





Materia Medica. 1/3

Do. Wright.  
at 8 am.

Monday  
Jan 4 19<sup>th</sup> 1857

W. P. O. Whitwell.  
McGill College  
Montreal.

William P. O. Whitwell  
B.M.

Phlebotomy.

Murray Murray

Cha. Russell Montreal  
Glenville  
Calumet

Falcomus  
Moral



Done Monday or May 2/67 26

Alcohol effect on system

Urine, matter, diminished  
wt.  $\frac{1}{4}$ . urea diminished  $\frac{1}{4}$   
uric acid.  $\frac{1}{3}$ . mucus  $\frac{1}{2}$ .

Am't of  $\text{CO}_2$  exhaled p. lungs  
not increased - feculent disch'g. scanty

Calancton, perspirat. not increased practically  
5 Am't. of  $\text{H}_2\text{O}$  fr. pulmonary surface  
diminished  $1\frac{3}{5}$

1857

W. B. Whitwell

7 Notes, on "Materia Medica."

Monday }  
Jan 9 19<sup>th</sup> } Bread.

McGee College }  
Central }

The constituents of bread are wheaten flour, salt, water & either yeast or leaven old dough already in a state of ferment<sup>n</sup>.

The yeast or leaven causes the sugar of the flour to undergo various fermentation by which Carbonic <sup>gas</sup> & alcohol are formed.

The starch is also ~~pro~~ supposed to promote ferment<sup>n</sup>. The Carbonic acid is prevented from escaping by tenacity of dough & a spongy mass is thereby formed.

Good bread sh<sup>d</sup>. be porous, vesicular & elastic & sh<sup>d</sup>. separate into crumbs when submerged in water - sh<sup>d</sup>. cont<sup>n</sup>.  $\frac{1}{3}$  water adulterations - potatoes. They assist ferment<sup>n</sup> & render the product lighter - great objection. less nutritive than flour - pale - the bread sticks to knife when cut.

2<sup>nd</sup> Alum - It augments whiteness & firmness of bread & renders it less liable to crumble - bread which contains alum is

objectionable especially in cases of dyspepsia  
3. Sal-volatile - which makes bread porous  
It may be detected by subjecting bread  
to heat, when the fumes will prove the  
presence of this adulteration.

4<sup>th</sup> Carbonate of Potash. corrects sourness.  
small proportion of little consequence.

5. Blue Vitriol renders flour more white  
& bread more retention of water. Test  
ferrocyanide of iron which gives a pur-  
ple precipitate.

6. Carbonate of Soda & muriatic acid. -  
The flour may be diseased - or adulter-  
ated with various kinds of meal -  
which however can be detected by the  
microscope. Bread is very nutritious  
serviceable in cases of dyspepsia.

Bread 24 hours old the best - stale  
bread is objectionable - Bread considered  
pernicious by some races. Very white  
bread apt to be constipating

2 varieties of bread pan & bran bread  
former more soluble - latter which

is made of unbolted flour valuable to  
dyspeptics - tends to regulate the func-  
tions of the bowels. Hot rolls apt to  
give rise to flatulency + gastric disorders  
Unfermented bread

There are two kinds of unfer<sup>d</sup> or unleav<sup>d</sup>.  
bread one heavy + compact - the other  
light + elastic. Biscuits generally of  
this class - cakes - ginger-bread &c regarded  
as a rich variety of bread.

pastry + puddings unsuited to dyspeptics  
cakes not so objectionable for children  
Panada prepared from thin slices of bread  
tried until the bread becomes pulpy  
when superfluous water is to be strained  
off + the bread beaten into consistency  
of gruel. white sugar + a little white  
wine if not objectionable added.

Fermented bread seems most suited  
for civilized life.

Indian Corn - Maize. Native of this  
Country, cultivated in most parts  
of the world. 7200 feet above level

of the sea most favorable to the growth  
of P. Corn. diff. kinds. blk brown  
golden yellow white yellow most  
Common white superior in quality  
Meal very nutritious. Contains 77  
per c. of starch. Flesh acquires  
firmness under its use.

### Peas + Beans.

Peas - *pisum sativum* - Contains 45.5  
per c. of starch + 18 per c. gluten - some  
sugar - + a little pectic acid - The skin  
or pod contains tannin - peas are  
very nutritious more so than pot<sup>o</sup>.  
Contains a large proportion of Nitrogen  
with <sup>in dried state</sup> known to produce flatulency -  
fresh l<sup>o</sup> liable. Beans less easily  
digested than peas - considered stimu-  
lating or heating unfit for febrile  
or inflammatory Cases.

Potatoes. *solanum tuberosum* - Capable  
of sustaining life - native of this Coun-  
try. In its wild state as in S. America  
not larger than Marbles - Cultivation



has lost it to its present size. Amt. of  
~~starch~~<sup>water</sup> 75 per cent. - of starch 15 per cent.

The proximate principles of the potato  
are water - starchy matter - ligneous  
matter - proteinaceous principles  
(vegetable fibrin - albumen + gluten)  
fat - gum - asparagine - vegetable acids  
salts + occasionally solanina, which is  
a vegetable alkali possessing powerful  
narcotic properties. Baked potatoes  
according to some less nourishing than  
fried. Four lbs. pots. =  $1\frac{1}{4}$  lbs. bread.

Potato subject to various diseases  
scab - dry + wet rot &c. &c.

Pot. starch, sold under name of potato  
flour or English Arrow root - infe-  
rior Indian Arrow root.

Island Mop. (*Cetraria Islandica*)  
contains starchy matter lichenin 44 p.c.  
Must be deprived of lichen principle  
before it is fit for use.

Carrageen - one of the Algae - vegetable  
jelly or Carrageenin 79.1 per cent.

Iceland Moss used as a Nutrient-  
demulcent & emollient - used in  
Convalescence - from disorders of the  
chest - useful in Cases of Atmic  
dyspepsia. A decoction of Ice-  
land moss - made with the un-  
prepared plant therefore contain-  
ing the bitter principle is used  
as a demulcent tonic in consump-  
tive cases. It is prepared by boiling  
down 5 drms of the moss & a pint  
& a half of water to one pint. The  
dose is from two Tablespoons  
to a wine glassful. Monday 19<sup>th</sup> Dec 19.

Quin. Patent of Quin is absorbed.

disappears in 3 hours after its ingestion get rid of  
as Lactic acid.

Cum Arabic - Shittahin - Hippocistis ramosa & Sato  
(Quercus) Egypt alba & white thorn.  
iaca vera - Ha - Arabia. 1 herb. Yellow from  
Senegal. 2 yellow tree from Arabia & E. I. from  
Supper of from of from. minute vessels white.  
moisture & more than they can contain.  
when rose bark cracks - & pure earth's  
out from wood during wet seasons -  
2. 3 bundles and - nauseous not so od  
or unless as electum. 1 sheds of bark  
found in solution. Affords precip = Spl R  
plumbeat Quin with auct lead

Loth Kruis<sup>2</sup> gum consist of arabic. +  
baseone - both sold uncryst. - latter not  
sol in H<sub>2</sub>O part is  
gum arabic ad. with G. Senegal  
Mucilage - 3ij G. A. 3j H<sub>2</sub>O.

put tied at top, and suspended in H<sub>2</sub>O. or  
tinctura. Mistura Acacia nas  
Comp<sup>d</sup> Nihil. St. Almond. al. Sugar + water  
Rubes. G. A. + Symp. & Stm + starch  
useful in tickling cough. depending on  
inst. of Acacia - mixed with 6 grain<sup>l</sup> of  
G. Frazeanth. Gum Dragon.

Astragalus leguminosia papilionacea  
Astragalus Calene dr. p. fruct. Small green  
mucilagin. Convolvulus decurp. Cont juice.  
Jus stints a growth laude. more grain.  
under infl. of hygroscopic causes.

Tragacantha cauculata + T. Sisyrona.  
1. Flute praeis. Carinated. 2 Views as  
Comp<sup>d</sup> of G. Frag. one has burrow +  
Analogy - salts  
Gum Tragacantha same used as gum  
Acacia. Comp<sup>d</sup> Frag. powder. P. J. starch  
symp. as Excipient. in metallic salts.

Alcohol - found p. Symp. + starch - ferment. 70° 80° Labo  
Catalysis. Symp. isolated into 2 Constit. Alcohol + CO<sub>2</sub>  
C<sup>2</sup>H<sup>2</sup>O<sup>12</sup> - (C<sub>8</sub>H<sub>12</sub>O<sub>4</sub>) & Equo gas 8 ff @ D.

Symp. forming resolved into Glucose. If cane Symp. used, may  
approp. small amt. of H<sub>2</sub>O. mechanism a else passes into  
glucose. - Colony malta + Soranthen in the oil of grain  
product weak at first. Destil<sup>n</sup> to make it  
stronger. Prod<sup>n</sup> varies. Carb. Pass. 1. Chl. Calcium  
abs about H<sub>2</sub>O. + Repts Spt. prod. of redistilled @ more  
Carb. Poluis. Absol Alcohol obtained

Rec<sup>d</sup>. H<sub>2</sub>O. 0.838. | Alcoh. 0.794 s.g. ▣

Ind<sup>ic</sup> of Ethyl. de Comp<sup>d</sup> G. Lini. Ethyl gas  
inflam. S. g. - 3.8 - { Ethyl C<sub>4</sub>H<sub>6</sub>. Causes - C<sub>2</sub>H<sub>5</sub>O  
Alcohol is Ethyl + H<sub>2</sub>O. & O. Alcohol when first  
green with cupreous salts distilled in  
Alcohol of Ethyl. Ammoniated Alcohol,  
basis. of Ethyl - mucos. Ammon. Fr. Opi.  
Alcohol hardens abund. material.

# Gum

Tuesday 20<sup>th</sup> June

Gum possesses following characters not crystalline translucent - made up of globules semitransparent dissolve in boiling water - produce a mucilage - do not dissolve in alcohol & when recomposed by the acids. 2 Proximate Substances - Arabin dissolved in water Baesine does not dissolve in water, but swells up. Both converted into glucose by Sulph. acid. Arabin peculiar to Gum Arabic. According to some gum is converted into dextrose or grape sugar in the stomach - <sup>2<sup>d</sup></sup> others that it is <sup>impacted by</sup> <sup>alimentary canal</sup> <sup>at</sup> <sup>the</sup> <sup>stomach</sup>. <sup>3<sup>d</sup></sup> Others say it passes unchanged thro' the stomach. Contrary to 1<sup>st</sup> opinion gum does not from experimental appear to be acted upon by gastric fluids. 50 drms given to a duck. 46 drms found afterwards to have passed with excrement. If gum is absorbed it is in very small quantities. The 3<sup>d</sup> opinion is proved false by the exper<sup>t</sup> with duck.

Digestibility of gum. It has been asserted that gum has been found in stomach.

3 hours after injection.

Nutritive value, accord. to some, very great.  
Uses - serves same purpose as glucose.  
Contributes to calorification.

Gum Acacia. Shittim tree supposed to be identical with above - Acacia vera + A. Arabica - first affords Gum Senegal.

Acacia vera native of Africa - Persia - Arabia belongs to family Leguminosae - <sup>Mimosa polygam mance</sup> stem grows <sup>juice exudes</sup> in a very erect manner - fruit of peculiar shape - necklace - gum merely sap wh. has become extravasated: usually supposed to be a product of disease. Gum Arabic

3 qualities - 1<sup>st</sup> Electum or picked gum <sup>Turkey gum</sup> consists of masses generally as large as a hazel nut - clear + of sweetish taste - forms a clear transparent mucilage

2<sup>nd</sup> & 3<sup>rd</sup> varieties receive name of Common. <sup>Both have s.g. - 1.535 to 1.335 by tub-</sup> Both have s.g. - 1.535 to 1.335 by tub-

analysis afford a powder. If rubbed in warm water becomes discolored - if kept any time becomes sour - acetic acid.

Adulterated with gum Senegal -  
or Gum gives red color

Gum Senegal mixed up with <sup>in</sup> mucilage - better. Dissolve  
make a good mucilage.

occurs in pieces of <sup>large</sup> size as an <sup>British</sup> hollow. <sup>by</sup> int. <sup>traces</sup> of <sup>calcareous</sup> - <sup>phosphatic</sup> - <sup>red</sup> color.  
eg. <sup>Barbary</sup> gum occurs in small  
lumps - color <sup>deeply</sup> <sup>or</sup> yellow vary  
in <sup>ing.</sup> masses  
honor - angular bears. E. Indian gum

occurs in large lumps wh. weigh sev.  
lb. of <sup>acid.</sup> <sup>brittle</sup> <sup>fractured</sup> <sup>in</sup> <sup>fragile</sup> <sup>vitreous</sup> red color. Cherry tree gum - taste

not so gummy - shape usually angular -  
British gum <sup>manufae?</sup> <sup>fr.</sup> starch - wh  
is dried <sup>to</sup> <sup>be</sup> <sup>in</sup> <sup>dr.</sup> <sup>purple</sup> <sup>color</sup>. Part S. A. composed of Arabin

$C_{12}H_{22}O_{11}$ . Impure contains Nitrogen.

Gum Arab. Known by tests: solution  
soon acquires acid properties. if alcohol  
be added, a flocculent precipitate -  
Acetic acid a white precipitate. H. Pine.  
Murex-Ferri when added produces a pecu-  
liar jelly. Physiological effects - Demul-

cent + emollient + nutrient. Some in-  
jected into <sup>men.</sup> <sup>inj.</sup> <sup>fills</sup> <sup>disturbance</sup> <sup>of</sup> <sup>healthy</sup> <sup>man.</sup> <sup>emul-</sup>  
sion or produced: useful in irritation  
of mucous membranes. serviceable  
in enteritis or intestinal disorders.

employ? as topical agent in burns or  
scalds - varnished over the surface.



Pectine. chief constituents pectine + pectic acids, almost identical. unknown what change they undergo in stomach - <sup>peptic acid</sup> ~~with~~ <sup>almost</sup> ~~extremely~~ insoluble & slightly nutritive. 2 forms - jellies & jams - bases of all such preparations. Best suited jellies for sick raspberry - currant + strawberry. jams analogous to confections. S. Marmalade flav'd with Tolu.

Sugar 14 lbs. consumed <sup>annually</sup> by every individual in Gt. Britain. Sugar used by a man for 40 yrs. one lb. a day tend to be so body found to be in a normal state.

The ~~general~~ common opinions that sugar is production of worms & causes canis of teeth unfounded. Sugar not useful in diseases of renal organs as in diabetes - sugar is prohibited in cases of Oxalic + Phosphatic diathesis.

