Vienne
Dietaro
Tissier
Metchnikoff

H. W. Cox & Co. London
£17.9.4

Polyphos. Elektrizitäts-
Gesellschaft.
München

~~5.1.7~~ M. 3192.30

Rich. Seifert & Co.,
Hamburg

M 1345.20

Dietase

Englisches Lesebuch
von
Muret - Sanders

Schulz Cuno

Electrocardiograms
Heart Rhythm
Jan a.m. d. Oct 7, 1896

Rothschild Hosp.
Nov. 7. 5. P.M.
Prof. Palgetti

Cystoscopy!

Woman, general redness and injection
injection of bladder. Mucosa swollen in places, small hemorrhages. Subacute cystitis, ~~[illegible]~~ hot enough pain for acute.

Man. One-sided redness. injection
Right ureter opening red & injected! papillae of fundus.
Left side bladder better, ureter not seen.
Pus and mucus easily washed out. hot cystitis, would be more mucus. One sided fever L. B. Right Kidney.
Test blood by cryoscopy.
If blood is .055 or .056. normal.
If .057, 8 kidneys. ~~blood~~ both affected. if .060 badly deficient do not dare operate! on kidney

or prostate? May prate
for some other malady.
When Cystitis becomes
chronic, there is cicatrization
of mucous membrane, while
Psoletter.

Frauen Klinik
Wagner No. 9.
Radical hysterectomy.
Preparing uterus.
Ligate off appendages.
Open broad ligament
after first tying the
deep pelvic ureter
outer broad lig.
and making little slit
in peritoneum to mark.
place. work down to
uterine vessels. find
ureter underneath
put finger between
lig. & vessels, follow
ureter up to bladder.
Take out enough vagina to get 2 in
below disease. Dir. open ureters in
vagina.
When lymph glands are involved,
only 10% have remained free for 5 yrs.
Generally return but life is prolonged
Pleis 2-3 yrs. When connective tissue is
involved, even greatly, prognosis is better.

Spinal Anesthesia
Novocaine of Merck
Sol. 1% (Merck)
in Sterile Water Sol)
1/2 cc. at dose
Inject between 2 & 3
lumbar spine
May also use 5% Sol
well, swab skin with
Clean skin, no antiseptic
Clean with Salt Sol
Withdraw 10 cc of Spinal
liq.

Franz Klink
Wurtheim - Wagner
No. 9

In cases of bad heart or kidneys use spinal anesthesia
Have used in 700 cases & no bad results.

Do not use cocaine. Use tropococaine (Merck)
Put up in flasks containing 1.25 ccm of 5% solution.
This is mixed with 10 ccm of lymph withdrawn out of spinal cord, by inserting needle of extracting ~~fluid for~~ syringe into the neck of the flask, mix well then return to spinal canal.

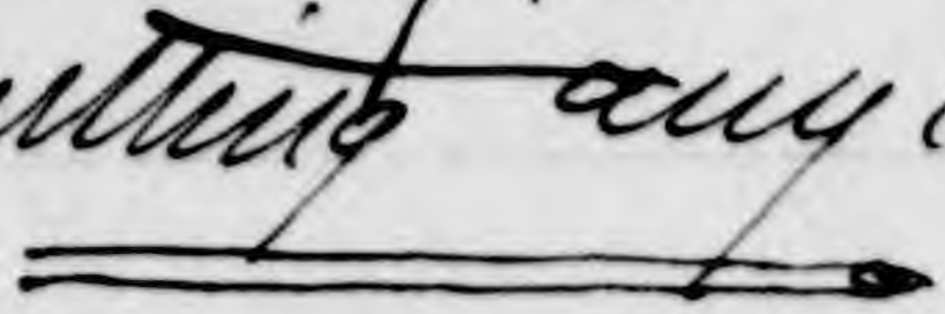
Technique
Clean skin, scrub with soap & salt sol. no antiseptics.
Clean hands also, but no antiseptics. Never saw bad results with antiseptics

insert needle between 1 & 2, 2 & 3
or 3 & 4 lumbar vertebra, 2 & 3 bis
Puncture in middle line
with patient well bent forward.
Practice patient well in ad-
vance to bend if can bend
forward sufficiently. Insert
needle between tips of spines
and push obliquely upward
until spinal canal is felt
as shown by running out of
fluid. If mixed with blood,
do not proceed further. Likely
to be trouble.

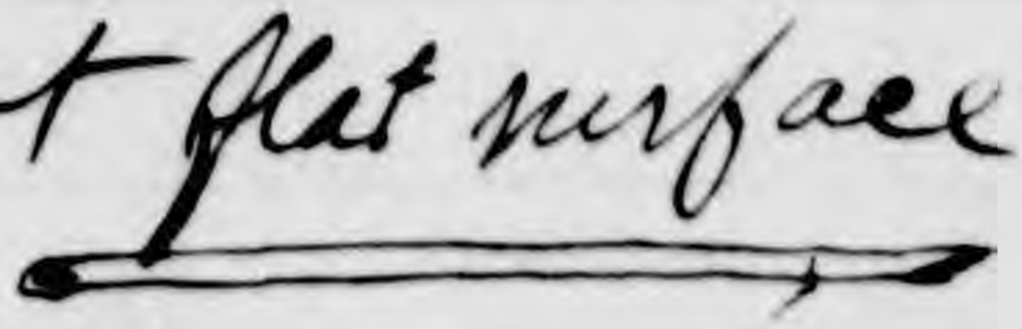
Draw out 10 ccm of lymph.
(do not allow loss of lymph.)
Close end of tube with
finger or put in plug. Then
~~[illegible]~~ draw ~~or~~ hot tropacocaine
sol into tube & mix with
lymph, then return to canal.

Keep patient upright for 50 & min to prevent gravitation of Sol. to medulla. In 6 min. patient will be ready for ✂.

Use needle with sharp point, flat surface looking laterally, so as to avoid cutting any nerve, thus:-



Not flat surface above, thus-



This anesthesia will last 50-60 min, may then give chloroform. Very small amt. indeed, is sufficient. Has done radical dept. this way, but not vaginal dept because the latter involves peritoneum of upper abdc cavity.

Preparation of Patients

No preparation but a light diet the day before and no food day of operation (of infants) but patient to be well warm & horribly. Often fecal scybala in the colon. Do no harm, at least not much. (Castor oil laxatives & food after op.)

Conversation with
Dr. Lane of London.
Vienna. Nov. 9.

"I'm awfully glad to see you."
I have much hard work to make people see the importance of the colon trouble. Stasis in the colon and toxemia resulting from it. ~~Cause of~~ is the very foundation of medicine. It is almost the whole thing. I never operate for gastric or duodenal ulcer or gallstones any more. It's silly. Put the ileum into the rectum and all goes well. It's silly to drain the gall bladder as Mayo Robson does. Just get the kinks out of the intestine and the gall bladder becomes sterile & makes no more trouble. I never operate for gastric troubles

any more. Just put the item in the rectum. Stops all. They get well quick. I operated on a seven year old boy shortly before I left home. He had rheumatic gout very bad. He began to get better right away.

After operation give 1 or 2 gr. Paraffine two or three times every day of their lives. Better than agar-agar.

"What about lactic ferment?" "I've given that up. Paraffine is better. I take 1½ oz every night I like it. Then this is good too (rubbing on abdominal muscles) It helps immensely.

The best man on anesthetics

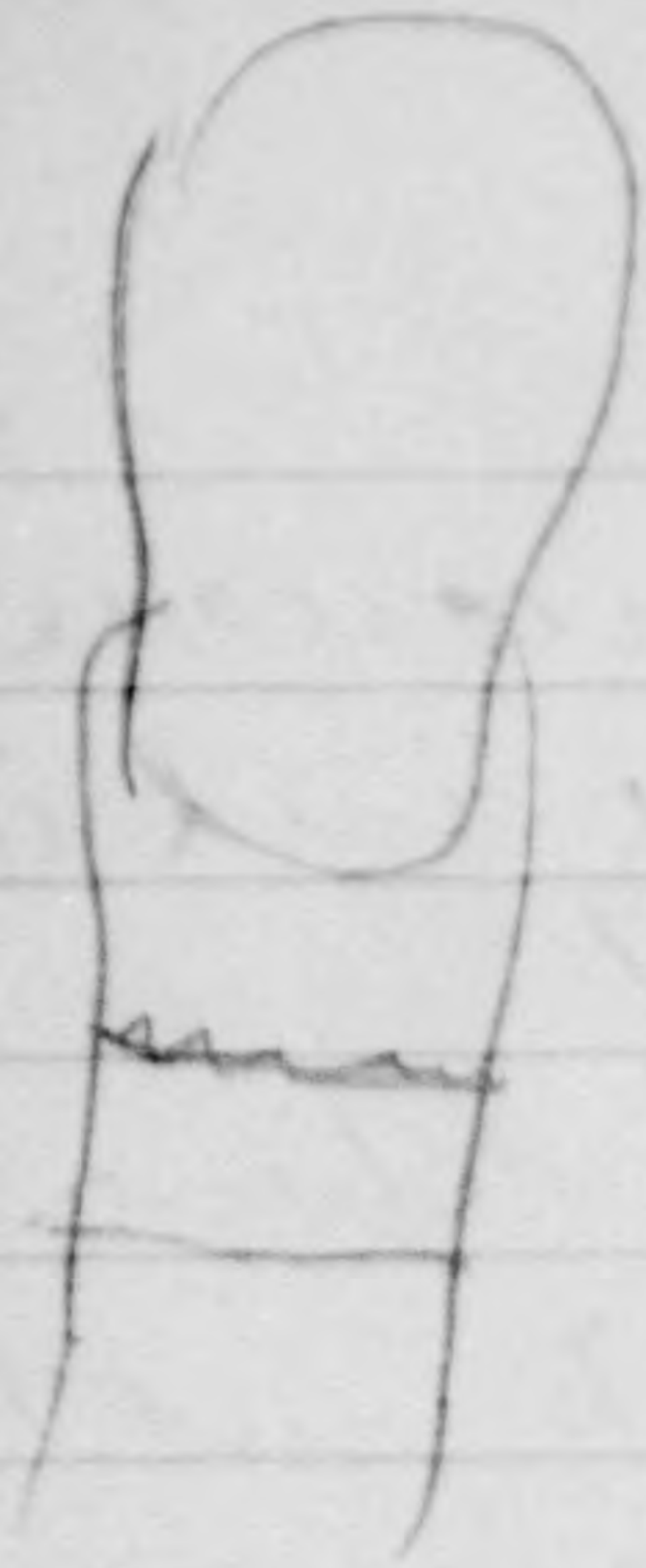
is Dr. Distaso, an Italian
working at an Institute in
Russell Square. 37(?) W.C.
London. I will have
him come & meet you
when you get to London.
Metchnikoff told me that
he knows more about
cancer than any other
man in the world.

"A woman came to me
with both breasts all
swelled up with cysts.
They had advised removal
of both breasts. I put
her Bacillus into the rectum
and the breasts began
to diminish in size at
once. Cysts & pancreas
do the same. Absurd

to operate on the pancreas.
Remove the cause and it
goes well of itself
Only way to relieve
Lane's kink is to put the
ileum into the rectum
laxatives as possible.
If you do anything use
obstruction retention.

ask Lane
1. How often bowels should
accrue.
2. How long stand before
recording Op.

Lane said "when we neglect "call"
the feces return up into the
bowel. We have seen it with
the x-ray. I have a very
good man Jordan who keeps
his spirit "pigheaded" & is
willing to learn.



Werthein-
Wagner interviews
Saturday
Nov 7 11

Dr. Sinclair.

Royal Institute of Public Health.

Dec. 13.

Gram Stain

Gentian 1 min

Iodine 1 min

alcohol 100 } Gram of aerobes

acetone 50

Carbolfuchsin - at once

Dry with blotter.

Pass through flame

Examine without cover glass

Intra cocci

Gram - diplococci

Gram cocci

Small cocci

3 species { streptococcus

Coccus-bacillus

Anaerobic cocci

staphylococcus

Distinct

saccharolyticus

Pasteur bacilli

Bacillus aerogenes (Bitter [illegible] short rods) facultative

new form
diakes acetic & butyric acid
anerobic

very long
Butyric microbe - anerobic
thick long rods.

Bifidus - anerobic
very changeable

Non bearing.

B. Butyricus — anerobic

Bacillus Butyricus
chains among
in elliptical loops.

Spore bearing.

Bac. Sporogenes tip spore like mn.
lipremit oedemum. (anerobic)

Bac. putrificus the microbe of Bren.
stock. (anerobic)

Bac. Welchii (from Bac. Enteritidis Perfringens)

when Bulgaricus is in
lacer.
add drop of gram iodine
sol. put on cover glass,
& with microscope

B. bulgaricus appear blue
very long &
mucus bad starch
digestion.

Zooglocus

When enterococci take the blue stain also, the screening is very bad starch digestion

Gram neg.

Sarcina 8

very common in normal feces, in fatty cases greatly increased. Lives on peptone. — aerobic

Coliform group there are many varieties aerobic or facultative

aero many anaerobes.

Two kinds especially very abundant in colitis

welches B, always present
in colitis, gout & in
rheumatism

very highly toxic always
found in meat etc.

(Large Gram pos bacilli
may be either butyricum or
welches.

Long, fine bacilli ~~are~~
B. rigidus, anaerobic
proteolytic

Gram stain not reliable.
Depends on condition of
microbes. Chief Thing
is the form.

Acetobacter Gluc

Media

Yeast

1% Sugar (any ferm sugar)

~~H 10 aa~~

add 1% acetic acid.

