



25

Greater fleas have smaller fleas
Upon their legs, to bite 'em
And little fleas have lesser fleas
and so a d. infinitum

C. Kingsley

1851

Standish
Randysh

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11/10/69

Notes of lectures on
Materia Medica
& Pharmacology
'69.

Chemical action sometimes fuses.

Some metals have not been fused but probably will be.

Conversion from solids to liquids

a certain amount of heat disappears
latent heat like a lb of water & turn it to zero
take new the at less of H_2O & you get a mass at 40
mix equal parts of water at 11°C & ammonium
nitrate & a temp of -16 may be produced
by means of snow & sulphuric acid you can get
at winter from -7 to $-5-1$ & by mixing
snow & calcium carbonate we may get $-55-$
 100 cub inches of Phos at 44° when melted
expands to 103.5 and contracts when cooled
some exceptions the most rare are
water & iron. melted iron expands when
solidifies, but gets set in cast iron.

Boiling

The boiling point of a liquid when the
bubble of steam passes through without
condensing. In a glass vessel water
boils at 100 but in a metal one
at 100 . If you boil water set

does not

boils readily, thrown upon a
fire it will boil with rapidity
The boiling point of water is that at which its
water boils decreases the higher you
go at facts it boils - 90. 1 at M. Blaine
at - 84.

Ammonia

Hydrogen gas is water but the gas dissolved
test for ammonia by a tube mixed with HCl and
and dense white fumes.

Hydrochloric acid

Is a compound of chlorine & hydrogen
generally obtained by action of SO_4 on common salt

Sulphur

SO_2 Sulphurous ac. SO_3 Sulphuric acid
 H_2SO_3 H_2SO_4

Sulphurous anhydride given off in volcanic
in air of large towns, a river in S. Am. contains
a large quantity of it. It is all for
pre to boil SO_2 with iron or copper but away
but that will take away of free SO_3

It is colourless. 225 under considerable press.
It liquefies at -15° it condenses & evaporates
very rapidly. mixed sulphur if thrown into a
jar when the chlorine is on fire will put it out
It bleaches vegetable colours. all but what are of an
animal nature are all bleached by sulphurous acid
& does not destroy the colour but unifies with it
It also destroys those colours which are due to large
quantities of oxygen. It is a strong deoxidizer
a valuable antiseptic. It stops fermentation
vegetable life is destroyed by sulphurous acid
Be. basic acid than two equivalent of H^+ .

Sulphuric acid

It exists in form of anhydride & H_2SO_4
the most important of the strongest acids.
The action of $H_2O_4 + SO_2$ of p. 11 p. 34 bou 327
p. 35. boils with dense white fumes
& snow sulph acid you get an exceedingly low
temperature

Intro. by perchloric acid Aqua regia

Oxides of Iron.

Two important oxides Ferrous & Ferric
It is a bivalent metal also a quadrivalent then

Protoxide of iron difficult to obtain

very little known about it, It gives a deep green
precipitate with H_2S . The Ferric & Ferri compound of Fe^{3+} are
the tests for Protoxide of iron

Dry oxide of iron

It occurs largely in nature in combination with silicon
It exists in nearly all minerals & plants & the mineral
owe their red colour to it; it is an excellent hard
metal. It is found in the cracks & crevices of volcanoes

It is often mixed with clay. The raw silica is nothing
more than clay impregnated with iron. It is insoluble in
water, it is difficult to dissolve in acids

Hydrated oxide of iron is best antidote of arsenic
It is prepared in this way. Take some green vitriol
heat till it boils add sulphuric acid

It can be detected by the same tests as the protoxide
It is a combination of ferric or some other acid
with iron. The blue color is owing to them being in

by mixing ferrous sulphate & tartaric acid. If salt
is not pure the ink is blue, pure salt gives the
jet black.

Excellent test for per. oxide of iron in Fe

Magnetic oxide of iron

It is a mixture of the proto & ferro-oxide. It contains
the most iron of any of the ores

Ferrous acid is obtained by mixing iron
filings with water & its weight of sulphuric
& decomposes rapidly

Compounds of sulphur & iron

two of importance

Iron pyrites is derived from gold by pow & mix in
nitric acid which dissolves the pyrites but not gold
Comp of Phos & Iron is of no importance. It may be
det

8 NaCl
14 H₂SO₄ 1205
4 H₂O

Testing for arsenic

See that your Hydrochloric acid is absolutely pure
old.

Arsenous acid, Fowler's solution, arsenic acid and the
substances generally found
when in contents of stomach

Metallic Ionics

Iron

This is the chief mineral tonic, it enriches the blood, invigorates the system and improves the functions. It is often given in combination with other medicines. when used as a tonic it should be given in moderate quantities and the use should be continued for some time as it is slow in its action. give three or four times a day after meals while there is food in the stomach.

obstetric's 25/1/70

Cervix the part is an oval, separated & 1 mm thick
a spindle in shape. The effacement of the neck
the near app. of cervix, & small of cervix app. at diff. periods
of gestation dur 3 mo. it is lower & more in front & pushed to the
right side of the rectum. In last six months the cervix rises
fully the ascent of body mounts up above the beak of the
fundus for 2 to the right change in size vent of uterus
as follows fundus is det. part of the body. In 1st mo
the abd. cannot be detected & the fingers cannot reach upper
part to detect any. In 4 or 5 month the fundus may be felt
about the anterior wall of pelvis. It is quite above the
pubis in 5 mo. it rises then we feel part of umbilical
& finger find the enlarged body of uterus. In 6 mo
it is as high as umbilicus in 7 month it may be felt
half way bet umb. & lower end of uterus & finger readily
detects the gl. part of uterus resting on symphysis & within
the clud. head. by end of 8 mo. it is as high as navel from
umbilical & the abdomen in 9 mo. the uterus will
scarcely not obs. by in. elevat. of fundus when on con-
full. lower towards end of 9 months, difficult
to touch the os. in course gets very high at up-
& back part of

Quickerly this is due to act of more of child
fetal motion can perceive about $4\frac{1}{2}$ mo of last
month have been conformal with direction con-
fused of front into abdomen, but peculiar
feeling accompany, such is diff. in that produced by move-
ment of child in womb. At fourth month the mother
can see, feel, this on her eye in upper part
& may perceive & this is seldom seen thru 8 weeks
for gest. nature of general def. described
it is like the tickling of water, sometimes as pulsation
& others as a fluttering, all of fetal motions
or sanguine discharge. Motion has been observed
may be felt at intervals by the mother, all lab-
period it is easy to see the movements. These
places, the hand on abdomen will produce
kicks, we labour under the clear advantage
we must trust entirely to the woman, she
may in faint tell us she has felt these
Whether motions are felt, is that certain evidence that
a living child is in uterus? it is not, for in some
cases the intellectual sense the parts of organs, part
& in some cases of abdomen muscle decrease when
the uterus is only to personal contact from

from one end to the other. at other the like contract
a one point. some women have accen the power
of contracting the abdominal muscle in a complete
quickness, may be postponed, when the 5-6-7-D month
in some I never occurs & the mothers in these cases are
wasting. It is seldom that you do not meet it
Chester in Annie diff of pers as to this sign.
If none of per woman is put in way & exp in high
any place. when put in it is a ad whitish clouded
& has a nausea adom. per whole contracts
as seen & makes in cloudy, flutter. The urine in
become more impid & opaque. No change is seen
in surface part but in 18-24 hours a ring
on all both. clyt granules appear in many cases
& in some instances they unite to form a thin
transpare under layer. the am soon thus for
several days & manifests the pec signs of it
upon 2-3 day soon soone. to transparency, diminish.
the ring in clouded, clyt relax, adom is stronger & a
pellicle may be discerned form like a nebulous
strait but gradual clyt, clearness. these are
evident on 3-4 days. the pellicle presents a shiny
opaque upper whic grows thicker the more

sap is under impregnated, small grain which is
white column & crystalline & is like the layers of put-
in cold water, by 5-6 d, the pellucid is destroyed, & is
debr precipitate & forms a white crust on the
p. There are reforming granules which the pro-
agreement tint now supplants, on 5-6 d,
the turbid, of the column increases. perhaps
then commences & a 3rd cell receives more
which perhaps engenders on oxidizing uncer-
-tain off a strong cheesy odour, not clear at
what period. Do not doubt at this mon-
-thick says after 1st month. This not of course
a del. con. It consists of crystal of triple plus
a third case, fat corpus & fungus growth
various opinion as to what it is to be attributed to
some conclude that the passage of air into the
can then show con with lacteal secretion
Nervous that it is an over secretion of agolyzed
matter. The air as follows, not always in
an of young women. It has been seen in
healthy pers & in those of pers with p. disease
Obs agents to fix, & other say, the in 89 case
to cause it app in 68 in 11 was not performed

in 30 cases of kind expect per that
of all but 3. In 50 & can conclude that the p
is of importance is of in. Can from in some
of with Phthis & c. some say that the can that
that while & cannot be raised or high as a ay
happens important corroborative proof. on this
account should not lightly set aside. Dusky hue
of vagina. This is one of the best marks in signs
& is present from early for 7-15 week when
other signs are uncertain. It commences in 4 or 5
week. till delivery & ceases with lochia. Lochium
is of a violent hue. or a kind or dusky hue not
confined to vagina & on mucous surface of vulva & on in-
side of myograph & on the oblong of growth & it
is more intense mark at upper end of w. not uniformly
diffused but in patches. may be absent in some
cases but very present is a pink
vaginal pulse. the arteries in menometragia
& parturition are more noted

The Leaf. what its function is & its form
from the distribution of a bundle of
vascular tissue.

Phyllotaxis is the order of the leaves. the stem
advances by internodes and a leaf at leafy end
internode

Two leading types of venation. in one type
there occurs a tendency to veins ^{-etc} repeat to radiate
in other always mixed with lateral branches
leafy part

Sods Hypson Sulphate

$\left. \begin{matrix} 50 \\ 20 \end{matrix} \right\}$ builded with Sulphur

Selenium

similar to sulph in all its properties organ
ic as a red precip

Selenium

is even rarer than Selenium

Chloroids

Chlorine forms the type. all of them unite with
17 # and are monads strong affinity for meta
+ non metals

Chlorine, 33-55. sp gr 2.4

This Hydrochloric acid is obtained from ch. sod by
glauber. this acid was called muriatic acid
Chlorine is made in two methods
~~any body who ch contains~~
colour pale green, odour disagreeable. acts upon
lungs most violently. antidote wet a hand
kerchief with alcohol & breathe it, as it
absorbs it quickly, soluble in cold water
to extent of 1-2 volumes. when exposed to
pressure of 4 atmospheres it condenses to a green
liquid. Phos when put into chlor takes
fire of itself & a little O is present it burns
various metals will burn in chl as in
oxygen without being heated. Gold leaf will
after a time be attacked. Chlor dissolves
in water but the solution spoils in time
most curious property of C is bleaching power
all substances bleach if the chlorine is perfectly dry
It acts violent on all compounds of Hydrog
which of peroxide C H oxidized on by vapour
dense black fumes arise strong affinity
for all decomposing animal substances

Sulphur can be decomposed by chlorine
valuable as a disinfectant

17/10/70

Undersy
MacCallum

Menstruation, continue

The duration of menses is from 4-5 days
5 may be taken as order duration
but many women has her menses peculiar
some for 2-3 days with the menses for a week
in the variations be quite within the
limits of health. The quantity is sub to an
amount which is com^{patible} with health in
women is menorrhagia and then
just 3-5 oz may be taken as an average
a good way is to see the number of napkins
needed to give a change of 3-4 is a proper
number for normal menses. If 7 or 8
the flows, excessive. The quantity seem
to be influenced by diet habits & climate
grade in rich & indolent women than
with the poor & inductions, the
amount is not the same than the
menstrual epoch, to see if flows more
during the 1-2 day more during 3 & 4 & then
diminishes neither is the discharge always
continuous. It is not clear & stops

for several hours or even days. Moral
anxieties, depression, cold may determine
to menstruation. The condition of the whole
ut is modified, the decline of blood to the
organ makes it bay & darker, finer &
looser. In the vagina, the Fallopian tube parts
of the uterus & the black matter. The canal
of the os is more dilated at & subject to
the mucus. A cancer to the uterus would
strictly a contraction of os at the sphincter
muscle to the uterus & is one of the
author in utero flow a marked increase
of vascular feeling. The retention of the
The cause is depend to the ovaria, to which
connected with evolution of ova follicle & connect
without, it is found that in women with pro-
act of present ovar. even when the sexual feel-
is strong but in whom ^{the} the uterus is deficient
ovulation takes place, and it is possible
& c. no sanguineous discharge occurs even these
cases a show from the ovula, epistaxis, or a profuse
In cases when ovar have been & perhaps the
menstrue are stopped.

Large number of red is courses of over 6
pass from the cavity of uterus. A row from
the pores of uterus. To the apex
uterine mucosa even swells but body
& neck. In uterus it formed a valve, men-
strual epithelium easily detached & shows
a red work of blood vessels. Thus in men-
struation was thickened, comp of uterine glands
& filled with cylinders without cilia. Struc-
ture below uterine gl corrasp of a network of fine
fibre, nucleated fibre & amorphous
uterus covered with mucus, surface
of fib open, vagina in men, pale
with a thin layer of mucous, it wants
for this is that the inner rim of
the vagina that of gestation

For says that it is deciduous by month
Lyle Smith is of opinion that mucous mem-
is broken up & its debris discharged dur-
each month, & the blood is called dur-
break up of men, & the duration of men-
corrasp to the hirs one in this decade
& some of her

nature of discharge can say say the dirty
the milt, prove that the reddish is acid
viscous, the blood being dissolved by acid
it has been found covered by blood globes of
plate of blood, mucus from glass is expelled
spun & exhibited. Whilehead has shown that
the milt is alkaline as it comes from the ovum
but become acid in the vagina, this fluid
has been chemically & courses of treatment given
to blood, it was sup that milt has diff
in the absence of it in milt is milt
that the cause of no coagulation depends on the
acid secretion of the vagina, when contents of
ovum is milt is coagulated in uterus, If milt
is milt sup to milt the acid secretion
it coagulates out of the body, The symptoms
is attended with a peculiar odour, it milt
in milt milt, the de milt, the
line it is milt, or milt of milt, milt
habits of milt. The status, milt a milt
from 9-26/16, the milt milt was at the
age of 4 1/2/16 in form milt milt milt
on milt of milt. It was the that

in Anterior or anterior occur in women only
& in a colourless state & in some cases
& that in children in torrid zone and become
more numerous, The difference between the
stomach etc is 2 yrs. The ~~Age~~ is 13 in the
& 15 in Engg, In Tabernacle it is 16. Other cases
hence illustrate as the increasing number
of extreme civility, much sedentary occupa-
tion, refined by demoralize
measures which prevail in centers of civi-
lization, all these react on the uterine organs, thus
menstruation appears earlier in child of such
race has an influence, English child seen
in India would & vice versa
The cessation of the menses takes place at
45 yrs but periodical variation
known to occur at 35 & some have none
at 60-65 perhaps 20 yrs & stop then to occur
20, month the period would be 380
The cessation rarely takes place suddenly
but irregular circumstances, a variable
period of time, this is called the "dodging bit"
over from a few months to 6-7 yrs or, 2 yrs

a general indigestion, of nausea, lumbar
pelvic pain, colic, flushes of heat, & sudden
& spontaneous of chilliness & perspiration
as regards men that they suffer post partum
sometimes the epich. cover on by slight thick
may be excessive. a vaso flux of ill. it
replace the flow in uterine of each, in my
of cases the troubles are slight & disappear
disease declare themselves. which before were
latent -

Changes in the uterine part of the
ovum, these results in formation of
decidua, this is a membrane which un-
derlies the ovum & is of the
nature of the chor. I conceive ~~that~~
process of reflex. the form will
the uterus & leads to the condylo at the
time of the ovum this are in contact
at part when ovum rests upon uterus
up to a recent person I even thought that immi-
grated the uterus on its end was
a membranous sac & the ovum sees the Gale
enter the uterus by pushing before it a thin membrane

& thus consider the d. reflex. This assumes that
the ovum has the power to detach this membrane
& the ovum is sometimes called
like as in person that Dec is not an ovum
Dr. Allen has shown that it has all the struc-
of mucous mem of uter. the for an ov large
enochete the simple glands become comp
the mem is soft can hypertroph. & fills the
uter. & the ovum may exit at any given point
in all the mucous mem const the D. vera
as to the D. ref. Gooden & Co. say that colloid
matter accum from uter. follicle before
it about the term the 2nd class of em. the cells
had power of prothrombin. The small ovum
into the air is embedded in air fluid
which comes with the above. is the uter
Acc. to Hunt the d. w. reflex is for the fur-
ly the metamorphosis of the membrane
he thinks that the Ova and the uter is const
in soft & being more than & is. the diff
can be the d. when first form it differ
from d. w. in consist of all what
D. vera has. The part of const. contains

a case of an albumin chat & adenoma to the
 ovary, "hydropenone," Blood passes thro
 the uterus of Dr. is smooth the uterus was
 of number of cupped dilatations or "bladders"
 contain whitish fluid. Uterine coly. below
 last seen at 2 3 months.