Sugar formed during efflorescence of flowers alkalies distinguish glucose do not affect cane sugar. More. Test to distinguish glucose from cane sugar.



bichromate of potash test for glucose.

crystals of cane sugar double oxygen prismatic.

add. alkaline solution bichromate of potash produces green tint in glucose, does not affect cane sugar. add to a solution wh. is supposed to contain glucose solution of copper + liquor potassa when tried.

{ Sugar } <sup>cane sugar is crystalline</sup> <sub>not crystallizable</sub> Wednesday 21<sup>st</sup> Jan'y  
{ Glucose } found in the urine in diabetes  
Cane sugar resolvable into glucose + lactic acid: lactic acid formed in the stomach does not leave it. rest is absorbed.

Dietetical uses of sugar. Is req<sup>d</sup> to build up tissues - is a restorative agent. Sugar necessary for the liver - Sugar supplies various fluids of body: sugar is always a normal constituent of blood chyle. lymph: occasionally met with in saliva, pancreatic juice + urine.

Insulin necessary Constit<sup>n</sup> - though bile is chiefly made up of sugar. Sugar affords material of adipose tissue. Negroes, dogs, etc. become fat in the West Indies. Those who live on rich fatty food not so fond of sugar.  
v. Desquinaud

nature suits the sugar in milk to the <sup>of the veins</sup> ~~muscles~~

(10) Sugar favors more rapid consumption of effete matters

(11) Is essentially by its transform<sup>n</sup> into Protein

(12) " " in blood.

(13) According to Liebig necessary to maintain heat of the body - the symptoms of diabetes opposed to this last view.

Sources when Sugar may be obt. 1<sup>st</sup> S. Cane. Was known to Ancients: middle of 6 century. Came 10 or 12 ft high: of class gramineae: juice extracted by means of mill: sugar obt. from juice by Concentra<sup>n</sup> + clarification: raw sugar impure.

112 parts of raw sug only 79 parts refined s.

Sugar possesses follo<sup>w</sup> general character - ease with wh. it is resolved into carbonic acid + alcohol - it is not affected by potash - easily crystallized - crystals of sugar lustrous in dark. Morphous + amorphous. 3 kinds of latter - muscovado - <sup>bastard</sup> Demarara - ~~the~~ Indiaa.

bastard lighter col. than mus<sup>c</sup>: last pair of raw sugars - very dry - straw col.

colours matters of sugar candy <sup>of the previous</sup> - green and  
white of copper. 14 Cases occurred in Dublin.  
yellow - from gamboge. Sugar often adul-  
terated. May cont<sup>n</sup> organ<sup>c</sup> matter - Liqueous matter  
<sup>case may</sup> of contain a small into: potato sugar  
Manufact<sup>d</sup> from potato starch: always  
contains sulphate of lime - test Chloride  
of barium & acetic acid throws down  
white precipitate. never possesses same  
sweet taste - does not dissolve in re-  
tified spirit. Fungaceous matters recogn<sup>d</sup>  
by time. iodine gives blue precipitate.  
bone dust, chalk - stucco, &c. Chloride  
of sodium recognis<sup>d</sup> by Nit. Argent. wh.  
gives a white precipitate. Used in Phar-  
macy - a preservative or antiseptic agent.  
Sugars used to rectify certain substances  
employ<sup>d</sup> in making syrups. pills &c.  
Liquors. Boluses. &c. - Sympus simplex - 3. 15<sup>th</sup>  
Sugar when exposed to <sup>heat</sup> loses its saccha-  
rine qualities - Caramel produced.  
Molasses obt<sup>d</sup> by draining <sup>from honey S.</sup> Iscarch obt<sup>d</sup>.  
from loaf sugar - supposed to contain  
10 or 50 p.c. of fine sugar.

Acer saccharinum - Maple.

Cassia plant <sup>Egypt</sup> - official part pod. 20  
of fut in length: used as an aper-  
fient & laxative.

Thursday. Jan 22<sup>nd</sup>

Fig Tree met? by ancient authors both sacred &  
profane. Isaiah applied fig to Hezekiah's bit.  
15 or 20 fut high - rough bark, grey color, leaves  
remarkable - deciduous - upper surface of  
leaf dark green - under surface lighter. N  
fruit pyriform - flowers concealed from view.  
Official part - the fig - 62 per cent. sugar.  
Contains small quantity gum - phosphatic  
acid, & extracted matter. Best figs Smyrna.  
Emollient - nutritive & emulcent - in large  
quantities laxative - fig used as a poultice  
to boils - tumors - etc wh. are undergoing suppu-  
ration.

Manna - literally means "what is it?"

Fraxinus omis - native of Sicily, Calabria,  
& parts of Greece. Manna supposed at one  
time to be an atmospheric produ<sup>ct</sup>. Fraxinus omis  
supposed to be tree which affords manna.  
concrete juice - which may be evacuated by

artificial incision - Nickle down bark where it  
 dies + forms Manna. Of three qualities - Manna  
canulata or flake Manna - more or less laminated  
 its color whitish - under darker - usually brilliant  
 possesses a sweetish taste - soluble in wat<sup>r</sup> + sp<sup>ir</sup>  
 does not readily undergo various ferment<sup>n</sup> - may be recog-  
 nized by tests for glucose. 2<sup>nd</sup> kind Manna  
 insortis 3<sup>rd</sup> M. Siciliana exists in masses -  
 is not so sweet or soluble as other. no reg-  
 ular appearance - often adulter<sup>d</sup> may be made from  
~~sugar~~ honey, combined with a cathartic

Comp<sup>n</sup> of Manna. Contains a large amt. of  
<sup>crystallizable</sup> sugar, ~~than~~ <sup>in anhydrous state</sup> 42.6 per c. - Manite an amorphous  
 substance - slightly sweet. not peculiar to Fraxinus  
 genus alone. Crystallizable sugar same as can<sup>n</sup>.  
 Contains Pectinous Malt<sup>r</sup> also some acid. <sup>and dark color</sup> <sup>formed into</sup>

Of its medicinal prop<sup>s</sup> - as a laxative - allied to  
 Cassia + Tamarind: when fresh nutritive - when  
 kept some time liable to produce sickness. <sup>mannose</sup> <sup>caustic</sup>  
 chiefly used as aperient in disease of children  
 dose  $\frac{1}{2}$  oz to 2 oz. to an adult. <sup>Glycerin</sup> <sup>of</sup> <sup>the</sup> <sup>same</sup> <sup>kind</sup> <sup>as</sup> <sup>the</sup> <sup>above</sup> <sup>mentioned</sup> <sup>one</sup>  
Leguminos Plant. Famous for quenching thirst  
 & deodor - intro - cuts - sup<sup>d</sup> in wine Quale Sliz  
 cultivated in S. of Europe.

Liquorice like manna glycyrrhizone doesn't ferment.

official part root - as large as little finger -  
sugar chief const<sup>glycyrrhizine / crystal masses</sup> - also resin - powder used  
to cover pills: chief prepar<sup>n</sup> the extract: best  
occurs in large sticks. Troches of liquorice  
& gum arabic of ea 6 ozs. + 1 lb. of white sugar + water

Troches of liquorice & opium - flav<sup>d</sup> with aniseed  
"Victor's Troches" useful in an anaphylax that  
Prune or Plum Tree. 300 species. S. Europe \*  
<sup>dryer fibres</sup>

Prunus domestica alone official. Prunes  
of superior quality. St. Catherine's or green saps +  
St. Julian's <sup>more medicinal</sup> Plum contains a large quantity of  
sugar. with gum. pectin. & treated with  
<sup>1 1/2 p.c.</sup> used for same purposes as figs - useful in  
debile & inflammatory affections.

Rose Tree or Canina. St. Julian and dried good  
in constipation. In prep<sup>s</sup>. <sup>Senna</sup>  
<sup>part</sup> supposed to ~~have~~ been an antidote in hydro-  
phobia: hence the name. Official part  
berry. <sup>Confec. R.C.</sup> made from pulp<sup>c</sup> - <sup>Sugar</sup> possesses  
demulcent & emollient qualities & is also  
laxative - useful in diseases of children

Tamarindus Indica Tamarind  
Leaves used by natives of W. I. in cases of  
jaundice - seeds supposed to be astringent.  
used as coffee sometimes.

5) Strong cup of a nitric acid

leaves of this tree specal: like those of sensitive plant  
close up in the eve: & during wet weather  
Offic' part legum or pod. contains Tartaric acid  
citric acid - malic acid - sugar - gum acid  
citrae - malto - useful as a laxative. albes  
thirst in fever - dose from 2 drs to an oz.

Vitis Vinifera supposed to have had its origin in  
Egypt. Fruit refrigerant.  $\frac{I}{I} \frac{I}{I} \frac{I}{I} \frac{I}{I}$   
Mel.  $\frac{I}{I} \frac{I}{I} \frac{I}{I} \frac{I}{I} \frac{I}{I}$

Merely collected by the bee. Virgin honey old from  
the hives of these bees have never swarmed.

Carthagen honey - sometimes adul: with glass  
recognized by trace of iodine. Clarified honey

\* Extract Glycer. Spanish juice in rolls  
contains Copper in many cases. Refined liquorice  
Trochis Glycy. et Opii.

\* Simpes. Rosa cinnaud. polyg. Offic' part. fruit  
called hip. scarlet appearance - ovoidal. sweet  
& agreeable. In interior pulp parenchyma. achroma  
of sugar & ligneous fibre. ribena. hard encasement  
trichs. Fruit nutrient & laxative - in intest.  
disorders - Dull'd up with water in putrid  
affections. Gargle

Tannin in Rose decomposes Ant Lact.

Rosa Canadensis. In acid - haemorrhoids -  
CO<sup>2</sup> not well evolved. Causes bad dyspepsia in some.  
Otto Rose said to be prepared by macerating leaves in HO.

Rosa damascena - but kind for Otto.  
Wt 80 Otto of Rose solid - 2 lbs - 1 solid the liquid portion  
1 pt water 2 pts - spot of congelation. Sep. by rectif'g  
distills liquid & leaves solid behind  
like starchine & charcoal

Monday, July 26<sup>th</sup>  
Dr. Wright

Cinnamic acid.

Substance wh. occurs in 2 states of crystalliz<sup>n</sup>  
resembles in outward appearance benzoic acid  
but differs from it in producing a strong  
acid like that of bitter almonds on being mixed  
with chromic acid. These substances

Balsam. of Peru - sweet smelling Balsam.  
Native of Mexico & Peru. First known 1781.

Family - Leguminosae. Flrst receptacle called  
pericarp or legume. Pericarp smooth external<sup>y</sup>  
Bark removed from tree - long piece - says to fill  
up the space & fine built beneath & balsam  
exudes & is absorbed by saps wh. are after<sup>wards</sup>  
boiled - has resemblance to treacle - odor aromatic  
acid & pleasant - taste acid - pungent.  
is inflamm<sup>e</sup> is dissolved by alcohol & water.  
s. g. - 1.105 to 1.107. Smell resembles a  
mixture of vanilla & benzoin - shd not afford  
water. Chemical analysis

{ Cinnamic Acid.

{ Volatile oil - called Cinnamicin (taste warm acid etc)

{ Resinous matter - dark brown color (has not smell hot  
taste)

B. of Peru used as a stimulant in



gumous discharges - in bronchial disorders -  
irritates surface of skin: removes pus &  
in old sores. Valuable agent in Chronic  
Laryngitis - James inhaled - removes hoarseness -  
used internally 10. to 15 drops. 4 or  
times a day. In Chronic Bronchitis mixed  
in Pneumonia - gangrene of lungs - used for  
discharge from ear - dropped on cotton wool  
& introduced into meatus auditorius <sup>ext.</sup>  
used for sores & foul ulcers - bed sores &  
chapped nipples - in baldness - mixed  
with Olive Oil. in gleet, Chronic Leucorrhoea.  
10 to 20 Minims  $\frac{1}{2}$  dram or even 40 Minims.

Balsam Tolu. Prep'd by pouring over a thin  
fluid spirits out. ~~collected~~ ~~liquid~~ also hardens  
dry white Balsam: dissolves in mil. water & alcohol.  
contains an acid resin, wh. increases by keeping  
dose 10 grs to  $\frac{1}{2}$  dram. Sympus Tolucaum, stim-  
ulant - expectorant - good article in many  
Indications of Cough & in various <sup>as B. Peru</sup> disorders.

Styracis - storax - used by ancients as <sup>gum</sup> ~~gum~~  
not known in Britain till 1597. Family  
Styracis

A tree only yields from six to 12 lbs  
11 *Styrax liquidus* - <sup>(2)</sup> *Styrax* <sup>inuncta</sup> <sup>(3)</sup> *S. ussatis*  
11 Liquid Consistent, dark grey, smell agreeable - dissolves in water + alcohol.  
occurs in lumps - <sup>2<sup>h</sup></sup> *Communis* + amygdaloid

13 *Styrax* <sup>liquidus</sup> - (in grains - lachrymos) + little lumps.

### Chem. Analysis

Curcuminic acid

Volatile oil - styrene - yellow<sup>d</sup> - same smell as styrene - warm  
Resinous matter styrene.

Physiological effect, same as Balsam Peru. etc.  
dose from 10 grs. to a dram.

Compound styrene pills - styrene - saffron +  
opium: dose from 1 to 3.

Acid Hydrocyanic ~~acid~~ or Prussic acid  
<sup>by Scheele</sup>  
discovered 1782. Constit<sup>ed</sup> of four <sup>or</sup> four <sup>or</sup> bodies.

A single drop dropped on some proved fatal  
to the Verina Pops<sup>2</sup>. Emitted in blood, excreta  
of girl. Hood exposed stained linen a blue color.

Bitter almonds contain no hydrocyanic  
acid until combined with moisture.

H. C. exists in Combin<sup>ed</sup> with Ra chess +  
sassafras. Cause of decayed <sup>in</sup> <sup>of</sup> <sup>fruit</sup> <sup>the</sup> <sup>acid</sup>.  
rabbit died <sup>in</sup> <sup>of</sup> <sup>fruit</sup> <sup>the</sup> <sup>acid</sup> from inhaling vapor of <sup>the</sup> <sup>acid</sup>.

$\frac{2}{10}$  gr. anhyd. acid proved fatal, when injected into jugular vein death almost instantaneous 2'. taken  $\frac{3}{4}$  grain - ordinary time 5 minutes - exists in 2 states.

Anhydrous -  $\text{C}_2\text{H}_2\text{O}_2$  -  $\text{H}_2\text{O}$  -  $\text{N}$ ,  
Hydrous acid - dilute H. acid - differs  
Shield's - strength 5 perc. or from 3 to 5 per c.  
Boussingaults - 3.3.