This is the media

add to media small amount of fecs

The acetic acid is added to prevent growth of other bacteria

by the producer

Infinenbalos

Colon Bacillus of Gram,

then die,

small tube upside down in tube of blue gas,

8 mucilage in the

small bitter flora is
bad, many Colon B.
Colon B is worst of all
in colon, because of
~~conditions in perfume~~ are
favorable to ~~[illegible]~~.

Note

If gas affects in
small bitter is
evidence of many
microbes of colon
group.
B. Coli-indol
B. Lactis aerogenes
B. Para coli
very bad are
indol & phenol

Milk Medium

Sterilized milk with litmus
Put in feces - no. 24 hrs.
1. If milk does not clot
means acetic sour,
or good flora
2. If solid, hard clot
means many
lactic acid microbes
good flora.
3. Clot in 24 hrs
means proteolytic
microbes.
4. Aerobes may be taken when
inoculate with feces. Bring
to boil. Exhaust air
with induction. Seal up
incubate 1 day (always)

2d Method Dissolve Welch's Agar medium

1 Tube full Common Agar

2 add 0.8% sugar (equal half of dextrose lactose) ~~Sterilize~~ In sterilizing do not heat over 110° C for 15 min. higher drive well caramelize.

~~Inoculate~~

Melt the agar in tube in boiling water bath inoculate while not incubate in hex. this method gives all the spore bearing microbes, chiefly bacilli but

including fees for
refreshments, appliances
of photographic
(with discretion)
these.

Prizes and certificates will be awarded with Mark cultures & Arrange Chamber. All the ~~Colours~~ will be

The Bearing. +
~~Pallisson~~ Poison
Formula. Allcarbad.
4th

There is only one
growth of good Tuesday
the rest formicy.
The remedy B. Antitoxin
all the acetic acid

Same h. (1)
Milk mixed for curd after rec. from the g. which is poured off will see hours of casein very curd and rotten, and a thousand times with milk serum.
The serum must be hours. as cooler as a dull milky.
Weak lube, smell, odor is best less smell & butyric acid, well as there. Careful to break only a little at and if then recent, so it may explode from pressure of gas.

Welches & B. Bulgaricus
hebben overeenkomst
ook alsof Mogt
der bulgaricus coli.

Zo is ook
van Shennig substratum
Bact.

De Knaus Gruyf.
meetbunzen 5 hunnd
kies 08. 8 de tuscaan
& Drummer diarrhoea
Gram neg. B.
meestal & distinguish
media - alkalin agar ordinary
gelatine media. add a
little sugar. Neck
make fat culture

Incubate at 42° cent for 3-5 days.

May be Kinds of Lignefaction

1. Like Bacillus Globus. This means Hydrolysis.

2. Cylindrical bg. means fermen.

If put one comes then means both are present.

Leipzig.

Leistaro introduced me to Dr. ... a friend of Tissier who was the first to make use of Tissier's method of changing the flora of the intestine.

Leistaro stated that Tissier's method with bifidus works well in children but not with adults. He is working on a new method which he promises to write me about.

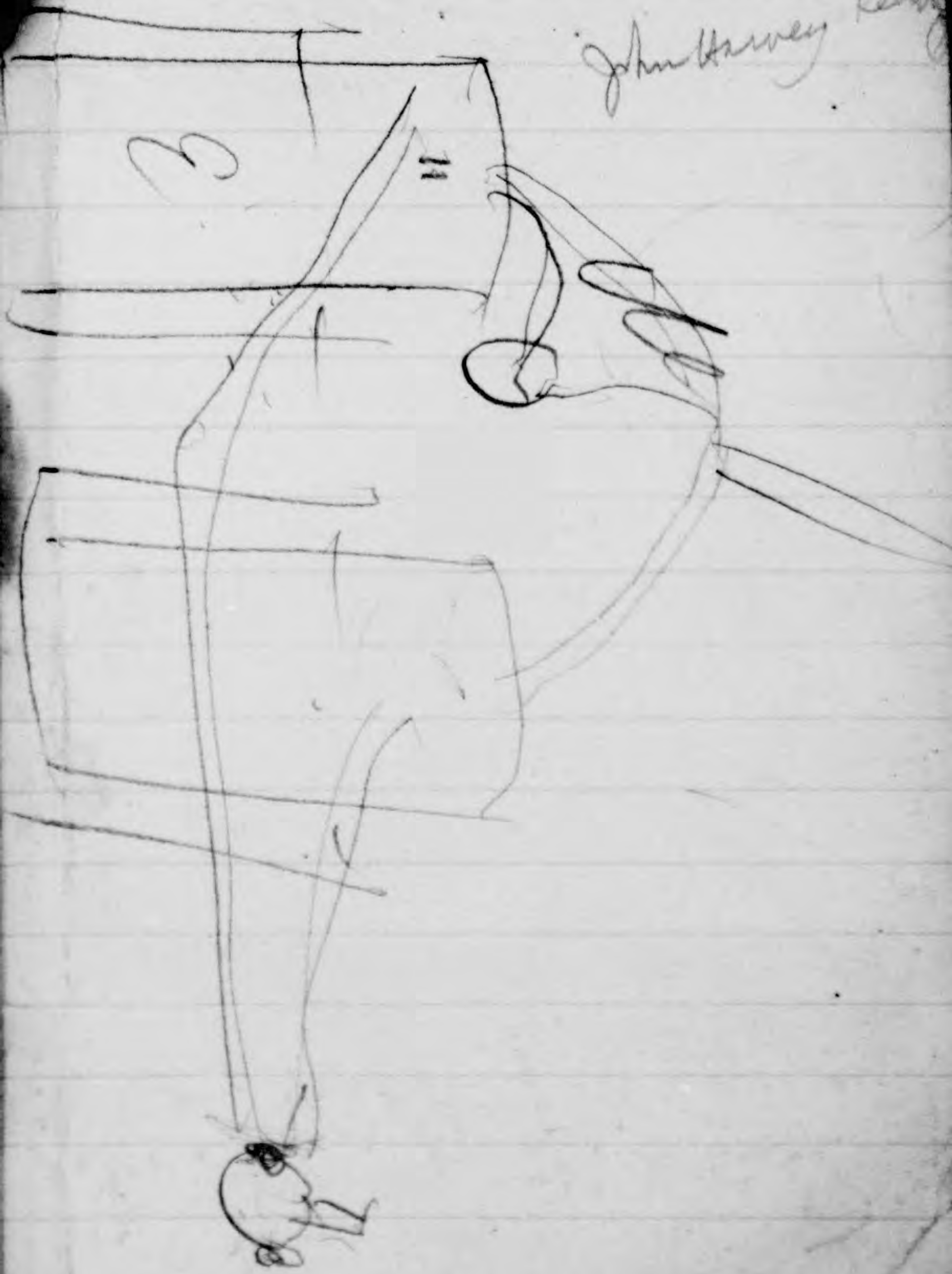
Leistaro said that Tissier was the first to show the importance of the acid forming microbes in the intestine and that Metchnikoff had not treated him fairly. M. & Tissier are not friends.

Dinsmore agree ~~that~~ to
accept an engraving
Madonna belonging to the
Sam, and gave me
permission to announce
him to that effect. He
will make special ex-
amination further for
$25.00 or £5. Said he
would like to form a con-
nection with America.
He said "I was Metchnikoff's
right hand man. I was his
first assistant. was with him
for 3 years.

Dinsmore is getting up a
large book on the plague & the
interesting volume he will
send me when published
now in the printers hands.

3500
AA

John Harvey



Incubate for 8 hrs
at 37°C

Egg media

nutrient broth.
Add to each litre a large piece of coagulated egg.
Inoculate 2 tubes with feces
Boil 1 tube
1 ~~tube~~, the other not

Lactus milk, 2 tubes
Boil 1 for which other not to test if many good microbes in intestine, are reducing to kind of coagulation.

Beilieh	certainly, to be sure
Veranlassung	cause, occasion
naturgemäss	naturally
Übergang	transition
ähnlich	similar
bestehen	to exist, to persist, to remain
mitunter	sometimes
manchmal	
zuweilen	
hin und wieder	
schon	already
bereits	"
obwohl	though, although
obgleich	
obschon	
wenn schon	
wenn auch	
wiewohl	
gleich jetzt	now, immediately, at once
sogleich nun	
sofort	
im Nu	

vielleicht	perhaps
etwa	
oft vielfach häufig	often, frequently
auch ferner überdies	also
also so folglich demgemäss	so
demnach	therefore, then accordingly, consequently!
dennoch	yet, however,
denn	for, then
der, die, das,	the, that, who, which
derselbe	the same, he, she that

deuten	explain, indicate
erklären	interpret
auslegen	signify, point out
ausgedeuten	
deutlich	clear, plain
Deutlichkeit	clearness
Deutung	explanation
gelangen zu	obtain
entsprechend	correspond to
übereinstimmen	
über	over, above, about, by, of, in, on, upon, beyond, across, during
trotz	scorn, spite, dare in spite of
trotzdem	in spite of the
vielmehr	rather
auffallen	strike
unterschieden	well marked
hinweisen auf	refer to
vorhanden	present, existing near, extant
Verschiebung	displacement

eintretend	occurring
Nachdruck	insistence
verdienen	Force
zwar	thus, indeed
übrig	left
ein	in, with
je nach Anfalge gemäss	according to
indem überdies ferner	besides
Entdeckung	discover
auch nicht	neither
Entweder	

Der Professor unter-
suchte den Kranken

Gestern untersuchte
der Professor den
Kranken

Als der Professor den
Kranken untersuchte
fand er Krebs.

Gestern hat der Professor
den Kranken untersucht

Als der Professor den
Kranken untersucht
hatte, wurde er
von einem anderen
Arzte gerufen.

answer - show
certain - certain
another - anderwertig
evidently - offenbar
content - bestrebt
sometimes - bisweilen
otherwise - ~~als~~ sonst
raging - wütend
importance - Bedeutung
deduction - Abzug
independent - selbständig
soon - Ohnmacht
describe - schildern
exist - bestehen
correctly - richtig
deceitful - trügerisch
struggle with - Bekämpfung
give attention to - sein Augen-
merk richten
auf

ausscheiden – eliminate
hervorragend – prominent
Vermögen – ability
bilden – form
Geschmack – taste
eine Zeitlang – for some time
Vorteil – advantage
ratsam – advisable
wahrnehmen – perceive
nachstehen – be inferior
ausser – besides
sich abspielen – take place
entstehen – arise
zunehmen – increase
zunächst – at first
betrachten – consider
pflegen – frequent recurrency of some fact
verfügen, – dispose of

erzeugen — produce
erzielen — obtain
Zufuhr — supply
Ersatz — substitute
vortrefflich — excellent
Ablauf — elapse
Eingriff — interference
gefahrvoll — dangerous
Nachweis liefern — give proof
einwandfrei — unobjectionable
zumal — especially
indes — however
sogar — even
vorübergehend — transitory
schließlich — at last
sämmtlich — all

Marcelo Hoffy
Chari Klinik
Jan. 5.
~~allop~~ Waschid.

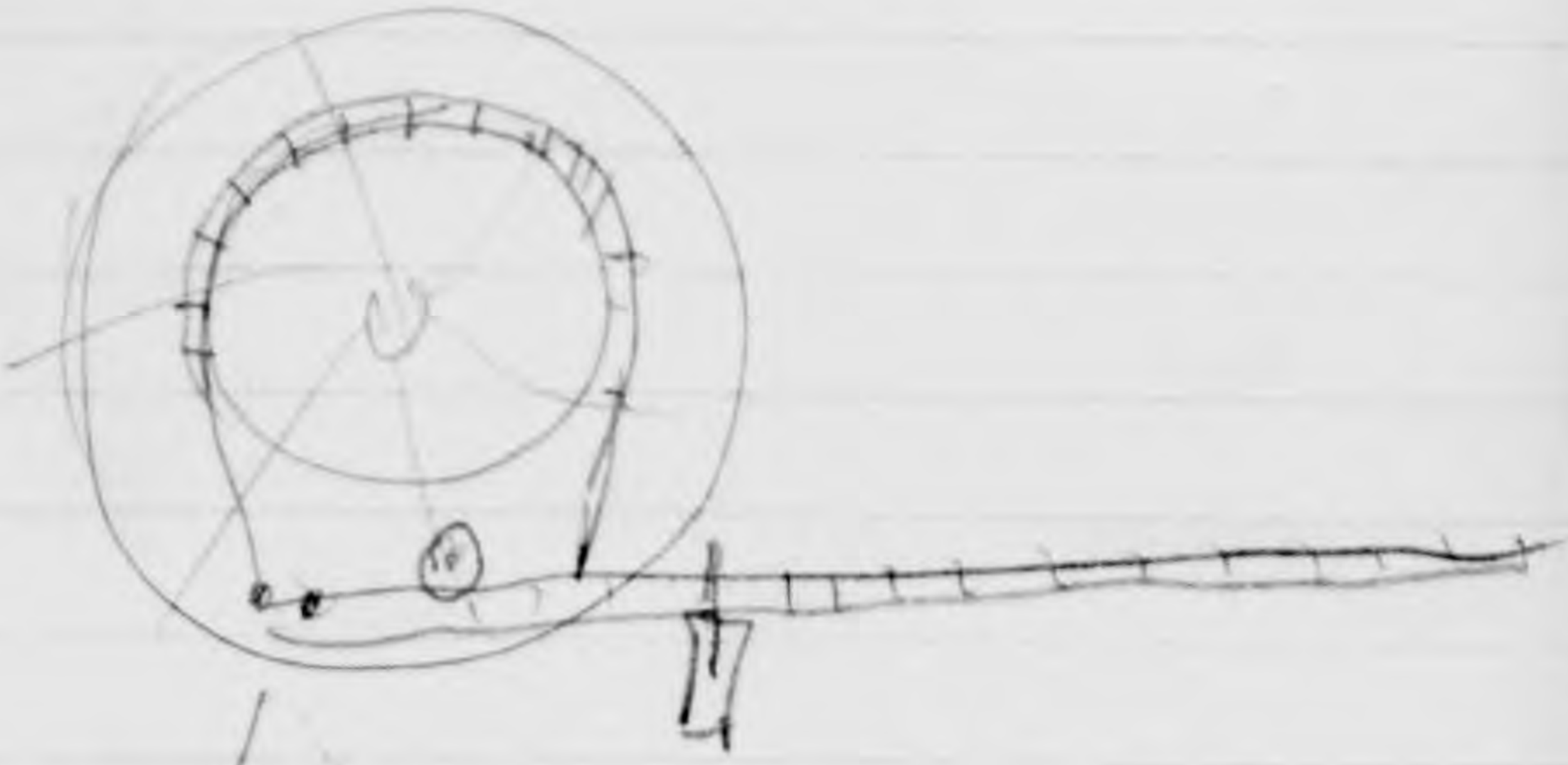
Alypin 20% Sol
for anesthesia for
small children -
Lars Fridsmans
Chil. 6-10 yrs. chlor-
form. ~~Oly~~ In never other
younger children,
alypin
adults always
20% Cocaine. for
upper part. & 10% for
lower parts,
~~Heart also~~
always apply ad-
renalin after cocaine
also use. Cocaine
& adrenalin always
through tube after general
anesthesia