Surgery Pro. Curcups 25/10/70

~~Dysipatas~~ Boroli a small tumor of a purple
 color says slowly an painful & may, 2 1/2 end
 of use aches & mineral acids, cod-liver oil
 nourishes iron & Sun chlo Pot & ^{X-XI} acid of iron 3j
 of in Plethoric upon local low diet & Lij, Potasoxv
 other times a dgi. local Dr. of cusp. by about
 any mil, or paint with Iodine or by con. incision
 & more easily useful in acrop. Uterus with
 poultices punctures or cover with soap plaster
 or soap sugar & the carbolic swabs ^{4 full is in use} is useful in
 the organ. Carbuncle ^{or anthrax} more formed, sometimes
 felt painful spongy swell, of indur. of dusky
 nature slight elev. circled & circum as it
 when it becomes hard & brown & cells has shrunk
 & shrink away at ear point & the star color cells
 has shown through & dark imbed scars pass

& all this, the prog is slow, const, unbroken,
app. unaged & in men & all their women. Local
make a piece on & upon was the old plan
of multilensu & pen in this may be done
but not generally signed. Use piece of adhe plas
or wrap ple on thick leather to get opening as
collodion has a spot under. A powder to the
spreading, the danger pyemia, If the virus
arise medic with carbol & condy, pull the sloughs
away as soon as possible. some but little can be
& sup. it on place see part & kill the skin & cells
sub & the appol, & powder with oil, sometimes
are substituted in. Use in in Ch Pot. Carb
are & bark, & sublimed pot. were & brand,
, see are small cut for & clear out the wounds.
Purp. rubrum is an exuberant, a fatal
form is facial carbuncle & come as a
pen on upper lip & on a few days on
the face is a hard carb. with & acids
in olive pom & D. open to no good if
seen in the flesh of caustic, use 24 hours the
side face is involved. In Carb. carb. carb.
spot worse, carb. acid

Dysreflexus can be seen in cases but to be
seen, must be seen, & complete other very clear
account can be made to make all way of
Inflam, spread rapid & change place, local
also internal organs, a blood driven cause,
a circulatory or con of. Drunken & rap
pious way, & is so epidemic. cold moist
wounds & it is contagious as to all such nurses
& scab wound old sores are not reliable, like
hoops seen & occur in bad, ventilated hospital
in crowded wards, cont of put unaided matter
under such a type wound very attacked
to be seen to several parts, 1st Ex tend skin
cut Ex, 2 Phleg or cellul. cut, 3 cellulitis
or diffuse inflam & has been seen in Neck or
arab, periodic, & in Locomotive. Trauma
Simple Ex, after ngors marked for pulse
coat put, arachnoid out in 24 hours. may
come on circulation each const. Ex, of Ex
may on finger an swollen & a red black,
surface, less say, in this order it comes
in the other of aff & is of a high red color
pressure, after internal, with for reason in

& a big sensation & strong pain. eyes swell
in eyes & secretion when much debilit pale. nose
open rapid, & ears empty in mind looks very talk
place in any office when the glands of neck are swollen
& painful. often see these symptoms even the
long effluvia, inflamed or he has caught the ailment
under it is more liable to a return. Doubtless my
infl in some form point, face & head the neck head
ache. tension growth & full pulse & asthenic type
lemon of discharges of eyes & tendency of epistaxis
& diarrhoea in age of youth & advanced it is a
found disease. brain apt to be implicated
in heart adults it is common. Fract. of cond.
sympt^{ic} ^{type}
or asthma or aneurism & for by paroxysms
& for acon & acon or veratrine or Belladonna
~~or~~ of it runs on to lower asthenic type of
for part, use Fr. Menten. xx d. 4, 3 & 4 hours
& may be combined with gum, or nourish
liquid food. Local fomentations used with op
or with a plaster, & change the hot cloth for
around with glycerine. Catarrh is relieved
3 self in part of meal, it should be in 1 lb
or velp ^{2 1/2} to 3 of fluid. If leucorrhoea is present

a fine lanceol & pen rapid the skin cold to be
ought never to be used, Floux is a pen down small
& same may be in of ten of two but you have the dose
& while hand may be used deage - fleshy part, use
Lundages of the pen

Cellula. cutis moniformed, count of graft
of four part pen do, & the three of two of four
of game & collapse, ridges of a dark color swells
at first soft & is often in feet than, but in
a normal eye hand when when by early large
vesicular form with a bloody area, pain, intense
tension & throbbing in the pen are done here
in uph. By seen in person & of left breast of lesion
in Sanguis. if it extends deep the entire fascia may
be destroyed in some cases amputate is require
T. sub. is in of seen in, small pen, and, a small
for edg. in the, then certain, ch. Pot. In of green,
Chile of pen & Linnæ in large dose, & bones liquid
no, hot ferment & elevate when skin is hard
& leave their first incisions to the fascia, some
in form of long incisions made them in dreamwood
form on the whole of the limb, plus with in
of much less, & agh. was even found once with

sub oil or any lead & the gallie was redwood
 & being dry, if sloughy occurs the she must
 be pulled any. full incision an imperious dis-
 her for discharge of the sloughs. A scirrhous
 as a proccesor is a swelling of the glands of the part.
Cellulitis has no confinement & may
 arise from wound, it is seen as a firm of
 any soft part ever than spinning, with in-
 creased heat & redness & after dough occur
 crepitation, among infolubus some time
 provide bile glands. Full incisions, stone
 & seen as local forms. It is seen by a blood from

Tumors 26/1970

Amorphous under the microscope, composed
 of unorganized, began not delineation & is very
 to new growths, but largeness quantities
 or covers great and small parts

Tumors are called amorphous when they are
 & herough when they have no circulation
 - occur in all parts of body, especially in glands & cellular
 ran in soft & soft tissue, may in depth when
 any what matter & in kinds to men. color as
 pink and by good will of tissue the act

Inf attacked a liver acts in a depressed manner
May be removed in various ways, by abscess, or by
slough, or by cauteries or ligature, & to the knife
to determine the choice of means we go a distance
In in Flesh, & Encysted, or come you globular
and or cyst when flesh, ones are solid & when
the natural text a sac containing, fibr. fatty
or meat. Encysted has a regular sac filled
with var. in, & they vary from liquid serum
cheese or honey, occas. black melanotic & imbed
by dated. Cystic. Simple or Barre. & Prot
Sacs contains some fibr. & Prot
Some pooled tumours are seen by cond. collected and
when forms a barrier may have no such limit
some have no tendency to communicate & be
in Innocent & Malignant. In which in the
of long daily life & tend to be ulcers of
a long bleed or called Malignant, they are
all heterogeneous. Inoculation similar
some hold a middle place as Scrophulous
but can be absorbed or broken down by slough
Simple solid tum. 1 Haemidula in
Fibrous plastic. Chronic Hypertrophy when

It is a new cut, as in the note by J. M. S. who
told by the vessels, seen made up of cellular
blood vessels, & glands, subcutaneous membrane
& muscle. When cut into the natural texture of the
or form condensed, when it has acquired a
the mass is large, smooth surface, with a fine
a perfect nodular, brown of colour, and with
rapid growth under a column of surface, when
is cut into, a smooth fine granular appearance
is to be seen, under microscope hypertrophy of the cells
variously shaped. It is most readily
absorption of gas, imbued of iodine or an
all over of Hg, $\frac{1}{4}$ of a portion of mercury with 20
Chl. & the carb. of Pot. \times - 20 grs in cup of water, with
it may be prepared with sodium bromine, or with glycerine
in iodide of zinc or tin, growing up when thin &
tender, see Whistler's an. & only to possess
of iron can, section should be allowed
and diet, & to give an of liquids prohibited
of obstinate you may remove the knife, when cups
is done & it is not turned out of as can
the arteries has formed muscular

28/10/70

Fibrous net with in sides of neck & other
maim in various places under the skin. It is
found to be cartilaginous, dense as the horse
with a nucleus of gly calls desmoid. See
of cellular dysplasia, when cut, fibrous
inclusion with naked eye, slender undulating
filaments, has an irregular surface. comp
& firm feel, grows in color in a cyst, except with
hardest of all samples. not rare painful &
slow growth, some contain cysts. (See cyst
of Bern.) (Paget, fibro-cellular) grow to cause
use & ~~cause~~ differs from sarcoma in that
no pain or cure with removal of disc
rotation of skin, & ceases to grow after a while
Fruit samples of tumor of skin if deep
situation probably not leading to cancer, & the
form however do. These that occur, are called
Necrotic fibroid of Paget. tend to occur after
amputation & some of the forms have tendency to
involve internal organs. No necrosis
or a softer & less fibrous at each recurrence don't
resist cancer. don't affect lymphatic & of course
perfect health, not constitutional affection.

Very cellular nucleated cells, imperfectly developed
In distinct connection removal, none is not
confined to it. The most embryonic the most
likely is it to occur again, removed by the knife
when internally, occasional

Cartilaginous, Enchondroma, simple growth
in short bones, has often grown to size of porous
egg. dense, eventually, the osseous structure
requires due according to situation, another variety
is found rapidly, sometimes with bone
apt to occur, & affect internal organs, except
to soften and break down in the center
Another tumor is called Myeloid neo-
plasm, connected with bone, like the structure
of marrow, vessels, sometimes, contains
containing so much blood, removal of a part
is to be unless very small.

Fatty tumor, ten varieties are known, & others
in appearance seen even fat, less granular
grown to large size enclosed within capsule
this has little or no attachment or connection
with blood, irregular in figure, skin
not discoloured, deeply irregular gray

no pain. exam soft doughy feel met with
in perfectly healthy persons in women more than
men. met in several places in same individual
do not become dangerous, but it is inconvenient
grows to a large size, sometimes it gives the feel
of fluctuation, when exist as an independent tumour
is not amenable to absorption. It can be turned
out with the fingers, sometimes, deposited in
lumps met in back neck these should not be
removed by knife amenable to absorption. Try pot. out
for long time, Lond. Pot 3 to VIII 3 a, 3/4 of 1/2 of 1/2
a compress. Bromate of ammonia in
5-grs doses is the modern remedy. Ulcers left
alone. Neuromatous seen only of small size
but it often, and of tumors & cut nerves that
this when the has not been cut is of chess, & is
painful situated immediately under the skin
remedy is excision, when cut with for a completion
of fibrous character & often follows wound or blow of
nerves. of upper end of thumb it is usually so much
or else with scaly, that a second cure is nec
met in a thumb, of forearm than in any other part
Calcareous some be found about the neck

Mammary here is a cross adder

Cysted tumours. Rept., snipe or beaver
compos or Pr. comp of rept. cytob form in rept.
- when for pro dup or per, by or cytob pro
thickness and greenish of fluid or oil with
in the cyt., by the mature of the tumour, var
divid. serous cyts. under skin in mamm

re longue, testicle, when simple ough the
punch cry ed with iodine or paris at
that as a chron abs. Mucous cy com
for under the longue called var

in the recess of obal brethng ducts, conting
very greenish formous, & ing for eye of paris
eye, punch pass out con ducts eye of iodine
iodine, pass a small thru or incise. Synovial
cyts more is common in what called ganglia
in sheath glands called windgalls in horses
eye gnaible, burst with the thumb, or will burst
use much upon, first is below than first
four months 4 weeks brought on by scabby
or on elbow burn inflame & a synovial cyt
forms, the Rues about eye of apple upon Patella
or by Pat. occurs blebs with drops

Such has & pain. If the do not de. lay in
up spec with a trochar & ruyat a 3/4 in bod
Sanguinous cysts proceed from my m. absc
hnd det & water. Cysten ce or seps
accord to rules of covid melich, antheron
scatomatus a fluid or solid matter. all ye
for a pea to walnut either in or under skin
& num in females & numerous. also solid
or lead & be all in face then sacse fluid
white's many outgrow of sebaceous follicles
these are rarely absorbed. sometimes discharge is like
like aphrons turn. if locally inflamed urethra
& suppurate & cause an intractable sore
excised early if person can. in occiput make
free occ. of skin dont cut the bag & then turn it
out. of large size potato, leave a little flap on
surface & may have to cut away the bag, about 1/2 in.
difficult to remove & ha to deal with must of
Leman. mesh with one eyelid & then remove from
the cartilage. work the cartilage & take the cyst
out but not through the skin. Proliferous of
absc cyste sarcoma, Pay Prodyer recalls
met with same form in ovaries than in

when in cystic disease of chorion, Ovaries
unilocular or multilocular, if large secondaries
seen from having several apparent or pro-
vult, either in clusters or singly, project into
the cavity or found in the walls, common
spreadable, met with in ovary, contents
are variable in size & contents, contents
used yellow or deep red color or purple with
increase common in size, & rise to no pain
except to pressure, most of glandular structure
and. This can be absent, or more rarely except
in ovary, a multilocular may become unilocular
covers removed the better. Culcarious tumors
of the uterus & polyp, Mucous or fleshy simple
or malignant. Mucous is known from polyp but wet
& some mucous polyp stovarts, should attend to
valuable to - Corn Polyp soft smooth base to
by size & met in nose cavity, external near along
open shape, & pedicle remains same size, white
fibrous in structure, base is common in cut
at first cover with cut then rise above open
aperture, base smaller deep part painful &
will bleed, met with the surface of old persons
after the come malignant, about uterine vessels
can called piles, In nose pulled out by pos

in when mg. to cut off. pull down & put a nose
glaze on the double leg is exploded, but may
be cut off or stimulated to absorption. Local with
glacial acet acid & Acids, Mercur brown & curate.
^{3/4} Scrophulous Sarcina, under this head of
common disease, then called Kings coil. It come out
in indurated masses peculiar char. Lymph
& sanguinon most fr, far even lymph basin
blue eyes, pupil dilated & tenderness of eye
gritted & even an eruption, skin fine & delicate
a part of the face. Sometimes look of health florid
& soft. In child defecum splavium, feverish
irritable & liable to attacks of dinea. May except
in severe Caustous it is great the nose, indurated upon
wonder, sluggish system, moral & intellectual
faculties blunted. Scrophul is inherited, some
passes over a generation, altho' heredit it do
not equal well marked in P & Ch. Noords
of circumstances, what are under to lower
the constitution, it is also obser to my
in of open & healthy persons to whom guardly
exposed & scurified. Cut every corner
& exanthema are frozen & cause are outbreaks

of the dis. of phth. due in part to cause
scrophula in children. Non-contagious
by way from scrophulous father might come
to wife through the child. Presents diff.
appear. product of soft brittle unorgan
molar assembly chess. met in absence
under the skin in the glands or, from milk
it seeds others eggs, called Tubercule. Me
it come of molecular granules. These are
small round irregular grey of pus. It
is unshelled & ragged edge contains granules
mixed with old globules & mixed with imper
fect epithelial cells. It is incapable of generation
myself in quiescent for years, or degenerat
int calcareous or softer scrophulous. Do not
con't depend on event of power in the right
to form itself matter. It is a perversion of the
nutritive. Two forms, grey yellow
form a small white tree like deposit in
the lung, yellow larger, occ in large masses
1/2 - 1 1/2 in d. grey approx condit & the yellow
an advanced stage & undegr. fully degen
all extant liable. infants & are mon ab.