Acid of Edinburgh 3.2 per c  
London College 2. " "  
Dublin - - - 1.6 " "

Thus the strength varies from one to 5 per c.

Tuesday, July 27<sup>th</sup> 57

To ascertain strength of Prussic acid.  
100 grs of sample - int. silver added - precipitate collected on filter where it is known & the precipitate is dried & subtracted from wt. of filter & divided by 5 when quotient denotes quantity of anhydrous acid. One method of making Prussic acid  
Ferrocyanide + Phos Sulph. acid + water.

7 drms London | 6 ozs (Dingbush) 20 grs London | 3 ozs Edinburgh. 1 1/2 pint London | 6 ozs Dublin

Put into inhalated retort. acid passes over the tube & is collected in receiver.

(2<sup>nd</sup> mode of producing Prussic acid)

Cyanide Silver. + Hydrochloric acid treated in same manner as preceding + prussic acid passes over also it may be procured from hexacyanide of mercury + hydrochloric acid - P. acid passes over + bichloride of mercury remains in the retort. Dr. Clark's method - not

Hydrocyanic acid - like water - but lighter - scarcely soluble in water - extremely volatile - freezes at zero + boils at 80°. possesses Jubla acid properties: tends to undergo decomposition soon after it is made - becomes brownish + sediment soon falls down - which is carbon.

In order to preserve Hydrocyanic acid sh. be kept in dark room + submerged in acetic water + drop of sulphuric acid preservation.

Odor - similar to wh. is evolved from peach blossom: like an odor from decomposition matter + from the stomach - importance attached to adour - discov. 7 days after death: longest time - odor may some times be detected when the <sup>presence of</sup> acid cannot be proved by analysis - odor subsists 23 days <sup>after</sup> death.

2<sup>nd</sup> Test. Intest. of silver. precipitate

The precipitate

Produced - if scanty dissolves in cold nitric acid  
dissolves in ammonia - burns with pale rose  
trib. 3<sup>rd</sup> Test. Iron test or Prussian Blue test.

First add sulphate of Iron & liquor Potas.  
add a little sulphuric acid & next hypochlorous  
acid - a single drop or more - a deep blue  
Colour produced. Sulpho cyanide of Ammonium  
Manufact. from hypochlorous acid - a blood  
red liquid on combination.

Trib. of Quinacum test. dark precipitate thrown  
down. + Sulphate of copper & hypochlorous acid  
tests. Blue precipitate. 1<sup>st</sup> 4 tests only needed.

Trib. Strips of white paper introduced into the  
suspected liquid, + Nitrate of Silver added.  
Experiments with match glasses.

Detection of the acid in organic liquids: allow  
to remain until they settle - sediment dissolved  
with Alcohol & treated with tests. Hypochlorous  
acid may be found in stomach - for a tho' not  
having been taken intentionally. ~~But~~ The  
odor of H. acid also simulated. Blood should  
be tested. The acid produces a change in  
the colour of the tissues - as gall.  
recopied in all cases - particularly pleura.

Physiological effects.

peculiar acid sensation in mouth & soon  
ulceration - vertigo - dimness of sight, tinnitus aurium  
dyspnoea - dilatation of pupils - depressant on  
muscular system.

Toxicological effect.

Becomes poisonous when applied to mucous sur-  
faces - as conjunctiva - or absorbed by skin.  
Most fatal when inspired. When heated  
pains in head - constriction of chest - expect<sup>ed</sup>  
of blk fluid - tendency to taper occasionally, or  
a variable state. Swallowing of large doses  
2 divisions!! Acute cases. Inevitably, chronic  
convulsions or rigidity. Wednesday 28<sup>th</sup> Jan.

Chronic poisoning. Four teaspoonfuls taken - insens-  
ibility produced. For four days after poison was taken  
urine poorly secreted. Volition will be preserved some  
time after Prussic Acid has been taken: say 3'  
3 drms taken, consciousness retained ~~some~~ 2' or 3'.  
State of cerebro-spinal not exactly ascertained - reason-  
able states produced by epilepsy, eversion.  
In acute cases, right side of ~~the~~ heart dis-  
tended with blood - when death is protracted  
both sides of heart distended.

Microscopical appearance.

Intestinal appearance then of asphyxia: gall bladder presents peculiar dark blue stain - mucus lining of stomach has a peculiar spotted appearance. Odour detected in brain - peritoneum &c.

Treatment. If early stomach pump - washed out stomach with mixed oxid of iron.

3. Agents: (1) Cold effusion - (2) Ammonia & Chlorine gas. Water poured on head if surface is not cold. Heat agent Ammonia applied to Schneiderian Membrane, <sup>or given internally</sup> Artificial Respiration sometimes employed. Electricity & Galvanism sometimes had recourse to.

Potassic { anodyne. sedative. Calmative  
acid { sialagogue diuretic.

Useful in Phthisis - whooping cough &c. Pertussis in Bronchitis. Pneumonia. Asthma. Laryngitis. Angina Pectoris - Hypertrophy of heart. - In large doses of gastric affections. Enteritis Colic - general diseases of nervous system Tooth ache - local agent in ophthalmic diseases. In ulcers, in affect<sup>ns</sup> skin - quickly heat. dose from one to 5 drops Schild's acid - Potassic

acid floats on surface of water gum. emp.  
to make it combine - as a wash dram  
or more in a pint of water. Prussic acid  
forms constituent of various plants -

Bitter almonds - consist of 3 substances

Fixed oil - amygdaline - emulsine -

Emulsine analogous to <sup>vegetable</sup> albumen - contain acid

Amygdaline white crystalline substance soluble  
in water, alcohol, when these two substances

come together volatile oil of bitter almonds.

Volatile oil does not exist in bitter almonds.

V. oil - fluid straw yellow color when 1<sup>st</sup> of 10<sup>th</sup> but

by rectification is quite colorless, heavier

than water - inflammable - burns with

white light - soluble in alcohol.

Vol. oil {  $H_2$  aromatic acid  
~~Hydrogen~~ Hyduret of Benzole  
Benzoic acid  
Benzoin  
Benzoserin

11 active principle oil - 2<sup>nd</sup> not poisonous.

like oil peppermint. Benzoin peculiar

kind of Camphor. Effects of poisoning +

treatment same as in Prussic acid.

dose  $\frac{1}{4}$  drop to one drop.



<sup>ak</sup>  
Cerasus serotina - wild cherry tree - rosacea -  
Bark in unannulated portions - officinal part bark,  
bark owes its properties to volatile oil - when  
taken in liquid Calmative + sedative - in  
Septic fever useful + dyspepsia Cardialgia  
Infusion usual mode of exhibiting it  
 $\frac{1}{2}$  an oz. bark,  $\frac{1}{2}$  pint cold water fluid filtered  
after  $\frac{1}{2}$  an hour - dose one or 2 ozs.

Cherry pectoral.

syrup - Speciemanta wine - hydrocyanic acid  
morphia.

Thursday 29<sup>th</sup> Jan'y

Cherry laurel tree - <sup>prunus</sup> Cerasus lauro-cerasus  
native of Persia - an ~~shrub~~ evergreen - flowers  
small - concave calyx petals whitish yellow  
color - usually 18 stamens - inflected + form a  
Cup around the pistil. Fruit resembles  
a cherry in shape - red color.

official part - leaf. remarkable for  
stoutness - concave - peculia smell - leaves  
yield an oil - like bitter almonds does not  
succumb to extraction process. of  
Hydrocyanic acid present 3 percent.

Cherry laund water contains  $\frac{1}{4}$  per c. of Prussic Acid, tho' different varieties of leaves possess diff. quantities of acids.

Edinburgh Prepar<sup>n</sup> possesses a red color - caused by Lavender. Antidotes same as for Prussic Acid.

### Tannic Acid.

The astringent principle of many vegetables.

Procured from powdered galls - possesses a yellow color - turns blue to red: of bitter taste precipitates a solution of gelatine - Leathern or tannate of gelatine. 3. It precip. whole of

alkaloids - Resolves in water - less soluble in alcohol or ether.

-Compound  $C_{18}H_8O_9$  = Tannic acid. Gallic

acid may b. obt. fr. tannic acid by exposing latter to atmosphere Gallic acid does not dissolve in cold water, but is soluble in alcohol.

That tannic acid procured from quercus robur - Gallic acid obt. from galls. Medicinal properties. Powerful astringent - when applied to externally or internally

Tannic acid converted into Gallic acid in stomach - Employed in hemorrhages -

menorrhagia - especially in those of relaxed fibre.

Beneficial in epistaxis - Bleeding of gums.  
Bloody urine - in fluxes from mucous sur-  
faces - gonorrhoea or gleet - 18 grs. dissolved  
in 6 ozs wine used as injection: for chancres  
prolapsus ani: useful in ophthalmic diseases  
one part of acid dissolved in 3 or 4 parts  
of water - in sponginess of gums - sericaster  
in tooth ache - especially where gums are  
enlarged - useful in treatment of dyspepsia  
accord<sup>g</sup> to Char. Alison - given in conjunction  
with Kieckhefer or hyoseyamus - useful in  
disease of nerves - in rickets, in an-  
eurisms - in leucemia. Dose from 5 grs to 15 grs.  
best form pilula - Lotian 4 grs to 6 grs 6<sup>o</sup> oz water  
ointment a scruple mixed with a suff. quantity  
of water.

1. Acacia catechu - family Leguminosae: native  
of mountains of Hindostan - fruit called legume.  
Official part extract obt<sup>d</sup> from the wood  
Tena japonica at one time named: alto-  
gelba a vegetable production: obt<sup>d</sup> by boiling  
small chips.

3 Sorts accord<sup>g</sup> to shape.  
Mass. lump or ball & cake catechu

alone imported into India  
Mass catechu bitter sweetish taste brown  
& brilliant appearance - sp. yield 50 perc.  
of Tannin. Rose catechu sweeter - yields 38  
perc. of Tannin. Cake - square pieces - which  
is length & width - thin - Catechu - <sup>contains</sup> a Crystall-  
Substance <sup>principle</sup> Calcein Calcechine - very sweet -  
a resinous substance. Calcechin used in  
affections of a month -  $\frac{1}{2}$  oz Kino - 6 oz of  
Catechu - in diarrhoea simple - atonic  
of a chronic form - presented in  
treatment of.

Simple powder -

Infusion. Tincture Catechu. 1 to 2 drms

Electuary. Calcein - Kino Curranmas - Nutmeg

Compound Catechu powder -  $\frac{1}{2}$  drms to 2.

Arbutus - uva-ursi. arctostaphylos.

Bear berry - or little shrub: stamens 10 in 12

Fruit berry. Official part - leaf. recent  
brown color - outer margin uniform - treated  
with potash a dark precipitate falls

down - leaf. contains Tannin & gallic acid

forms extractive substances

Adulteration with red Mountainberry leaf - wh.

is more red in color, its border serrated - un-  
crossed - antilithic - in urinary diseases  
when urine is dark red with latent  
sediments - combined with Pareira Brava  
or Buchu. Infusion  $\frac{1}{2}$  oz to a wine  
glass full - extract 15 grs to 5 drms.

Bayra Anthelmintica - vermifuge - large worm  
Rosaceae - sex. sep. icosaandria pentandria  
leaves yellowish brown color

Contains 24.4 per cent. tannin - 2 per cent. Resin.  
volatile oil in fresh leaf - not in dry,  
active principle tannin. Cases of tenia  
useful - expels worms: produces various  
sensations - thirst - sometimes vomiting -  
purgation: infallible in its action.

Dose  $\frac{1}{2}$  oz in an adult. Small quantity  
of lemon juice to remove flavor.

Monday - Feb 2nd

Logwood - native of Campeachy Bay -  
Leguminosae - 40 or 50 feet high - fruit pod.  
Official part wood - imported in large billets  
3 or 4 feet in length. Alburnum - The chips  
when boiled are known by test - "acid from  
light yellow - alkalies purple - alum <sup>suff. height of</sup>  
violet. Logwood used as astringent - tinges  
alaline discharges: removed in part thro' urinary  
system - not much absorbed by intestines  
Used in diarrhoea - chronic dysentery -  
serviceable in diarrhoea caused by too  
early weaning children. Log? possesses  
slightly tonic qualities - In hemorrhages  
leucorrhoea - gonorrhoea flat - adminis-  
as decoction or infusion - 2 or 3 wine  
glasses full 2 or 3 times a day. non  
pain in substance - Extract - pills some-  
times made fr. it - unserviceable.

Rhatany Root - native of Peru - found  
on declivities - root official part. very  
irregular - size & color consists of four  
leaves - outer borders waved - see exp.  
Selandra monogena - The root occurs:

lentius plicis usually size of goose quill -  
medicinal virtues reside in bark: Com-  
municates a reddish color to saliva -

Communicates its principle to water - al-  
cohol - yields tannin 43 per cent. astrin-  
gent quality owing to tannin -

Rhatany used as an <sup>extract</sup> astringent - 15 grs to  
 $\frac{1}{2}$  dr - tincture  $\frac{1}{2}$  dr. <sup>2 or 3 fluidrams, according to U.S.D.</sup> Infusion & decoction.

Mecuna pruriens or Cow-itch.

Leguminosa: leaves v. large - most magnif-  
icent part of plant flowers. sep. sep. dia-  
delphia - off. part legume or pod - resembles  
in shape  $\zeta$  - dark brown color exterior: fine  
hair like projections on outside of pod - the  
med. part. - within pod 4 or 5 seeds. seeds yield

tannin. Physiological effects - vermifuge.  
no effect on tape or thread worm - pods  
said to poison worm: but rather by their  
irritating causes worm to lose its grip.

Firm combined with tannin - potent lin-  
sparingly - <sup>does</sup> followed by purgative ~~to~~ medi-  
cine being irritating when applied to surface.

Kinds - native of Africa - grows 15 or 20 feet  
in height - ash colored bark - flowers yellow?  
Offic. pt. exudation - gets very dry & brittle  
fruit a pod - leguminous - off part con-  
crete juice exorted in little masses. Spasm  
yellow-black color - brilliant - color saline  
Psa. Cormyates mucous membranes. Shd  
dissolves in water & alcohol.

Botany Bay Kinds -

Kinds yields a conc. gum. Tannin - with  
extracted matter 75 per cent. near to Cas-  
sia in potency; <sup>potent as astringent</sup> useful in pyrosis -  
in treatment of external diseases - ul-  
cerations of surface in fissure of  
the anus - fistula in Anus.