Ansicht — opinion
führen — to lead
bloss — merely
wiederum — again
erfahren — to undergo, experience
bevorzugen — prefer
beitragen — contribute
mehrere — several
geeignet — fit
zugleich — at the same time
weshalb — on which account
Fähigkeit — capacity
Vorzug einräumen — give preference
sich gefallen lassen — to suffer
Vorsicht — precaution
sonst — else
Gefäss — vessel
sich bewähren — prove good

zumal
besonders
namentlich
vor allem
insbesondere } especially

sauber - clean
Einschmelzung - breaking down
heftig - violent
obwohl - though
probably - wahrscheinlich
unterschätzen - undervalue
wiederholen - repeat
vermeiden - avoid
Gemütsbewegung - emotion
wechseln - alternate

Ingo Stat
Ernst Gantz, Berlin
N.W. Birkenstr 18



make large wheel
light so as to avoid
momentum. Exhaute
work duff for each
pound. apply crude
number terms.

Menu for Banzoof Zoological Gardens

Dec 15.

Working street flue rebuilt in the Monkey House.

Breakfast
Bread, boiled potatoes, raw wheat. Hard later.

Dinner Bread & meat & boiled rice, sugar (used to have a monkey that ate nuts with a spoon. wildnut spice banof.) Cabbage Cookance 2 Mu-

Supper
Mammas bread
Potatoes
Boiled
Kaldtaek.

Some raw
meat.
meat
Humbute
Their
roots.
Wot
Their
natural food.

Some raw meat every day. Morning.

Lume

Dr Lewis & Co.

For Paracoli and Bacillus

1) Dr Gilski media

Paratyphoid + para coli

make smear of fæces

Phaneuptions, typhoid or para coli fæces stool, red & blue colonies.

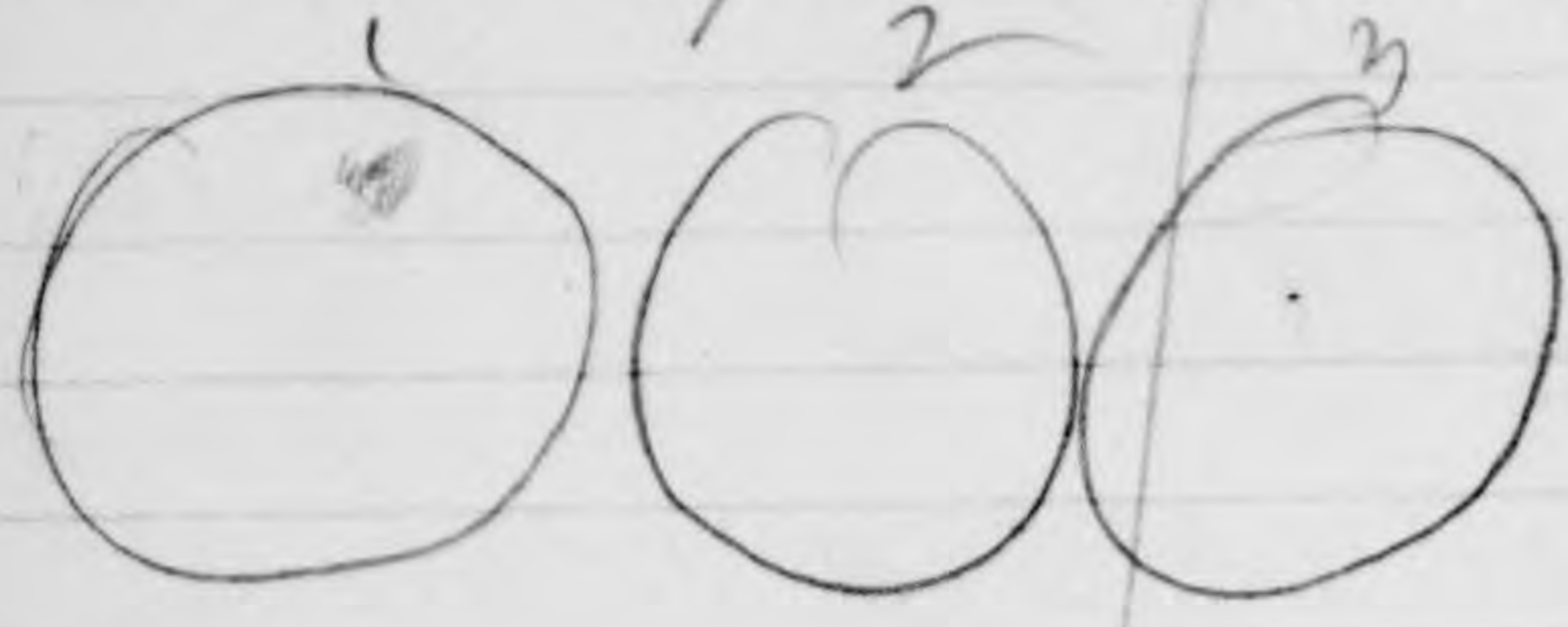
Red colonies coli group, blue color belongs to 3 groups of Para coli pseudotyphoid + Typhoid.

Neoli very abundant only color all red outside

Now make subpellin of nodule or bile for 7 or 14 days in incubator. Then make pure culture.

~~Put up one flask~~

make 7 plates, diluting



Put one sterile dipstick wire loop. Rub round with glass rod, Then rub rod on surface of 1 oz. 2 + 3

Put on 5 or 6 drops
more liquid. Rub
round with glass
rod, Then
rub rod on surface
of liquid. 2 + 3

Yo violet color
B. & ~~other~~ aerobes
make little cult with
aloping agar with
sugar.
Pure color bad
mixed, good.

Hydrotherapeutic procedures.

1. General.

a. Cold water & Hot water

Two classes of each.

(1). Percutient. — (2) non-percutient.

(1).

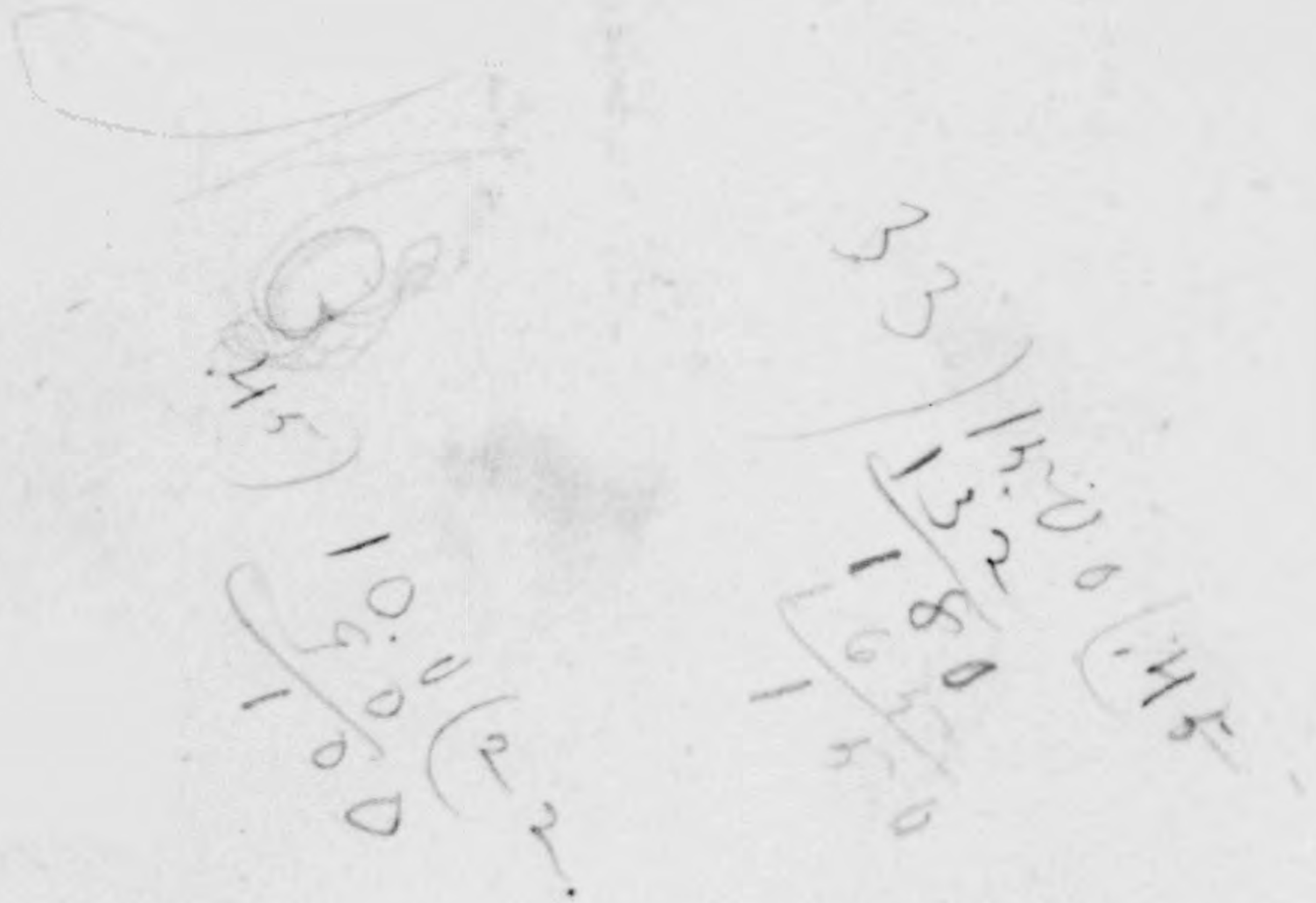
Percutient — application or douches. — Great variety — in general a column of water directed against the body.

Acts by Temp- & pressure

Three factors. — Temp-
-ture and Force.

Range of Temp. 45° - 70° F

Best effects below 60°.



Higher Temp. more prolonged
Foto low Temp - causes Ery-
thema, from too strong re-
action.

Erythema and Furuncles
(Skin eruption and boils.)

Pressure 10-25-lbs or 21-55-ft.
water column

Pressure easily controlled
by valve or finger.

Lemarchand issued pres-
sure 150-200 lbs. Too strong-bruis-
ing, dangerous,

Douche may be fixed or
movable

Varieties of Douches

Rain douche
Percussion "
(experiment-)
Descending douche
Vertical
Pouring or Swan" neck "

Horizontal jet.
~~Circle spray~~
~~Circle Horizontal spray~~
Circle Spray -
Horizontal spray
douche

Effects of different temp.
Used.
Cool
Warm
Hot.

(Revise this and make
exact - Temp. B. p. 80)

Special Precautions.

Headache. - Vertigo
Sweating of Hand
abdominal Pain
or Pelvic pain

and other painful
regions in hysteria
Hysterical or neuro
attacks. Weakness
Palpitation, Short=
ness, Nervous
Insomnia.

~~Local Douche~~

~~Scotch douch~~

a without transition
b with
alternate douche

Local Douche

Head —	Cheal —
Heart —	Spinal
Lumbar	Hepatic
Spleenic	— Epigastric

Abdominal - Hypogastric
Articular (Foliis)
Feet, Sciatic,
Aerial, Plantar
Filiform, Circle of Ring.
Circle sprain, Madage of Ring
Inguinal.

External 48 B -
Nasal.
Ear.
Bladder.
Urether.
Vagina.
Uterus,
Colon (Ceum -
Colo-clysler)
Stomach

Hot, cold alternate hot and cold for each of foregoing except-those dried ear,

Hot rectal irrigation in Pelvic cellulitis especially in girls.

Medicated Irrigation Bladder, Urethra, Bladder Colon. — Dr. Kellogg's irrigator. — Dr Kellogg

~~H.C.~~ Dry a gauze w-rolled edgings uterus

May 17. 1898 - 7

Combined Horizontal and rain douche used by Flurry. very vigorous.

Allowable - if moderate temperature.

Immersion (Bath without percussion)

Plunge, Full Bath

Sea bathing Diminished surf bath

Full bath

Cold, Hot, neutral -

Graduated (Jenkins & Buchard

Alternate - full bath

Neutral " "

with cooling of head

Half Bath

Graduated Lady rub

(Shallow bath, & graduated shallow, rubbing shallow,)

Affusion or Pail
pour, W.S. pack

Moist-friction (~~W.H.A.~~)
with hand - towel - brush

Sponge bath.

Towel rub.

Wet-sheet rub.

Partial Baths

Sitz bath. Hot-neutral cold.

Foot-bath-al-dif-temp.

Hand bath.