5-12-14 years or later scrof. at pub-
erty at discharge. 2 internal may come
it is rarely developed after puberty external
females more liable than males, In skin
in eruption, on scalp occasionally of
gland of neck, these become permanent
from deposit of subcutic, progress is slow
softening goes on slowly & finally it suppurates
& bursts, malodorous process is slow & impure
& a blue scallous occurs as left after the healing
sometimes it is deep in sub-cut all hair & in
long with out any pain then, softer spongy
abscess. Serosa membrane of joint as tubercle
be affe membrane sub is deep, heads of long bone
in cancella of them, & costalages & synovial
of the in vertebra in fibro-cartilage sub, bodies
soften & finally caries, In progress the soft
parts cover become aff & pass down the spine
& form Psoas abscess or Lumbar abscess
Serosa membrane the body, in lungs periton
arachnoid all subject to see. Lungs most
frequent than any other. Effects of const
in noddy sup. at low the acuteness

slow & indolent, wants the acute pain, Dis-
ment. Prevent scurvy, form moisture
special all to prevent develop of scurvy
a plain healthy diet, animal food eggs milk
rice & vegetables & some a wine when
ripe fruits, warm clothes, must in of air
well ventilated cool sleeping rooms, when
it shows itself the early may be kept by
in oxygen tent. In Plethia in the dose
of iron, but not well born & avoid as a rule
mild men on alkaline canal, regulate diet
Bills upon vom of iron, expressed of the
nut acid. Dec saws & ag. Calc. In sum
to see coast, when actually form, soothing
plain diet, protect from cold, compress
of 3 2oz Pot & 3 oz water at night but
use of iod. & Iron. Cod liver oil, with
pimento wine or poor if not well borne
3-4grs to a drachm of cod, Iodine of iron with
iodide of Potash is useful, Eucaly is iod-
chlorine of Potash is useful, if given ad-
ther will cause absorption, the rest sh-
be checked out even to faint, blister of

very slow, of blue & straw green with cream Pt
Hypophosphoric acid & borax & put even with cit-
ric acid & call chemical food

Malignant Tumors

1. M. we mean ^{all} each as seen ^{half} pass a new
lex^{turn} & escape of partly a present or ady. L
L on a portion, & 3 on which can st
all under cancer now, sub. Schismus
2. Enche or soft- 3. collagen or felt. 4. Mel
enoid, 5. Epithelium & conclude with
disc of facial fungus & Lupus

Schismus or hard, the tongue by Greek P
to all open sign of hard, but limited in
to those which term in cancer, this is seen
found in firmness & cerebra hardness
not a homogeneous mass, in neck of bands
interiorly full up with a light brown bull
sub, the disease from center of tumor, there is ex-
treme toughness & resistance, when sch is in
a small size a thin, concave on surface
but in a deep fur of fibrous, & of cell
variable oblong or spher 700-1600 gm
lay much in sun or more much in 11°

by person or so a quantity of milk juice
with cells as met with. cell wall frozen
invisible. I ch. dived in acule schro
late time by the access in adverb marks
slow per. from, more vascular & softer
when attack a hundred year baby for some time
like the bubble about but soon it tend
extend along the absorbents more rapid
than continuity & they are shown, launty
though not admitted to size of cups
large breast. cur spy on of them cover
at - glass per. ovaries, ch. ser. ra
occ below middle period 40-50 sometime
in younger persons. Mr. Birke's 450 cure in
20-30, 19 case, 30-40, 100 C, 40-50, 193 cas,
50-60, 97, case, 6070-34 cas & gradually
induces. Monp in 7 then in M. perhaps the
drug of life may have something, Disperiment
wash do in. In cities more than country, deep
out of pts to come rous is more of coffee
the enlarge m & under called into it is a abuse
bad food, unhealthy habit, & dep of moral
or may come on with out any local cause & on

Language

more pleasa than one, greenish yellow color
 cause Death. contain in Blood & sepes of Milk
 Fells of 2 or 3 days depos. on pt, but must may
 be concealed by the fat, in small waels one view
 typical curies shows by cracked end of integ.
 or it, knotted feel of tum & joint hardness with
 in part to size ~~retraction~~ of the nipple, accou
 to concave contra of the mass & the bound
 distant cancerous. Pains as peculiar albu
 leucolaty & painful to handle. With except of
 cancer no dise. remains greasent for a long
 time & indurativ. When in a case is aff
 pu or secor, the milk dries & though abse
 when death comes a cast of a little, on
 appear of numerous ulcers, painful, edges
 hard, irregular shape, deep, scooped down,
 spongy, painful dark purple bloody & fetid
 hot being pain dully extit. be more from it
 & tedious by the part done name & indiges
 comeson. loss of appp, opp. ^{some enough} breath, dies sudden
 than in rapidly some a few case ulcers
 when myzpus with little change, one
 spot exceed brillencies of the bone & ar

ops to break on slight irritation. Cause, In-
ent. Is a low or cont? such as to blow
abscess &c. these can only be seen as excite-
cause, there is a condition of system, & mode
of development of peculiar cells, breaks of
in app. perfect healthy persons, & may later
be cut & become constitutional. Treatment
no specific most fatal & intractable form
of organic disease - no medicine can cure
nothing but complete removal & then recovery
will take place in many of cases, when it
when it can be removed & nature ought to be
left if no doubt remains. The time would be
often allowed the disease to extend when it could
not be removed. A late operation is worse
than useless, an excision of the gland has
been tried for cure, the most useful for palliative
one. nitric acid of chloroform as most modern
express to vapour of chloroform. sol arsenic, per
Oxon, cod liver oil, iodine & bromine & iodine of
it being to delay. Local use poultice with corn
Hyoscy. with ext of leaves of late Carb. & ascal
acid with gum turp. Flus & citric acid
by destroying with chloroform with saffron
in a paste with flower of oz of a penny app.

When slowly & delicately introduced, it is not
read if it may be under a piece of rubber
Beneficial if it involve only the front sub maxillary
gland and not involved & it will occur in a less
painful form & its duration is shorter
Secondary cases usually get it longer & is pain
less, when may be seen by cautery & one when
excise may be called, with harmon when imper
to remove all no operative particularly suspect
is seen to con into a fatal purulent, nodes
abscess. Chances of success are better if ulcer in the
stage has come over, whole organ is removed
cut wide & free in heart. Soft cancer
is leucosphaloid or medullary, fungus haemalode
This is like anubula of brain, is in masses
or fine membrane partitions, seen in
as firm, this is either some whitened or
purple, section exhibits numerous bloody
points & look like a cog, In any tissue
no free intellect, man, bones, eye, cut
cell in, lung, stomach, like hard leads
to spread by contiguous & also more in along
formation occur at all ages as a rule in whole
life than hard, majority of soft cancer of the
appe resemble an abscess, skin is hard

Raukesler, Class of food

Class I

Alimentary necessary Food

Group I Mineral or inorganic

in a soft. I. like bone under eye, Med of
in a soft in the eye. This is a mor fatal
dise in 2 years, when in deep part lead to
to impure in long than tube, pain is uncertain
possible sensation. Microscopic of cell like has a
brown run more fluid & less tube in tissue, cells are
tough packed together. This leads to open & rupture
& soft substances it does to elongate. Then become
blue when it opens a soft fungus even shoot out from
the opening. Such fungus beak bloody, very matted
profusely, a symptom is a pale yellow complexion
in soft app. connective tissue confined to one organ
disease to its function more rapid than the pain can
not move on the acute, a matted condense body, salt
in case of flat connective tissue condition, period of
life is. Inherent, no named, all local app. infectious
to any amount of disease before lymph gland. as if
followed by relapse, the body is attacked it is more inc.
open on in the last years.

Classification

SubKingdoms

Classes

Acotyledonacea { Thalloginea
Acroginea
Anoginea

Monocotyledonacea { Endorhizea
Exorhizea
Dictyoginea

Dicotyledonacea { Gymnoginea
Hypogynosa
Epigynosa

Obstetrics 26/10/70

Ballotment, this is an exceedingly valuable method, it is of two kinds, viz. external when only the feet are palpated or internal when the foetus is the most delicate should be replaced in a semi-recumbent position as to make the axis horizontal & then the hand is lowered in the pelvis. Advise that the bladder & rectum should be open, the index should be used but the vagina & a part of the cervix & the perineum not touched & pushed. be careful not to touch the uterus, the other hand may rest on the abdomen, a deep inspiration of the patient, when it has been taken a rapid gathering pressure against the uterus with the fingers, if a foetus is in a head position will recede from the finger & will fall back against the finger with a gentle part if she is standing the index finger should be used on a venous with feet looking forwards, in making the blow, it should be given below the umbilicus & below the umbilicus upwards. External Ballotment - best position for the woman on her side on the edge of the bed & when the abdomen projects beyond it, one hand placed on the

ridge pella & others above, if fetus a sudden up of
lower hand properly the fetus up & it will gain
descent on the other hand. Different mode is as
4y pogastra rehs place worn on side with hump
nas on on these with chol depressed, the ju
is above the penis, the period is betw end of 4 - m
of 6 months but will vary according to cream but by
feels, amount of gas, towards 7 months it is
most clearly recognized, no longer pierces at begin
of 8 or end of 8 months as fetus is too large, were pro
spectively of little room in os uterine

Signs of anxiety abd, sounds of fetal heart & often
suffle. First applied by Meyer of Gen in P.R. of
decls not out det. pr, but life of fetus, come for much
phc. times she been comp to better of watch made a pit
more frequent than mother pulse, 100-160
often accelerated or diminished without any obvious cause
pr unless as age of child, this rate is alike at all per
of fetal life, it has a metallic harshness in some cases
The intensity is directly as the period of gestation, at part
light spec stronger as gestation advances
space will vary 3-4 inches, also exist one spot
when max exists. May be heard most frequent

low wall more rays in median line
on lumbar regions & in neck of umbilicus. rarer
I suspect most cases when sounds are central
& sounds are equally audible at opposite sides. In many instances
twins, rate of pulse should be equal & such with
maternal pulse; they are never synchronous in twins
the pulsation may not be heard although the child is living
child may be small, feet weak. This lying on her back
change her position. In course of 4-5 months
The value consists in its being given the other signs being
be ignored & 2nd & 3rd when been decision of pulse
when not heard not to be considered as non-evidence
of fetal progress. Certain precautions bowels
stomach, turned down off. As in umbilical case
she should be in a recumbent position a sheet over abdomen
& noth when held it & the abdomen a piece above in room
& examine soon in inguinal region. Uterine couple
is the best before any other, not given before 4 months
of age when uterus becomes an abdominal organ
not well by any other, in any part which
near pulse & ascends from neck to neck seldom
in fundus uteri or lower region, come a hour
some cold blowing over both & covering over of pulse

or musical, or soft & distant sound of the sea at
some far or near distance, it is synchronous
with radial pulse of mother. When path ceases
it is though to be produced in walls of uterus, 1st
the same sound has been heard in fetal tissue & just
2^d it is often heard as whole surface of uterus, present
for a short time after delivery, period when placental
fetus has been born. Upon in place or near it the
drum when present in room where it is present
in any position, press should interrupt the murmur
as a sign of pregnancy is valuable. If silent be
in up any time sound becomes interrupted or
suspense of breathing. No proof of life of fetus
1st should remain beyond of 3 months, you have no
sign or sign on which you can place piece of rhubarb
from your own cups or continue of menstruation, bit
of black varicella, stomach & vs. uteri. Dark, color
of vagina or dark abdomen may be present or when
rough or the may be conscious of varicella seen or
at 2nd in 4-5 months middle of the period you
least may see of abdomen. You ought to be now well dign
with deep as before. Determinate. Smear may be felt by
mother, the song & heat heat in & in or dark

columns dark abed in, & ball formed. As it is much
the structure & circula fully formed in the upper
arole, a 3 in 6. & under month. dev of abd size
of the tumor much varying, and diff pt of child long
marked rec with sun surface, after state of v. & shortness
course. In case unworkable rule, to collect by possible
part of before we promise an opinion 3/10/70

Duration of pregnancy

imp medical legal bearings, by English laws
It is now 9 calendar months or 40 weeks, not
exact for a few days, with 273 or 275 days
280 days or 40 weeks, two or three days.

1st is period of human gest fixed at 40 or
2 if not, what is longest what shortest
in which a living child can be born
40 weeks embraces a large number of cases
but is it ever exceeded, gestation is not fixed
40 weeks, what is the longest period of pregnancy? Simpson
in 58 cases durat was 37 weeks, in 75 it was
38 weeks, in 122 it was 39 weeks, in 192, it was 40 weeks
173 it was 41 weeks, in 99 it was 42 weeks, in 63
it was 43 weeks, in 20 it was 44 weeks and
upwards from 302 - 326 days Simpson in 14 cases

336 days & 22 of 3, these result to long gest
except from part of lower animals. Cows 285
days, Earl Spencer found same duration in cow
as in human period, in 391 cows 243-301 days
were the limits, length was 284 days. In mares
considerable variations occur, the law is that
"the term of gestation is not fixed but variable"

Dr. Meigs has a case of 413 days, mumps 337
days, there are remarkable exceptions

What is the shortest period? This has
drawn rise to much discussion, 1. a calf 4 1/2 months

& lived 50 days, but doubtful, Chr on 167 day
or 5 1/2 months & lived 8 1/2 hours, Fleckhorn, at 2 5 months

or 175 days & live for a week, Mr. Fair's relate the
fact Chr on 171 day difficult maintain the live

live for 24 months & shed of new ones, Would you
believe she that gave to 180 days of embryo
but after that it may live. Duration mumps

is 1st that it is not fixed to 40 weeks, 2nd
that longest period is uncertain, it exceeds
300 days but not defined, 3 shortest is 171 days

when extreme care and attention are
at 180 days more certain, so calculate

duration time of concept must be determined
2 nodes 1 is to calculate from ^{last} menses
9 months or 40 weeks, this has advantage
of being general in application, but liable
to error from uncertainty of exact time of
conception. Most likely time is during mes-
truation. In calculating a mistake of 3 weeks
in order to avoid error the middle point of cat-
amen period is taken 2 is to date from
1 sensation of first kicking at middle pe-
riod or 4 1/2 months after menses cease
Cause why it should be 280 days, it has been
referred to development of body of foetus,
state of pelvis & cervix uteri, lungs, trunk
& every cause is change going on both
uterine decidua lining which tend to part
at the effect separation between uteri & dec.

