Mercurial course should be continued longer than recommended by the West-Indian writers -

Lecture - Feby. 20th #219

Mercury in disease continued.
And of its use in Fever -
The enthusiasm in this respect
has subsided - It was first used
by Paracelsus in this respect
Sir Theodore Deer was P. to
James I. - He used it in
intermittents with a view to
salivate - Child was fond
of giving Mercury in every
thing - In Tertian fevers
Mercury is improper - In
Fevers under the form of
a remittent Mercury is
much more proper - But
in a more simple remittent
Mercury need not be given
of Mercury in Yellow-Fever.
In this disease Chisholm saw
Mercury with decided effect -
~~He considered this disease as~~
~~inflammatory sometimes affecting~~

Chisholm considers Mercury almost infallible - His practice has however been questioned. He never found Bark useful but injurious.

In 1793 Mercury was used in this disease tho' not with a view of salivating. B. says they frequently gave Calomel tho' with a view to its purgative effect. Calomel in Vera Cruz is considered as entirely improper in Yellow fever. B. says out of the many who took Mercury in Yellow fever not more than 8 or 10 have died after a salivation was induced. This his experience. The practice of salivating in fevers then of the most important diseases. B. lost a Patient in Yellow fever aged 18 days - It died with black vomit -

In Dysentery - In many cases of this disease Mercury has

Dr. Clark of England
used Mercury in this disease
with decided good effects.
He gave from 5 to 10 gr. Calomel
with opium every night
By this practice all, except
one, recovered. The dose of
the Calomel should be in
proportion to the violence of
the disease. B. has frequently
combined with Hy. Calomel
a portion of Emetic Tartar
Ipecacuanha — If Dysentery
assume the form of malignant
form Hy. should be used
largely — Dr. L. Duffield
~~to Brown~~ knew that
practice of giving Mercury
followed 48 years ago.
~~In 1794~~ B. saw two cases
of Dysentery in which Mercury
killed — Patients the one
by hemorrhage from the bowels

the other from a caries of a bone –

When the Dysentery is complicated with Scurvy Mercury is altogether improper –

In 1748, 400 troops took Mercury & all who were salivated died

The chronic state of Diarrhoea is happily treated with Merc

of M. in Rheumatism

Mercury is sometimes used in this disease in small doses at night & next morning a bag M in union with Gum: Guaiac excellent.

Gout has never been cured by Mercury.

In Hypochondriacs & Dyspep. have been relieved by Mercury

Dr Potter of Baltimore has used the Blue pill with advantage in Dyspepsia –

In Lyphus fever Mercury ~~to~~ to slight salivation, has cured.

Lepra - Can say little from experience - From analogy it may be good -

Dr. Hillary recommends Antimony in Lepras

In Frambœsia a grains Mercury is said to have been good - Dr Hillary gave Mercury in this disease. He gave Calomel only objecting to unction -

Ptyalism should not be raised high - The history of Yaws much wanted - Dr. Tucker found Mercury completely successful in Yaws or Frambœsia -

[illegible] XXXXth P. M.

225. 226. 227. 228

Lecture — Feby 23 [229]

Mercury continued —
Liver nearly allied to Syphilis
This disease extremely common
in Canada some time back
Mercury has sometimes proved
useful in Scrofulas
Cancer is said to have been
cured with Mercury by Ritch
Mr Adams says the only case
of cancer in which Mercury
is useful is immediately after
an operation for the removal of
a cancer —
Mercurial ointment has been
recommended in Amaurosis
Deafness is sometimes cured
by Mercury —
Psora or Itch — Mercurial
preparations excellent in it —
The ung.t Citrinum is preferable
It ~~some~~ is apt to injure the
Linen — Ten gr Corros: Sub: to
1 ℔ water also cures it — This

remedy sometimes salutary by its external application. The disease produced by the Rhus radicans, deserves a name from Nosologists. It is cured by a weak solution of Corros: Sub: in a proportion of about gr iv to ℥j — B. says he is the discoverer of this remedy. Mercury not only cures this disease but renders the skin less susceptible to take the disease — This Poison-vine B. has given in Phthisis. Troublesome eruptions after the application of Blisters, which are extremely apt to itch, have been cured by Corros: Sub: Colica Pictonum has been successfully treated with Mercury.