Heating compresses
Neck Chest-
epigastric
Abdominal
Trunk. Pelvic
(Sacrum, pubes
upper thighs)
Leg
Feet,
Various local
heating compo-

~~Fluid~~

Hot Compresses

Fomentations
Hot bottles, bags -
bricks, covered
with moist cloth

Dry Heat.
Hot-bag - bottles - bricks
sand bag etc.

Cold Compresses.
To head, neck, wrists
chest, abdomen
pelvis various
local, using
ice bag, dry
or moist-colder-
ed - cold comp -
often changed
thin moistened

cloth, called bath
evaporation with
hand or electric fan

Miscellaneous - To be classified -
H + C. Compr -
" Sponge
" Pour
Long Pack
Chest "
Cotton pack to joints
~~Steam~~
Moist-evaporating Pack,
Hot-air bath,
Partial " " " -
arms - legs joints
Vapor bath
" " "

Russian
Turkish
Finnish
Electric Light bath
Local application
of electric light,
Electric, Mitt
Far, Gal, Sin.

Therapeutic Effects

Sedation

Of pain, analgesic

Of nerves, anti-spasmodic

Head, Heart, Stomach

Of local irritation, congestion, inflammation

Phlogistic

Of fever, Antithermic

Definition of Sedative:-

An agent which moderates the increased reaction of an organ or set of organs.

a 13½

Introductory Pathological Biochemistry

Course consists briefly in three classes, as regards pathological effects

① Some local or altering digestion, as gastritis, bilious lymphatic

② Constitutional conditions, or diathesis

③ Combination of the two.

Under head of ① we have Gastritis, Dyspepsia, Jaundice, Intestinal catarrh, Pancreatic, nasal, pharyngeal and hepatic, etc. Skin diseases, ~~Gout~~ Bright's, Rheumatic

Bottey's classification

Tonic & sedative

Revulsive.

Calorific

Derivative

Analgesic.

Excito-reflex.

Excito-motor

Perturbing.

Resolutive

Hemostatic

Sedative

Antiphlogistic

antiphlogistic-

proper-(cold)-

antiphlogistic

Enteroptosis

*Under Members (2)

Rheumatism, Sciatica, Gout, Diabetes, Uric Acid, diathesis, Eczema and Heavy ~~other~~

*(1) Sensations and many ~~nervous~~ affections such as ~~chronic~~ neuritis

---

Under head of (3) Albumin Bright's, Chronic Migraine, and many other disorders

atonic - (heat
Hemostatic
~~antiseptic~~
antiseptic

Anti-thermic
anti-pyretic

Sudorific
Eliminative or
Depurative.
Spliative or
alterative.

Sedative
Antispasmodic

Classification of Remedies

Therapeutic Effects

Excitant
- General
- Endo-gastro-intestinal
- Diuretic
- Cholagogue
- Cathartic
- Heart — Hemostatic
- Uterus
- Bladder
- Nerves
- Expectorant

Sedative
- analgesic { general, local
- antispasmodic { general, local
- antiphlogistic — General
- Cardiac depressant
- Respiratory
- Local { Local anesthetic, Local sedative
- Antiperiodic
- Antiseptic
- Diet
- Hydrotherapy

Hypnotic

Infancy
Childhood
Youth, Puberty,
Adult — Menstruation
Women
Substitute for menses
Lactation
Sed. pressure of age
Hypnotic

In Hyd. lost Jahrbücher I say this affinity always tested. The same remedy, same off-balance, same well-being, exciting, or soothing, to patient or malady.

In classification I feel an attempt to describe the means by which the various desirable therapeutic means may be produced, mentioning so far as possible the governing conditions and circumstances. The same remedy may thus appear in several different categories.

?

Exciting of Sensorium

Two kinds of exciting effects

Opposing effects of exciting on Sensorium

(2) Secondary from reacting. Exciting effects increased by

(1) Extreme tenuity or great diff between tenuity of water & that of skin

(2) Sight of life

(3) Sudden "

(4) Perception + pure simpleness energy jets

Mitigate effects by blunt stimulus

Advantage of otherwise accumulation of stimulus

Quick effect

or exciting

Alcohol - explain it

Slight impulse - effect followed by narcotic or depressed effects

other stimuli

Different forms of exciting effects.

Primary General

Local { Rhinozoster
Cardiac
Uterus
Bladder
Bowel } Gets-water.

reflex

Secondary. or

Eliminative

General - Force - Strength, appetite
general sense of well being.
Oxygenes

Local

Endorgfe { eliminative
Epithelial { Sudorific
diuretic
cholagogue
Cathartic

Analgesic
Sedative - 3 + left
Revulsive Rubefacient
Resolutive
Alterative (h. 221)

Excitant
Direct tonic Nutritive

Massage

Def. Massage is a manipulation which stimulates the circulation, increases the activity of the cells, and increases vital processes.

In more modern terms, it may be said to be a remedy which gradually restores normal tissue metabolism or change, both constructive and destructive, thus reducing tissue proliferations and restoration of the cells to normal functional activity.

Physiological effects are as follows:

Massage acts in a healthy way upon the circulation and the blood vessels.

Reflexes from the skin

Reflexes from the muscles

Resulting effects in the skin are a stimulating massage producing fatigue by exhausting the cells of the skin.

Some effects of soft water are not constant effects when taken as a bath, but are indirect, the benefit of a bath in the daytime in health, and such as functional activity from sun, bath, etc.

Advantages as only drug treatment

Structure and the self

Rest & Sleep Magazines

most powerful sedatives are
most powerful stimulants are rightly
adapted and applied

Physiologists must have found
single organs.

2 R.D & J.D still more, for
bran been absolutely.

3 J.D. [illegible]
4 J.D. & W.S.R. [illegible]
5 Dr. J. [illegible] [illegible]

1 Pleurisy
12 Pneumonia
13 Surf bath

(1) [illegible]
2 [illegible]
[illegible]
alternate

Careful training or avoidance
of public person - [illegible]
1 Convalescence
2 Convalescence
3 nervous - neurasthenia
4 hypochondria
5 hypochondria
6 rheumatic
7 gouty
8 neuralgia
9 pregnant
10 very young
11 very old
12 women
13 Skin diseases
14 Deficient cardiac
compensation

15 [illegible]
16 [illegible]
17. Acute mania
18. Consumption
& especially known
thoracic cancer
19. Diabetes
20. Prostatic disease
21. Neurotics
22. Combating fatigue
23. Ataxic cases
24. Idiosyncrasy
against opiates
25. Affections of
sleep

Directions General for Cold Baths.

1. Certain patients from 80 react by testing cum. Let copy of note to Dr.
2. Watch for bright red color. If does not appear apply heat 4-5 min the repeat. Note change from dusky to bright red. Repeat if necessary. The influence influence of cold much diminished by this means.

To cover the temp. the shorter the application very cold 1-3 sec.

Most durable effects from very cold short baths

Ice the most useful of all means for local effects

add water-drinking, another cold water enema

R to stay in. Pen-refria, use hot instead.

All applications on tonic the temp. 3 which is too energetic to provoke resistance on the part of the body.

Tonic effects produced by temp. 98°. from.

All tonic applications tend to red. & reflex vasomotor change.

Lowering the temp.

For tonic effect the temp. must of

to resulted to patients
Tonic eff. indicates
(irritable weakness.)
as in many cases
of delirium, nervous
ness and agitation
of fevers, accompanied
by depression. In
such cases, a
cool application of cold
gives immediate
and complete relief.
also in chronic neures-
thenia, hysteria and
other cases of chronic
irritation of the digestive
organs. Borden

and
Insomnia, chronic
inebriety & nervous
nervous disturbances
arising from entero
ptosis

Toxic effect of cold
water is produced
by exciting the
increased activity
of all the intricate
processes of metabolism
Toxic effects the
most important

Hydrotherapy—
The constant aim should be to attain the use of low temperature.

Conditions of disease and of individual susceptibility require training, mod. temp in persuasion, at first, short applications of temp is low.

Applications 26 27 short
never dangerous —
too long, always
dangerous —
Very cold water.
1-3 hour, at first
never more than
5 or 6 sec.

In giving douche
do not apply compla-
but rub the bath
or applications
douche too long

produces exciting effects, from least strong reaction.

In emaciated and anemic persons and chronics oxygen and fuel deficient hence the system is exhausted and fatigue produced by the reaction from very cold application

Nervous irritability exaggeration of organic

reflexes - causing
nerves - prescribing
radiators, palpitation
pressure of breight in
the chest. Broadening
pain & nervous
abnormal reactions
& paresthesia, such
as pricking, numb-
ness etc. To avoid
such effects use
~~foot rubs~~ sponge
baths, hard rubs,
not that back
effusion, douche
with ~~light~~ pressure

~~Tepe~~

Use moderate temp-
60°-80°
Precede cold application
with hot bath 4-10 min

Depressed conditions of the
nervous system require
exciting applications
such as rain, spray,
jet, ~~short~~ immersion-
short and cold. Towel
rub. cold — rub mug

Sedative Applications

Sedative or depressing effects, produced by the same means that produce tonic effects differently managed. Whether a certain ~~Applications~~ application of Mild gin Camp is tonic or sedative depends as much upon the temperament of the patient and his condition, as on the proceeding itself

Nerve
The most
the only
immediate sedative
Sedative effects by cold
water, may be produced
in two ways — (1) By re-
storing nerve tone
through tonic appli-
cations — (2) By cooling applications of cold water
Sedative effects may
also be produced when
warm water is used

Water 92°-9
total bath
diminished and
immediate sedative
effects by cold
water, may be produced
in two ways — (1) By re-
storing nerve tone
tonic appli-
cations — (2) By cooling applications of cold water
Sedative effects may
also be produced when
warm water is used

ways - (1) application producing irritation

(2) By prolonged application at neutral temp 92°-97°

a short hot mix of an astringent

wet

(a) Spec[illegible]

Gen Sea[illegible] System

Neutral bath 30' – 2 hrs (70°)

U.S. pack, warming day, not too warm covered to sweat skin.

Jet D at 75 to 80° 3 min

~~cold~~ Recept to lines, long time or, evaporating cap.

Cold cath, Douche, compresses,

Ice Douche, ① sponging ② Pour, ④ Douch

Abdom heating compress, moist girdle.

Hot Neuro Sedative

Heat: moist or dry, hot water bag, bricks

Cold: Ice bag, compress or evaporating compress

Pour, H+C, immersion

must avoid reaction.

alternate with pour every 1 to 3 hrs to obtain sed. reaction, and avoid damage from chilling.

2 Main Therap effects.

Advantages of Hydrotherapeutic sedatives like baths over drugs, specially over sedatives

Here sedatives

Brief effects of all sedatives drugs and special evils of each.

6) Sedat. Electric.

5

Brain
Cold to head & face, heat to upper spine. C to face, h. to back & neck, cold to neck, short cold bath to hands + arms, feet & legs, hot bag warmth (95° to 104°) to Circus, legs, or hip bath.

Heating | Face to arms, legs, trunk, half back.

Jets or S.D.

Sensed to C in neutral B. 30-60°
Was. N. 75°. Shut hot B 98-104°,
lung cold 76-80 gradual cold.
Cold to head, face ice bag on heart.

Heart Sedative warm bath.
98 to 104° cold over heart.
Cold water drinking, Pa 79°

Local Sedative. Cold hip-
lancet, Hot. highly. Ice
stomach, hot water drinking,
Temp of water 103° Afterwards in
higher Before meals 1/2 hour.

Sedative	Opiates

General

(1) Nerves

(2) Circulation autitoxic

(3) Temperature

Sedative

(1) Hysteria, Calmative autitoxic

— Delirium, Insomnia, hysteria, anxiety, nervousness, autitoxic

(2) Feverishness, overreaction

x 2 — in pain, fatigue, exertion, without exhaustion

(3) ~~Antipyretic~~ autitoxic

fever — Cold - heat!

Local

Analgesic

Antiphlogistic

Astringent

Anesthetic

Hygienic or Prophylactic.

Daily cold bath.

Rest and exercise.

Hardens skin; protects from cold. Stimulates tissue processes of nutrition and assimilation, aids digestion, acts powerfully on the sympathetic, the chief regulator of nutrition, vasomotor symptomatics.

How to take cold bath, hand towel, sponge, tub, dip, shower, plunge, ring spray, how to have friction to each individual area at a time.

Hot bath 2-3 t. w. at night

Oil rub in cold weather.

Linen, clothing under.

Increases vital resistance

" active blood corpuscles.

The volume of blood, one of nourishment increased by cold bath. (See massage)

Hence protects against malaria and germ disease

Abnormal or Hel. or disease organisms

Summer. Cold bath increases ability to bear heat, or rather the loss by sweating, by bracing nerves.

Winter. Hardens skin and lessens danger of cold pulmonary congestion, etc., increases ability to bear cold, & of skin to protect itself.

Precautions.

Very cold baths must be short.

Reacting by exercise, hot bath, etc., & state of respiration, suffices for cold bath, if not carried to fatigue.

If fatigued use cool or tepid bath. If much fatigued, cool sponge bath following shortly not bath.

all persons cannot bear
very cold baths. Cold feet
walks or immersion below
knees, feet & for others,
plunge or bath, sponge
others. Use best suited to person

1-7 years, immersion
or sponge, not & in any
form. Tepid cool, or cold
never very cold.

7-to puberty - affusion or
light ⊕. not too cold
prevents wetting bed, often
indicates weak inhibitory
centers, may develop
serious nervous diseases
later. Daily cold bath
Cures bath
Aid growth and de-
velopment & muscles
& nerve tone. General
nutrition.

Ab

at Puberty. cold bath daily, exercises successfully growing pains and muscular troubles, regulate menstruation, favour good sexual development, antagonized will frequently sometimes by allaying nervous states, cures headache, palpitation &c etc.