Dose 10 grs. to a scruple of the powder,  
tincture. Kinds - rectif. spirit. Dose  
½ dram to 2 drams.

- Compd Kinds powder. Opium, Curia-  
mon - Compd. Electuary, Catechu
- Compd. Catechu powder.



Potentilla Tormentilla - off. part root -  
occurs in tortuous masses irregular - outer  
brown - decidedly astringent. Contains  
17 per cent. of tannin - dose, <sup>of powder</sup> 30 grs. to a ʒ.

Punica granatum - pomegranate  
tree presents a row of projections - thorns -  
bark - yellowish brown color. Most attractive  
part flower - calyx - <sup>in the center</sup> blue.

Off. part fruit - <sup>at ripid + bark</sup> alveolar in shape - top  
capota - outer portion calyx or rind.  
cortex of fruit occurs in incutated  
masses - taste astringent. Bark of  
Root thick - rough dull on inside beak,  
with fibrous or plexure fracture - both  
contain a large quan. of tannin.

An extract of the bark contains  $\frac{1}{3}$   
of tannin - astringent of great  
power. Best mode, <sup>macerate</sup> decoction, 2 ozs. of boiled  
<sup>bark</sup> fruit + quart of boiling water. <sup>miniglaful dose every</sup> used as  
 $\frac{1}{2}$  hour - 4 or 2 hours.

aststringent in Chronic diarrhoea -  
Huidoo Drs. use pulp in Combination with  
Saffron. An infus<sup>n</sup> of bark yields blue precip. with  
Salts of iron + yellowish white with a solut<sup>n</sup> of gelatin.  
Dose of seed + flowers in powder, 20 grs to ʒo grs.  
Seeds are demulcent. P. Decoction granati + g. radialis.



Tuesday, Feb 3<sup>rd</sup> / 57

Quercus robur.

extern. <sup>ha</sup> form. C. dia.

used as astringent - principally employed  
as Falso - Scapula, Mandamus,  
externally - prolapsus ani - <sup>10 drops to 1 qt. b. w.</sup> (astringent  
dose wine glassful)

Rosa Gallica - coccinidia monogena. Off.

part petals - <sup>From</sup> 2000 lbs of buds - 100 are petals

lacto astringent - Contains tannin in form

of <sup>colos. quality</sup> tannic acid & also Gallic - <sup>colos. oil - fixed oil - albumen - silica & oxid. Ferri.</sup> specially

serviceable in Phthisis - valuable tonic

Infusum - macerate petals in boiling

water & add sulphuric acid. Wine

& astringent - in diarrhoea & febrile dis-

eases - used as vehicle for certain of tonics

quinine - incompatible with some sal-

stances - acetate of lead - alkalis, earths &c

Confection - petals kept up with white sugar

juice as as. Mel Rosa - Sympus Rosa G.

Valerian <sup>(Plant. wh. contain acid principles)</sup> furnished by Val<sup>a</sup> officinalis

found along rivers: trianodia monogena.

fruit small capsule - only one pistil -

Off. part. root - foli<sup>s</sup>. Characters - bark

yellow. inner color, when broken short particles

turbid warm camphoraceous - acid - stercoraceous

when chewed leaves disagreeable impression

Analysis - 1<sup>st</sup> Valerianic acid - extracted  
in large quantities from *Belbernium* - amt  
in root small - root's smell dependent on  
volatile oil - acid has a distinct smell

2. Valerol. valerian

Valerian Root supposed to be a powerful  
stimulant <sup>without narcotic effect.</sup> & increases cerebral circulation

more vigorous - antispasmodic - in hysteria  
most useful remedy - in heart. of

Chronic neuralgia - in epilepsy - used  
in adynamic states in latter stage

tympanum - Pneumonia - ad rem.

either in powder or liquid - off form

15 grs to a 3. <sup>3 or 4 times a day</sup> Infusion - macerate root

in boiling water - Tincture. give in doses

3i or 2. Compound tincture  $\frac{1}{2}$  drn to 3

Valerianate of soda - Fixed oil - Vichemate Potash

*stratigen of Cassia*

+ Soda. oil of Vitriol + water.

Vel. soda. 2, 3. Sulp. zinc 23, 73. Distilled water one quart

Valerianate of zinc - antispasmodic - stimulant.

adult. of sulph. acid be poured on <sup>pure</sup> acid 3

no odor at Coarse. dose 1 or 2 grs.

Valerianate of Iron - double decomposition

dark red color insoluble in water.

possesses very disagreeable smell - given in  
typhoid with anaemia, dose about gr. <sup>repeated</sup>  
Valerianate Lamine. <sup>(Several times a day)</sup> Amth accumbens  
occurs in two sorts of crystals - soluble in  
water: given in intermittent fever - produces no cerebral <sup>coordination</sup> spasm  
Guaiacum, native of Paranaica - It is an  
antiferrous substance - leaves small-  
flowers bluish - official part resin or  
wood - <sup>resin</sup> procured after various plans -  
sometimes exudes spontaneously - heat  
applied - incisions - cutting wood into frag-  
ments & boils them in salt - occurs in  
round masses or large fragments. In  
mass like the adulterated larch wood &  
slightly acid. Its smell peculiar, dissolves  
in alcohol & ether - Contains Guaiacic acid  
one of most Protean substances - means by which  
we may distinguish gluten fr. starch. Test  
for guaiacum resin - Slices of potatoe decolor  
one surface is stained blue <sup>Stigmate of alteration</sup> - Saccharif.  
taken in considerable quantities produces  
parvity re - useful in amenorrhoea.  
dysmenorrhoea. leucorrhoea. septica. 3 period

Much esteemed by Dr Deau in Amenorrhoea.  
powder - dose scruple to ʒi drach. Colicities.  
Chronic Bronchitis + Rheumatism.  
when pain has become stationary, in  
neuralgic affections - in Combination  
with Valerian.

Mistura - gum acacia + wh. sugar in  
Cinnamon water. Tincture. Compound  
tincture. Wood of Guaiacum: shavings of  
Guaiacum wood give a bl. color when touched  
with vitric acid

{ Wednesday }  
Feb 4 1857

Scammony - long known - formerly much  
thought of. *Convolvulus scammonia* - native  
of Greece and Minor - pentandria mono-  
gynae - belongs to trailing order of plants  
like ivy - leaves sagittate - flowers large  
yellow color. Official part concrete juice  
obt. from root - Jews chief traders.

True Scam 4; adulterated w/ Virgin Scam 4.  
Possesses a peculiar smell like old  
chese. In good samples of Virgin Sc. show  
a diff appearance some brilliant pieces  
+ some dull. This scammony yields  
active principles Valerol rather.

The adult occurs in large irregular masses  
- plano-convex - The Calcareous - <sup>11</sup> pure Calca-  
reous - amylaceous ~~Calcareous~~ detritious  
Chalky scammony possesses a dull  
pasty appearance. Amylaceous produces  
a blue color when tinct of iodine is applied  
Tinct. Ferri causes a deep purple color to  
Calcareo-detritious

Favosaceous texture by tinc. saccharum &  
Favosaceous scammony. Chemical Comp. 4  
" Resin - exists in various quantities - occurs  
in masses white & brittle - if triturated  
with milk forms a fluid resembling  
Cacao - 8 or 10 grs. Resin diffused thro' 2 or  
3 ozs of milk forms a cathartic draught  
To form resin of scammony

Scam. digested in proof spirit - distillation -  
resin left in retort as residuum. Another  
repeated renders it more pure.  
Scam. contains gum called Arabian.  
Used in medicine as Cathartic - acts  
mildly. does not produce much gastric  
derangement. It does not produce  
local inflammation powerful acrimony.

Useful in removing mucus from intestine  
Useful in venereal disorders - useful  
as a medicine after a crusade against  
arrows has been carried on. In inflam-  
mations. As a acutivation - applying.  
one 10 to 15 grs. adulterated with anti-  
dotes

(Pulvis Com. Kam 4.) Scam 4. Lat. Jalap & Gaija.  
one from 7 to 23.

Confusio Scammus. S. Clus oil of S  
& syrup ginger or rose water. useful  
to pregnant females.

Jalap - *Convolvulus jalapa* - nation of  
Mexico - grows near a place called  
Jalapa - at a height of 6000 feet  
above level of sea. M. part tub.  
It seldom reaches more than 10 feet from  
root - Jalapa vera - occurs in masses  
more or less rounded - surface marked  
by a n. of deep notches - cut surface  
usually grayish - just cut - white  
wood. Concentric rings dark color





Most Common purgative in daily use  
dose from 15 grs to  $\frac{1}{2}$  dram - give 1 gr. for  
every year. Resin & gummy matter mixed  
together accord to London College.  
dose from  $\frac{1}{2}$   $\text{ʒ}$  to  $\text{ʒ}$  ʒ.

Juc: of Jalap. prop. spirit & jalap  
Gamboge - Not 1<sup>st</sup> from Ceylon.  
it is accord; to some certain that the gamboge  
of commerce is W. from more than one  
sp. kind of plants. Siam gamboge, more  
Common. Off. part juice which is obt.  
from stem. Seeds covered by mass like  
nutmeg. sometimes juice laudes gatta-  
tion: or procured by incisions. Siam &  
Ceylon. Siam gamboge in two sorts -  
1<sup>st</sup> stick & 2<sup>d</sup> mass gamboge.

1<sup>st</sup> occurs in pieces of cylindrical shape.  
from being hardened in canes. Surface  
dusty, by yellow color. very brittle - tinged  
within a yellow color. Mass or cake  
gamboge - usually fractured surface more  
uneven than preceding. This refers to Siam  
gamboge - Ceylon gamboge more substance. It  
usually occurs in balls.

Thursday 5th

Gamboge sometimes adulterated with starch.

Composition - Resin wh. depends on gambogic acid - may be reduced to two sub. acids  
Constituent of Pelliconi's pill -

Tests

Physiological effect - Powerful drastic ca-  
thartic - soon operates & produces copious &  
liquid stools - It soon produces nausea  
if not used, & vomiting sickness - with vomiting  
commonly joined with diarrhoea & cap-  
to dissolve brown in gastric juices.  
Tends to excite pulse circulation. Emen-  
agogue remedy by some - Special stim-  
to nerves of abdominal plexuses - most  
useful purgative when constipation de-  
pends on atony or sluggishness of  
bowels. In large doses sets up inflamma-  
tion of bowels. Post-mortem alteration  
a sloughing may be observed. When an im-  
proper dose has been taken, vomiting &  
anodynes - <sup>of some utility</sup> Medical uses. In consti-  
pation in Dropsies.

used a resinous & acroatic purga-  
tive in Cerebral disorders - sometimes used  
as anthelmintic - especially for Tenia.  
Dose 10 grs to  $\infty$  rather too large: begin  
with 3 grs or 4 grs. Pilula gambogiae com-  
posita - ginger, soap, & aloes. Usual dose  
1 to 3 pills 5 to 15 grs. Compound  
Calomel pill - Caloclyster.

Benzic Acid -  $C_{14}H_{10}O_2$ .  
occurs in litch seeds. When pure sh. has  
no smell - warm sens taste - fuses when  
strong applied - vapor acridly irri-  
tating - dissolves very readily in boiling  
alcohol. dissolves in solutions of lime  
water precipitated by <sup>muratic</sup> acid - (test lime  
water - & muratic line. Ferri throws  
down red precipitate. Boil gum benzoin  
in lime water - & add muratic acid -  
this substance is obt<sup>d</sup> from Oil Cinnamon  
may be made from hippuric acid  
Benzic acid powerful stimulant -  
from mucous Canals - to heal mucous  
Membranes. In Chronic pneumonia.

2 grs benzoic acid + 3 grs Camellia - Resin?  
in incontinence of urine - in gout &  
rheumatism - dose 5 to 15 grs.

Benzoin - native of Sumatra - Borneo Siam  
furnished by tree of large size - inexpressible  
tree juice part used - One yields Benzoin  
at 6 years old and continues produc-  
tion 4 years. Siam benzoin the best  
occurs in large irregular pieces - dull  
rose red tint. Sumatra benzoin pieces  
of rectangular form - larger than the other  
dark reddish brown color: when broken  
across resembles granite. Consists prin-  
cipally of benzoic acid - Certain Resin  
Substances - soluble in rectified spirit.  
3 sorts of Resin extracted from these gums  
a. B. y. Expectorant & astringent. Valuable  
agent of Constipation depending on cold  
clap? as local application in pinings?  
Stimulating Expect?

Take  $1\frac{1}{2}$  grs. the Benzoic Co.

2 drms of oil of peppermint. 2 drms. Laudanum

1 dram to or 3 times a day.

emp'd. in treatment of wounds, which  
are healing by 2<sup>nd</sup> intention. Cont. plaster  
Hk. sanscrit - Compound tinc. benzoin

### Cocculus Indicus

Tomatium Sansc. oriental nut-berry  
is fruit wh. is the medicinal part -  
More or less spherical - taste acid and  
irritating. Contains 3 acids.

### Aluega - polygala.

Snake root. Native of this Country  
United States. Root tuberos. Knots  
superficially, terminates in a kind of crust.  
Leaves sessile - or have no stalks -

fruit Capsule. Official part root.

When dried much corrugated. possesses  
peculiar acid taste. Root contains a  
peculiar acid on which its medic<sup>l</sup>.  
qualities depends - polygalic acid  
soluble in water.

Physiological effects. Stimulating  
gut particularly to mucous sur-  
faces - action occasionally determined to  
skin - generally used as a diaphoretic

essentially in certain forms of Pneumonia  
in chronic bronchitis - in croup latter  
stages. Useful in some forms of dys-  
pepsia - atony of the bowels - in amen-  
orrhoea - in dropsy anasarca.  
powder  $\mathfrak{R}$  to  $3\mathfrak{i}$  - decoction + syrup.  
infusion. Hild's Syrup. - Senega, tartar  
cristall & squills. Compound tincture  
of Senega - sweeten infusion.

Monday 9<sup>th</sup> Feb 1857

Sinapis nigra. Tetradynam., siliques, crucif.  
era. Indigenous. Seeds of black Mustard have a  
conoid<sup>a</sup> degree of acrimony & pungency. Gulesa  
pungent Vol. Oil. having Sulphur as constituent  
does not <sup>me</sup> exist in seed but is prod. by act. of H<sub>2</sub>O.  
a colorless pale-yellow liquid, boils at 298°. Slightly  
soluble in H<sub>2</sub>O. & readily in Alcohol, Ether.  
Mustard seeds swallowed whole act as laxative.

Phys. Effects - decidedly stimulat<sup>e</sup>. resuscitation  
produced by its external application.

at once used as emetic - used in early  
stages of Cholera - also in latter.