Diseases of Pregnancy. Many condi-
tions arise, many ailments an exaggeration of
symptoms of pregnancy & arise from sympathy
of the womb, most common conditions
that result of mechanical pressure displac-
ement

Chylo-poietic disorders, nausea and
vomiting these are symptoms when with
in excess occurring persons. evidence of health &
not of disease, usually, sometimes comes on at 7 am
from perpendicular position of uterus. The morbid
sickness may continue through the pregnancy
& may come in the morning and last all day, when
it is extreme & give rise to intolerance of food.
If not relieved death may take place, peritonitis
gastroenteritis & the imbibition gives rise to train of sym-
ptoms not often met, emaciated exhausted cheeks
eyes custer, cheeks fuller, eyes depressed, pulse
quickened but weak, tongue dry & purple, bowels curdled
rip gas tender, expression of suffering, fluid vomit
vase somewhat clear & thin sp. mottle yellow
green, sometimes it ceases spontaneously or may
continue till the end of gestation. Treatment
depends generally of disease & period of pregnancy
in high cases at all no treatment, in severe cases
must see what time has on it, when it is severe
relieve the secretions to peristalsis one eighth
of Druf Colic 3 Bicarbonate Xgrs. 2-3
in Acetic Acid, stomach with.

retain good some ofl open of Balthus 200
a poude con gr & Bismuth & 1/2 grs of morph
Salicin is used in dr 3-5 grs, Cocaine in
1-2 dr, in pill made with bread crumbs
Sump rice sabbogrenni, but - 12 grs. & made
2-3. 2 gr Nit Cer, 1 gr Distrit of the, with
without 1/2 gr of morph, 1 gr of Peperum
Chlorofo 3 dr usual. Effervescent dr
42 gr Citric acid in A. B. W. & simplest 3
42 gr Mica Pot, & a tablespoonful of
mixed, Champagne & bottled cider good
form & name when used may be useful in
uterine complaints or sacrum, or if
injection into rectum & vag, B. Cladon
13 + 3 of length to cover uteri, when much
pain in epigastric pr with fever, a few
beds. to part of stomach is useful, or
bleed from anus. Conducive to epigas
tric region, or large poultice sprinkled with
Zinc opii, quiet & able, diet of liquid
Kne in small quantities & when stomach is least
irritable or enervated, the cod-liver oil in emulsion
when all fail & debility cannot be arrested, then long
about resubion of the ovum done & delivered too

take a period. No choice between life of child & life
of mother. Depravation of appetite in some better
than at other periods in general it fails & pers
a met in whom a peculiar aversion to articles of
food and a morbid desire to repugnant articles
alkaline and saline nature often simple &
tardies & sometimes disgustful & musty foods
and sometimes amon t Morbomania, these are
accosms with disordered stomach, long loads
& exhalations of plain fluid. Inf con of pers
have been found after death, indulgence with which
prognat vomis is treated cure these desires the grat
fed, this is wrong, oppose firmly. If a sign of
to some kinds of food let them avoid. Little medical
is needful & must be useful & period of opening
bowels. Respergula & Inf Calumba, Hof man and
dyme & opm are useful, If ecate be used as 10grs
of the ca lode. 4-8grs such News 8grs Rhew
diet bland & nutritive, As most fauces abate
in 3-4 months you may counteract with
Pyrosis. This - met with in later half of pregn
any reflexion of gravid uter on the
mental amount. derang bowels & certa

articles of food. Complains of burning pain
at pit of stomach & eructation of bitter fluid some-
times sometimes occurs, no constipation, dis-
turbance. In every case destroy great
Indigestion when slight. Change diet. Food
irritation to pit of stomach, dose of blue Mag-
nesia acid of benefit if antacid medici-
ne. $\text{Zinc Magnesia Calca 3}$, or Zinc Amm. 3 Tr ,
 Cinn Aqua 3 Tr Aqua 5 Tr . Two or three table-
spoons, antacid table spoon of pure water with
milk. X. XV min of Pota by in bar water, show
antacid find use acids some dos of acetic or mineral
acids. bowels attended to in all cases & laxative will
be called for, pain in some case so severe gen-
erate, distress to pit of stomach or irritate
pharynx to regurgitation. Cramps in stomach
& duodenum. Do them called attend to the
causes of cramps like pain in stomach
& some cases abortive. Causes derive from
irritation of bowels, errors in diet & mental emotion
or bilious calculus. Full dose of Zinc Opi XV ,
 Chloroform xxx min will give relief & the
remove the cause. Alcoholic purgatives

A may create a chonfuterus & umbilic pits
which may be present. A Billa plan is used
over the stomach, leeches to epigastrum, Tonics
in intervals. prep of sup. Int muc acid & sup
x m to $\frac{3}{4}$ inf. Constipation this com
in preg. send to occur more in bilious than in
limper. degrees vary in ordinary cases the
in few days any excess or over 1-2 3 weeks
amount is avail. in 14 parts Causes 1st to any
act of genital system & dur. eneg of tubes
2 loss of diet 3 press on the uterus,
4 for of vertes of the on gut; or 5 - cramp
are for more umbilic, of tubes, 6 legs, &
undulant habits of Pys & worse, In slighter are
pet complains of uneasiness & dis comfort &
headache or absence of mear & fluid blood in
small quantities. In may only where con is long
the course of headache or dullness & dis comfort
sleeplessness unple. Durus general uneasiness
might in abdomen. Stomach disturbed appet dim
vomety occurs, pains in abdomen & fluid were
mixed with tender in, pains may be mistak
for labour pains. Hemorrhoid occurs in these cases

Should this continue till labour it will be dangerous
or pentoneths magnesium & persulphate per
along slight constip in pregnancy, to which
per may be relieved by castor oil or Pul the Co
& after this may give clearly a pint warm water
or gleet, after evacuation an astringent one
will be in Dec of oak ba³ & poppy heads
& must be retained, & in small quantity or
Dec Cinnamon 20 in Laudanum, this may
be sufficient, Comp Sones & aperients

Ex Taraxacum }
Ex Gentian } 40 grs
Com Rhu Pul }

Sub Iron 20 grs. Div into 24 or 48 Pills

Two night and morning, they act efficiently,
or Ex Tarac Comp Rhu & Sub Iron 20 40 grs
divide in 24 pills. When false pains occur give
5 grs of calomel followed with 10 Rhu & 20
Drog of Tur op & Chloro ether. An astringent
& open of medicine is sufficient. Do it artfully, this
should be scooped out: softness with water

Diarrhoea has frequent accompaniment
& in some cases an evidence of its presence

some a prodigious labour in north cure &
be considered as a disease. It will extend by
its own accord. Such was, in frequency & character
may resemble colour & water. milder attacks un
y pain lessens occu present, when slight crust
does not sympathize in perspiration, when ulcers
occu pain is great, long & pale segment, etc
hot, thirst, appet diminish, stools as the bow
& offer in of obstr seem may cause abortion
work form may prove safe, be careful not to mix
with the looseness for diarrhoea. Co Per Costa xv-
xx & dos in 4 hon or Chalk mix with Kino
alliative are use Hy Dry cum Croci & Dovers, Van
Blues ad other has to acetu Plum & open Pelt, Wh
much less a dose of Ol Ric with 20m of open
of lichen with 5 & slash eye

Disorders of circulatory system. Palpitations the
are frequent & in average health, open due to
debile hyperfermable, some feel in after con
or at quitters on end of gestate. Attack may be
occasional deep of point in continue days week or in
pale with to many, see the new mov, Pulse count
in redent in con, ans from shock or cur

actly the N.S. as mental moods, and, especially, a
worn heart. In women of acute febrile and most subjects
program and larger of the etc. & later when and a
mass must get aorta & pla occur. Other than
mental smothering placidness, different paper more of diet
within of the third change & plentiful, or organic disease of heart
as eye for along pass place in post most any & of robot
a small quantity of blood on of delicate or anthesis over
and a curm sur val, avor sp can chlo cath or aspect. dur
cut since, pass of avor sur sur sur, state of digest
orga regulate diet - light amount in little food in nervous
head raised & pillows in the night - fatigue avoid

Syncope or Faint, most frequent at junctions & occurs at other
times in those who do not suffer from syncope. Occurs
during menstruation, weakness, & delicate women. Immediate
cause disturbance of cerebral circulation. Involvement
of chords. Acent of pale mental emotion great extent
oppressive signs & adorns heated rooms also induced of
inflammation & plethura. Burns of the face has not with a
fatal syncope in early stage. Stroke pale in veins
to head thro & collar air to blow over the face. Loss of
the eyes, spasmodic convulsions over face, for some stimulus
come brand, emetic. If in severe position, long near
the face of the face the position, between attacks of
in a moderate course 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Chinese

Emetics 3/11/89 W. H. Allen Lecture

~~Zinc sulphate~~

Ipecacuanã as used in med consists
 of the root of a little plant called *Cephaelis ipecacuan*
 grown in South America principally in Brazil. only the
 root is used in medicine when dried it
 is about the size of a quill, slightly notched
 looks like beads strung on wire, hence
 it is called *annulata* ipecacuanã
 consists of the *central* corky part which
 is the active, the woody or inner part
 is inert. It breaks with a clean fracture
 colour dark brown or blackish sometimes
 reddish tint. The plant is a small
 shrubby one grows in moist shady
 places. reduced to powder is of a buff
 colour. It belongs to the natural order *Gynochloaceae*
 shrub from 1-3 feet high. corky part
 is easily reduced to powder. the floating
 particles when *in* ground sometimes pro-
 duce spasmodic asthma. several
 prep are extracted by alcohol & boiling
 water is an allusion called

emetic, it was supposed to be in composition
with an acid species. acid: when pure
it is a very powerful emetic. It is a white
powder, moderate, very soluble in both
water. ~~in composition~~ An emetic

dose of pure emetic $\frac{1}{2}$ gr to $\frac{1}{2}$ gr, but
varies according to the purity. Ipec. has
been highly recommended in certain forms
of dysentery. $\frac{1}{16}$ gr of pure emetic has been
known to produce severe vomiting

Principal effect^{etc} of Ipecac is produced through the
8^m pair of nerves. pure emetic is 3 times as
strong as impure. $\frac{1}{8}$ gr of emetic is as
strong as 20-30 grs of ipecacuanum.

Powdered ipec is locally irritant, capable
of producing irritation of skin for considerable time.
It is slow in acting & hence not valuable

Powdered ipecac taken in small quantities
proves a tonic in indigestion. In too
large quantity will produce irritation
 $\frac{1}{4}$ - $\frac{1}{2}$ twice or thrice a day before meals is
& most useful when food lies heavy on
stomach. small dose even stops

excessive vomiting arising from other causes
In very small dose it provokes alternate as well as
vomiting & has an influence on the skin
dose for alterative is from $\frac{1}{4}$ - $\frac{1}{2}$ J. diss.
me advantage in using it as an emetic. It soon
produces vomiting & is soon thrown out
if it is given in excess; ordinary dose for dysentery
20-30 grs if the dose is thrown up repeat in an hour
large doses seldom produce vomiting unless there is
congestion. The large doses should be repeated in six
hours. Spec is highly spoken of in treatment of menorrhagia
& epistaxis & some speak ^{of it} in uterine hemorrhage. It is
given in haemoptysis & was recommended by DeGraaf
It is not so good when general prostration & syncope
is required as far as cure timing
dose for emetic from 20-30 grs. given at once
dose & repeat. sometimes you will find patients
who will vomit at $\frac{1}{2}$ gr hence advantage of giving
it in divided dose 1 dose for infant $\frac{1}{2}$ - 1 gr
as nauseant for adult 1-3 grs & repeat in
3 or 4 hours. Some of spec made by macerating
1 oz of Pulv Sp in 2 oz of wine. Emetic dose 1 oz
with strong wine. = about 2 grs of Pulv Spec $2\frac{1}{2}$ 53

more frequent, given to children smelt & dose
of 10 min 1 D = $2\frac{1}{2}$ grs of Pulv. Venen spec
is more frequent as expect & nausea
10-20 min for adult for child 4-5 min
Syrup spec. is twice as strong as last Pharm.
= 30 grs to oz form it was 13 grs to oz this
made even. The ex. get with syrup of m
2 oz being mixed with 20 $\frac{3}{4}$ ^{of syrup} $\frac{3}{4}$ in drs for adult
 $\frac{1}{2}$ $\frac{3}{4}$ 1 D in $\frac{1}{2}$ dr to dr

1. com pill of ^{spec} Conium Pil conio cum ~~2~~

Pill of spec & squill 1 - 7. ConPup. Poor smell

Comp. Powde of spec Dover pot + in 10

Venen spec 22 grs to oz

Draches of ipecac $\frac{1}{4}$ in each

morphia ipecac $\frac{1}{12}$ grs each

Dover pour 1 spec 10 grs dose 5-10 grs

child not more than $\frac{1}{4}$ grs 2 or 3 in 4 hour

spec is usually followed by powder on spec

pure smelt is crystals & white. impure this

has small deliques in air. bright yellow colour by

addition of nitric acid

Galium some call Indian Plant

not in B.P.H. but in all American works
that ord. Rosaceae. small shrubby plant
west-coast & ^{two} *Urtica* *trifoliata* & *sp. pulchra*
~~leaf~~ is used in medicine & works like yucca
not a deep mark transverse. It has a
slightly reddish tinge. wrinkled longer more
than spec & trans. less general apper
very similar. consists of thick brittle
reddish cortical portion & has the same
woody cord as true yucca. taste is bitter
& disagreeable but not acid. water
extracts its principle. Galium is known in
small dose & emetic in large ones
not much employed in this country
emetic dose is 20-30 grs. tonic dose is
2-3 grs. expir. dos 2-3 grs

Panguinaria

that ord. Papaveraceae root is used in
medicine. small perenn. plant sent
up a petly white flower. about a thick
little fringe irregularly contorted with pores.

roots attached to it, when fresh it is in pieces
2-3 inch in length, abounding in an oily
coloured juice. when dry, change its colour
becomes orange red instead of pink red
the powder is red, odour is somewhat mas-
tice, water & alcohol extract its principle
a bitter principle in alkaline ^{caustic}, it is obtained by
digesting the root in pure alcohol & filter
through animal charcoal, this an
active emetic with some narcotic proper-
local irritant, taken in moderate dose
it excites the stomach & increases the
the activity of secretory organs, in full
doses it vomits freely & harshly, not often
given as emetic by physicians more in fan-
cise, used as an expectorant by Phys
it may be held as much superior to pue-
dore for emetic pur 10-20 grs dissolved in water
as a nauseant from 1-5 grs
emetic dose of ipec 1 gr at 15
emetic dose of ipec 2-4 grs
given in chronic aff of lungs, not highly recommended
as an emetic, vomiting severe, hard and excessive

Euphorbia nat. ord Euphorbiaceae

two species grow one *E. ipecacuan.* *E. corrida*,
flowering spurge. milkweed both found in Canada
& U.S. roots penetrate deeply into the soil much
indurated when fresh, yellowish external
interior with the moderns, slightly sweetish
& cold properties water & alcohol, large doses
both vomit & purge not safe in overdoses as
ipecac emetic dose 10-20 grs. dose of 5-6 grs
act on bowels. 1-2 grs as nauseant

Lobelia inflata

belongs nat. ord. Lobeliaceae Indian tobacco

It is indigenous to C. & U.S. flower end of July
small plant foot to 8 inch in height, flowers
leaves scattered small & far between corolla
delicate blue colour, quite small, present inflated
capsules holding seeds, seed in shape sometimes
like an almond, marked with long line & cross
lines, whole plant is a bitter seed once as clove
as plant, impressed on sharp, powder
is of a greenish colour, taste like tobacco, requires
by 212 act. pr. Lobellina, a powerful sedative

more is than emetic, one drop to a calf render
it motionless in an hour, it is a slightly reddish
oily substance, when pure it is yellowish
very acid soluble in water more so in alcohol
alkaline reaction forms salts with acids
at 100° it is decomposed, not generally used in
medicine in its isolated

Powder Lob is locally an irritant but on vascular
and nervous system it is sedative, small dose
it is nauseant, larger doses narcotic
properly in large doses as an emetic. In overdose
it is a violent poison, like Loba when it vomits
it is not so likely to prove fatal, poisonous dose
is not definitely ascertained, seeds twice as strong
as rest of the plant, death usually takes place by
asphyxia, a $\frac{3}{4}$ ^{of powder leaves} has been known to kill a man
vegetable astringent thrown down the active principle
nut-galls, green tea & green u. could amount counteract
the deleterious effect in some
frequently given for relief of spasmodic asthma, not
very safe as an emetic, given in dose of $\frac{3}{4}$ gr it may, when
produces vomiting, if inflammable things be present with
asthma, use depletion before giving lobelia

in dysmenstrual colic will afford relief, in whooping cough
it has been highly recommended, also in cramps,
strangulated hernia, to dilate the os uteri.