Adults, must adapt to conditions of life. Rheumatism & rheumatism, gout, gravel, ~~or~~ migraine, or migraine, use, tub bath 3-4 min, followed by short cold bath daily.

for sedentary, brain
exert a substitute for
exercise. The Finnish
and Zappr. all athlet-
ics, but boxing,
true cycd. but perfect
substitute only.

for women especially
useful, to avoid after
determining influences
of evil, life, which
menstruous.

<u>Cold bathing</u> favors
development of the
uterus. Finally, that
offering as supposed
of special service
to young girls.

In cases of dysmenorrhoea menorrhagia & relapsing inflammation, hydrastis is of great service. Cold bath at beginning of menses has produced a fatal hematocele.

See clinical part for further observations.

The writs have in
included Rapt and pun-
~~ous~~ by fee from incon-
venience by habeas
C. B.

during Prosecution, best
× Worthfield, C. B. use
Lefed Prince. here
C. B. at beginning of
Jeeva, yet many
Jury not allentum to
Ulen rule when a-
Confined, and suffi
no during Jacob's
Worthen, Prince of
be ye. Eng.

Old age: arteriosclerosis, no etiology.
C.D. only in those long trained. Skin inactive vessels rigid, reactions weak, heat reactions slow.
"Cystitis, weak heart, bronchitis, emphysema, probably present in old cases, must be remembered.

In Pregnancy. Avoid
D. in all forms, use
short stays, not
very cold. Douche
cold applications to
abdomen, glutea
region, especial in
high degree with the
hæcaution.
In lactation, Avoid
lumbar region &
abdomen, may
cause illness. Do
appear prematurely.
Offline Chiefly to
suffer from body,
increase flow of milk
& cause mastitis.

Cod 27 Rest

Swim & skim Balls
with gymnasium should
be supplied with
every school, aid
physical develop-
ment & mental
activity, and un-
garnize avels of
school life.

Medical treatment and Cookery.

Medical treatment.

Principles

Acute illnesses are
characterized by fever or pain.

Chronic diseases

Lasting months or years

Surgical Cases. Involving pain, fever, or danger
Traumatisms. Injuries. Sequelæ or accidents of all
kinds, at least at first. Wounds.

Obstetrical cases requiring
medical interference.

Nursing assigns.

Hydrotherapy a narrower
sphere now restricted
its use too closely to
cold water. Hydrotherapy
improperly means all Hygienic Office

Medical cases and bowels.

Medical cases.

Pneumonia

Acute malaria a c̄ companied by fever or fever.

Chronic malaria

Surgical Cases involving pain. fever or lingering suppurations. tuberculosis. Injuries. sequelae accidents of all kinds, at least at first. Gas.

Obstetrical cases requiring medical interference.

Nurse who assigns.

hydrotherapy a narrower sphere should be restricted its use too closely to cold water. Hydrotherapy improperly means all therapeutic of the

1c Neurasthenia. 130, 131 etc

Degenerations, Delusions

by review army general
vigor. Exudates are
absorbed, fatty degeneration
checked, absorbed parts
stimulated to new growth

Scleroses

Hypertrophy increase volume
of tissue elements

Hyperplasia increased
number of elements
when due to sympathetic
irritation or ch. congestion
or inflammation
abundant, canal
Hydrotics under
pressure

Gangrene from diabetes, nervous
affection, alcoholics, uric acid
poisoning

also arteriosclerosis
hydro very useful & can
much help in thrombosis, pure
service in maintaining normal
heat. Use hot bath, wet
pack several times a day

Dropsy due to heart or kidney
lesion great sinner
most necessary in dropsy
due to anemia, chlorosis, other causes in

Amenorrhoea, as natural,
hydrotherapy alone can
gastro intestinal, peritoneal
Controlled by Hydro.
Pelvic inflammatory
Organic Diseases of Pelvic
Cord are sometimes
cured & at least symptomatically, as bowel motor
ataxia. Myelitis. Nearly all
unfitted. Cold water must

In cases of bronchitis
emphysema and congestive stages
and chronic bronchitis.

Gastric affections most
valuable all remedies
Hyperpepsia, Hypopepsia
Dyspepsia. Increases
HCl. diminishes HCl.
acids intestinal atonic.

Renal
Urinary disorders. most
valuable, albuminuria & chronic of urine,
skin, bladder, prostatic
irritation,

Gen

Genital Disorders, Hysteria men & women, more valuable than any other. Sitz bath V.D. douche. Urethral & rectal irrigation, general tonic

Pulmonary Maladies,

Oil Inhalation, & asthma consumption great cures, but use & only for fresh or fresh air & exercise also cold shower bath & hot & cold air & exercise for Chest for vaginal

all catarrhal affections of air passages, of the greatest value. a healthy healthy, energetic, muscles, nerves

+ Pagenstecher, psoriasis,
lichen, intertrigo.
Occasionally patients year under
neutral ~~that~~ bath for itching water
as in pruritus, + icterus,

Heart affections. Great value. In excessive perspiration, warm baths 95°–100° 15' ~~temperature~~ followed by cold douche. In deficient perspiration, baths at 120° with friction.

Skin affections. Warm bath, also Finsen's light treatment is of great service for local symptoms.

Enema, hardened fæces, etc. cause many reflex disturbances which is the cause, Remote

Nervous Maladies.

Stops vomiting, cerebral affections in pregnancy, relieves cough in consumption, uterine tumor causing hemorrhage, pain of ataxia.

Contraindications in Cases
Specially adverse to
Hydrotherapy.
For Example
Anemia with hemorrhage
avoid C D to abdomen & lumbar
region, precede by
cold foot bath or from
spine or both.
Anemia with amenorrhoea
C & D as usual, but
precede with hot foot
& hips, thighs,
and shoulders & Venous
If varicose ulcer
Exist on legs,
use no pressure
If when water drawing
in other conditions
privilege cold D, begin
with short warm D 95-80
and come progressively
use also N & C's.

The diathesis	& cachexias
Alimentary obesity	Sluggish
diabetes	"
Chronic or	& infections
as malaria	, alcoholic
At beginning	ing of heating
accidents	first of all
faints!, 2.	susceptibility
Power to react,	
3. Heat making capacity.	
better.	To begin two
moderately	then two
severely.	Progress gradu-
ally as fever is	lowered

Better a different medicality applications of plein than make less effective and reverse,

agravation of symptoms at first but a bad medication. Suggests general treatment again. Suspend treat, & begin - gain may be rising pulse. explain Haig's theory about uric acid.

when they could hear
assert coherent weakness,
suspend a change.
begin again from an
evidence of "the safest
way work" based daf-
fined, explain what
the work is, he hears
fuls so well, he thinks
the heathens was doing
harm is reluctant to
begin again, he has
simply a fragments of the
one trust continue!

571 11

+ Cold affects bacteria in vessels in as well as tissues by initiate + conical radial reaction in following ways.

1. Higher temp.
2. H + C. a less extremes.
   b. Number of alternations
   c. Gradation, or progression
3. Precede with general D.
4. Succeed at once with "
5. Accom. " precede by heat, follow cold

D is most necessary. We may use other means for same effects, especially the following:

See 15-17

Affections of the Dorsal

Area	Affections
All skin	surfaces related
Some internal	visceral
and.	
In general, the skin overlying	
a part is affected on the same side	
lines.	
Scalp-hair,	Pia
vascular channels in the skull	
bones & dura	meninges; back of head
All skin	of trunk & legs are
related to	cord;
neck,	larynx
upper	Dorsal (posterior) lungs
chest,	lungs,
precordia,	heart
Right	lower ribs, liver
Left	" " spleen
Shoulders,	Uterus, bladder, rectum
	reflex & derivative

7-a Cold shower 5"

6 + Cold compress, ~~[illegible]~~

7 (2) Ice rub 5"-10"

1 (3) ~~Upper long and short hand D.~~

10"-15"

6-a + Jerk fol. by ice compress

or ice rub.

9 - b Hot sponge fol. by ice

4 (b) ~~Cold foot B. short shallow~~

4 a. ~~Hot foot~~

5 ~~(a) Hot cold immersion~~

5 + Hot immersion fol. by

cold affusion

2 + ~~Cold affusion~~

3 ~~Hot cold affusion~~

8 + Ice towel rub

8 - a with or without friction

hot affl.

10 + Cold air ~~[illegible]~~ d

10 + a hot air D

9 + Vapor D

11 ~~+ 7 5" 6 15" + D~~

~~Dorsal Spine~~

~~Dorsal Spine~~ ~~Stomach~~

Lumbar Spine, Uterus, Bladder

Kidneys, Intestines

nervous weight

Dorsal Spine, stomach, liver

Sternal flower pain, pregnancy, Kidneys

Epigastrium - Stomach

Abdomen, Intestines

Lower abdomen, uterus

bladder, colon, rectum

Sacral - bladder; uterus, bowels.

Derivative of the head.

& chest

Local applications of the D. etc and precautions.

~~D to~~ Head. ~~Cold~~ Cold, short baths, quiets. excites, use in inducephalia cerebral anemia, sunstroke with pale face, Cold D powerful must be used more carefully, ing cause too favorable effect, must be very short. Cold effusion, ~~or~~ ~~short~~ usually better. ~~Defrid~~ D perhaps excitement, use in insomnia, cerebral irritation or ~~exc~~ excitement. Use D at ~~70-75~~

80-92°F, 3 to 5, affusion is better than P,

In ~~to~~ to head, avoid pressure.

Say that app. to head instead be used cautiously. May alternate with cold in cases of cerebral anemia from hemorrhage. or in hyperæmia effusion or compresses!

Long cold wheat dressing use in cerebral congest. fever. sunstroke red face, ~~Pour~~ affusion, cold bag, ice compress a wash, cum bet means.

For further
Local D. | ones se
MB. 1. 92 etc.

Contra-indications

Cold baths dangerous in infancy, below 7 yrs

At beginning of menses period gen. cold baths dangerous anytime during period

Morning bath to cause return of menses.

Pregnancy avoid general cold baths, including douche & local baths best.

Organic disease and degeneration

Last stages of Phthisis always risky in

Bright's Cancer, late tuberculosis, general paralysis, cerebral softening, chronic atrophy & hypertrophy from exertion.

advanced Heart disease (organic) with dil, + dropsy, ice cold water, specially in aortic insufficiency, in which sudden death occurs.

aneurism of aorta when

arterio-sclerosis advanced

Apoplexy, avoid any threatening warnings

Some Skin Diseases,

Eczema, psoriasis

Eczema in acne, urticaria pruritus, herpetiform, vienna case Hebra's Clinic

Indiscriminacy against ~~walk~~ hydrotherapy!

Some rebellious cases, by careful training, dry friction massage, etc., etc.

Medicational Emmal)

water more nearly than any other, a universal remedy almost a veritable panacea,

application in all acute disorders at some stage, and in all chronic maladies. Even surgical maladies & accidents demand its use most urgently for all remedies for

Pain & Pain.
Significant
~~Role of water~~
indications for
Hydrotherapy: —

Fever B 64-66 & B3.
etc.
Rheumatism
Pain — acute
chronic
dull
Paraesthesia
neuralgic
reflex
Hyperesthesia
Anesthesia
Cough
Syncope
Congestion
Inflammation (local
anemia general
local

6k

Supplementary Hydro (Ans

Vomiting
Diarrhoea
~~Constipation~~
Hemorrhage.
nose
stomach
lungs,
bowels,
Kidneys
bladder,
uterus

Inf. of Cold on Pulse

Under cold, relation quickens heat beat ~~[illegible]~~ blood pressure is reversed. Heart pressure quicker pulse. Exercise increases heart beat same as ordinary

Rule Cold heaviness 3 hrs d. eating when digestion is slow, even longer after light meal, as ordinarily.

Reaction

Wells of Memphis.

2d Chill.

Continued chill,
Cold hands & feet
Internal congestions, as
headache, diarrhea
abdominal & ovarian pains
(in women) Catarrhal
off. of nose ~~Hum~~ etc.
lassitude, vertigo,
rheumatic & neuralgic
pains.

Rule. First d C B.

ascending C. P. & nerves affected
cold, vital
taking, not
digest is complete.

Chaps or disease, its nature, remedies, rician method with physiological rational method

Office of the artificial contrasted with physiological method

Pain, Methods of combatting

Rule when applying cold, patient must not feel cold, must feel warm from exercise or artificial heat or warm clothing

Suffumigation.

that fresh air, through, the bag to shine	not so.
Jacket that becomes use vapor blast + vapor	will not HCO, or HO, or cold air.
to modification effluvia.	and ex- 3 M. 125-7

Cold & relaxing according to the method used.	
Alternate may be cold & to turn of H or C.	exciting made more exciting than D. according
exciting	measure may
produce solution effects medically by use of feeble stimulate nerves at in anemia.	
Freezing, rheumatism, obesity, weak appetite, but always add cold at end, few exceptions.	useful in gout, fluttering, palpitation.

Animal meal — References

Beri-Bardi p. 22

Digestion — Effect of Cold on BBB p 32

Urine — Cold, increase urea in, & if too severe, may cause excess of urea, phosphates, even albumin & sugar

Urine Spinal balls.

Eet patient with if possible

Spine circle

Circulation

Urine

Water-drinking lowers tension by eliminating through lungs, skin & kidneys & thus reducing fits in fever

Cold bath lowers temp, by stimulat-ing kidneys, also perhaps by benumbing the sympathetic nerves of skin and so checking reflexes.

Effect of cold on respiration differs with mode of application

Immersion slows resp. in warm cold pail bath

Douche with cleansing effect

Oxidation - respiration produces calories increased

Reaction

Depend upon	Effects of application
1. Mode	of water
2. Temp.	of patient,
3. Condition	febrile or not,
whether	coarse or strong
whether fat	or thin
" weary	or fresh,
4. Ability to develop	an heat,
5. Ability to	defend loss of
heat, &	to support its
loss	
6. Condition of	circulation
7. " of	nervous system

Cold water drinking.