As emetic in certain cases of poisoning  
tea spoonful or latter<sup>l</sup> stirred in  $\frac{1}{4}$  a  
glass of water. In small quantities of  
~~Cataplasma~~ Stimulant of digestive  
organs. Cataplasma Sinapis

Boils. H<sub>2</sub>O. 10 $\frac{1}{3}$ . Flashed 1 Mustard aa in powder 2 $\frac{1}{2}$  3  
aa powders, mixed together with H<sub>2</sub>O.

Syrupus Armoraciae. Hence Radish sliced  
Mustard aa. 13. B<sub>2</sub> H<sub>2</sub>O. 1 pt. Macerate in  
Cord. Water for 2 hours & strain



Those Vegetables whose active principle is alkaloid = a vegetable alkali - possess a peculiar uronic acid which when rubbed produces a greasy sensation unto oil & water, combine with fatty substances & form soap - do not change litmus until it is turned to red.

An uronic produces a brown color.

Nitrogen. H. C. O. form alkalies: usually solid & fixed except Cocaine & Nicotine: form salts with acids - are extremely soluble in water.

When alkaloid is volatile.

Not boiled in solution of Potash. fluid put into a retort & alkaloid passes over.

A string tied. made of material solution of Ammonia added. Alkaloid falls down as insoluble precipitate

Most plants contain but one alkaloid.  
exaphrin. Cinchona.

Strychnia.

Opium.

Emetina - discovered in 1718 - a product  
isolated from Specac: containing C.HON.

Mode of procuring it complicated.

very energetic substance gr i vii =  $\rightarrow$

Common Specac: usual dose  $\frac{1}{2}$  to gr i

for emetic -  $\frac{1}{16}$  gr. expectorant.

Emetina forms principle of various  
vegetable: exists perhaps in Viola  
thorata.

S Specacuanha.

Rubacea - pentandra monguana.

In S. America. Off. Pt. Root: occurs  
in elongated pieces as large as goose  
quill. Thus Kinn blk, white & grey  
Root contains + accumulates.

Specac. Root found to be composed of  
two parts - Cortex + medullarum  
Cortex on inner side white color - Smells  
slightly aromatic

Medullarum - 80 Cortex 20 medullarum  
in good samples.

Compo<sup>n</sup>.

Phys. Effect. When Specac. applied externally  
gives rise to irritation - when taken in  
small doses - tonic, alterative, Specific  
Influence on Pneumogastric nerve.

Large Quantities - a Rauseant, astringent -  
in large doses - emetic - never  
leaves as the effects as Tartar Emetic.  
distinguished from squills by not being  
diuretic: from musk by not  
being stimulant.

Medicinal Uses. In pulmonary  
diseases, whooping cough - Spasmodic  
asthma, chronic Bronchitis.

also in acute Bronchitis: joined with  
Senega etc. In Phthisis 15 grs of powder.  
Dangful agent in Croup Combined with  
Ox Tartarac emetic. In dyspepsia  
gr.  $\frac{1}{4}$  or gr.  $\frac{1}{2}$  combined with Rhubarb found  
to relieve - when bile is deranged or when  
too freely secreted. In dysentery, as used  
by Heliodorus: Combined with Opium  
& acetate of lead.

Used in Simple Diarrhoea:

to gr. ℥. 2<sup>ss</sup> Rhubarb  $\frac{1}{2}$ . 3 grs. extract Rhubarb.

Used in fever gr. 15 to dose.

used especially - in treatment of  
Hydrocephalus. In spinal Regions  
in Hysteria - in certain skin diseases

Dose as Emetic gr. 15 to  $\infty$

Common 20 to gr. ii Tartar E.

Nausea, Stomach. 2 or 4.

Diarrhoea. Tonic.  $\frac{1}{2}$  - 2.

Every pint Cherry describes 100 lbs grs

Specac. Material.

Syrupus Specac:



Tuesday 10<sup>th</sup> Feb 57.

Quinine, active principle of cinchona bark. Q<sup>n</sup> is composed of  $C^{38}H^{22}N^2O^4$   
Sulphate of Q<sup>n</sup>:

Cinchona bark contains Quinic acid  
Quina, extracted matters &c.

Sulphate of Q<sup>n</sup> occurs in small crys-  
talline fragments - has a very bitter  
taste & is not very soluble in water.

When exposed to strong heat becomes  
luminous - if 200° turns liquid -

Sulphat. of Q<sup>n</sup> very liable to be adulter<sup>d</sup>  
" " " dissolves perfectly in any  
acidulated water, whereas fats do not.

Phys. Effects. Tonic - if amt. large may  
prove stimulant or sedative - powerful  
narcotic. Large doses give rise to gastro

(2) excitation of vascular  
system (3) an affection of nervous system  
vertigo - dimness of sight &c.

48 grs taken by a soldier - soon seized  
with giddiness - blindness - deafness -  
delirium & vomiting - largest amt.  
taken 150 grs.

## Quinine

Therapeutical Uses. As antiperiodic. In  
intermittent fever. Is incapable of  
benefiting as long as tongue is foul: is  
not useful when there is inflam<sup>an</sup>  
with general fever. First mode of pro-  
ceeding is to give a large dose previous  
to the attack - or <sup>2<sup>nd</sup></sup> immediately after  
it. Give patient 1 or 2 grs then a four  
times a day & when attack is coming  
on give larger dose. It is applied  
externally as per section. Is  
serviceable in bilious intermittent fever.  
Useful in gastric disorders - in eruptive  
fevers, in Scarletina when skin cool  
& patient weak & febrile & it is indicated.  
2 grs. Iamini with 10 grs Qt. Corap. Iris.  
Roses: after meals not more than  
3 or 4 times a day. Qt useful in  
treatment of diseases of Chest.  
In forms of Phthisis, latter stages. Col-  
liquative mixed with aromatic sulph-  
uric acid. In spasmodic asthma  
when Asthma Comes on every day or  
periodically

in diseases of heart, <sup>in palpitations</sup> in stricture,  
useful in most periodic diseases.  
Tartar Emetic Combined with Quinine.  
In Erysipelas - slight emetic, purgation  
& Qm. certain forms of gangrene -  
Anti-Caria, In Colic Cases Chemi-  
crema: affections of alimentary  
canal - at one time used in Cholera  
Useful in certain forms of dyspepsia,  
dysentery, as powerful agent <sup>in</sup> ophthal-  
mic affections: in Photophobia, those  
forms wh. are connected with gastric  
disorders. Chorea. Tetanus in con-  
junction with wine. In certain ce-  
bral disorders as Delirium, tremens,  
insanity, epilepsy. Many cases  
answered to gr.ii. in solution or in pills  
gt from best. Comp. tinct Quina.  
83 ℥i. 1 pint tinct Orange peel, and  
are drawn to two drms. Valerianate  
of Quinine antispasmodic & tonic. It  
constitutes active principle of many  
plants.



## Cinchona bark.

Cinchona. Used by natives of S.A. live in  
houses made of bark. Called Jesuits' Bark.  
Highly extolled by Robinson, S.A. historian.  
Grows in elevated valleys of Andes, extends  
from 9<sup>th</sup> to lat. 20° S. extends on a  
large territory - most abundant on rocky  
soil.

Sumatra - *Cinchona Calycaya*.

Scot " *Cinchona*

Dublin " *micrantha*

" *incisa* species

It affords a bark peculiar to itself.  
1<sup>st</sup> *Quina flava*. 2 *Quina lora*.

*Cinchona Calycaya* - long known as *Cordi-  
folia*. Cin. *Cinchona*. tree 30 or 40 feet  
leaves lanceolate. *Quina* S. rough, leaves  
of 1<sup>st</sup> length 1 foot or 2. concave. *Cinchona*  
*micrantha*, leaves oval, not known.

*Quina flava* Jr. rh. S. of Qu<sup>t</sup> is pure  
and compact in flat pieces or in quills.  
Outer surface presents a R. of irregular  
dots, nodosities & slight warts.

known if powder rubbed up & introduced  
in water sulphate soda precipitates it.  
From 1 lb. mark 33 sulphate Qu<sup>+</sup>.  
2<sup>nd</sup> Variety Comes in Quills. This Ink  
breaks with that fracture.

Wednesday 11<sup>th</sup> Feb 1857

Cinchona - true & false species. Calisaya 13 kinds.

Saxa 10 sorts - 5 called after itself.

Red 2 -

Calisaya distinguished from every other by treating it with Soda  $\text{Na}_2\text{SO}_3$ .

Two methods - <sup>1</sup> to tear off bark <sup>2</sup> to fill the tree & strip off bark. Usual ages between 5 & 20, Dried by expos. it the sun & air.

Chemical Comp<sup>n</sup> active prin. Quinine. -

Best Cinchonia - tonic re. Prop. Inne Crystall<sup>e</sup> when exposed to heat evolves an aromatic vapor - gives red color with acids - insoluble in ether, when its solution with chlorine throws down green precipitate. Exists in 2 states - base & sulphate.

Quinadina, very like Quinine, does not cause a mixture of Chl. & Am. to become green. Sapor? When berries yellow - if still greater. takes fire - exact prop. only known since 1852.

Arasina, & Paracine sometimes.

No of kind substances. Quinic acid, most important - formed Blk oxide Iron, & sulphuric acid a peculiar prod<sup>n</sup>; heated with Am<sup>o</sup> & Iron & dark brown.

Volatile oil - amt small 20 lb. bark give 1 lb. oil.

Quinometry. general more extract sulphate 2 lb.

103 bark 12000 to Sulphuric digest & filtered. treat with Am<sup>o</sup> precip<sup>t</sup>; washed with 403 H<sub>2</sub>O. dried & extract fold of paper after which, dissolved in ether, then fluid boiled 2 substances then Quinine may be obtained by evaporation.

Physiological Effect. Cinchonia powerful aromatic tonic. Quinadina weaker than others.

Bark. has Quina Med, properties as Quinine.

If taken in health gives rise to dyspepsia nausea & sometimes vomiting. occasionally aperient, tho' sometimes contrary effect, & is differrant anti-septic agent - <sup>(21-2)</sup> astringent - med<sup>l</sup> uses those of Quinine & Tannin. Poudre Rubra Cinchonia den 17 to 13

Tufus<sup>2</sup> Decoction not preferable.

Extract, taking bark, macerating in Cold  
water - fluid condensed. 10 gr to 15 grs.

### Tincture

Atropia, At - produces dilatation of pupil  
when applied large. at. very powerful -  $\frac{1}{2}$  to  $\frac{1}{8}$  gr.  
toxic. leaves in crystalline grs. If exposed to air  
becomes a yellowish liquid - soluble in water -  
Precipitated from its solution by tannin. Pure  
quite white: becomes yellow in time. Made fr.  
root or leaves of Belladonna. Sometimes present  
internally  $\frac{1}{50}$  to  $\frac{1}{2}$  gr. Useful in forms of  
neuralgia - Ric dolorem - chiefly used  
gr. Atropia 400 drops water - drop or two Sulphuric  
acid. used in Oritis. applied locally - in  
ulceration of Cornea, vesicae Cordis, prolapso  
Iridis, Cataract. Sulphate Atropia. Atropia.  
Forms active principle of two vegetables - Atropia  
Belladonna + Stramonium. Atropia Bella:  
Native of S. of Europe. Seeds, Pentandria  
Monogynia. Plant 3 or 4 feet high - dark  
green purple shade. Fruit size of cherry -  
pulp agreeable taste - 3 or 4 fatal. Root sweet.  
Atropia, Belladonnine oft. latter valuable  
element of Opium.

Phys. effects. When taken in small quantities -  
acts as resolvent. When small doses taken  
produce in time dryness of mouth, tonsils  
enlarged, throat reddened: heat cutaneous  
circulation accelerated much - produces circulation  
in sericibus, as distinct - if dose increased  
~~the~~ delirium produced - an agreeable one.  
Sericibus changed congested state of kidney.  
Impaired degeneration was however, however  
weak was finally extinguished.

Toxication by Belladonna. First impulse is  
to indulge in fits of laughter: eyes affected,  
weakness or illusions - face swollen, difficulty  
in articulation, dysphagia. Mouth swollen  
Red scarlatina appearance skin - a propen-  
sity to wander about. A loss of power over  
muscular system. Manifested at first in ex-  
tremities - Strangury in few cases - generally  
profound insensibility; Coma comes on &  
death - tho' sometimes after Convulsions &c.  
Diff. Color skin - Eyes - Mithful delirium -  
State of muscles.

Med. effects employ? locally for many  
purposes - dilatation of pupil, used in  
Iritis - Syphilitic or - local ulceration of  
Cornea - in cases of muscular contraction of  
orbicularis palpebrarum. used for relief of  
spasmodic affections - spasmodic stricture  
rigidity of cervix uteri. Internal uses.

Cases of fever - when pupil is contracted  
Beneficial in D. Tremens - Case large blister  
above neck, Belladonna applied. Symptoms  
improved. Emp? in tetanus, admodum. internal  
as atropine in chorea. In disorder of  
Chest 2<sup>nd</sup> stage of Pertussis. Extract of  
Belladonna, Ipecac. & Spasmodic As.

Angina Pectoris palpitation unresuscitated  
too adreney. Off prep. Powder  $\text{ss}$  to  $\text{ss}$  iii  
Extract. P. fresh juice. fluid thickened by Concentration  
100 W. 4 or 6 lbs extract. It soon deteriorates, after it  
has been made 2<sup>nd</sup> imp? for use. 18 grs Con-  
sidered when fatal - Extract Rub. chiefly employed locally  
dne  $\text{gr}$  to  $\text{gr}$  iv. Emplastrum. Soap & B. spread  
on bath in Affect<sup>n</sup> of heart or liver  
June. 4<sup>th</sup> lean in great spirit - unique antidote  
dne 30 m. in. Or a 3.

Stramonium, native of this Continent,  
used to poison arrows. enters as a con-  
stituent of plebeian drinks of China.

Pent. Mono. - Thorn appl. - stem rounded -  
leaves large deeply emarginated - sharp prickle  
on leaves - flowers usually solitary - white  
shiny - fruit called capsule - contains 4  
loculi: off. parts leaves - seeds.