It will sometimes fail to vomit, it produces
more depression if it does not vomit
dose for emetic 10-30 grs given in small portions
& repeat dose of 2mct 3ss emetic dose of powder
one or two papers 1-2 grs 2mct 20-40 drops
nauseating for adult-3i. for child 3-5 grs

Emet is made by macce 2 1/2 oz of 20^{6 powder} in 1 pint
of rect spirit percolate & pass spirit
through. This has strength of 5 1/2^{grs} to oz.
a drach^m is = 6 grs ^{13/16} not quite so strong as old time
alcoholic tinct made same strength as alcoholic
made by macerating it in ether for seven days
same strength as alcoholic dose 8m to 1/2 drachm

Penega

formerly given as an emetic, proper an expect-
orant, severe uncertain in action in cases
of cramps it is said to be useful & changes
character of inflammation more recent

Ibuprofen is sometimes given as a
nausea & vomiting agent

9/11/68

Squill (*Scilla maritima*)

sea onion, part used in medicine is the bulb found on shores of the Mediterranean. leaves long rather fleshy pointed. Plant sends up a long slender flower stock green pt is the bulb dry up in autumn fresh bulb is pear shaped, concentric layers like an onion. outer thin scale most reddish average size of bulb 2-4 lbs some 10 lb. two kinds white & Red Squill, white is generally preferred when dry it is yellow whitish brittle pieces strong attraction for moisture, tough leathery, puffy, ~~powder~~ has Squill is moderate but an acrid narcotic bitter taste. active principle an alkaloid, crystal. by head. Scillitin.

In large dose is an acro-narcotic poison as small a dose as 24 grs has been known to produce death, an emetic & generally purges vomiting painful & long continued. The prep at Aetium Scilla, Pillul Spec Squill, Infus Squill. best solvents are alcohol & vinegar. vinegar is the basis of the other preparations. dose of pow 1/2 6-12 grs for an adult.

not an admirable emetic. Powder Squill
is most useful for domestic ^{purposes} dose not less
than from 1-2 grs & repeat at short intervals
as it passes off very rapidly. It promotes a
free excretion from the Kidneys. Dose
is ma mac 2/3 of gr of Squill in 1/2 pi for
seven days. dose is exp & dim 10-20 m
not used, gr in fo

Part Emetic

11/11/69

a specific emetic &c. it requires to be absorbed
The preparation for preparation see 13 Pharmacopoeia
20grs should dissolve in 100 grs of water at 60 without
with Sulphuric it gives a yellow precipitate
Iodide. when given is in form of transparent rhombic
or other crystals. It is sedative to the system given
reduces the pulse lessens the temperature & number
of respirations. to produce these effects it is not
necessary to produce vomiting. It is believed that
on the secreting organs. Rawson was in
habit of giving large doses in inflammation
when given in as full doses as the system will
bear without vomiting it reduces the pulse
from 120 - 30. occurs if difficulty occurs
in establishing tolerance mix with morphine
antimony when given freely impoisoned as the blood
as mercury, but not in moderate doses. Astringent
is an appropriate diaphoretic in high fevers when opium
is contra-indicated. Inflammation a valuable
remedy sedative to the heart. Given simply as
an emetic it is given in early stages of disease when
you wish to disturb the system. in gonorrhoea &c &c

When we wish simply to evacuate the stomach some
other emetic should be given. Large doses
of inflammation have sometimes produced fatal
results. In children the prostration from free dose
of antimony is very great & always should be guarded against.
Local effects of that of an emetic, is for use as a
counter-irritant. It brings out peculiar pustules like
cow or small pox, a very useful form of granular irri-
tant apply the emetic when a blooded surface
as long as sometimes occurs in children
is sometimes produce even violent delirium
in large doses excessive vomiting, tinnitus, prostrated
feeble pulse, cramps, convulsions, delirium
purging inflammation of mucous membranes
It seldom terminates in death before the
second day. Its results are extremely like
cholera. In cases of poison give mild
emetics & give vegetable astringents, tannic
acid, tea &c. The tartaric acid must be
removed as if absorbed they prove as
fatal as the antimony. emetics give the
stomach, give antimony a large dose in emetic
if injected into the veins. in cases of

cholera by it often expels the obstruction
vomiting is also produced if it is injected
into the rectum, and if applied to a blasted
surface. It acts upon the chord of the heart
this is the most effective gem in aff of liver
for relaxing the muscles, in hernia, distent
medium dose for emetic purposes from 2-3 grs but
it is better to give it in smaller doses but should
not be given in doses larger than $\frac{1}{4}$ - $\frac{1}{2}$ gr
and repeat. better given in water in solid form
it sometimes produces severe irritation,
as an emetic is given with spec. 2 an 20 grs
Bismuth acetum, 5 mch in dose of 3 gr best for
children 20-40 drops
2 grs to

Sulphate of Copper

one of the best & most active emetics we have
conserve in large quantities, used in cases
of poisoning, no depression follows. small dose
emetic & astringent larger doses emetic
& still larger evidently corrosive. not often used
as a tonic in diseased condition of stomach

but in inflamed & bowels chronic diarrhoea
sulphur is resorted to as an alterative, stimulating
the ulcerated surfaces much more reliable
than nitrate of silver. a chronic enteritis
soothe in cases guarded with opium gives more
relief than any other medicines. opium
to prevent the copper irritating the stomach
this sometimes obtained from one of the processes
operating silver from gold the largest
quantities are sometimes obtained in this
way. this is in form of fine, large, deep blue
crystals, inodorous, hard & brittle with
alkali taste soluble in water not so in alcohol
efflorescent ^{slightly} in air, on addition of ammonia
a ^{precip} solution is first thrown down & dissolved
by a further addition of ammonia &
they assume a deep blue color. the am-
monio-sulph of copper. it is incompatible
with alkalis. astringent vegetable
solutions, very highly prized by some in
obstinate intermittent fever but
the hopes have not been realized. some
thought that it would replace quinine

It gives tone to the nervous centres & in this way assists the action of quinine. $\frac{1}{2}$ grs gr
3-4 hr acty $\frac{1}{2}$ gr $\frac{1}{4}$ op $\frac{1}{4}$ gr 2 gr of 1-Plb
as an em in cases of narcotic poison but
care must be taken if too frequently repeated
& not vacillated it convuls violently. If return
without producing vom do not repeat but
resort to other emetics. dose as an em not
repeated more than once, and don't wait
long after the second dose to use the stor
light recom in membranous crops. it
acts immediately & violently. Emetic dose
fluid 1-2 gr 1 gr; 2-4 gr; 4-6 gr, 3 grs of vom
not a very certain thing in crops. The mere removal
of false membrane does not cure the crops. The
formation must be stopped. It has been recom
in baldness as a wash to the head sub par in
pr $\frac{1}{4}$ gr in. oz of Brandy
dos emetic for adult 2-3 grs, 18 Par 5-10 grs
as a tonic & stimulant alternate $\frac{1}{4}$ - 2 grs
in ulcerate of stomach much more reliable than other
Two kinds of vomer produce by copper, metallic cop
is not poisonous unless acid is in the stomach

Salts of copper are all poisonous to a greater
or less extent. acute or chronic. acute
from a large dose. chronic small doses
for a long time. acute presents local
& general symptoms, copper taste, vomit,
somety, cupping pain, araxia, convulsions
broken consent in free admⁿ of albumen
milk, or wheaten flour. which has
ferrous sulfate is recommended
sugar has been proposed. but is not
not to be relied upon. animal charcoal
is only a protector of the mucous membrane
but perhaps it also absorbs part of the
Iron filings, have been used in these cases
their action is slow... In chronic poisoning
we have emacia, mu^{sc} wea, cough, pain
in the chest, a chura red of green or the
beetle purple edge. we have not the severe
white spots that are got from acute poisoning
low appetite & chronic diarrhea. sometimes
results from small doses of copper. but more
frequently from the use of cooking in copper vessels

Sulphate of Zinc

157/11/69

It is spoken of by people who bite them not pure but Zn in an impure form. made by dissolving pure Zn in SO_4 when pure in form of small white, rounded, crystals like sulph magnesia. It has a peculiar styptic metallic taste. It has no smell & efflorescence, is soluble in hot & cold insoluble in alcohol. not ant-poison in large doses but it acts so quickly that it has no time to produce fatal results. Give mild diluents, soothing agents, warm milk, albumen it has been highly recommended in ulcerations covered by false membrane. It should be applied with $\frac{15-20\text{gr}}$ to $\frac{3j}$ with camel hair brush. once or twice a day a weak solution is useful in throat. in chronic dyspepsia low down in rectum but zinc injected is useful 2gr to $\frac{3j}$ in some cases of chronic diarrhoea it is useful given in pill It is frequently used externally. useful in gonorrhoea $\frac{1}{2}\text{gr}$ to $\frac{3j}$. It is also used in leucorrhoea. 2-5grs to $\frac{3j}$ of rose water good for puerles. acts promptly as an emetic less corrosive than Sulph copp. effects are soon over & produces the current vomiting of any of the emetics recommended in groups to remove false membrane as an alterative & tonic it is useful in some nervous

disorders, as hysteria, chorea, in night sweats
in consumption it is useful 18 or to 4 grs by over
in form of pill, after stomaic dose 1-2 grs with
quinine or opium emetic dose 10-30 grs maximum
dose to be given in narcotic poisoning, don't repeat
more than twice, take given in water, dose for smaller
children 1/4 1/2 gr every ten minutes

Yellow Sulph of Mercury

It is not in B or Pharm & it would well be left
out in other treatises. It is in form of bright yellow
beige coloured powder inodorous insoluble in
water, when it acts it does so gently with little
prostration, exceptions to this, it is avoided
when not thrown up completely this apt to
produce salivation, it has been recom-
as an emetic in swelled testicle, it has been
recommended as an emetic in ~~scrophulous~~ scrophulous ery-
sipelus, single dose 5 grs child says 2-3
in over doses a corrosive poison. It has
been known to produce fatal results

Alum

It is a double salt - obtain from alum ves
It is obtain in Naples as an efflorescence on
the soil, alum stone is found in large quantities
in Italy, it furnishes the purest alum
℞ Ph five grains alum mix of potash alum
This made by adding Sulph Alum to Sulph of alumina
It resembles the potash alum that you could not
tell the difference, highly recommended in man crops
by Dr Meigs one of the best and safest remedies
in this disease, very prompt as an emetic
It has been recommended in whooping cough
and may be given with decided benefit but must
not produce vomiting give with some aromatic
in lead colic this unless ^{full} its action is not known
Used as a local agent in many cases in Epistaxis ʒss -
ʒss + ʒ, in piles successful, leech bites in hot water
solution, in uterine hemorrhage, aphthae may be
box as irritant & p.p.t., very useful in narcotic
poisoning. emetic dose ʒss child ʒ

Purgatives 18/11/69

Usually classified accord to activity

mildly called Laxatives

considerable energy Purgatives

act violently Drastics

Subdivisions. Cholagogues & Hydragogues
a good deal may be done by modifying the dose
or combining the medicines.

Laxatives operate with gentleness, pain occurs

results from either undue distension

or contraction. The bowels are loosened rather

than purged by laxatives, they increase

the mucous secretions. Purgatives act

vigorously on the bowels but are not likely

to produce excessive irritation, they may

exhaust the system from the depletion

which results. Some purgatives have

a directly sedative action some on the

hand have a tonic action. More active

drastics are depressing to system.

Hydragogues are those that produce watery

evacuations. applied to saline as well as
drastics. Among the Hydragogues the

Drastics are the most powerful, giving
very often results both from laxatives & purgatives
by spasmodic contraction, in
laxative effect from distension.

in Drastics ^{both} from violent contraction
and irritation of mucous membranes
thus griping should be relieved in laxative
& simple purgatives may be relieved by combining
with aromatics, ~~in true purgatives~~

In drastics aromatics will not be sufficient
with some narcotic or sedative

Cathartics constitute the most valuable and
important class of medicine.

Purgatives alone cannot be relied upon in constipation
the habit cannot be overcome, should always
be associated by other medicines. In treatment
of constipation diet, exercise, & attention to nature
will always remove constipation. Useful in cutting
short inflammatory infections, principally on
the revulsive principle. In very low fevers very
active purgatives should not be given. Rhubarb
and does invigorate rather than depress the
system. Effects may be modified by combination

ation. Sulph. ~~Mag.~~ Carb. magon. Sulph. ~~Mag.~~
Carbonate neutralizes any acid which
may be present. Castor oil & calomel may
be given together. Calomel on liver, castor oil
in bowels below. you have in this way an
more complete depletion of portal system
By combining several drastics the same
effects will be modified. Comp. Cathartic Pill
of S. in effect spreads it's spread over the
whole intestinal tract. The Purg effect is
increased by Conics. Senna will act better if
combined with gentian, gummi, columba,
sloe with asafetida. Purgatives act
best after a fast. mild drinks after the
purgative render it's action easier. They are
frequently assailed by emeticata. they are
nearly always safe. nearly all purgative
medicines minus calomel may be given
by enema. care must always be exercised. In hab-
itual constipation of ^{purgative} old persons, ^{emeticata}
are better than any other. they do not disturb
the digestive process. Between 3 & 6 pints is the
maximum quantity received by reclusa colon

Suppositories. small solid bodies introduced into the rectum & allowed to remain there. a suppository should be 2 in l each and for an adult; wgt. circa 1000 butter.

Sulphur James Bowen

Sublimed, washed & precipitated in commerce. precipitated is the most form for internal use. less gritty; sublimed sulphur given in dose 1-23 in honey small or equal given to 5 sulphur 3 lime boiled together & precipitated. Precipitated sulphur a uniform white powder especially in hard masses dark light.

Magnesia

a very mild laxative cannot be called purgative. carbon mag & calcined mag carb more bulky and lighter. solub of sulph mag res & carb soda stream precipitate wash with aqua distilla. mix with in two forms light & heavy clippings from the density of solution with which they are prepared. dose 10-60gr as laxative.