5 or 6 glasses at 40° F causes often fall of temperature with chill (frisson) followed by cold temp. in 70 & 80° F in more persistent lower temp. below 95° F

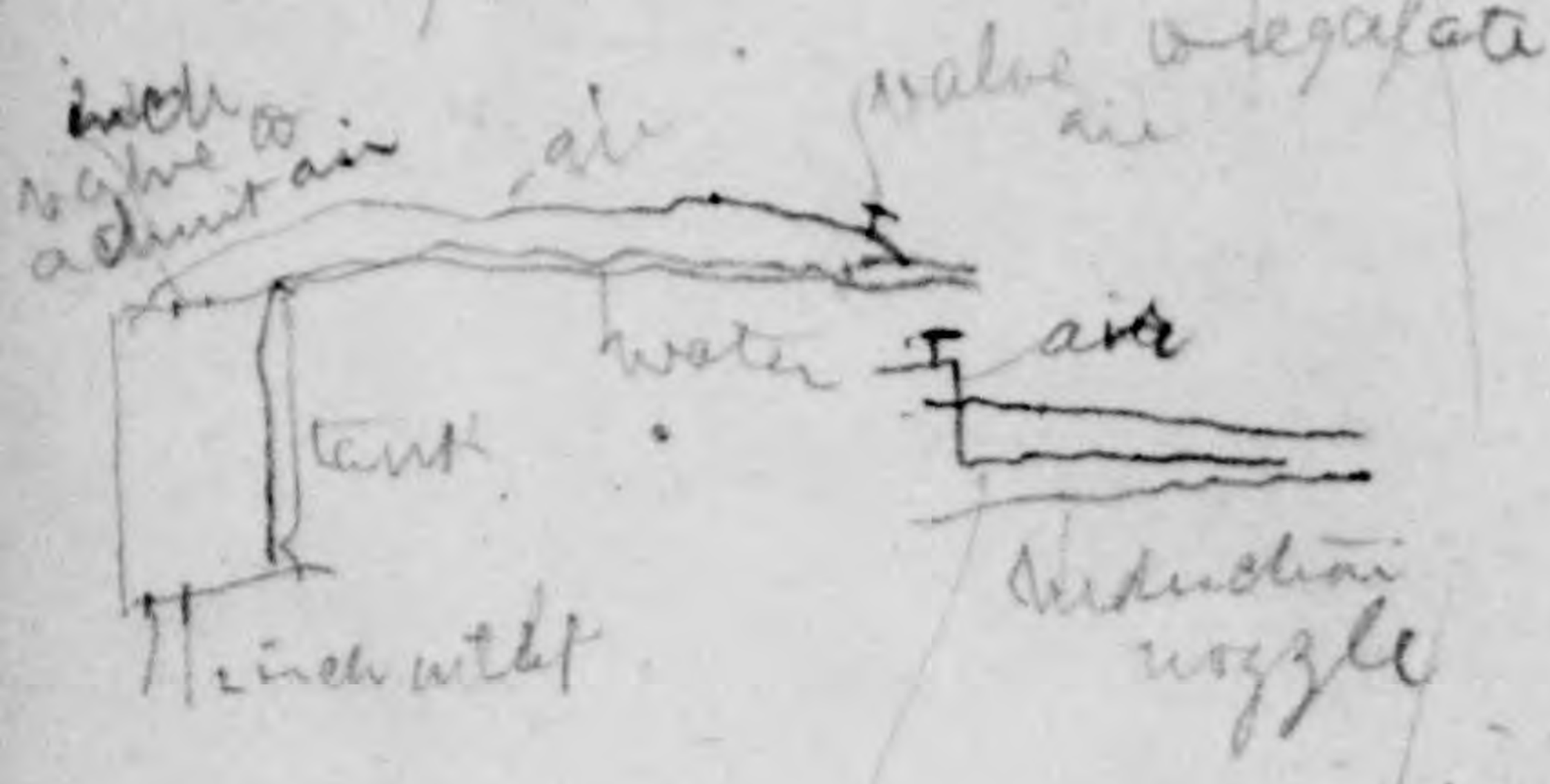
D'Arsonval shown by that fall beginning with

Laveine & Heidwolter produces results then all temp. lower temp.

Lower pressure

Low tank increase pressure effect.

Pressure & adjust air close to nozzle or even near mouth of nozzle, may arrange an indication plan.



very small orifice

By induction without pressure, or with little pressure. By also flow. of using air tank intervening but of water supply using water direct. Pressure

Miscellaneous Memo.

Caution about pain D, too strong
impression on brain & pneumo-
gastric area.

In some persons exercise
hinders reaction, causing
up heat. Chest & pelvic veins
in such cases. Especially true
after prolonged cold bath. Can-
also gives to flate of fatigue

Note that reaction from
heat has not had enough
attention.

Cold-tonic or alterative reaction
heat sedative " astringent "
causes dizzy.

Heat a stimulant
a blush red.
Cold a scarlet red.

Heat dilates ~~veins~~ venules instead
of arterioles. This is due to the protective
function of the system against heat.
1. The skin becomes a better conductor
2. Sweat is encouraged
3. Rate & circulation stored, thus internal not

Cold cough [illegible] at to
close pores, but to absorb the
heat of the fomentation the skin.
. For analgesic effects use just
analgesic cold to produce lively
red color, replacing dusky red.
In other cases, may remaining
enough to produce reaction if
desired, and thus tonic effect.

Under nervous system describe
how energy is stored. Show dif. between
fatigued and rested cell.

Mineral baths
Schott method etc

Water in surgery
heat & electricity
warms. in sprains, bruises
fractures
Ice & ice comp. for pain.
inflam. & hemorrhage.
inflammation. Cure inf.
If it appears
Use in old ulcers.

Water in Bed Sterility. Water
Arnica, Ammonia, Cold Wind
Natrum Mur. Injection for hemorr
ing.

Headaches, Bad
Resume Remi-13, 117-12

Cool Cold Wet Wind
more definite sedative
effects than cold being
less exciting. Its bold
lowering and calming
effect

Sedation produced by
~~poor~~ cold is always
preceded by excitement
- reaction more or less
the less intense the cold,
the less this excitement.
Suggest as a remedy, the

Graduated baths are usefull in graduated Principle of Practice	efficacious, Baths on shards fever.
Reducing baths are usefull in well nourished, well nourished. weakness, secondary chill, headache, etc. are evidence of too long, too or too long ~~the~~ application use higher temp, and prolong aff. as may be needed.	
Oscillating usually most cold D. due after blood,	Reaction occurs often or very cold & coldness of reacting of evaporation

Sufficient nourishment.

Moist skin, by stop loss of heat through friction and exercise, being converted into mechanical work.

Reaction will often be lessened, sometimes must be suppressed. Not always to be encouraged.

When ability to make animal heat is good, prolong cold & when it is poor, use water of higher temp.

In asthma & organic heart affn. apply to only legs, & even confine to feet.

Anemia with apnoea

apply C to upper lids, nts & feet, avoid lumbar & abdominal region use hot f.D.

Anemia with Amenorrhoea

General cold D.

In suppression, apply before cold D. – Ice bag

Regular menses, increasing over liver and part

hot foot b. tenth. & hot abdomen & thighs.

Rearrange foot & other hot baths so as to reach menses if to starting point, or to increase.

Substitute hot Dash in many cases for foot baths.

Describe Vapor. D

Shorten all treatments

In fevers suppress reaction as much as possible.

In Intermittent, in patients unreduced, use cold bath except when chill is unbending as shown by rising temp., then use cool or tepid D, and follow by dry pack. Careful not to wait till the chill is impending.

Some rheumatics, & gouty cases allow moderate cold D, other tolerate only heat, especially hot air, vapor, & E. B. Especially rheumatics with neuralgia

In tonic spasms with cool or tepid or long, light percussion. Scold is generally best, for Anemia simple Fatigue for excitable or hysterical women. When a tonic effect by prolonging the closing cold

Skin is very sensitive use W.S.H., Jam, & L.H. not air & water baths.

Nervous diseases, Insomnia relieved by exercising measures, otherwise only by sedation by cool or warm applications.

In Neuralgia, applied to head or neck not extended

Hysteria excited nerves too strongly, use mental

bath or ~~lukewarm~~ or warm cool, D.

Dyspepsia with sensitive ganglia, cannot suffer D on abdomen.

Hypochondriac, nervous sens. can only endure cin.

~~Nervous~~

Cases of spinal sclerosis with exaggerated reflexes requires long treatment D, little pressure, to spine.

Sciatica, generally irritable nerves. Not basto followed by Rc to leg + ~~temp.~~ slight cool D at end.

Locomotor ataxia with lightning pains and contractures by pressure, no cold D, but warm D, 95°, shine from 95°, fine D shine & neutral baths 93-96°

Or rule, Cold D
Gives all appreciation
except when cold is
contraindicated

Cold to a skin area, causes
contraction & reaction in
some related internal area.
This internal reaction may
be diminished by general
D. immediately after the
local.

E. L. B. Douche, glass lined

E. L. B + cold blast.

Hot blast with Cold D. 4
Cold " " hot D.
General & local

3506
AA
Kellogg, John Harvey

James

Lectures delivered
at Battle Creek College
during Special Course
Meth - April 1887.
by
Dr. J. H. Kellogg.

Lecture	Apr 4th	"Tobacco Tea & Coffee"
Lecture	Apr 5th	Tobacco. Tea - Coffee
Lecture	Apr 6th	Ventilation.
Lecture	Apr 7th	Ventilation
Lecture	Apr 8th	Ventilation

Pages not

Available

for filming

Tobacco Tea and Coffee.

Tobacco belongs to a family of poisonous plants such as The deadly nigher shade. Even the potatoe which belonge to the same family contains in its seeds and sprouts a poisonous principle.

The essential oil or poison-ous principle of tobacco is nicotine which is ob-tained by distilling the leaves. It is one of the most deadly poisons known both to man and animals the tobacco worm however seems to be proof against its. Other insects are rapidly destroyed by.

Among the Hottentots it is used to kill snakes and There are instances on record where it has been used for purposes of murder and suicide Children have been from the ignorance of mothers or nurses who have applied the oil of tobacco obtained from an old pipe to open sores.

One tenth of a drop will kill a cat. Less than one tenth of a grain has been known to kill a man. Tobacco contains from 2 to 8 per cent of nicotine, or about 420 grains to the pound. One drop equals about 1/3 of a grain. Therefore it is found that one ordinary cigar contains enough nicotine if all taken at once to kill two men. The great nausea produced when tobacco is first used is due to the poisonous effects of the nicotine not enough being absorbed to produce death.

The history of the introduction of tobacco is a very interesting one. Before the discovery of America its use was unknown in Europe. When Columbus discovered this continent and sent men ashore to discover what sort of persons inhabited the land, the sailors reported that they had seen the naked savages "twist leaves together and smoke like devils"

The proper term was thus applied to this vile habit at first, but gradually the bad example of the naked savages was followed and after about a century its use was universal in the civilized world.
It was not however till it had met fierce opposition that this state of things was brought about.
The wise & prudent foresaw in it a great evil, kings and emperors fulminated against it, the Pope issued a bull against useing it in church and even the Sultan of Turkey passed the most stringent laws against it, the penalty for its use being that the man should have his nose slit, the stem of the pipe passed through it and thus led through the streets.
But in spite of protests & laws the enslaving drug continued to add to the number of its victims. Strange to say however civilized nations made no improvements in its

use. The cigar and the pipe snuff taking and even chewing were practices very common among the savages. An ancient writer relates how they were surprised on going out to fight with a band of ~~sav~~ savages to see them approach unarmed. They expected to make them an easy prey but as they approached close too them suddenly found themselves blinded by something which the savages very adroitly expectorated into their eyes, which was nothing more nor less than tobacco juice. Snuff dipping alone, of all the ways of taking tobacco the most filthy owes its origin to civilized human dirt - that too of the gentler sex. This is practiced to some extent in the south.

Let us now consider some of the ways in which tobacco is harmful, for there are very many among those who use it who think or pretend to think

that it does them no harm. In the first place alcohol is a deadly poison. and both reason and science show us that the habitual use of any poison must be productive of harm. It is true that the system seems to become accustomed to the use of tobacco as it may to that of opium, arsenic + other poisons, but still the evil goes on, the more dangerous for being insidious.