Mercury the most important medicine with which we are acquainted. It requires much management in its exhibition. Mercury with Tartar emetic has its powers enhanced

Bark will cure Fevers, after the Mercury has salivated without effect -

Lecture - Feby. 24th

Dr. Hamilton is said to have detected mercury in the milk of a salivated woman - Mercury is absorbed when the system is much diseased - Mr Thornton's observation proves the same thing. B. thinks the powers of the Constitution, in some instances, have cured Syphilis. Took notice of Hunter's Theory & related facts which prove its correctness -

Camphor Cannot - Op: Strann: Lead, some of the Antimonial medicines have salivated - Some aromatic substances, as the Yellow-gum salivate

Emetics -

Such medicines as excite the stomach to throw out its contents - Then were fitted to many morbid states of the system? The first effect of is to evacuate the stomach & afterwards the duodenum

Lecture Feby 25th

All vomits do not necessarily produce sweating - Some suppose all emetics are ~~somewhat narcotic~~ noxious to the constitution - This however is often carried too far - for warm water will most certainly vomit. of Emetics in disease Can Emetics be given when there is a great determination to the Brain - Mr Richter gave them in Epilepsy - B. has invariably the practice without any injury but rather advantage May Emetics be given in Hydro-

cephaly? No. In Sen-
guiferous Emetics sometimes good
In different forms Asthma E.
given - Ipeca: in Spasmodic
Asthma has been used with
great advantage Rowley
recommends E. in humoral
Asthma -
In Consumptive Small Pox when
the Patient cannot discharge
the large quantities of phlegm
by Ipecac:
Ipecac: will bring on ~~Asth~~
Asthma - Dr. B. Robinson
recommended vomiting in
Hæmoptysis - Cullen did not
think proper to continue this
practice -
In Dysentery Ipecac: in small
doses has been recommended
It was given in small doses -
In Nitric cases this has
been recommended -
Hæmorrhages are not better man-
aged by any medicine, Sal: Sat:
excepted, than Ipecac:

Then belong a general relaxing & antispasmodic power in Ipecac: Antimonials do not cure so certainly in uterine Hæmorrhage as Ipecac: Digitalis seldom sweats tho' excellent in uterine hæmorrhagy Perhaps these remedies act by creating a new action in the system — When lead will not produce the effect add to it Ipecac: In Bubo advancing to suppuration, Emetics may be given with happy effects — In Hibernia humoralis vomity not to be given — In Jaundice Emetics indicated — These given while the Patient in the warm bath — Persons bitten by Vipers have been cured by Emetics

Of particular Emetics

1. Of vegetable Emetics

These the most important

P. M.

Lecture — Feby 25th —

Duncan's division into Emetics in rheumatism.

Asarum Europaeum. This has been frequently employed as an Emetic. Dunican thought it might be introduced into the shops for Ipecac. This not correct. The leaves as well as the root are used. This with us is called A. Canadense.

Euonymus. This has been intermittently by its external application. Good in warts of Horses.

Nicotiana. This is a narcotic emetic. The external application of Tobacco produces vertigo, fever, temporary insanity, a vomiting of blood & convulsions.

when large quantities of land acrim have been taken the external application of Tobacco has proved efficacious

Ipecacuanha - This ~~[illegible]~~ the most important of the Emetics - It is a species of Callicocca - The root consists of Bark & Medullary part - The property in the cortical part - This depends the power of opium - It does not make a very powerful impression on the stomach Ip: has been recommended in Dropsy - In this disease it has been used in the form of Powers powder - Swelled limbs after Dysentery have been cured by it - Clark for many years has trusted to a weak infusion of Ipecac in Dysentery B's formula

Ipecac: gr xii Op: gr ii & Cuba xxiv - Aq Pulv: viij - Give 4 powders in 24 hours

This is highly recommended in Dysentery & deserves a trial. The good effect of this formula does not depend on a purgative quality -

Dr Cynanch Trachealis B has given Ph: with calomel. The wine is made of ℥ij of the root & wine ℔ij - This root gives out almost all its virtue to wine - ℥j the dose - Ipecac: in doses of gr i will often excite vomiting - Ipecac: in union with Emetic Tartar is frequently exhibited - Two gr will sometimes produce considerable vomiting - Dos: of good Ph: grs. bidinay Ipecac: gr xii -

Spirea Trifoliata - This abundant in many parts of the United States - The root of this consists of bark & wood like Ipecac: This Spirea requires a larger quantity than Ipecac: Its dose gr xx A tonic property resides in this as in Ipecac