It is supposed to consist of exposed to a strong heat it dissolves not soluble in water, water containing an excess of carbonic acid dissolves it readily. The chief objection is termed bilious cause obstruction in the bowels. If acid is not in the stomach it does not act as a laxative. must not be long continued as apt to form concretions useful in bowel complaints of children as an antacid fluxiline. Give acids when you suspect constipation dose for child 2 yrs old 5-20 grs sugar & water, milk most convenient is the fluid Magnesia a solution of Magnesia in Carbonate of water, 13 1/2 grs. to 3 dose from 1/2 - 3 Tps for child 3-5 III it acts as a laxative. Calcined magnesia is prepared by exposing magnesia to a high temperature. It should not effervesce on addition of acid dose for adult 3j - 5

Custor oil

First of the true purgatives, imported chiefly from Cuba the seed of Ricinus Americanus oil not so good as East Indian oil, seed are pretty active cathartics leaves are large & fleshy & used to excite secretion of milk at the breast oil obtained from the seeds

either with, or without the aid of heat
when the oil is obtained impurities are separated from
it by boiling with water, seeds yield about 30 per
cent of weight soluble in 1 vol of absolute alcohol
Castor oil may be used in all cases when we wish
mildly to move the bowels. it is not absorbed actg
as local impression. It does produce an increased
secretion of mucus. sometimes it is absorbed & then it
does not excite purgation. serviceable in colic with
tand aumen. highly recommended for children
not a good purgative to be continued at short intervals
less irritating to children than adults dose for adu
3℥ - 3 or 3℥ Child 3 act from 2-4 hours
unpleasant to taste. whiskey & brandy. tea coffee
milk. best way for children warm milk & sugar
Castor oil 3. yolk egg. simple syrup 3 coloring
matter

Rhubarb

Chinese the general one in use. Russian always
in angular pieces. generally a hole through it
Russian lighter than Indian. I find is smooth
& roundish on the outside not as long as yellow
The hole is almost characteristic of Chinese rhubarb
a warming & stimulating cathartic, a tonic &
antispasmodic but probably not a stimulatory one
small doses prove very serviceable in cases of dyspepsia
& keeps the bowels in a healthy condition
1/4 gr. Rhubarb with olive flatule after eating
It is one of the best - I have seen administered after
debilitated conditions of bowels. small doses
of Rhubarb with bicarb soda is very useful
in cases of jaundice. 5th 5-grain FD
It acts as much by increasing the secretion as by action
on the muscular coat of intestine. It renders the
stool quite yellow not to be mistaken for bile
frequently tinges the milk, perspiration, urine
& occasionally the bitter principle passes
with the milk & the pups won't suck
carb of soda careful. Dr. L. Infus. Comp. &
Co Pul. Sapp & Stone

P 2 Lm 2 Inge 1oz

Put Rhu 2oz

capsules 2oz dose ch 1-60, adul 20-60

magg 1oz, 2 Rhu to apt of powder

Sugar Powder

Infusion

Rhu Ror in 2 1/4

boiling water 1000

deep for an hour dose 1-2 3

compill

Rhubarb ~ 3 3 3 III

Loc aloes --- 2 3 1/2 3 II 1/2

Myrrh 1 1/2 ozs 3 I 1/2

hard soap 1 1/2 3 I 1/2

Spapernut 1 1/2 3 I 1/2

Tracle 4 oz 3 II

1 pt in 4 oz mass

lymp

Rhu in powder 3 II

Coriander 3 II

sugar 24 oz

Must of oil 8 oz

water 24 oz

1-4 3 per dose

Tincture

Rhub	2 $\frac{2}{3}$
Cardamon	$\frac{1}{4}$ oz
Coriander	$\frac{1}{4}$ oz
Saffron	$\frac{1}{4}$ "
Proop 2 nd yr	20 $\frac{2}{3}$

dose purg 4-8 $\frac{3}{4}$ 2oz 1-2 $\frac{2}{3}$

Inch us 44 gr to $\frac{2}{3}$ loo shun for purg at

5oz before meals

Emulsion

Rhub	$1\frac{1}{2}$ oz
Mellon	60 gr
Cherry	20 $\frac{2}{3}$

dose 1-2 $\frac{2}{3}$ 33 gr 60 gr

Extract Rhub

Rhub	1 lb
Rect 4 th	10 $\frac{2}{3}$
Water	5 pints

5--15 gr



1 3/4
360

Third Extⁿ U.S. very like the group
Penna, ~~Caca~~ *Cacia lanceolata*

Alexandrian *Stidiam* *seena*,
Cacia elongata, leaves differ from each
other in diff. varieties, the two sides are unequal
in size shape & length. markings on
under surface conspicuous. ~~leaves~~
sweetish in taste, difficult to know
it yields its active to water & alcohol.

never follow *seena* tea. Good it spoils the flavour
seena contains a bitter principle. Cathartic

It grips sometimes, it is more readily retained
by the stomach when that organ is irritable

It generally purges the bowels at heart. It produces
pretty copious increase in secretions. sometimes

it will pass off by other passages. It depletes
pretty from the blood vessels, given in combination

with salts. when given to children infusion is generally
used without the salts. *Saltoseena* in cases of

indurated faces by augmenting the secretion & action
on muscular coat of intestine. when *seena* is given alone

in small doses it acts as a laxative. any of the aromatics
may be given with it. it does not grip as some

if combined with salts. The stools are free & liquid
dark coloured & fatid. Inf Scenna is apt to become
mouldy in a few days & as a great draught it is in
Hyposulphate of soda most likely would prevent it. do
not allow it to boil. pour boiling water on the scenna
leaves wht it stand for 1/2 an hour. give in small
doses enper 1-3 oz milk extract

Scenna \mathfrak{F} ij. 8mg 30gr Bollwort. \mathfrak{F} x dose
1-3 \mathfrak{F} .

Comps mixt green (the old black draught)

Pulp Mag 4oz

Gr Liquor 1/2 oz

Emulscenna 2 1/2

In Cardamon 10 \mathfrak{F}

Inf Scen add to 1 pint

dose \mathfrak{F} - \mathfrak{F} ij

Scenna is sometimes given in form of powder
doses \mathfrak{F} ij - \mathfrak{F} ij

Third ex Scenna peculiar to U S Pharm
is only the sweet evaporated down

Confect Scenna. Sem 7oz Cora 3oz

Gr Lr 3/4 oz 4oz 12oz pulp from 6oz

Tarriagoz 4oz dose 1-2 \mathfrak{F}

Smect-secunda dose 1-4 ℥ ushers as purgative
Syrup-gemma dose 1-4 ℥

Butter nut-

The bark furnishes an extract very like shubarb
dependence affections, useful in; a mild uninvited
scurvy etc. leaves alterative tonic in scrophulous
affections. collected in May or June
aromatic odour bitter taste

* bark is frequently used in family practice
5-30 act more like shubarb than any
other remedy, an active principle jugmanidin
a stimulant & neutral & alterative in dose of 5-10 grs
common by eclectic writers

Podophyllin. *P. peltata*

obtained from may-apple, not the old mandrake
atropa mandragora, common throughout
Canada, not used in medicine, sometimes the bark
in the fall the root should be gathered, the smell of podophyllin
is sweetish tart acid mucous, extract of alcohol
may be used as jalap a little more active more on the
liver. It has an active principle, a resinous matter

consists of two or more series of different solubility,
precipitate the tinct with water, per dose 2 grs
somewhat sedative to the circulation, the powder
of the root may be given in dose 20 grs & the ground
dose 5-15 grs, act Purgative dose $\frac{1}{2}$ - 2 grs
in large doses it purges & produces nausea. It appears
to be absorbed & thrown out through the intestine
effect said to be suppressed when taken in pur-
gative then with soda, in certain dropses P. d. has
been given as a cholagogue & hydrogogue
In convulsions of debility in small doses, used

Jalops *Exogonium purga*

an active hydragogue purgative not drastic.
It comes of powdered roots of *Exogonium purga* obtained
in the highland of Mexico near Jalapa at 6000 ft
above the sea, a long slender twining plant
exported from Vera-Cruz, tubers irregularly pear
shaped. Alcohol extracts the active principle
water does not touch the resin

Jalops with out the starch matter is often drastic
It produces very watery stools. Superstitious action

Com Pul Ja

Sulaps 5- } doses 20-30 grs useful in
Com Jan 9 } anasarca, congestion of the
Ginger 13 } Kidney

Cal & Salops useful as vermifuges

most frequently given in combination with other purgative

12-15 grs of Sulaps 2-3 grs of Cal. Ginger 3 grs

dose child 2-5 grs. do not repeat. Cal & Salop too

fully or give in repeated dose

Extract of Sulaps

Resin of Sulaps. dose 2-5 grs

Cal

Gamboge

gum resin obtained from *Stemodia cochinchinensis*

Several species of the genus yield gamboge (*Heptadenia*)

Gambogoides. obtained by decaying the bark & collecting

the sap as it runs out. bright yellow juice or bark husk

When exposed to the air. the gamboge is adulterated

colour of surface a dull orange. a tawny colour no smell

almost without taste. contains about 70 per cent of resin

a deep concoidal fracture & dissolves in alcohol & ether

see in compounds with sub. & alatyloid. insoluble in water

a powerful hydragogue & diastolic purgative

next to croton oil. violent irritant. these purge

doses generally produce vomiting & do not irritate as much as small one. some late writers state that Gamboge is not the villainous agent which we generally suppose. used frequently in small doses with other purgatives. It quickens their action. It is its own warranted. It acts on the Kidneys. Contained in Comp's Cath Pill about $\frac{1}{4}$ an each pill. Comp

Comp & Coly	12	3	} dose. 2-3 pills
In Salap	9	3	
Calomel	9	3	
Gamboge	2	3	

dose of gamboge 1-4 grs
 Comp's Pill of Gamboge 1 $\frac{3}{4}$ aloes ¹³ $\frac{3}{4}$ Cassia $\frac{3}{4}$
 hars swap $\frac{3}{4}$ ii. syrup in suff. dose 5-10 grs

Scammony (*Convolvulus scammonium*)

a gum resin. Synon. Asia Minor. in

Comp's Coly & Mixture of Col

Scammony (gum Resin). Confection, Comp Pill.

Pill Col & Hys & Comp powr of Scammony

Scammony has an ash gray colour

It is a drastic hydragogue dose of guaiac 5-10
are common Scammony 20-30 less irritating than
same dose more so than Jalap, though its general
effects are very similar.

Platanus (Squarrosus cum) scaberrima
rather greater than pumto genops. fruit
a small oval cucumber. 1/2 inch in length
thickly set with bristles. seeds of flat oval
reddish or oval like seeds of an apple
when fruit is ripe it falls off the stalk &
remains attached extremely & empties out
the contents, the juice contains the active
principle, must collect a little before use
sliced into pieces pressed, strained through
a sieve. obtained without pressure 1/2
than what is pressed. the flat
elongated pieces easily broken, of a green
greenish gray colour an intense acid
taste no cathartic is equal to it in other drugs
poisons. commence with small doses
better adapted to ascites, powerful local
irritant. in overdoses an active poisoning
administer demulcent, by the stomach
section narcotic to check inflammation
injection dose for 1/6 - 1/2 size in water
of 2 hours until it operates
to prep. in B. Pharm., the pure latex is neutral
157

James Powell

Black Hellebore ext in B.P. Ham.

underground rhizome of the plant small
blackish or brownish head about as
much as a straw, a white color in
structure it is named principally from Germany
should be placed up in fresh
contains an active alkaloid principle hellebore itself
it has been long known in medicine the hellebore of ancient
was probably not the same as our hellebore, in overdose
forms emesis, convulsions, atropine, atropine absorbed
dose 10-20 grs sometimes from 15-10 grs in cutaneous affections
Structure of hellebore used 1400 B.C.

Saline Cathartic Wedge See 1400

all produce a peristaltic action & hydragogue
stools all mild locally, with vigorous peristaltic
action on copious liquid stools. Salines always absorb
before they act in the bowels pass into the blood vessels
they pass the round of the circulation & are cleared
by the kidneys & bowels, must be largely diluted.

Neutral Part Potash

made by mixing a sol of carb Pot with
cream of tartar or acid salt Potash

It is deliquescent, taste saltish, said to
have been used as salt in some sea voyages

It has been recommended as a mild saline pur-
gative after the admixture of blue pill. It is

advisable to dissolve all saline Cath before
use. See Potash chaphostic & expect

It has been largely used in febrile affections
of child & adults, in cases of hepatic congestion
pur 3ss - ʒ

Acid Salt Pot. Creamy Part. Bet
found in grape juice obtained from

it also in pineapple & several other
fruits forms a crust in barrels in

which grape juice is fermenting, color
more or less reddish. If a warm concentrated

solution is allowed to cool a crust (cream) is
formed on the surface, the addition of a little

borax will render it quite soluble

It is used in the preparation of a number of substances
may be given suspended in water if in small doses

without being thrown dissolved, but if in large doses it must be thoroughly dissolved, it is laxative & refrigerant. given with other cathartics, useful in excessive lactation, frequently given as a laxative combined with sulphur, a similar mixture is useful in piles. This with out excep the best diuretics we have it must be given in large doses, less than half an oz per 24 hours, $\frac{3}{4}$ - $\frac{3}{4}$ in 24 hrs if you have abundant secretion it should be given in small doses & frequently repeated given mixing up $\frac{3}{4}$ in juniper berries tea or weak port & a bit. & drink a wine glass full at intervals of an hour or more, per dose $\frac{3}{4}$ - $\frac{3}{4}$ not often given

Sulph Potash

not used in this country as a purgative used in Dover's powder, ~~can~~ very gently & hard Mrs. Laxative in form 15 - 20 grs purge 4 - 63. This is unobvious & slightly bitter taste not very soluble in water & exspatiates when thrown into the fire

Bisulphate of Potash

not given in character by modern writers
as they are prepared by adding a little
sulfuric acid to the salt which decomposes
after the preparation of tartaric acid
It is a white crystalline substance and is
soluble in water in weight of cold water
dose ʒss ʒij as laxative, and it has
a tonic effect when used more frequently
used for cleaning green glass

Potassium Chloride

obtained in various parts of the world
not often given as a purgative, or used
as a laxative. ʒss - ʒij should act as a
purgative, given with cold water and
It forms an excellent saline after a purgative
It stimulates digestion, generally, and
is particularly useful in respiration affected
It appears to be a necessary constituent of
healthy blood, a weak solution in
bath very useful for rheumatism, &c.
Dose ʒij of salt to a gallon of water

sufficient for an ordinary bath, Hot by salt
from a useful counter irritant in some
cases. It is sometimes given as an anthelmintic
usually given by injection. ~~It has been~~
~~applied to internal aneurisms & as they sometimes~~
~~tear in.~~ in treating poisoning by arsenate of iron
Chloride of sodium is the best antidote. It is largely
used in the prep of calomel
It was thought that the use of it in great
produced scurvy, but it has been shown
that it is not the absence of salt - but the absence
of certain salts of potash which the sodium
drives out of the meat & the loss of fresh vegetables
which contain the Potash salt. As a local irritant
salt is exceedingly useful in hemorrhoids
1-3 teaspoonful almost certainly arrest the
bleeding. how it acts is hardly known. a strong hot
salt bath is said to be very useful in some cases
of diarrhoea

Phosphate of soda

In preparation of this bones are calcined & treated
with sulphuric acid & water. the sulphuric

It is what is called trassic or glass sand
1 pound

This is in form of fine large clear rhombic prisms
they rapidly effloresce in the air. Soluble in
aliquot quantities of crystal of stront. moderate
soluble in taste & common salt. insoluble in
alcohol soluble in 4 pts of cold & 2 of hot water.
Its only advantage is its saline taste which
enables it to be taken easily. It was at one time
thought that it would prove useful in disease
of bone (osteomalacia) but this is proved
useful solely as a mild saline cathartic
dose large owing to water of cryst. $\overline{3ii} - \overline{3i}$

Sarbo-citra of soda

recently introduced said to be preferable to
citrate of magnesia. Last and

Granulated efflorescent citrate tart of soda

Citrate of magnesia

These three are fancy purgatives. They are cooling
but not very efficient.