The local effect of tobacco upon the mouth + throat is that of an irritant + it is thus productive of catarrh & sore throat, deafness and many other quite serious troubles

The effect of tobacco on the nerves is particularly noticeable. It is at first slightly exhilirating. under its use the man thinks he can speak better or write better + so clergymen, lawyers and public speakers often become addicted to its use.

this effect however is deceptive
a prominent lawyer being
questioned on this point
said that he had to give up
smoking just before an
important case, for he had
had found that while, under
the effects of tobacco he thought
he could make a better plea,
he really could not arrange
his points so clearly and
logically. But the principal
effect of tobacco is that of a
narcotic. It tends to stupefy
& lower nerve tone, causing
a state of abstraction and
worries. The business man
perplexed with cares smokes
his cigar & he no longer
realizes his anxieties, but
they still exist & no doubt it
would be much better for
him if he did realize them.
It is this property of tobacco
as of alcohol, to which its
fascination is largely due
There is one marked local
effect of tobacco, namely
cancer of the lip or mouth
to which much attention

has lately been called by the death of several prominent men from this cause.
That the irritation of the pipe stem and of nicotine is very often a cause of this terrible disease is now admitted by all candid & intelligent observers.
In the great Cancer Hospital in London, careful statistics show that in several hundred cases only 3 or 4 out of 100 were women.
This great preponderance of men is justly attributed to the use of tobacco by them to so much greater extent than by the gentler sex.
Probably ~~some~~ 99 cases out of 100 are due to this cause.
Tobacco blindness is another serious disease now known to be due to the excessive use of this drug. The seat of the disease is first noticed by a change in the production of what are known as "after-images". These are impressions retained for some time by the

the retina after looking at a bright object.
Thus if we look at the sun and then turn our eyes to a white wall a dark spot appears.
So when we swing a lighted torch in a circle before the eyes, if swung rapidly a circle of light appears, this being due to the fact that the impression conveyed to the eye at each particular point is retained as until that point is reached again.
The normal duration of after-images is about one minute but in the first stage of tobacco-blindness it is found to be from four to seven minutes.
This indicates a partial paral-ysis. The sense of color is next lost so that the patient cannot distinguish green from red, specks appear before the eyes and general dimness of vision and so the disease pro-gresses until absolute blindness results.
It is a well known fact that smokers are deficient in en-

durance. Lieut. Greeley reports that every man who died, in his famous arctic expedition, was a tobacco user, while all who lived were teetotalers both from tobacco and alcohol. Many similar examples might be cited to prove this point. With this hasty review of the effects of tobacco, we pass to the consideration of the effects of tea, coffee chocolate and similar drugs all of which belong to the same family and are very closely allied in their effects. They contain a poisonous principle known as theine or caffeine, of which 7½ grains will kill a cat. Three times as much will make a person very sick so that in experiments it is not considered safe to use more than 15 to 20 grains. Dr. Smith of England experimenting with an infusion of two ounces of coffee fell insensible to the floor & so remained for several hours. Tea contains about 4%, or 280 grains to the

pound. allowing one teaspoon-
-ful ~~tea~~ of tea to the cup we
shall find that each cup
contains about 2½ grains of
the poisonous principle.
It must be evident from
this that many women
who depend on their tea all
the time must take rather
more than a poisonous
dose in the course of the day.
Tea and coffee were introd
duced into Arabia about
three centuries ago & their
use was at first opposed as
was that of tobacco. The
Mohammedan priests con-
-sider their use as contrary
to the teachings of the great
prophet. Still as tobacco
they found their way into the
very countries where their
use was most strongly
opposed. In China & Arabia
tea & coffee had doubtless
been used for many centuries
In So. America a plant
known as Maté or Paraguay
tea is found whose properties
are essential the same as tea

+ coffee. Coca and the lately discovered anaesthetic cocaine are obtained from it. The later has a remarkable property of deadening the sensibility of mucous membranes and of the conjunctiva and rendering them insensible to pain. Theine possesses the same property to a considerable degree. The habitual use of cocaine leads to the formation of a habit the evil effects of which are worse even than the morphine habit.

Tea and Coffee (continued) Apr 5th

That tea is ~~not~~ indeed poisonous is clearly shewn by the following well authenticated story.

During the Ashantee war a British Officer lost a very valuable horse in a sudden and mysterious manner. It was found however that the groom had placed feed for several horses in a sack containing one pound of tea in the bottom. This bring the last to feed devoured the tea with the rest of the feed & in a few minutes was so overcome by the poison that he had to be killed to put an end to his sufferings.

The effects of tea on digestion are well marked. Besides theine tea contains a large quantity of tannin a powerful astringent. The effect of this is to cause a contraction of the blood vessels of the stomach and thus prevent the formation of gastric juice. In this one particular coffee is not so bad. at the same time

the power of the stomach to absorb fluids is lessened while a large amount of fluid is presumed to be absorbed. Again theine is a narcotic. It paralyzes the gastric glands and thus interferes with the formation of the gastric juice.

It is a well known fact that tea produces sick-headache. This is due to the disturbance of digestion and to its paralyzing effect on the liver. Many women habitually take tea to relieve sick-headache but it always returns.

The most marked effect of tea is upon the nerves. Old tea-drinkers are notoriously nervous. Dr. Arlidge of England states that tea-topers are very common among the working classes in that country, and that these women depend upon their cup of tea to stimulate them as ~~the~~ much as the men do upon their liquor.

Of late years a distinct disorder has come to be recognized ~~and~~ known as tea-drinkers

disorder. It was first noticed among a class of men known as tea-tasters whose business it is to taste specimens of tea that is imported. The amount taken each time is very small but a large number of specimens must be examined each day & day after day. This disease is characterized by marked indigestion, great nervousness and a morbid fear of accident and other well marked symptoms, which are relieved when the use of tea is abandoned. So bad are these effects that a prominent tea-merchant in New York said he would rather give his whole fortune than have his son become a "tea-taster" But in spite of these well known facts tea is pleasant to take - so it has many defenders. Most of the arguments advanced for its use are both absurd and unscientific. It is said that tea must be used in some places because the water is hard

But tea has no effect upon hard water and if boiling had anything to do with it, it would be just as well to boil the water alone.

Tea is said to increase strength. In this respect it is exactly like alcohol. Dr. Smith of England, himself a tea-drinker shows by a series of experiments that under the influence of tea a person thinks he is stronger & can work with greater ease, but the following exhaustion is correspondingly great.

It is claimed that tea soothes the nerves and relieves head-ache. This is true. But this very fact is the strongest argument against its use. If it is good for a medecine it is bad for a food. For its effect is that of a narcotic and there would be just as much sense in using any other narcotic habitually as a food as in using tea.

We hear much about the cup "that cheers but not inebriates". This is simply poetic license

for tea does produce intoxication and even marked symptoms of delirium tremens.
There are said to be thousands of tea-drunkards in England particularly among women.
It has been related that a number of reporters for London papers were in the habit of meeting together for a regular spree on tea. Before morning some would be "under the table" just as in a dead drunk.
It is evident then that this class of beverages in such common use are not only unnecessary and expensive but really harmful.
The same argument which exists against the use of tobacco exists against their use only in a less degree.

Ventilation or Hygiene of the Air

Apr 6th

Respiration or breathing is one of the most important functions of animal life. In man the respiratory apparatus consists of the lungs, air passages and the chest with its various muscles. The trachea or windpipe divides into two large bronchial tubes and each of these into two & so they divide & subdivide until they end in the air cells of which there are many millions. The air passages & cells are covered by a delicate mucous membrane which if spread out would cover a surface of 2000 square feet. This membrane in the air cells is exceedingly thin and in it run minute blood vessels so that the blood is brought in almost direct contact with the air & is thus purified. In breathing there is a pumping action of the muscles by which the ribs are drawn upward & outward & the cavity of the chest enlarged

On account of the difference in pressure the air is drawn into the lungs. In this action the diaphragm plays an important part. This is a dome-shaped muscle seperating the lungs from the abdominal cavity. When it contracts its centre is drawn downward & thus the cavity of the chest increased.

The air is found to be a mixture of Nitrogen & oxygen in the proportion of four parts of nitrogen to one of oxygen. Normally it contains above 2 parts in 5000 of Carbonic acid gas. This is produced by the breathing of animals the burning of gas coal etc in other ways.

By experiment it is found that at each breath we take into the lungs about 20 cubic inches of air that is about 4 of oxygen and 16 of Nitrogen the latter serving to dilute the former. Expired air contains Carbonic acid. This can be shown by the following simple

experiment. Take some clear lime water in a clean glass tube & breath into it through a ~~sm~~ small pipe of some sort: in a few seconds the water becomes turbid & milky. This is due to the carbonic acid uniting with the lime to form chalk. after settling a deposit of chalk may be seen at the bottom of the vessel.
Again if we breath slowly into a deep, narrow glass jar & then let down a lighted candle it at once goes out showing the presence of Carbonic acid which cannot support combustion. It is for this reason that the bottom of deep wells is sometimes dangerous to life.
It is found by experiment that at each breath we expire about 1 cu. inch of Carbonic acid gas - at the same time the inspired air looses about 1 cu. inch of oxygen.
It would seem then at first thought that we would need

only sufficient fresh air at each breath to take the place of the 1 cu. inch of oxygen lost or 5 cu. inches of air. But there is something else to be considered. At each breath we respire not only carbonic acid but a certain subtle poison which has never been isolated nor measured but which is known to exist and to be exceedingly poisonous. It is found to be in proportion to the carbonic acid produced. It is this organic poison as it is called which gives to a close room its fusty odor. It is a common cause of consumption and of that general lessening of vitality that comes from close confinement in the house. Fresh air is needed in sufficient volume to dilute this poison so that it shall not be dangerous to health. Careful experiment has shown that at each breath we render unfit to breath

about 5000 cu. inches or 3 cu. ft of air. This volume would contain normally about 2 cu. inches of carbonic acid gas. When it contains 3% Carbonic acid it has reached its limit of safety. Thus at each breath 3 cu. ft of air reaches its safety limit and must be renewed.

We breath 20 times a minute therefore we require each minute 60 cu. ft. of fresh air. Now suppose we have an 8 x 10 bed room with a 12 foot wall. This will contain about 1000 cu. ft of air which would last one person about seventeen minutes. In spite of this fact as many as three persons will shut themselves up in such a bed-room for 8 or 10 hours. Were it not for the fact that air does find its way in through cracks and holes or even through solid walls cases of suffocation would be much more common.

than they are. As it is thousands die annually from the effects of chronic suffocation. Persons become to a certain extent used to foul air, but still its evil effects are very manifest.

Again if we take a large lecture room 50 x 70 ft. and 18 feet high we shall find it will contain about 63.000 cubic feet of air. Suppose that 500 persons are seated in this room with no means of ventilation, the air would become unfit to breath in about $2\frac{1}{10}$ minutes. And yet almost exactly similar conditions prevail in nearly every church and lecture hall. In these, persons often faint from the effects of impure air and the minds of all are dull & heavy.

Ventilation (continued) Ap. 7th

If we let down a lighted candle into a tube & narrow glass jar we shall see that after a short time the candle goes out. This is due to the accumulation of carbonic acid gas in the jar produced by the burning of the candle.

The candle will go out when 1/5 the oxygen in the air is replaced by carbonic acid.

Now if we again let down the lighted candle & at the same time let down a peice of pipe of smaller diameter than the glass jar we shall find that the candle continues to burn brightly. This is due to the fact that a current is now produced whereby the carbonic acid gas is carried off & fresh air supplied in its place. This can be demonstrated by holding a smoking taper at the mouth of the jar when it will be seen that the smoke is drawn down on the outside of the pipe & passes up into it.

This experiment illustrates the first principle of ventilation, that there should be two openings one for foul air & one for fresh air.

Other experiments represent this principle well. Suppose we have a ~~tin~~ tin box made to represent a house, and we place in it a number of candles of different lengths to represent persons.

Now if we close this box up tight & light the candles we notice that all burn brightly at first but soon they begin to grow dim & finally go out entirely, the tallest being affected first. This is due to the fact that the heated carbonic acid gas rises to the top of the room. Many human lives go out, only more slowly from a similar cause.

If now, in our model house we open ventilators at both top and bottom at one end, we notice that all the candles burn brightly & continue to do so. If we bring a lighted taper to the lower opening so that

the fresh air brought in is warm we notice that this air passes directly up to the foul air opening & does not mingle with the air of the room.

We see by this that when the fresh air is brought in cold it mingles with the air of the room before passing out, but when brought in warm, with the openings arranged as above it passes directly through from one to the other.

This brings us to the very practical question as to where we shall bring the fresh air in if cold. If at the bottom of the room the air flows along the floor & cold feet is the result. If at the top of the room, the cold air being heavier falls directly to the floor striking upon the head or neck & is thus a prolific source of colds & more serious troubles resulting from colds.

It is evident then that the conditions of healthful ventilation cannot be procured where the

air is introduced cold.
But where this cannot be avoided it is probably better to introduce it at the top having a box or curtain arranged inside the window in such a way as to reflect the cold air upward toward the ceiling.
When the air is introduced warm it is practically immaterial where it is introduced, for if brought in at the floor it at once passes up to the ceiling where it is diffused & becoming cooled somewhat falls again to the floor. It is probably better on the whole to have it introduced at or near the floor.
When the fresh air comes in cold, the foul air having been longest in the room & therefore the warmest will be found at the top of the room, consequently the foul air opening should be at the top of the room.
If the fresh air is brought in warm the foul air is found at the bottom of the room as it

is the coolest, so that in this case the foul air opening should be at or near the floor

Many persons suppose that if they have a ventilating shaft in the house that alone is sufficient to create a good draft, but this is a mistake. The shaft ✱ must be heated. In ordinary dwelling houses this can be accomplished by using the chimney as a ventilating shaft & allowing pipes from the stoves to pass up through its centre & thus heat the surrounding air.

To ascertain how large an inlet is needed for a given number of persons is a very important question & must depend upon the height of the ✱ ventilating shaft & other things.

It is found that the square root of the height of the ventilating shaft, ~~divided~~ multiplied by the square root of the difference in temperature between the outside & inside air, divided by four will give approximately the rate of the

air current.

We may consider 50° F as the average difference between the temperature of the external & the internal air.

It is evident from this that in the ordinary furnace heated houses ample provision is made for the entrance of fresh warm air, but it is also evident that this supply must be proportionate to the number of persons to occupy the room. Yet when we come to consider the arrangements in large churches & halls we very seldom find the inlets for warm air nearly large enough.

In large buildings the most perfect system of ventilation is one by which fresh air is brought in from out of doors to a room where it may be heated by steam coils & be then carried to each floor by shafts sufficiently large to supply all the rooms on this floor. Each room having a transom over the door

and an exit register leading into a ventilating shaft, the whole house is thus connected into one large ventilating shaft. The opening for fresh cold air should be so arranged that the supply can be regulated as required.