Horses take this as a tonic - In Kentucky there is an other species which operates in half order

Scilla - This a native of Spain - It grows on the sea shore - This will prepare & dry, when it loses much of its weight - Dry & lb, the wet ℥j

Ilex vomitoria - This a native of Virginia - It is held in veneration by the Indians - It vomits as soon as it touches ye stomach This also diuretic - This interesting on acct. of its relation to the Thea - The Indians tak before entering on business of importance

Lecture — Feb 26

Euphorbia Ipecac: This an acrid plant — It grows in Jersey

Of Mineral Emetics —

Many preparations of Copper are Emetic — The Blue vitriol, sulph. copper, is emetic — This kind of emetic Dr Simmons spoke highly of — Previous to taking a dose of blue vitriol take a cup full of water the Patient is to take a half a pint of water — It vomits as soon as it touches the stomach It is a manageable emetic according to Sam. Dissolve half dr. in half pound water & give a teaspoonful — In this way B. says it acts purges — Dr Manist gave gr iij of Tartar: Emetic & blue vitriol & a very vomit — Ale the preparations of Mercury in large doses will vomit — The Sulph: Mercury in doses of 48 will vomit & if a purge be not taken soon after it will salivate — In Europe it is given in Zemia Barmoratis

B. has prescribed
this under ℥ss ij ap6
in Angina Maligna
In union with the
Squill is given with
advantage.

Vitriolum Album or Sulph.
Zinc: This has been fre-
quently used on acct ℥ss
promptness in vomiting
In violent cases ℥ss to ℥j
In instances when poison
has been taken Ipecac:
preferable because it
is in some measure
an antidote to Opium.
In vomiting in fevers a weak
infusion ℥ss Mustard is some-
times preferable to any thing
else.

Dr. Moseley's formula
Vit: alb: ʒiij alum ʒj
boiling water ℥ʒ ~~xij~~ xij -
Mix let the solution stand
till cold - Dose ℥ss - For Children ʒj

The Pulvis Antimonialis
supposed very ~~to~~ nearly allied
to James's Powder
~~The James's Pr~~

This formula is said to avoid
neither spasm nor any of the disa-
greeable effects of the mineral Emetics.
This vitriolic solution has done
much more good in Phthisis in
the hands of B. than any other remedy.
Mosely recommends it in Dysentery
After blood may sometimes be left
out on acct of its purging. In con-
sumption it had better be left out
as decreased.

Antimoniated of ~~Potash~~ Tartris Potassa or
of Tartar Emetic. First appeared
in 1620. This soluble in hot & in
cold. More so in the form lets
degree of solubility is a proof of its
purity. It is decomposed by earths
& alkalis. Its dose from 1 to 8.
In divided doses sometimes prescribed.
Dissolve 4 gr in ℥viij & give a table
spoonful every 15 or 25 minutes.
Dr James' Fever Powder is
supposed by some to be compound
Antimony calcined, adding arsenic
acid & salt & baise it in bitter.
From Pearson's experiments this
Powder seems to consist of phosphate

of lime & antimony -

This an other mode of preparing the
Dispoha equal parts of white
oxyde of antimony & phosphate of
lime in a minimum of muriatic acid
& boiling water -

Lecture - Feby 27th

Dr James powder is very small
dose, still, sometimes acts most
violently - It in general is con-
sidered as a dose - This is a very
powerful as well as important
medicine Dr James did not en-
tirely trust to his powder in fevers
but had recourse to large quan-
tities of Bark - Goldsmith was
killed by taking this medicine
He took it imprudently.
Kermes Minerae - It is made by
boiling crude antimony in an
alkaline solution - This by some
is highly estimated - It is more
used in Europe than the Tartar &
Emetic -

Cathartics -

There are extensive set of medicines which evacuate the Intestines downwards -
Purging may be accessioned by various states of the System
Cold frequently purges. In 99 cases of Colica Pictonum ~~was~~ cold water thrown on the Patient had a good effect -
These medicines do not only discharge the contents of the Intestines but extend ~~to~~ their effects to adjacent vessels -
Cathartics necessary in fevers of all forms Typhus not excepted
These C. excellent in Febricula
Dejection of spirits frequently cured by purgative medicines
Some purgatives are taken into the circulation -
If a purgative be applied to a running sore it will purge
Inhabitants of hot climates require, in general, more of a purgative

1. The best Gamboge is obtained from the Stalagmites Gamboioides

than those of a ~~hot~~ cold climate

Duncan arranges v. C. into C. stimulantia, Refrigerantia Adstringentia, Emollientia Narcotica - B. does not admit this arrangement - P.M.