Thursday, 12<sup>th</sup> Feb

Stramonium, leaves, warm color having an  
acid & bitter taste, Analysis - an alkali  
Phys. Effects. Property of allaying sensibility  
irritability: an anodyne, no tendency to  
induce sleep. Sedative to circulation -  
Calumnia - powerful antispasmodic  
e.g. when any is inspired -

Powerful poison, symptoms diminish  
of s. vertigo, kind of madness ob. increases  
amplitude of family in S. produce peculiar  
spectral illusions: excites jealousy. Vapor  
is said to be as powerful as drug itself

When dose large - Convulsions & paralysis -  
secretions greatly augmented - diuretic &  
aperient. Useful, in Spasmodic Asthma.  
Yes at a time, adm. also internally for  
same disorder - Relieves Cough in Phthisis.  
In latter stages of Pertussis or Whooping Cough  
In pleurodynia, in large No. of nervous  
affections - In chorea - In epilepsy,  
during intervals, In neuralgia - gastro-  
dynia - intercostal Colic - gripes in

cutentis - remedy in Insanity. Ointment  
made of leaves and seeds antiphlogistic  
remedy for burns & scalds.

Powder gr $\frac{1}{4}$  to gr-i-dose. From seeds & leaves.

Extract. gr $\frac{1}{2}$  - gr-ss. dose. Strong decoction  
Tincture 3ss to 3 dose  $\frac{ss}{3}$  on a quart  $\frac{v}{10}$ .

Unguentum. Incorporating powdered leaves with  
lard or from the seeds.

Strychnine, called sometimes Tetanine - in  
small quantities produces a rapid contraction of muscles.  
First described by Requinot 1818.

St<sup>t</sup> - occurs in amorphous & crystalline state

Remarkable for its insolubility. Dissolves in  
2000 parts boiling water: 7000 cold water.

Under microscope - presents little flakes, 2<sup>nd</sup>  
six & eight sided prisms & lastly four sided.  
Its bitterness, gr-i to 7000<sup>parts</sup> or a gill of water.

Color test - chromic acid - bichromate Plumbic  
or peroxide lead: all founded on principle that

Galvanic test, recognize 1 part in 20,000 parts fluid

Fog test, object to procure rigidity of muscles & sp.

Preipitate test, iodide Potass - yellow color.

— bichromat Platinum, chloro gold.

— " Mercury - white precipitate

Blood to be laid in heart or large vessels.

dilute it 2 its vol water. Fluid tested. All,

Coagulated - acetic acid added - fluid

filtered if tried may be decolorized, passing  
it thro' animal charcoal.

Physiological effects. In small quantities  
powerful stimulant. Makes Chymification  
go on more rapidly - increases influence  
on secretion low, urine - gastric juice.

" 1835 "

Occasionally slight aperient, if dose large produces  
spasm of muscles, loses command over them  
penicula quivering in muscles in arm or leg  
Piscus has penicula pili, previous, of mental  
anxiety - vertigo + dimness of sight.

Paroxysms come ~~on~~ resembling tetanus, nearly  
all muscles affected.

strychnine powerful stimulant to sexual system

Toxication of Hiera dog 3 1/2. 1/8 gr.

1/2 gr. smallest quantity wh. has proved fatal  
Symptoms observed correspond to former.

Alarm, tenor - sometimes vomiting - sometimes  
about larynx; about jaws, mouth closed

paroxysm in entire part of body. Body  
often bent; muscles quite hard, nervous

exhaustion, Cause of death, asphyxia -  
nervous exhaustion - acts a specific

stimulant to <sup>motor</sup> nerves of spinal tract of  
~~brain~~ ~~spinal~~ Some suppose brain supplied

to seat. Some cerebellum supplied by part that  
spinal system is seat.

Post Mortem. change in spinal marrow, much  
more soft, now + also effusion of water. Color in  
brain, also post mortem correspond to those  
of asphyxia - brain compressed.

Treatment. Iodine, Potassium, + Chlorine associated to  
Fe anti-dotes. Extract Catechu. Canad. <sup>gum</sup> ~~gum~~.

Conium - Has a Sedative of motor system  
Stomach pump. Artificial respiration.

Cold douche + compresses Head letting.  
Therapeutical Uses

In paralysis, not in that wh. depends on  
any structural change in brain or spinal  
cord, not after apoplexy. Better for  
opery which depends on habit - after



poisoning by mineral acids - Cautions. Begin with  
in small doses <sup>grm</sup>  $\frac{1}{50}$  -  $\frac{1}{40}$  gr or  $\frac{1}{4}$  <sup>of Paralysis</sup> as soon  
as muscles quiver quantity has been reached.  
Sometimes employed topically on paralysis.  
 $\frac{1}{4}$  gr. applied to acromion after Cataplasms  
have removed. St acid in Amaurosis  
Nervous exhaustion, in Chorea only from  
which are not connected with any change  
of brain. In debility, which follow dyspep-  
sia - used in dyspepsia or in Constipation.  
St given in dose  $\frac{1}{40}$  to  $\frac{1}{30}$  gr. <sup>as a tonic</sup> Best form in  
solution as acid. Sometimes in form of pill.  
Salt of St called hydrochlorate of St.  
active principle of many vegetables.  
Strychnos - Nux Vomica

It grows in diff. parts Asia & in Africa - on  
Cote d'ivoire - large tree. sep. sgs. peat.  
mono. - fruit large berry - cov. by Cortex  
externally. seeds. calca cows eggs - flattened  
discs - depression named umbilicus. seed  
very hard - pulverized with great difficulty.  
None of prep<sup>n</sup> Strychnos seeds heated to powder  
boiled & the solution heated <sup>with</sup> quick lime - super-  
lucant fluid evaporated - & precipitate boiled  
with rectified spirit wh. is removed by ~~the~~  
evaporation. Bonicia another constituent.  
Bonicia + nitric acid produce a red color  
whereas pure Strychnine does not.  
Strychnos acid. 2 kinds of color matter yellow  
& red. Red changed to yellow by Nitric acid  
Baccine gum Extracted matters. Powder of  
St adulterated with Guaiacum. Recognized  
by Nitric acid. wh. gives a greenish brown.  
Phys. Effects same as Strychnine.  
Smallest dose which has proved fatal 15 grs.  
The persons have ~~been~~ <sup>been</sup> 350 with imbecility

useful in pyrosis, in pregnant women  
 in diarrhoea. pill  $\frac{1}{2}$  gr. salicid.  $\frac{1}{2}$  gr. Rho.  
 $\frac{1}{4}$  gr. Opium 1 gr. Calca. Iron. Intermittent  
 fever & remittent. Parosid does not  
 Alcoholic grain, stronger than other.  
 dose  $\frac{1}{2}$  gr. to, tincture (4d. P. / 10 min. to 3.

Monday 16<sup>th</sup> Feb 57.

Urea  $C^{24} H^{22} N^2 O^6$  amorphous, either in white  
 powder or crystals. fuses & turns yellow & heat  
 Sulphuric acid changes red color  
 Nitric ———— red & then yellow  
 smearing when applied to skin

Dovers Powders  
 Jam. H. Dovers Powders  
 3meo 20. Wm. Nuttall

Veratrum album, scyphate native of Europe  
 in Great plenty in Norway. root pe-  
 culiar tubercles appear like small  
 1 ft. in length - v. stiff, with a row of nodules  
 flowers small - grow from axilla of smaller  
 leaves. official part root, rizome, folles.  
 appearance, seems to consist of 2 parts  
 upper pt. globular, interior with black  
 upper distinct. lower pt. rows by ones,  
 upper made of imbricated laminae  
 blue & covered leaves.

analysis yields oxalates + an alkaloid  
prurine - Veratrin used as stimulant  
purgative + emetic, dose in powder  
grv to grxx to grxxx

Min 10 m. to a 3

inguentum, root coarse powder with  
lard flav. by oil of lemons.

Aconitina soluble in H<sub>2</sub>O. When to  
be more powerful than Prussic Acid

$\frac{1}{50}$  gr. killed a sparrow.  $\frac{1}{5}$  gr. a dog,

Possesses a peculiar, resin taste -

Solution made of it + allowed to fall  
in conjunction. Principal Emulsion.

Turned to red by Sulphuric acid -

extremely liable to be adulterated ( $\frac{3}{16}$

a gr.), generally with starch, A.P. with

great difficulty, Evaporate tincture + add

Sulphuric acid re. re. Used in medicine

as anodyne, anesthetic + locally as

in the delirium. It is the active prin.

of aconite. Aconitum Napels.

ratio of E. stem wh. ascends from

root - leaves peculiar consist of 4 or 5  
florid upper dark green, lower

Aconitina W. From every part of the Vegetable  
but the root is off part. Root 3 or 4 in.  
long, resembles a small carrot, placed in a  
+ manner in the earth - circum: is not  
greater than that of thumb - in fresh state  
this root possesses a peculiar smell - by  
desiccation is shewled up. This root  
yields a small quantity of Aconitina  
also fatty matter - Aconitinic acid.

Phys. Effects. When 5 grains are allowed.  
<sup>in a few minutes</sup> feeling of heat produced, sensations  
of numbness in diff parts - accompanied  
with feeling of distension, a feeling of  
warmness & lassitude. Circulatory  
system depressed - pulse falls - respi-  
rations lessen, when original dose, 10 minutes  
tongue in end of progress increased - ex-  
tremities at first appeared warmer  
than natural, nausea + attempts to  
vomit inducing to sleep, body weak-  
ness, pulse reduced - + respiration 13.  
When orig. dose 15 minutes. symptoms  
of intoxication - pulse immediately  
fall - vomiting - numbness, tingling, &c.  
Toxication by aconite - Experiments  
with 4 animals. Usually great depression

pulse weak, respiration less countenance  
pale - pupils contracted - extremities cool  
According to Dr. Fleming.

"Sedative to system - <sup>24</sup> by Aconitina  $\frac{13}{4}$   
generally syncope.

Powerful antiphlogistic remedy, in  
carditis, Pneumonia, 5 Minims of  
Linctus repeated every 4 hours until  
pulse is raised may be combined  
with Calomel, morphia, Useful in  
Erysipelas. Trichus resembles iusine.

Given in Rheumatism, acute - in various  
Spasmodic & convulsive affections, in  
delirium, hydrocephalus.

Contraind. Not suitable for one where  
there is a broken down habit of body, not  
administered when there is any impediment  
in respiration.

Fleming's Linctus. - alcoholic extract.  
 $\frac{gr \frac{1}{2}}$ .

Hyoscyamia, exists in solid state -  
dilates pupil. active principle of H. niger.  
herbaceous - indigenous plant - part. mar.

Hypoceraeus.

Tuesday, Feb 17<sup>th</sup>

off. preparations

Extractum - dose grv grxx. Opium sh<sup>d</sup> not  
be conjoined with Hyoscy<sup>l</sup>, as their effects  
are not the same.

Tincture - made from leaves + fruit.  
dose ʒi to ʒiii - Heulane<sup>is</sup> energetic  
per seetum.

Pills - colocynth + Heulane.

Tobacco, Nicotina, contains no O.  
enters into combination with other substances  
+ forms salts. Nicotina pale, colorless,  
acid taste + smell, inflamm<sup>g</sup>.  
O. energetic substance - single gr. <sup>dissolved in acid</sup> allowed to  
drop on tongue, has destroyed a dog.  
Never used medicinally

Nicotiana - Solanaceae - pent, mono-  
fruit called Capsule, triang in form.

off. part, leaves are 30 kinds of Tobacco  
only one officinal - Virginia Tobacco. -  
leaf a foot in length - with spots on surface  
in Virginia T. Besides Nicotina,  
malic, citric, phosphoric + nicotinic  
concrete Vol. oil - Callea T. camphor.  
When consumed by ignition - smoke + vapor

Phys. Effects - when taken in small doses  
increases secretion, diuresis & increases  
secretions, sudorific, large doses  
nauseant - makes face pale, extre-  
mities shrunken & cold - feeling of  
depression - next heart - vomiting  
occasionally produces diarrhoea.  
Vertigo, dimness of sight - ideas bad  
loss of speech - Muscular weakness  
Coldness of surface, respiration irreg-  
ular - pulse low. Occasionally poisonous  
when administered as emema. Has  
proved injurious when smoked to saes.  
Medic. Uses. As depressant & diuretic,  
colic, uterus susceptible, hemia. Used in  
dyspnea - <sup>of chest</sup> hyperthorax - Sump<sup>d</sup> locally  
to destroy pediculi, & in cutaneous affec<sup>ns</sup>.  
Powder - found useful in ophthalmic  
disorders.  
Uranium Tabaci, 10 to 403



Solanina, from Solanum

Occurs in small grains - resembling sulph of Qu. Chem. equiv. 810 Not yet emp. in medicine but forms active principle in Solanum dulcamara - belongs to same family &c as former. trailing plant off. part twig. Purple Calera solanine exists in Solanum d. auriculatum & esp. Citant to general system. In febrile & rheumatic disorders - scrophulous & syphilitic affections.

Colchicum - distinguished from other alk. acids by the faculty with wh. it unites. Its sol<sup>n</sup> in H<sub>2</sub>O, Colchicina very active agent - to gr. Kalia a cat.

Mute, Crystalline, Substant - violent irritant to intestines - a large quantity of bile excreted, dose - to gr to  $\frac{1}{15}$  gr

Colchicum. native of Europe - perennial plant - leaves in spring & flowers in fall - <sup>see</sup> bulb or Cormus - as large as Tulip bulb. - Cormus Verm., Corrugated, bulb. Off. part Cormus.

Phys. Effects - Stimulant - <sup>Kidneys</sup> Wine is  
a diaphoretic - Stim. to Muscles, sedative  
to circulatory system - to nervous system.  
In large doses - poisonous, by prod<sup>s</sup>. gastro-  
enteritis, vomiting, - purging - evacuation  
similar. Dephisms sometimes bloody +  
Anuria. c

Smallest dose wh. has proved poisonous 2 1/2  
Med. Uses. Specific in gout - not suited  
for arthritic gout. given in large doses  
after small doses, always beneficial  
when pain is intense re. given in  
Rheumatism - Beneficial in chronic  
muscular Rheumatism - Said to act  
serviceably when evacuation, feces cond<sup>d</sup>.  
with.

Anti-phlogistic agent, in fevers. In  
thoracic affections.

Preparations from Cornus

Aquino Wine + Extract

Seeds " Tincture + Com. Tine

dose of fluids ʒ3 to ʒii

extracts ʒj. to ʒss.

Conia.

Wednesday 18<sup>th</sup> Feby

C<sup>12</sup>H<sup>12</sup>NO - off. from *Conium maculatum* - a very powerful substance a liquid - pink white colorless: has a <sup>strong</sup> smell. 100 lb of leaves <sup>produce</sup> 3i Conia.

Tests. Dry white acid changes its color  
tint. Fern. passes a brown color.

Chlo. tin. yellow cold precipitate.

Ammonia - dense white fumes.