Sulphate of manganese

not in B.P. but in U.S. Disp. a beautiful rose
coloured salt. diss. protoxide in sulphur
acid. fumes evaporate & crystals
produce it when dissolved must be heat & carbon
of manganese. to precipitate any iron & change
the colour. This purgative in from 3i to 3ii
produces liquid stools & is best to produce
free bilious evacuation when blue pill has
failed. in large doses it has produced general
inflammation of the abd. visera
has been recommended as a tonic & alterative, in
anemia. Dozard has recently affirmed that it
is comparatively worthless as a tonic, as an
alterative it may be more valuable
dose purg 3i. 3ii 5-15grs as alterative

Calomel ^{#S₂Cl₂HgCl} Hydrarg. Subchloride

This said to have been used in Europe first in 1608 but
was used in India long before. prepared by efflu-
a combination between sulphuric & chlorine
Calom 3i, lime water 1 pint constitutes the black vomit
useful in syphilitic ulcers also a disinfectant

This one of the most useful & the most abused
in the *Medicina Medica*. Its influence over the
glandular system is very great. It modifies
the conditions of the solids & fluids, it is a val-
uable alterative & cholagogue. when in large
dose it is sedative to the stomach, controlling
nervous irritability. It lessens the vascular
activity of the stomach. doses of ʒj to ʒss have
been fatal but these were probably edwign
severe gastric abdominal pain. and the
It has been strongly recommended in Asiatic cholera in
doses ʒj - ʒss every two or three hours, such large
doses are not justifiable until we have tried
large small doses. maybe useful in small alter-
ative doses in the commencement of the disease;
It is one of the most valuable alterative/purgatives
in febrile affections, care must be taken in
the administration, it should be combined
with vegetable purgatives. In typhoid it
must be given cautiously. In formation of false mem-
branes some say that mercurials are serviceable
in inflammation of serous surfaces, in croup it
is used the the next after ipecacuanha.

Hydrocephalus is said to improve under the use
of calomel. In meningitis inflammable & fibrile disease
of children calomel is regarded with great favour.
In some of the exanthemata it is useful, not
safe in scarlet fever. In small pox it is not dangerous
but they are not well borne. In measles it is
often useful. In bronchitis opneasides a combn
of calomel & ipecac is exceedingly useful.
In anasarca calomel is indicated. It
must given in moderate doses combined
with other purgatives. In erysipelas calomel
often proves very useful. It may be given alone
or combined with vegetable cathartics.

Calomel & Jalap is often useful as a vermifuge
for children as are also in the commencement of
bilious complaint. it modifies the secretions, & mitigates
its force. The purgative power of calomel does not
increase with the dose above a certain point
from 5-20 grs will act as strongly as 3i-3ii
full purg dose 5-20 grs. dose child $\frac{1}{2}$ gr.

Blue Pill. Pilula Hydrargyri
Has same strength as Hydrargyrum creta
The usual 2 pt merc 3 con opposites the mercuric

3grs contain 1gr of mercur



it is a soft bluish mass. the mercury is in
the form of metal not of an oxide
this is mild but efficient after act after powerful
purgatives have been administered
5grs of the full of colocynth often given
in combination with vegetable cathartics
this is seldom given to children difficult to make
them swallow. this is milder in its general effects
than calomel.

Pilula Hydrargyri cum creta. 1-3 pts
1 pt metallic mere 2 pts prepared chull
a grayish blue insoluble heavy powder
this is thought to be milder in its action than blue pill
and is most frequently beheld as an
alternative. It modifies impure succine the
secretion from liver pancreas & intestinal
glandulae dose for adult - 3j or 4j
1/2 - 3j as alternative dose for children
purg dose 3-5grs to ch 5-3 years & 1-2grs to ch

Cerebro-spinal Stimulants

Treatment of narcotic poison is simple
 if a certain part has been removed from
 the stomach - not give an emetic. Stomach
 pumps does not remove as well as emetic
 if food is present it will block up the tube
 or if the pieces of poison are large. If the emetic
 the instant should be used. The sulph Zinc
 or Sulph Alumina which is perhaps the best
 Sulph Cupr mustard, gamboge may be used
 do not repeat them too often as they may
 act chemically if they remain there destroying
 the coats of the stomach. not more than two doses
 should be given, abuse may be given freely
 titillate the fauces with a feather
 after the administration of as much of the water
 emetic as you dare give. ipecac. water should
 be given freely with whatever emetic you may give
 an infusion of nutgall will precipitate most of the
 active prin of the narcotics. magnesia will precipitate
 many of them. coffee & tea may be given to counteract
 the effects. the alk prin of coffee & tea may be given next
 with the emetic. snuff may be given. belladonna

Two varieties of Turkey Opium Scamantingell
Opium the best in the market in cakes from
1/2 lb to 1 lb 1/2 lb broken the exhibit a granular
aspect, leaves placed around the pieces, the B.P.
describes the pure morph. grown in Asia minor
Turkey opium ought to furnish 6-8 per cent
morphine the other varieties use much less
than the taste is bitter unpleasant nauseous
a brownish colour. Opium is a light brown
when dried it is easily powdered. water dissolves
about 1/2, alcohol 4/5 of Turkey opium. This is com-
very much adulterated, dilute acids exhaust it of its
active principles. Sulphuric acid dissolves the odorous
principle & narcotine, opium of this kind is called the narcotic
It is one of the most complex articles in Mat Med. the
chem. morph. n. v. c. the most important are
the morphine, acet^{an}, narcosin, codein, meconic acid
is useful in med. & legal. Codein is an alkaloid
resembles morphine though weaker, closely allied
chemically, but a wide difference in their power
not as reliable as morphine dose 1-3 grs. Narcosin
only recent introduced, price high, not to be depended
upon, dose 1/2 - 1 gr. It is so strong that the narcosin

Narcotine It is obtained by digesting the water
extract in Sulph ether. It is met with in
white needle like crystals devoid of taste
very large doses may be given without producing narcotic
effects. It is useful as an anti-periodic. It is bitter
the salts are also bitter. acts powerfully as a diaphoretic
It is found in opium to the amount of 2 per cent.
not generally used in medicine.

Cryptopia & Strucium produce convulsive symptoms
Strucium has lately been put in the market by a
gentleman in Detroit.

Extr. Opii contains all that is soluble in
water. made by dissol in water filter & evaporate
Comp. Pill of opoas is an opium pill. Op. 1 lb
swaps 4 pts water for sup. 5 grs contains 100 grs
use glycerine instead of water if you wish to keep them
only a dose of 2 is in the name

Confec. Opii mix pow opium & 1 gr in 40
may be used as an anodyne in colic & diarrhoea
An ordinary dose of opium is 1/2 gr - 2 gr
if about is suffering much pain increase the
dose. In small doses from 1/8 to 1/2 it produces

~~P~~ ~~Balloy~~ ~~Prophylaxis~~ ~~725~~

a stimulating effect more than a large one, stimulation is produced by a dose that will not produce narcotism, in injecting it into the tissues the stimulating effect is kindly manifested. It may be given either by mouth or rectum, when as an eye drop the fluid preparation should be given the injection or infusion in some soothing vehicle. It may be given as a suppository. In central cases it will produce its effect much more quickly when given by the rectum. In giving it by rectum the dose must be increased beyond that which should be given by the stomach.

Dover's powder - about 1 gr of op^m in 10 grs of acacia
Anaphrodisiac & expectorant. it is exceedingly valuable in Bronchitis spasmica in adult and aged people also debilitated system.

Balleys sedative solution, Ligivon op^m sed.
An old medicine the old preparation is lost it was probably a watery solution of opium its strength is a little less than the Dutch op^m dose 10-20 grs.
Thiis are numerous in U.S. most of them

are opium alcohol water. dose the same
as the tincture.

Proctor's preparation is similar to the denar.
etized kind of opium has the same
Campbell's opium Paragon's contains
about 2 gr - to 3, modern leafpans are
larger than the old ones.

Opium 40, Benz 40, oil of anise 30
powder 1 pt, macerate & filter. The
camphor oil of anise & benzene acid
give a stimulatory effect to the mixture.
dose for adult 3i - 3ii for child 8i
increased with age of child. It is a useful
preparation.

Junk's Opium made by dissolving 3j in pure
spirit of wine. This contains 33 grs to 3
4/5 to 3, dose 10 - 25 min. 14 min = 1 gr of opium
Vinum opii take Ext opii 3i cum anise 75
olive 75 for Symp 3xx. 22 gr of Ext to 3i
dose 8tt xx.

Acumen al. An. Opium opium, Saffron,
Benzene acid,
dose 3j 3i 3 = 5 grs.

Amn Pow Chalk with opium 1 in 40

a nice preparation useful in diarrhoea

Comp Powder of Opium. Kern. opium & Camomile

wh. double the strength Pulveris 1-20

Comp Powder of Opium double the strength 1-10

opium black pepper, ginger, cardamom

Opipha

24/1/70

are all aloid, & represent the narcotic strength, it exists in combination with mucic acid, a solution of ammonia precipitates the salts

opium & generally contains a little narcotic

sleep after dissolves it out. Almost insoluble in water, in cold alcohol, & opt dried

acetic sulph. HCl acids dissolve it readily
Lact. bitter dose $\frac{1}{8}$ - $\frac{1}{4}$ gr

Acetate, Muriate are principally used

as emulsion but 1 gr opipha = 6 gr opium

the other the 1 gr = only 4 gr opium

Acetate by more dilute acids and with morphine

strongly the morphine is decided by it, it is in

slender needle like crystal dose $\frac{1}{8}$ - $\frac{1}{4}$ gr

They may be applied externally or hypodermically

The salts are supposed to produce the soothing

The pain, contraindicate in inflammation
obtain, contain an active principle Hyoscyin
dose of the water of solution will debilitate the pupil
induces vertigo between the eyelids. I m. c. & extract
in general use: dose gr. ʒss - ʒ
of opoponax leaves, it has a sweetish taste
in greenish colour; Extract isaponate the
expressed juice of the fresh leaves, dose 5-10 grs
as useful a narcotic as opium

Cannabis Indica Indian Hemp
more reliable narcotic than Hyoscyamus, frequently
used in this country, does not produce constipation
nor does the force but not the frequency of the pulse, said
that Indian Hemp confuses while it excites; also from
a volatile oil & resinous matter Cannabis, fragrant
odour, generally used in form of extract & mixture
dose variable ʒss of extract of good but sometimes
the dose must be very much increased, may be given in pill
or emulsion. I m. c. 10z in pint of spirit dose ʒss - ʒ
22 grs to ʒ, generally mixed with in compresses & cakes, female
plants are used. In tincture made from the Extract
but when good produces good narcotic effect. It is recommended

to excite uterine contractions. instead of Ergot

Supp Aether

distill a mixture of alcohol & sulph acid. in this way
it is impure & must be redistilled. For anæsthetic
purposes it must be distilled again. It is highly
diffusible stimulant. but its effects quickly pass away.
combined with (arecamum) it is the best thing in a spasm
factoris. In em all doses it acts upon nervous system.

Hofmann's anodyne is a good anti-spasmodic &
It is contra-indicated in acute inflammations, dose
ʒj-ʒij continue every hour if necessary. Give in wine glass
ful of sweet and water. It is not soluble in water. It is
used as an anæsthetic it is used in the U. States
used only by inhalation for anaesthesia. for internal use

Hofmann's anodyne is the best.

ʒʒ Aether Alce^{not} 1 part heavy oil of wood ʒiiij = Hofmann's anodyne
It has a hot-pungent taste slightly sweetish. ʒj-ʒij dose

Camphor

a more direct narcotic than the aether, a concrete volatile
oil, obtained from a tree in China Japan etc. it per-
vades the whole tree. - Camphora japonica.

As an anesthetic is the best. Brought to Europe in
impure form, soluble in alcohol. Chloroform & some the
not. Some think it of great value others think it useless
dose 1-10 grs. in Powder of ~~chloroform~~

(Stramonium) & Belladonna

It is more whooping cough. Droussseau speaks highly
of it in large doses & rather in one full dose than in
small repeated doses. It is safer one grain of $\frac{1}{5}$ grain in
24 hours. It has been recommended in vomiting during
pregnancy. In incontinence of urine it is exceedingly useful
probably by giving tone to the sphincter of the bladder $\frac{1}{50}$ - $\frac{1}{10}$ gr.
J. D. will effectually stop it. It has been found useful in
overcoming milk abscess. The extract smeared over the breast
usually rubbed up with a little water & glycerine & smeared over
either the areola (if large) or over the whole breast. In painful
milk stagnation. It has been recommended as a prophylactic in
scarlet fever. dose powdered leaves 2-4 grs. Extract made
from green leaves; Lincture from the dry. dose of extract
 $\frac{1}{4}$ - 1 gr two or three times a day. I substitute the pupil
drop a minute of atropine in. I use 13 to a pint of alcohol
dose 5-20 min. An ointment & Lincture are
official. Emplastrum Belladonnae, incorporating the

extract with adhesive plaster, are exceedingly useful preparation, useful in mammary abscess. in neuralgic affection of flat surfaces it gives prompt relief,

atropine, the active principle of the Belladonna root - sometimes made from the leaves, it is in the form of finest needles when, salts alkaline reaction, will often dilate the pupil within minutes, more certain in its effects than belladonna, dose should never exceed $\frac{1}{10}$ gr. $\frac{1}{30}$ to $\frac{1}{15}$ proper dose one drop of a solution of 1 gr. to $\frac{1}{3}$ will dilate the pupil

Lactuca, Extract.

It consists of the milky juice of Lactuca virosa obtained from the stem, when the plant is in flower. ~~It~~
It is not a very reliable narcotic. It may be given in those cases in which opium from some advisory way is dangerous dose 5-20 grs. not much used

28/1/70

Conium. Hemlock. spotted.

plant looks a good deal like parsnip, found in Europe & United States. leaves gathered when the plant is in full full flower. grows in many localities, like in properties to Licuta virosa of this country. leaves & seeds of Conium maculatum are officinal. seed $\frac{1}{8}$ to $\frac{1}{12}$ in length

One leaves are used are Cataplasma Conii fresh one
and one extract. The active principle is a volatile oil & called
Conia. It is a direct sedative, sometimes inhaled useful
in sore throat; sedative to the brain & depresses the
circulation does not often act upon the kidneys or skin
to narcotic powers are slight; it promotes but does not pro-
duce sleep. It soothes the nerves. It may be used in form of
wafers, extract, or tincture. Extract most frequently
used. made by wrapping the ~~express~~ juice of
the leaves. dose 2-6 grs & may be repeated 3-4 times
a day. It was supposed to have a specific influence over
the uterus, & infants is sometimes useful.

Test of its strength & value rub it with a solution of
potash & if it does not give out a musky odour. It
is worthless; Cataplasma Conii useful in painful
tumours enlarged glands. Incense is made from
the seeds $2\frac{1}{2}$ pint. dose 30-60 mm & increases
Succus Conii in B. Ph $3\frac{1}{2}$ -3 not as reliable as Lin. stor
Conia the active principle, best obtained from the
seeds it is a yellowish liquid. an acid bitter taste
very volatile

1.45 normal density Chloroform, Trichloride of carbon
 a colorless liquid, weak taste, volatilizes in air burns
 with a black smoke, vapour heavy & can be poured from
 one vessel to the other, this fact should be attended to
 suds when thrown into water, gives a sweetish taste
 to the water, alcohol & ether dissolve it readily
 cohesion between the particles of chloroform is very feeble
 alcohol & ether are common impurities not dangerous ones
 only weakens it, commercial ch contains 3% water
 when dropped in water if alcohol is present the
 globules are surrounded by a milky film. ~~But~~
 chlorine compounds are dangerous impurities
 Perfectly pure chloro does not keep well, and should
 always be mixed with a little alcohol, the most sensitive
 test for ch is the bi-nitro of iron which becomes brown
 on addition of a drop of chloroform, when chloroform is prep-
 ared at a high temperature it more readily undergoes
 decomposition, chlorine compounds may be detected by
 nitrate of silver when a white precipitate of silver
 iodide chloride of silver, irritating to the skin, produces
 intense pain, but is sedative afterwards. It diminishes
 the power of the blood to unite with oxygen

2/2/70 2 Allen M.D. W.D. W.D. W.D. W.D. W.D.

Chloroform is probably unchanged in the blood, the effects result from the influence of the chloroform on the blood globules. and the influence of the altered blood globe on the brain substance produces the anaesthesia. The blood of the patient under the influence of chloroform is of an arterial hue anaesthesia is due to the impeded oxygenation of the blood.