Lecture Feby. 27

1. of the most powerful Cathartics or Purgatives -

1. Colocynthis - This grows in E. & A. The pulp used - It is one of the most drastic purges. Dose from 4 to 10 gr. A mixture of Colocynth is said to have emmenagogue chances -

Convolvulus Scammonea

Its dose from 3 to 8 gr. + ij triturated with Jalapa -

1. Gamboge - This produced from 3 species of plants. Gambogia Gutta, a species of Hypericum. Its dose 3 or 4 gr.

Gamboge is to be combined with Calomel or Jalapa -

Best Patent pills contain 242
this article - Lee's pills most
excellent -
Helleborus niger - This grows
in Germany - Its root from ℞
to ℥ss - Its cathartic property in
its resin -
Aloes - A gum resin, bitter,
shining fracture & - the inspissated
juice of the aloe
It is not fitted to all con-
stitutions -
Convolvulus Jalappa - Not the
Mirabilis as has been supposed
It is a native of S. A. It takes
its name from a Town Jalappa
Its active property in its resin -
This B. says not fit for children
Combined with calomel its
property that gripes is lessened
Its dose from ʒj to mss -
children may take gr ii a iii
This not the proper C. for our
Fevers - Who will think with
Barton?

Podophyllum Peltatum -
This one of our most common plants known by the name of May-apple B. has used ℈j of ye powder of the root in yellow. Fever & other similar fevers - This sometimes gripes -
This & Calomel much preferable to C & Jalap or Rhubarb -
It is not so emetic as Jalap it leaves ye system less disposed to ~~costiveness~~ / leave the Patient costive than Rhubarb & Jal.
Dr. Gleinworth supposes the Podg. Pel. was ye best purge in Colica Pictonum -
It is to be collected when the fruit is ripe or ye leaves yellow -

Extract from the Bark of the root of the juglans cinerea or white walnut or Butternut — The dose is about ℈j — This is a maximum — It is medicinal from gr v to ʒ ii — It seldom nauseates or gripes — It is not quite so prompt as some in its efficacy good — While under its operation it produces disposition to sleep — It produces no bad effect on the head — The extract should be made about the first March

Lecture - Feby. 28

Rhubarb. The production of the Rheum Palmatum is of best - The root used It is a gentle purgative its dose ℥ss - In large doses it sometimes gripes - It is little astringent. It is the best purgative combined with calomel, for children - It is diuretic - useful for fevers of some kind

Polygala Seneka - This purgative as well as diuretic - It is one of the most certain diuretics

Cassia Senna. From Persia An ounce yields seven grains matter & extract - It is a safe purge tho' apt to grip This frequently fennel seed Our native Cassia Marylandica is nearly equal to the first

Sulphur - its dose ʒi to ʒiij This is frequently joined with Magnesia or Cream Tartar.

It is not apt to leave the bowels flatulent. The fetor is its only objection. In Dysentery has been recommended.

Castor oil. From the Ricinus Communis. The fecula yields the oil. The husk, if mixed with the oil, vomits & purgatively or physic. It may be taken in wine & brandy. For children give it with Molasses. In milk some take it.

Cream Tartar: some admire in Colica Pictonum.

Calomel must be given in large doses to children. They require as large doses as adults or nearly so.

To Sal: Glaub: add Cream: Tartar. Lime juice renders Sal: Glaub. more palatable tho' ~~not so~~ it diminishes its purgative quality.

B. relates the curing a woman cured of Scrofula by going to the Sea-shore. She drank the Sea-water & occasionally bathed in it,

B. recommends Dr. Hamilton's book on Surgery - It is according to B. one of the best practical books which have appeared -

B. concludes his cours-
He has given ~~the most~~ a more ex-
tensive ~~cours~~ practical
course than is given in Europe
A course on Mat: Med: more
difficult than any other-
You should continue to
study, & observe &c &c
He now concludes, re-
commending ~~[illegible]~~ a desire for
fame &c &c &c &c &c
&c &c &c &c &c

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