Conia acts upon motor tract of spinal  
Cord. Conia <sup>used</sup> in tetanus and in poisoning  
from Strychnine - Conia forms no. of  
salts.

Conium maculatum - spotted hemlock.

Sheep & birds feed on it with impunity  
indigenous herb: umbellifera pent. digg.  
Off. parts leaves - dark green color.

Analysis - Conia - Vol. oil - empyreumatic  
oil - Resinoid matter - gum extractive &

Phys. Effects In small doses exerts al-  
terative action on system - anesthetic  
& diaphoretic - When persevered in prod-  
uces change in mamma & testicles and  
to old winters.

When taken in large doses produces intoxi-  
toxication. Produces madness + paralysis  
of voluntary + most involuntary muscles -  
+ then death - Post mortem it is ob-  
served that the brain contains little  
blood + according to Dr Juss the heart  
loses its irritability - Course. Emetics -  
purgative stim. Nuxom, Coffee &c

Uses. In Cancer - smalls dose, fre-  
quently repeated. In a long time - In  
scrophula - and in ulcerations - Rhenus,  
in pectoral affats - relieves cough in  
Chronic Bronchitis - <sup>time</sup> Conjoined with acthus  
seilla + ipecac wine.

Prep<sup>ns</sup> Pulvis - dose grs to grv.

Extractum. of no value 6 mells after its  
preparation - dose grv to X or XV.

(412 grs every day for 11 days. 573 cont<sup>d</sup>  
in 100 days. In a patient)

Tincture. - strong m<sup>ss</sup> to a 3.

5. Fine. very serviceable in relieving acute  
inflammation - in Chronic Bronchitis  
Cataplasma. extract added to Linseed  
poultice. Usgat<sup>un</sup> laid + lewis.

Compound Cornium pills.

Lobelia lobelina - <sup>yellow color.</sup> This sub. aromatic smell. rarely procured by a strong tinc. of leaves. Pow. crebo spinosa  
lobeliaea - part. monogynia.

Off. part entire herb accords Vol. S. P.  
Leaves compressed into blocks  
seeds small - Analys. - Lobelinia -  
& lobelinic acid - Vol. oil to wh. smell  
is due. Removd. Maltos.

Med. Uses. powerful expectorant  
with giving rise to distressing cough.  
Nauseant & in large doses - Emetic.  
& produces gastro-enteritis.

Toxication. 3 small. sutures. vomiting  
& in half an hour insensibility - face cold.  
features pinched & pupils contracted  
Death - first matter - inflam. of stom-  
ach & intestines. seeds recognised  
by means of magnify'g glass

Med. Uses. In spasmodic asthma in  
small doses - during paroxysm in  
large doses - in chronic bronchitis

~~Purpurea~~ - griseo logro as expectorant, nauseant

12 as emetic <sup>10 grs</sup> to 20 grs

Unitas 23 to 123

Morphia,  $C_{34} H_{60} O_{18} N$   
 $\frac{34}{35} \frac{60}{20} \frac{18}{6}$  avoids to another

Mo, alkaloid - crystalline - occurs in prisms  
very insol. in Ho - but dissolves in spirit  
Contains 6 p.c. Ho. Morphia subject to  
adulterations - narcotine etc. May be  
extracted by dissolving fluid in S. ether.  
then narcotine dissolves. Has 2 powers  
stimulant + sedative - When first  
taken stimulates pulse - then sedation  
It produces lactic acid - exerts influence  
when urine is subject to phosphates  
diathesis - in general fever.

Diff Interven Morphia + Opium  
after exhibition of both no disagreeable effects  
does not produce wakefulness + starting  
out of sleep. Opium powerful anti-  
periodic remedy - It tends to produce  
euphoria - It produces irritation in  
skin not so opium. It diminishes  
vision not so Opium produces paralysis

Radix n. n. O.

Pure M. never used in medicine.

Hydrochlorate of Morphia -

Opium - chlorate lead - Hydrochloric acid + H<sub>2</sub>O

Opium contains Morphia - meconic acid, Codeia

Hydro. chlorate of M. occurs in small white granules

Smallest quantity which has induced death

3 grs. Preparations

Solution of H. C. Morphia. 106 m contains 1 gr of <sup>Hydro</sup> M.

dose xx m to 3

Lozenges.

Thursday 19<sup>th</sup> Feb

Acetate of Morphia,

Made by saturating M. with Acetic acid, usually  
contains 1 gr. c. No. occurs in Crystals found  
in pulment state - does not contain  
much Morphia as preceding - Lgr. said to  
have destroyed life, Persius can be made to  
hydrate it.

<sup>Preparation</sup>  
Liquor Morphia - Sulphate of Morphia  
dose gr  $\frac{1}{2}$  to gr  $\frac{1}{4}$ .

Opium - poppy plant native of India -  
papaveracea - polyandria monog. - stem  
herbaceous - flower grows at top of stem  
is solitary: consists of corolla - calyx is decid-  
uous at first very conspicuous  
Off. part. Concrete juice of unripe capsule  
of unripe papaver somniferum.

Varieties of Opium.

- 1 Turkish { Constantinople
- { Smyrna.
- Egypt<sup>n</sup>
- Persia
- Indians { Banarcs Superior
- { Patna Hindostan
- { Malwa Inferior

English. German. French.



Good Constantinople <sup>consist of round pieces wh</sup>  
is soft - bitter taste - consists of small tears  
Opium <sup>weigh</sup> 4 to 6 3/4 - Opium

Smyrna - large masses 2 lb to 3 lbs. usually ir-  
regular in form - surrounded by dark leaf  
shining red color, made up of tears: loss 1/2  
of it, might by a water bath - dull rather  
desire of lacte.

Egypt<sup>an</sup> masses 4 to 8 3/4. Red-brown color. only  
loss 1/2 of it <sup>wh</sup> in bath.

Perica - occurs in sticks, wh measure 5. or 6  
length, size of little finger - wrapped in white  
paper - pale brown color - extremely soft.

Banaras - in large balls - 35 lbs. - cov<sup>d</sup>. with straw  
& poppy leaves. like a wet, iron 2 lb shot -  
opium has resemblance of potato, soft.

Patna or garden patna - square pieces, 4 inch  
in length, same 1/2 inch thick - comes in  
small lumps - brown blk. hard & dry sacchar  
quality <sup>inferior</sup>

Patna <sup>inferior</sup> comes as Burray  
pieces wh. weigh 10 3/4

Supria Chalna. pieces wh weigh 10 3/4.

English not often met with - occurs in irregular  
pieces - German not much known: Ea. sample  
has bitter taste - narcotic odour - see journals -  
usually moist. Opium is inflammable & tends  
to undergo decompos<sup>n</sup> by being kept.

Perica contains 1 per cent. morphia.

Strychnia 8 pu c. Morphia obtained.

Adulterations - recognized by inspection - dirt  
mud sand & key Common.

Comp<sup>n</sup> of opium - 2 alkaloids -  
Morphia - Codeine - Codeine can be ex-  
tracted - + occurs in large crystalline form.

Tabina, when injected into vein of dog -  
produces tetanus <sup>rapidly</sup> - 5 to 10 grs - 53 has been taken  
Meconine - occurs in rh. Cryst. form

Acid sulphuric & Meconic.

Meconic acid occurs in meconium scales.  
by <sup>diff. degrees of</sup> heat is converted into two other acids

Effects <sup>poison</sup> Occasional or habitual use.

150 drops taken by Dr. Jones in a glass of  
whiskey - Turks even use 4 + 63 at a dose.

Stimulation from opium followed by much  
greater depression than that wh. is the result  
of <sup>doubtful</sup> alcohol. Deteriorating effect greater on  
health than on <sup>an</sup> ~~was~~ sound constitution

Phys effects. On nervous system, acts  
just as stimulant - then as sedative  
- sensibility blunted - next torpor or pro-  
found lethargy. Opium not a sui-  
table remedy in cerebro-spinal disease.

Dr. Wright

Monday, 23<sup>rd</sup> Feb 1847

Opium useful in relieving spasm & in diminishing muscular irritability.

Circulation first accelerated by O. left ventricle contracts with greater rapidity for a short time after Opium has been taken.

Effect of Opium on digestion.

Lessens sensibility of muscular part of intestines. Induces Constipation.

& tends to prevent excretion of bile - diminishes appetite - prod<sup>s</sup> bitter taste - feeling of heat - nausea. & in large doses may produce vomiting.

Useful in allaying enormous appetites a where there is too great secretion.

Effects on Respiratory system.

Diminishes act of Insp<sup>n</sup>. Impedes circulation of blood - paralyzes respiratory muscles. Injurious in 1<sup>st</sup> stage of Pneumonia - Contra-indicated in Congestion of lungs. Prejudicial in inflam. of lining membrane - as it prevents excretion of mucus.

Effect on Urinary System — differs accord-  
to Constitution — Sometimes produces  
acid urine — in diabetes diminishes  
quantity of urine. Diminishes greatly  
a superabundance of urine. & favors  
passage of calculi

Effect on Sexual System.

Said not to effect any change in  
the menstrual discharge or milk.  
but ~~it is~~ <sup>It is</sup> known to be narcotized per  
Injures. Useful where there is profuse sweating

Toxication

Symptoms resolved into 1<sup>st</sup> & 2<sup>nd</sup> stages  
In 1<sup>st</sup> Stage — Small pulse — respiration  
silent — tho' frequent — ~~per torpor~~ <sup>can be aroused</sup> —  
face pale — limbs warm. In 2<sup>nd</sup> stage  
cannot be aroused — inder inexcitable —  
respiration slow & stertorous — pulse slow  
full & round. Effects resemble those  
resulting from Concussion of brain.  
1<sup>st</sup> stage runs into second — or sometimes  
vomiting may come to relief of 1<sup>st</sup>  
stage — Recovery from 2<sup>nd</sup> stage rare.

February

Symptoms usually appear from  $\frac{1}{2}$  h. to 3  
sometimes 4 or 5  
hours after Opium has been taken.  
Smallest quantity wh. has proved pos-  
sible 4 grs. Solid powder & 23 grains  
of  $\frac{1}{10}$  has killed a child -  
or 1 drop.

Apoplexy resembles Opium poisoning -  
the 2<sup>nd</sup> stage - 1<sup>st</sup> stage exactly oppo-  
site. Face pale from O. florid in epilepsy.  
Accounts preserved distinguished from Opium  
by the greater wakefulness of patient.  
Accounts great nervous prostration.

Poisoning by Belladonna dilates  
pupil - produces phantasms -  
Stomachium produces vomiting -

Tobacco produces great weakness, vom-  
iting - Prussic acid affects eye -  
pupils dilated - eyes glassy - Muscular  
system - tetanus or paralysis.

Cannabis Indica, Produces violent  
pleasur of pleasant delusion.

Post mortem - Corruption of brain  
in sup. lobes base of brain injured.  
serous effusion.

Blood has a fluid appearance heart has its Con-  
tractility exhausted lungs Voluminous Arteries  
dark blood less Congested.

Treatment - Emetic - Sulph zinc or  
Sulph. Copper - ~~1 dram~~ <sup>of former</sup> to 2 drms or  
15 grs of latter. Copious warm drinks.  
with Sub <sup>Co</sup> great Conjoined - Stomach  
pump - when <sup>power</sup> Opium has been taken in  
liquid form. Would be titillated - Per-  
son must be kept awake. Moderate  
walking, ~~the~~ between two others - useful.  
Slapping feet with wet lints - mustard  
plasters -

Shocks from galvanic battery - body plunged  
in warm then in Cola water. Bleeding  
not generally indicated. of most service  
during latter stage. when there is Congestion  
Stimulants never given before ejection of Opium  
To keep up respiration. Certain anesthetic  
substances - tannin. barks, chlorides - iodine  
Teeth. usually for mucous acid  
+ morphine

Tests for Meconic acid.

Nitric acid produces a cherry red color which increases on standing - sulphocyanide of ammonium produces similar color with  $\text{NO}^5$  - bichloride of Hg. changes it again.

Morphia.  $\text{NO}^5$  gives red color. Boracic greenish-yellow color. Moistened time of iron - deep blue color,  $\text{NO}^5$  added red color replaced by a red color - opium gives a red color with  $\text{NO}^5$ .

Tuesday 24<sup>th</sup> Feb 9. 1857

To determine quantity of Morphia in opium boil liquid + add ammonia.

used in Inflamm<sup>s</sup> (2 objections - Opium said to be a stimulant, + to conceal disease) Never in acute severe inflamm<sup>n</sup> until after bleeding of blood is not properly arterialized Opium sh<sup>d</sup> not be given - Opium given in inflamm<sup>n</sup> of a low type.

Must not be used in Cerebritis - acute hepa-  
titis - in acute Pneumonia - & sometimes  
in Laryngitis - Bronchitis - Opium must use-  
ful in

injurious in inflammations of mucous mem-  
branes. Useful in fevers, ~~which are~~ in those  
of a low ~~colic~~ habit of body. If on ex-  
hibited opium ~~produces~~ accelerates pulse  
& no good results follow it sh<sup>d</sup> be pro-  
hibited. When pupil much contracted  
Opium sh<sup>d</sup> not be given: belladonna  
then most serviceable. Tartar-Emetic  
combined with Opium. Most called for  
in latter stages when diarr<sup>hea</sup> & skin  
Coul. Amm. In intermittent fever useful.  
Opium used in Rheumatism, that wh. is  
accomp<sup>d</sup>. with profuse sweating &  
where pains are migratory.

Serviceable in preventing eruptions & scabs  
from pericarditis - Tetanus - in gan-  
grene - used in treatment of syphilis  
given in conjunc<sup>n</sup>. with Conium.  
In irritable Chancre & eruptions.



Useful in diseases of Abdominal Regions - in peri-  
tonitis - Combined with Calomel - in fecal  
Extravasation - lessens peristole of bowels.  
In peritonitis of a traumatic kind & in that  
wh. results from rupture of blood - 105 grs  
given to a person in 5 days. - 2 grs given  
half hour or hour: little nourishment  
given - low typhoid forms of peritonitis  
Serviceable in Strangulated Hernia - given  
in dose of gr. ii repeatedly - Calomel conj<sup>d</sup>  
Intussusception relieved by Opium.  
In enteritis - patient lies in semi erect  
posture until ineffectual syncope, then  
Opium ad<sup>d</sup> 2 grs: - in diseases which  
n<sup>o</sup>? terminate in asthenia. Useful  
agent in certain disorders of stomach  
Combined with <sup>carb.</sup> Ammonia in mor<sup>b</sup>. Sick-  
ness: in dyspepsia - gastrodynia - gas-  
tritis: in facilitating passage of biliary  
Calculi - usually given in liquid  
form: in affections of kidneys - Nephritis  
diabetes - Opium reduces quantity of  
urine excreted in a day. cystitis - aene-  
tence of urine & irritability of bladder

Useful in relieving uterine pains - in false  
pains which precede real labour pains.