(1) Special action of chloroform on the blood

(2) effect is to diminish the arterial supply to the brain

(3) renders the flow sluggish ^{in the} capillaries ^{producing}

(4) effect on nervous system in large part due to par

a state of anaesthesia does not imply hyperaemia

less blood contained in the cranium during sleep & anaesthesia

than during waking hours. First effect observed in

narcosis is imitation of the heart. Chloroform after a

temporary stimulus depresses the heart's action

Three stages 1st preliminary stage of slight cerebral ^{convulsions} ^{to be seen}

(2) an anaesthetic condition abolition of consciousness

comes on before the power of motion is lost (3) of deep

sleep or coma a complete insensibility to every thing

around you, these stages are said to be constant in all anaesthetics. In some cases tonic spasms occur after relaxation. The quantity which has proved fatal is various sometimes it results from the admission of small quantity

more danger in the attempt to bring a patient under
the influence with a small quantity than a large one
in a fatal case of 15 drops, 30 gtt in another
chloroform gives 4 drops to the minimum. The lungs
are found of a bright rose colour. The right cavities
of the heart are filled with dark red blood. brain
& nerves appear normal. surface of the brain engorged with
blood, not the deep ones as in apoplexy, lungs sometimes con-
gested sometimes pale. death under the influence of
chloroform in animals is somewhat different
from that in man. occurs in human subject
by syncope, by asphyxia, by nausea
due to a poisoned condition of the blood. i.e. containing
too much chloroform. the kind of death is gener-
ally slow & does not often occur; the most usual
cause of death is syncope. ~~the~~ ~~fatal~~ ~~condition~~
~~is~~ I now thought that no diseased
conditions contra-indicate the use of chloroform
other than that certain conditions of organs such
as fatty hearts, diseased lungs, long continued
use of alcohol, all contra-indicate chloroform
up to 1867 130 deaths had occurred which according
to Dr Darwin is 1 in 10,000. When dangerous symptoms

manipulate themselves, suddenly falls comes
in the respiration can be aided, the patient
should be in a recumbent position, the tongue
should be pulled forwards, resort to artificial
respiration, the Marshall Hall or the Sylvester
blow gently into the patient's mouth, warmth should
be applied, ice cold water, friction should be
urgently applied, galvanism should be
used, the current should not be too strong, success
followed in 8 1/2 hours perseverance, injections of
brandy, sweetened peruvian, The majority of the deaths
have been in persons with healthy hearts
when the patient is about to take chloroform, he should
not be allowed to fast too long, about three hours before
he should have the stomach emptied

Tonics

they are medicine which re all the vital functions
divided into three classes animal, vegetable &
mineral

abile (Animal tonics)

formerly used freely & has been brought into use
again. dose 5-10 grs two three time a day. supposed
to act partly through the stomach, & partly
passes into the blood, & improving the general amount
It is frequently given as a chologogue, but probably
only supplements on bile when not in sufficient quantity

Cod Liver oil

is obtained from the liver of the cod fish.
Three kinds of oil brown, pale brown & pale
the darker the oil the worse the taste. the palest
is the most efficient. It is injured by long exposure
to the air. It become rancid. some 27-30 distinct
substances in Cod Liver oil but it is impossible
to say upon which principle its efficacy depends
27 pt of iodine in 100,000 pt of oil or $\frac{1}{3000}$ in 3p
27 pt of Phosp. in 100,000; . It does not alone increase the
fat but it increases ~~the~~ ^{the}. It is the only remedy that
exerts a marked influence over the tuberculous diathesis.



SP 9/270

Glycerine

Lamin 3p. Morphine 3-4grs. Glycerin 3p water 3ii
Koreore napple

Glycerine 6. In et Benzoin 1 pt is also useful
it is used much as a solvent used for the vaccine
crust. as a nutritive tonic it is well substituted
for Serum of horse & is of comparative value
value as a substitute for cod liver oil, & sometimes
above the dyspepsia group applied to the larynx
with a brush. It resolves many imbalances
holds them in solution better than alcohol
1pt ~~of~~ ~~the~~ ~~body~~. Dose 3p - 3ii in milk tea or coffee

Bitter Tonics

The true vegetable tonics are nearly always bitter.
They may be divided into those which are purely
bitter & those that possess other qualities besides
their bitterness. Their power is due either
to a bitter principle or a neutral alkaline
those which have alkaline principles are found
to have ^{more} influence over mucous diseases
than the neutral ones, which are more used
in dyspeptic affections, their influence is loc-
ated on the mucous membrane of the stomach

and they favour the secretion of a more healthy
gastric juice, & so promote digestion. some think
that the bitter principle is absorbed and acts as
the bitter principle of the bile does, this is not the
generally accepted view. They sometimes prove
emetic & laxative in over-doses. *Quercina* does by far
with produce nausea, some are more prone to this
than others, hence these tones are often given
with purgatives. In various headaches they
are given with anti-acids as magnesia when
there is constipation. The simple bitters are
generally resorted to after severe diseases
they promote digestion & assimilation.
The Peculiar bitters contain certain principles
besides the simple bitter which acts on the stomach
^{which act on the system}
The simple bitters may be chosen almost indis-
criminately, but the peculiar bitters have to
be selected according to the peculiar symptoms to be cured.

Luassia *Siamia* *castanea*

usually in sandal wood or shavings comes from
the West-Indies. contains a neutral principle
Quercina. It does not interfere with any other medicine

This a pure and simple bitter. It is very destruct-
ive to insects. and as a fly paper, recommended
in treatment of carbies. an Infusion may be used
in Pediculi capitis & corporis. It is said by some
writes to irritate the bowels in large doses. It is one
of the purest & most powerful bitters we possess
it is applicable to all cases of flatulency & is the
earliest & more tonic in consideration. It may
be given alone & afterwards with pepper along with
Useful in Hay fever & urticularis, one of the best remedies
may be used in Powder. Lincture & Infusion, some
who are dyspeptics chew the quinine chips continually
& this highly recommended for tobacco chewer
dose 20-30 grs of Powder. An Infusion is made by steep-
3ii of chips to $\text{3}\text{XX}$ ^{grate} 1-4 oz twice a day may be
made either in hot or cold 20 minutes with hot
12 hours with cold. An Extract is made by steeping
the Quinine with water and evaporate to an extract
dose 2-5-10 grs. Lincture $\frac{3}{4}$ oz 1 pint rectified spirit
dose $\text{3}\text{ss}$ $\text{3}\text{ii}$, some years ago some persons are said
that the Extract would prevent Asiatic Cholera
it was inoculated by making an emulsion & 10-11 grs.

Geniane a European plant. Fresh tubers
found in Italy Ireland, root several inches in length
laxing sometimes dried, spongy wrinkled epiderm
acids are thought to lessen the bitterness. Compound Iodine
destroy the bitterness entirely. It contains no Lactic
acid yet it undergoes decomposition in whole of iron
this results from Picric acid. It contains a considerable
quantity of saccharine matter & undergoes fermentation
In Ireland they make an interesting drink
all the bitter seeds the milk bitter sometimes & the
yonder wort with. Iritan sometimes act on the breast
the infusion sports in a short time by fermentation if
it has been mixed with hot water

Colomba, a clustering plant. East Africa

Bog Bean indigenous in Canada & U.S.

a many places used to impart bitterness to ale

Cattuncorn.

The dried flowers cultivated in Europe & they are useful
they have a strong aromatic taste, an aromatic bitter tonic
useful in indigestion. frequently used in fermentation
dose powder 10 - 30 grs

Infusion is the best form to administer. $\frac{1}{2}$ in pint of water
3i - 3ii a dose, given cold

Eupatorium. Boneset
faint odour for bitter taste. The effects differ
in moderate dose cold, tonic, warm in free
doses emetic, purges. as a tonic. moderate
doses warm diaphoretic. active principle Eupatorium
dose 3-5 grs. It is well suited to the indigestion of
cold persons. useful in dyspepsia & in warm persons
in free doses. dose powder 20-30. Inf $\frac{31}{3}$ to one pint

Antidote Serpentina. Virginia Snake Root
a very palatable tonic a caustic odour
when fresh has a yellowish colour. Its tonic & diaphoretic
first through its bitterness as an antidote for a heat & it
may be used in dyspepsia forms a good vehicle for
Carbonate of ammonium.

Myrrh
a balsamic exudation from Balsamocera myrrhos.
It is brittle & taste bitter acrid, active principle
bitter resin soluble in oil. alkalies combine readily
& render it more solid. myrrh is a bitter tonic tends
to purge & induce

Murboracca
an orange coloured berry about the size of an orange & the

are embedded in it. covered thickly with
an ash coloured hairy substance, they are very hard
& contains 3 alkaloids, strychnine

It is tonic with dephlogistic & deurtic, used in
paralytic condition of the motor nerves
in anaemia is much used, useful in many
cases of dyspepsia & impotence, highly seen
in prolepsus and spasm children. in strychnine
of the eye it is useful. this condition is probably
connected with disorderd stomach. dose to be given
10-15 minims. when given too freely it produces
involuntary contraction of the muscles

It is an excellent remedy in venous tumours
the alcoholic extract is sometimes added to purgation
pill in $\frac{1}{2}$ gr dose to pill. I necture & Extract
Strychnia. Dose 2 or 4 pint dose 10-20 m.

Extract. dose $\frac{1}{2}$ - 2 grs. Strychnine endemic
dose not more than $\frac{1}{2}$ gr. in poisoning. ^{must begin} artemisin
nicotine, chloroform, Calabar Bean are the
best antidotes.

Hops. Incline unclear. Infus better. a pillow of hops is often recommended to produce sleep may be used as tonic in dyspeptic cases. use for insomnias used principally in malary ailments to which it imparts a bitter as well as a tonic property. Scrupule the bitter principle & consists of little yellow granules which are on the leaves obtain by rubbing the hops & then sifting. dose of Scrupule 6-12 grs increase if necessary a Tinct is recommended.

Dog wood (Cornaceae) in B.P.

a small tree 11-20 ft in height. It has a gray red colour water & alcohol extract the properties act. princip. Cornin has been used for quinine. It is a mild tonic & feeble antispasmodic. Powder dose 3 & up to 5 grs.

Willow Bark

the bark of Salix alba act. principle salicine. It is a mild tonic slightly anti-periodic. 3p tonic. 3antiper & lake 3i dan the water content. Decoction is sometimes used in old ulcers the concentrate. Salicine is not precipitated by any reagent known dose of salicine 2-8 repeat 2 or 40 grs per the part. It opens the stomach less than quinine.

Wild Cherry bark (Cornaceae Prunella)
cominents of quinine bark. not to be confounded with choke cherry (Cerasus frugifera). bark from roots is the best

to
a
less
in w

It does not
dose powder 3p
1/2 to 1 pint. dose 3/11.

a Symp is mentioned Symp Pomi Virginianica
Bark 3V

Sugum 1/2. Water Chest Leaf

Argemone Bark ~~leaf~~, Casparia

obtained from *Gallepsia officinalis* grows in S. America
It occurs in flat pieces with. It contains a volatile oil
a bitter principle & a resin. It is said to keep the bowels
slightly open. dose 10-30 gr. Inf. 1oz - 1 pint boiling water
Liect

Cascarilla

Bark of *Crota alata*, in West Indies. bark thin
Inf 2oz in pint water Liect 2 1/2 to pint

it
exerts
a
influence over the

Whorowind

It is simply a mild bitter tonic and has no expectorant properties!

Drops of 4 grains dose 2 or 3

Orange Peel

Two species better known, the bitter orange peel has slightly tonic properties.

Cinnamon Nat ord Lauraceae

under fruit of a tree in Ceylon. It exerts a stimulant influence on the alimentary canal

Common ginger & Cardamoms in equal part is the Pale Cinnamon

Cayenne Nat ord Solanaceae

It is an aromatic stimulant & is a combination of warm Rhei

Nutmeg. myristica. moor

are obtained from large nut clusters. Mace is the mucous
membrane of the outer covering the

Cubebis. Piper

abounding plant from east Indies useful
in gonorrhoeal affections. obtained from a climbing
perennial plant they resemble black pepper
spherical in shape. & have aromatic. They have
a tendency on the mucous membranes & are
applicable to the first stage of gonorrhoea, recommended
for leucorrhoea. in doses from ʒss to ʒiij these large
doses disturb the stomach. they contain a large amount
of oil dose ʒoil 10-12gtt belladonna then powder
Brown's Bronchial Troches contains oil of cubebis
sugar & tragacanth,, there is an oleo-resinous extract

Matico. Piperace. Aristida elongata

native of America Peru. dried leaves 6 or 8 verticillate
2-8 inches in length like the sage plant
it contains a volatile oil & bitter principle it is generally
regarded as a strong astringent. it contains no tannic
it is not an astringent. It is a styptic & stimulant
the volatile oil is styptic - bitter principle is tonic & stimulant

protrusion into the central sinus & located. It varies
in size & shape from a pinhead to a growth which would
fill the nasal cavity, generally several of them. The attach-
ment to the septum is dense & firm. It is connected
with attacks of ordinary catarrh. Symptoms are at first
he is most frequently catches cold, thus attended with a
slight discharge, feeling of uneasiness especially in the nos-
trils & makes frequent attempts to remove so by blowing
his nose. ~~It~~ ^{the} sides of the nose are much affected. The voice
is altered & is nasal, he sleeps with his mouth open.
The second form is regarded as a malignant growth, soft
which readily breaks down, bleeds on slightest injury
& is similar to soft cancerous growths, this is generally
attached to the perioticum of the bone & unless of the
of a pedicle it is a broad one, & extends upwards to the ethmoid
cells & is tendency to rapid growth & in growing displace
the bones & other parts to produce considerable amount of
deformity. Fibroid the 3 form, this form consists
almost exclusively of fibrous tissue & sends out processes
into the cavity of orbit, ^{occurs} occurs at all ages & most fre-
quently in mid-life 30-45. It may occur in children & boys. It is
often found in young children & boys. It is often found
after for Pity is simple & by part. As a rule part of the
It is put in a pair of forceps & removed by cutting

(order)

(suborder)

Helmintha

Strobilomorpha

Turbellaria

Trematoda

Ceolomorpha

Nemaloda

Anisostrobilomorpha

Acanthocephalida

Cestoda

Planaria

Nemertida

Tassecela Monosclerida

Distoma Distomida

Tristomida

Polysclerida

Gyrodactylida

Anguillulida

Gordiida

Filarida

Oxyurida

Ascarida

Strongylida

Cucurbitida

Tenacida

Bothriocephalida

Tetrarhynchida

Take of

Granulated zinc $\mathfrak{z}\text{xxvi}$
Sulphuric acid $\mathfrak{z}\text{xxii}$
Aqua distilat $\mathfrak{z}\text{xxi}$
Chlorine water a suffic
Carbonate of zinc $\mathfrak{z}\text{ss}$

add the H_2SO_4 to ~~previously mixed with~~
water to the granulated zinc and stir
until efferve ceases, then continue the ac
and gently heat ^{in a water bath} to a gentle
the acid add chlorine ^{water} until
redd odour of chl escapes

James Bowd

Lep. mesenterica } 1. color ~~white~~
 } 2. " dextris } from com.
 } 3. line ~~white~~

from composit. } 18-20 rows - untestinae ~~testinae~~

James Bowll

James Bowll ~~not a test~~

9 0 0 0 0 0 0 0



What do you see that C.

John Mosler

James Bowll you ~~not a~~ pin info

Greater fleas have smaller fleas
 upon their legs to bite 'em
 and little fleas have lesser fleas
 and so ad infinitum

C. Kungley or

$K_2S_6 \cdot C_4H_4O_7 \cdot H_2O$

James