Useful when labour is complicated with rigid  
state of Cervix uteri. In irritable  
vagina - where heat & dry state are present

Useful in transverse presentation in  
labour - pains which follow rupture of  
uterus: or when Child is in abdominal  
Cavity. In certain forms of uterine  
hemorrhage. Useful in relieving pains of  
dysmenorrhoea - irritable uterus -

Certain cases of ulceration - Used in  
Laryngitis <sup>stipulosa</sup> & Croup - pertussis - to lessen  
Cough in Phthisis - in Delirium  
tremens & in Cephalic diseases.

Grain's Mixture - 2 to 4 grs Tartar emetic  
83 Camphor <sup>grain</sup> & 13 Opium - 1 to 2 tea spoonsful.

In that form of Delirium tremens which  
occurs in old drunkards.

Opium used in treatment of Epilepsy  
In ophthalmic diseases - locally.

Delayed granulations on lining mem-  
brane of upper lid - Useful in

skin disease - prolapens Anid: &c. &c.

Papus Pulvis Opiv - stimulant  $\frac{1}{8}$  to  $\frac{1}{4}$  gr.

" " diaphoretic, expect  $\frac{1}{4}$  to 2 grs

" " antiphtyritic sedatum 2 to 5 grs

Pulvis Opialus. Every 10 grs 1 gr. Opium.

Pulvis Specae Comp.

" Kino " Every 20 grs contain 1 gr. Opium  
Chemis diarrhaa de penter.

Comp? Chalk powder - Every 40 grs - 1 gr Opium

Pilule opiate - Opium. Sulph. Potas. Ros

Every 5 grs contain 1 gr op.

P. styracis Comp. " " " "

P. saponis Comp. " " " "

P. Specae. Cum Scilla Every 5 grs -  $\frac{1}{3}$  opium

P. Plumbi Opiata Styptic 8 grs - 1 gr -

P. Calomal. et opiv. Every pill 2 grs Calomal  
 $\frac{2}{3}$  gr. Opium

Extractum Opiv, Confection of Opium

a gr. of opium in every 30 or 40 grs Mass.

Electuarium Catechu - Every wine &c.

Every 323. 1 gr opium.

Trict. Opium - 33 druz 2 pts. Spirit.

Camphorated Tine. Opium.

Every fluid 3 Contain 2 grs druz

Announced Tinc. Opium. each  $3\frac{1}{4}$  contain 1g opium

Aether Opii. 20 M - = 30 M Tinc.

Vinum Opii. Opium Cannam. Aous + Sherry Wine.

~~Very strong~~ Emema Opium

Emplastrum Opium

Empirical Forms of Opium. Thursday 26<sup>th</sup> Feb<sup>y</sup>.

Blk drop - Geromys's solution.

Godfrey's cordial - Dolmy's Carminative

Some persons extremely susceptible to Opium.

When O. is given to allay pain - if no effect is produced - another dose may be given

after 30'. Given generally  $\frac{1}{2}$  mouth.

Per seclum some think O.  $\frac{1}{3}$  weaker:

the others differ - employ same dose

as anodyne + narcotic give full

dose - about 2 hours before bed time

the depression continues for 12 hours

after dose.

Poppy heads furnished by papaver

sumiferum - vary in size from that

of an egg to a man's fist - brown color

Fruit sh<sup>d</sup>. be gathered when immature.

Prop. of }  
Poppy heads } Extractum.  $\frac{1}{4}$  or  $\frac{1}{5}$  weaker than  
Common <sup>Opium</sup> ~~Extractum~~ 5 grs to  $\rightarrow$

Symplocos papaveris

Decoctum papaveris - used as Inter-  
nal application

Biberina  $C^{35} H^{20} N^1 O^6$

not known long - powder or mass. <sup>120</sup> dirty  
white color - 2<sup>nd</sup> Resinous substance.

This alkaloid easily proc. fr. Sulph. of  
Biberine. ~~purpose~~ in this state

Biberine resembles Paracaine (fr. Para Bark)

Biberine not emp<sup>d</sup> in medicine - but Sulph  
obt<sup>d</sup> from Bark of Biberis tree -

Thin brilliant black scales, bitter aro-  
matic - not soluble perf<sup>y</sup> in HO - SO<sup>3</sup>

added. Sulph. Biberine powerful tonic  
& antiperiodic - not so liable to give

rise to vertigo as Muricine, used  
in same cases as latter substance

Ordinary <sup>am tonic</sup> fr<sup>n</sup> to fr<sup>iv</sup>. antiperiod - gov to give

Tree found in S.A. - 60 feet perfectly  
naked - off part bark. Exported in large  
pieces - interior cinnamon color - short  
fracture.

Biberis acid. Lannin

Delphinia

NO<sup>5</sup> produces a liquid of a  
dark red but next to a brown color.  
D. prop. like that of Veratrum - used in  
same cases - given in Rheumatism  
Dose inter<sup>ly</sup> gr<sup>ss</sup> to gr<sup>ss</sup> -

Argemone. 3 of D. to an 3 of last  
Off. parts seeds - brown salt, composed  
not much used in med: Emp<sup>d</sup>. externally  
to astringe pediculi

Neutrals - neither acid nor alkaline  
prop. - homologous + heterologous - classes  
divided into 2 classes - nitrogensized + non-  
nitrogensized form neutral salts to union  
with bases.

Crystallizable + amorphous.

Calumbine - occurs in hexagonal crys.

With lacte - Corubus & palmatus or

Obumbo tree - Known in 1765. -

State of Africa - on banks of the Zambezi

Off part - Root - Cut into vertical

slices. Often adul<sup>d</sup>. with other

Calumbis. True Calumbis contains a large quantity of starch

Iodine produces blue comp<sup>d</sup>. codex starch

Calumto - yields Calumbine - Vol. oil  
aromatic. about  $\frac{1}{3}$  of wt of Calumto is  
pure starch.

Calumto - bitter tonic - antihelm. in  
large dose accel. pulse. Emp<sup>d</sup> as Tonic  
in Circoalocem from floor. Used in  
ad. dyspep. of atonic type - diarrhoea  
in Child. Comb<sup>d</sup> with Jemgum -  
powder gr 5 to gr 15.

Infusion. ana 3j to 3iii

Tinct. — 3i to 3iii

### Cusperone

bitter substance - Red color by  $\text{NO}^3$  -

Galipia Off. - West Indies - off part  
back of root or stem occurs in  
pieces 5 in in length. 12 in breadth.

Coar<sup>d</sup> with mossy sub. wrinkled. Cinchona

like color. Voluntary disagreeable fetid  
smell - inner wood plicated adul<sup>d</sup>.

with bark of Styracis sup<sup>d</sup> vom. which  
is hard & pulvizes with difficulty

other spongy soft etc. + of a bad smell  
Styracis flk.

Cuspana Bark yields Cusparine: <sup>2</sup> Heine-  
Pow. tonic & stimulant - catarrh  
to skin-mucous surfaces - irritant in  
large doses. used in Chorea - in those  
Cases when Rhone is used.  
Produ pr v to gr x. as infus. & tunc.

Quassia Quassia. active prin. of  
Quassia - afforded by *Q. aculeata* found  
in Jamaica. Wood off. Expated in oil  
billetts wh are chopped up into chips  
yellow color - phorus texture. Bitter  
taste - Analysis Quassia - vol oil -  
Resinad matt. Salts of Potash -  
Powerful Tonic In large doses acts as  
irritant - antiperiodic - said to be  
an anthelminthic.

Quassia used as an agreeable Tonic  
used in Quassia with Hydrochloric  
acid after worms have been expelled  
In ferment form. As tonic in certain  
Nervous disorders - Chorea - Epilepsy  
Supercin - a Bark sp. <sup>aromatic sp. of</sup> *Coccoloba*  
Comb. with Sulph. of Fellos. <sup>aromatic sp. of</sup> *Stannum*  
Tonic Quassia - ʒj to ʒij



Simaruba Bark - 6 in. to 1 1/2 ft in l.  
epidermis thick - Quercite action  
Resinous matter - Tonic, astringent,  
& in l. does emetic - sometimes called  
dysentery bark - decoction ʒi to ʒij

Salacine - from willow bark. 50<sup>3</sup> part  
red color. Tissue decre. of fresh bark.  
When salacine will be deposited on  
it cooling. Salacine recommended  
as substitute for Quinine. Same of  
circulation tho' body changed into  
Salacine does from ʒss ij to ʒss  
Active Prin. of Salax. Willow bark  
decoct<sup>n</sup> 2 to ʒ 3, 3 or 4 times a  
day

Monday 2<sup>nd</sup> Mar: 57

Smilacene

Prepared from Inet. Sarsaparilla -  
fluid decolorised & subjected to evap<sup>n</sup>. wh.  
Engelse. apper. nausea & disagr. small dose  
not unite with acids & form salts: hypochloric  
acid found on it & passes from red to yellow  
In small doses raises appetite - dose ʒij to ʒij  
action firmic. - Smilac Sarsaparilla which is  
derived from Larza - a vine & parula, a tree  
First known - Nation of S. A. under name  
Smilax there are 2 kinds - Smilax medica  
Root small r.v. long & end off. scabrous

branches possess tendrils - by wh. vegetable is enabled to climb: - leaves possess a net of nerves flowers small - fruit a berry of a reddish red color, off terminal part. Root,

non-mealy & mealy.

1st Mealy not eat. gives brown color - when broken - a small dust escapes with brown color - when touched with lime, Dec. blue color when SO<sup>3</sup> does not affect Cinchona. Roots present.

2. two fibilla - 3 Chief kinds of (non) mealy  
Brazilian - Honduras - Caraca -

1 Caraca occurs in large bundles - wt. 100 lbs of fibilla in a bundle. Outer bark green, br. color pith is usually 2 to 4 times as broad as bark.

2<sup>nd</sup> Brazilian bundle only wt. 15 lbs - darker brown red. generally pith not so large as former.

3<sup>rd</sup> Honduras 2 feet in length - in 2 sorts. from 4 to 5 in diam. & 12 in. always gony & has no fibilla.

Jamaica Sars. the

occurs in bundles wh. measure foot to 12 in l. Root knotted - when broken no black, <sup>or acid</sup> taste of touched with SO<sup>3</sup> covers surface. Yields a l. quan. of extract. From 3 lbs of Root 1 lb. extract.

India Sars. bundles 2 feet to 2 1/2 in l. green brown color very few roots - yields smaller quan. of extract

Veracruz outer bark in thin round corrugated

clumps of all tinguish diff. kind of root

Taste. more acid latter it is  
Breaking it - no powder starts shd escape  
Quae of fix.

Beard - good root.

SO<sup>3</sup>. sh. discolored surface  
Tint. Codine.

Sisal. Similacae. Vol. oil. a Resinoid matter  
a l. quantity of starch; granules  $\frac{1}{2000}$  an in in  
length.

Phys. Effects. When taken in small doses prod. no  
effect; but when in large doses & for a  
length of time - is alterative-liquefacient  
Purific - diaphoretic & diuretic. Never yet  
known to have proved poisonous.

Emp<sup>y</sup> in Syphilis. - of no use in primary  
disease - only in secondary kind - most  
serviceable when it is cut for a long  
& given in combination with nitric acid  
Indicated in Scrophulae - in glandular  
enlargements - in Phthisis. 3. In Rheu-  
matism - Chemis 4 In skin diseases - as  
Sycosis - Poriasis - & promote Circu-  
lacion

Preparations Pulvis ʒss to ʒij

Decoctum ʒʒ Pot & 2 qts Dilig water.

Mild until reduced to 1 quart.  
dow ʒij to ʒij.

Compound deco. contains - galeum liquorice  
& magnan. dow is same as last.

Extractum - Prep<sup>d</sup> by Evap<sup>d</sup> decoc. thick liquid  
acid taste & rancid smell - not Extract made  
from Jamaica but pot<sup>l</sup> in making & about ʒij  
dow ʒij to ʒij

Syrup. - dow same as former.

Taraxacine from Dandelion Root, dis<sup>d</sup> in Ho  
& com<sup>n</sup>. a peculiar taste - does not unite with  
acid, obt<sup>d</sup> from juice of Dandelion - just dried  
fine fluid corpa. not used pure in med.

Taraxacum. - chevreuil - off. part Root  
of tubercle form - light brown water, inner wh.  
green. juice - April or May. water - No. of pith  
in outer side of Root. Comp<sup>d</sup> of Taraxacine  
Resinoid matter - Inuline - Taken out  
act. as tonic & cholagogue - & diuretic.  
used in dyspep. & disorders of stomach -  
phlegm &

Infusion -  
Extract 5 grs to 3 ss.

Digitalis, occurs in wh. Crystall  
soluble in Ho - juice by Shelton & M  
two times as much as powder of leaf  
dose from  $\frac{1}{60}$  to  $\frac{1}{30}$  gr. in  $\frac{1}{15}$  gr. &  
dampness effects

Test 503 - wh color - wh. becomes red  
ends in Red.

Hydrochloric - green - pans tho' diff colors  
tho' it settles into yellow.

Fox-glove - tincture acetic acid & ammonia  
active pmi. digitalis - 3 spec. only one official &  
introduced by Fucius. Off. part leaf & recept for  
first year, leaves more recept in form - with taste pink  
Narcotic smell - when dried brownish green  
Color - analyses - dig line Section 10. n.

Phys. Effects. Capable of reducing pulse from 100 to  
40. diminishes its force & breaks in upon its regularity  
induces an occasional excitement in pulse. It is an  
accumulative medicine - is a diuretic - only  
acts conditionally. A cathartic. In large  
doses poisonous - great depression of circulation.  
diminishes op. con atten shalt sometimes con  
ulsi ins - que 9. ac con nia. Men str ing pur g

Finished, April 2<sup>nd</sup>  
March 1857.

Cont<sup>d</sup> in an other book.

Wm. West Whitwell, M.D.

M.S. Ind.  
Rowland Curme from Lyell

making a no percular oscillations - slow  
processes that are

very  
Char no ver

10.73



20

Jan 3

4. 8.  
50. 100

4 4

1.2  
1.1 1/2

2. 3

2. 3 100

69.5  
100  
100

freemius  
actinogulus

D.

MS  
Acc. no. 280  
1886-60  
V. 2