Ordinary window ventilation is bad for many reasons. It is impossible to regulate the supply of air. A person may go to bed at night having secured the admission of sufficient fresh air the wind being on that side of the house & during sleep the wind changes to the opposite quarter. Then he not only ceases to get fresh air, but the air is sucked out of his room & foul air from the halls & opposite rooms is drawn in. In this way if there is a case of contagious disease in any one room the germs may be scattered all over the house.

Again in the case of large dormitories with central halls. If windows are open

in an upper hall during a calm, no fresh air comes into the hall but an upward current is made & foul air from the lower stories is drawn up to the upper ones.

There is but one safe way to ventilate such a building and that is as described a-bove.

Ventilation (continued) Apr 8th.

In many large public buildings as in churches the ventilation is so arranged that the foul air openings lead again to the furnaces & thus the air is used over & over. This is a very economical arrangement & may be used to good advantage in heating up the church before it is used & is not objectionable provided it is so arranged that while occupied, fresh air may be brought in from out doors.

In ordinary houses heated by stoves, a simple device may be employed at a small expense to procure a constant supply of fresh air. The stove should be surrounded by a sheet iron jacket & the fresh air brought into this from outside the wall by a pipe at the base. Thus the cold air, striking directly upon the heated

stove is warmed & passes upward into the room.

The chimney should be built double so as to have a seperate flue for the smoke & foul air, or if this cannot be done the stove-pipe may be carried directly upward through the chimney.

A foul air register at the floor may then be made to lead into the chimney.

In some cases a ventilating shaft may be built in the corner of a room, a sufficient draft being secured for the whole house by burning a kerosene lamp or small oil stove at its base

The heat of a stove may be further utilized by enclosing the stove-pipe in an iron jacket leading up to a register in the room above.

The only absolutely safe way is to have a seperate ventilating duct for each room.

Sometimes in large buildings such as hospitals and asylums ventilating ducts are made to lead up into a ~~one~~ large garret & from this there is one large opening in the roof. Thus the garret becomes a reservoir of all the foul air. Perhaps much of the time this plan works fairly well all the air passing upward & out at the large opening.

But it has been found that if a window be opened in a room on the side of the building sheltered from the wind, the result will be that foul air will be drawn down from the garret into the room & out of the window. The only safe way to avoid this is to have each conducting shaft led up seperately through the roof.

There is one important caution necessary in the use of coal stoves & that is that dampers should never be used in the chimney

the supply of fresh air may be cut off by a damper in front at the base of the stove. A chimney damper prevents the poisonous gases from passing up out of the stove & allows them to leak out into the room. This would be bad enough were only carbonic acid gas formed but when the supply of oxygen is cut off carbonous oxide, a more deadly gas is formed.

The atoms of Carbon in the stove tend to unite with two atoms of oxygen forming carbonic acid or CO_2 but when the supply of oxygen is cut off each Carbon atom is obliged to be satisfied with one atom of oxygen and the deadly carbonous oxide or CO is formed.

Air & Water Contamination. Apl 10th.

The most dangerous impurities in air are gases & germs.

Gases result from the decomposition of animal & vegetable matters also to some extent especially near large cities from factories & chemical establishments. The most dangerous and common gases come from cess-pools, drains, vaults, sewers etc & are believed by many physicians to be productive of various febrile conditions such as typhoid & diphtheria.

Germs abound in both air & water. If we examine under a powerful microscope water in which some animal or vegetable substance has been allowed to decompose, we shall find a large number of little bodies of various shapes. These are known as bacteria. The germs themselves are invisible but are produced by these microscopic fungi & are called spores. These differ from

ordinary seeds in that they grow & multiply by sub-division instead of sprouting as the seed does.

The word "germ" as commonly applied is incorrect.

The whole air is supposed to be full of these germs.

The particles that float in the sunbeams are composed largely of them. Where air is entirely free from dust there are no germs.

Street dust is full of all sorts of germs & these too of many diseases as consumption. These minute spores play a very important part in the economy of nature.

It is their business to destroy dead animal & vegetable matters. If it were not for them dead things would simply dry up and in the course of a few years accumulate to such an extent as to bury us all.

Bacteria are vegetables although they possess the power of motion and are able to swim around

in water like fish
Germs are very necessary when confined to their legit-
-imate work, but they may attack our bodies & set up morbid changes ~~while~~ when we are yet alive.
Thus in Diphtheria, a person may get a sore throat & thus the power of resistance on the part of the mucous membrane be weakened, then if germs of Diphtheria are present in the air, they are very likely to find a lodge-
-ment & multiply rapidly, causing the formation of the false membrane. They will even attack raw surfaces in other parts of the body, as where the skin is broken from a bruise.
Many other diseases are probably produced in a somewhat similar way by specific germs such as cholera, typhoid fever, small-pox, consumption & many others. Where the vitality of a person is lowered and

germs are present in great numbers the most favorable conditions exist for the spread of disease.

Germs are most abundant where there is food for them that is where animal or vegetable matter is decomposing. On the tops of high mountains very few if any are found, in the valleys they are much more abundant, while in crowded theatres & thoroughfares of large cities they are exceedingly numerous.

It is a noticeable fact that flies are always found where decomposition is going on & they can find food. They are much more plentiful around our back doors than around the front for this very reason.

It has been found that flies collect & live in ~~these~~ the germs so plentiful in such places. If examined under the microscope the wing of the fly may be seen to be covered

with minute hairs or feathers, for the fly is a "feathered bird" and bacteria may be seen entangled among these. When the fly "performs his toilet" it is really for the purpose of brushing the bacteria off from the wings & onto the legs from whence they are conveyed to the mouth. Thus the fly is seen to be a very useful insect, a sort of sanitary sheriff sent out to arrest germs, but at the same time the presence of the flies is a sure indication of the presence of germs or breeders this the fly may be the means of carrying contagion. ~~Food~~ should be always protected from flies. Fly "specks" contain many germs. In hospitals it is found to be very important to protect patients from flies, especially in cases of erysipelas as a healthy wound has been known to be infected by a fly carrying the germs of erysipelas to it from an unhealthy one.

Let us now consider some of the sources of germs in our ordinary dwelling houses.

One of the most prolific is the kitchen sink which is very often the open door through which death enters the house. This is especially the case where this communicates directly with the cess-pool. The air & foul gases come up into the room laden with deadly germs.

In the kitchen pantry there is often left to decompose or grow mouldy pieces of bread & other food, sour milk etc. All these are prolific sources of germs & wherever sour or musty odors exist in pantries this is a sure indication of danger.

The wood-box, when not cleaned out for a long time, being the receptacle of apple cores, rotting wood & many other things may become a source of danger.

In the cellar are often found especially in the winter bins

of decaying vegetables & many other things which tend to contaminate the air of the whole house.

Closets without ventilation & in which dirty clothes are allowed to accumulate are exceedingly bad.

Where soiled clothes cannot be washed at once, they should be hung out in the sun & air & then disinfected.

Other places in which germs exist & multiply are in the carpets & under them & in the walls especially when one layer of paper after another has been applied. Here the paper, paste & the moisture supplied by condensing steam produce most favorable conditions for the development of germs.

Your house is a distillery. The steam which is produced in the kitchen & which in cold weather condenses in visible form on the windows also condenses & is absorbed by walls, bedding etc throughout

the house. This is the cause of damp bed-linen in unoccupied rooms.

If ~~wall~~ the wall-paper contains arsenic, this is set free in the form of a poisonous gas by the decomposition set up by the moisture, especially where a fresh layer of paper is applied over an old one.

Many houses become so impregnated with foul smells that they always have a peculiar smell about them & this may be so bad as to cling to the persons and clothing of those occupying the house.

Such a house is an infected one.

Poisoned rats dying in the walls and under floors are often a source of great danger. A live rat is a comparitively harmless creature but a dead rat may kill us.

There is sometimes found in houses a species of mould, which

it is very hard to get rid of and which seems to have been described in the Mosaic law under the name of "leprosy"

The most stringent measure for which there seems to be abundant ground were employed against it.

If it could not be removed by ~~scrap~~ scraping the walls & allowing the house to remain unoccupied for some time, the house was torn down & removed outside the city.

Bed clothing when not properly aired & changed may become a fruitful source of germs.

Outside the house there are usually many sources of contamination of the air. Wood-sheds in which are piles of decaying chips, vaults, cess-pools, drains barn-yards and pig-sties, chicken yards, dead animals & many other things contribute

their share to the myriads of bacteria that swarm in the air of such yards.
Every bad smell is a sure indication of their presence & should not be tolerated.
We should cultivate the sense of smell, ~~for our sake~~ for it may become very obtuse from frequent abuse. Thus persons become so hardened to foul odors that they are no longer warned of their danger
Bad water is even more productive of evil than bad air, for in water as well as air germs multiply & thrive.
The germs of many serious diseases as typhoid fever & cholera are found in impure water.
More deaths are caused every year through the agency of germs than from ~~any other~~ accident, war famine and all other causes & the seeds of these fatal maladies are more

often carried through water than through air. Before considering the sources of contamination of water, especially of well water we must learn from whence the well water comes. There is at a certain distance from the surface of the ground a body of water which is always working its way slowly in the direction of rivers & streams, following the water-shed. The height of this ground water as it is called varies at different seasons and in different places. It is constantly supplied by the water which soaks down from the surface. The height of this ground water may be estimated by the height of the water in an ordinary dug well. It will be readily seen that as this ground water soaks down it will carry with it all impurities with

which it may come in contact. In this way a cess-pool from which the water is constantly leaking away may become a fruitful source of contagion to a neighboring well. So also may any other sources of filth through which the water filters. Decomposing matter is more dangerous under ground than above.

Well water becomes contaminated by typhoid germs through the agency particularly of cess-pools. The excreta of typhoid patients in which these specific germs abounds being received into the cess-pool the whole contents of it, are contaminated by the multiplication of these germs which find their way at last into the well! Thus it is plain true that death lurks in the "old oaken bucket that hangs in the well"

It is important to be able to distinguish pure from impure and dangerous water. This may be done in several ways. Pure water is tasteless, odorless & colorless.

A more accurate test may be made with the following mixture.

3 grains of Permanganate of Potash
12 ~~grains~~ grains of Caustic "
to the ounce of water.

a drop of this pink solution added to a tumbler of ~~pure~~ water will give it a light pink color. If this color does not disappear but remains unchanged after half an hour the water is safe. If the water is impure the pink color will disappear, the more rapidly, the more impure the water.

Driven wells which pass through the stratum of rock or clay which supports the ground water, into the second water, always

provide pure water free from contagion.
Boiling water will render it safe from germs.
The natives of Central Africa drink only boiled water & are entirely free from the cholera. Where persons use only boiled water, there is no danger of contracting this disease.
There are some germs that will withstand a considerable degree of heat.
Water is not purified by freezing, for the germs again become active when it melts, nor is water purified to any great extent by passing through the soil as is commonly supposed. It may be slightly at first but when the soil becomes saturated with filth it no longer has any effect upon it.

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LIBRARIANS' ACCOUNT BOOK.

As indicated by its name, it is intended that this book shall contain all the accounts of the society.

First in order should be the account with the district, under the heading "District No.—." On the right hand side of this account the district should be credited by all books and tracts ordered, as per bill received, and on the left hand side by all cash paid to the district, which has been received on membership fees, donations, and sales.

The next account should be with the district on periodicals, in which the district should be credited by all periodicals ordered, and debited to all money paid to the district for periodicals.

In ordinary business it is customary to keep a cash account, on debit side of which all cash received is entered, and on the credit side all cash paid out is entered; but since the librarian or secretary receives money for various enterprises, as well as that which strictly belongs to the society; and since it is necessary in making a proper disposition of this money, to keep that which belongs to the several enterprises separate, it has been recommended that the cash account be divided into fund accounts, or that fund accounts be kept in the place of a cash account; as the "Tract Society Fund," which embraces membership fees, donations, and sales; the "Periodical Fund," consisting simply of money received for periodicals. In this case each fund account should be debited to all money received belonging to it, and credited by all money paid out from it. The balance, or the difference between the Dr. and Cr. sides, will be the amount on hand, and the sum of all these fund balances will be the entire cash on hand.

If preferred, a regular cash account can be kept in connection with the fund accounts. In this case, all money received should first be entered on the Dr. side of the cash account, and then on the *Cr.* side of some fund account,—the one to which it belongs. When money is paid out it should be entered on the Cr. side of the cash account and *Dr.* side of the fund account. The same result is obtained by both methods. The latter, which requires one more account, may seem more complete to some. A fund account should be opened for each enterprise upon which money is received.

It becomes necessary to open accounts with persons, Sabbath-schools, etc., when they receive anything from the society for which they are to pay a stated sum. In these accounts the person, school, or society is debited to what he or it receives, and credited by what he or it pays on account. These accounts should follow the fund accounts. Members are not expected to pay for tracts for distribution, excepting as they do so indirectly by membership fees, donations, and sales. A record of the number of pages of tracts taken by members for distribution, can be conveniently kept under the head of "publications drawn," in the back part of the book, also a record of pledges made by members to various enterprises, with the date of payment.

If further instruction is needed respecting librarians' accounts, it can be obtained from the T. & M. Instruction Book, price 25 cts. For sale at Review & Herald, Battle Creek, Mich., or Pacific Press, Oakland, Cal.

Sample Page. Raw Book

Temp. Taken every 1/2 minutes

Name		0	1	1½	2	2½	3	3½	4	4½	5	5½	6	6'
O'Neil	m	96	97	98	99	100								
	a	92	95	96	97	98	99	100						
K. Geiger	m	92	97	98	99	100								
	a	90	95	96	97	98	99	100						

4 minutes the average time in mouth of 1st 100 cases
98.62 average Temp in mouth of " " "
4.33 minutes " time " axilla of " " "
97.23 average Temp. " " " " " "

		1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7
P. Ellwanger	M	96	96.8	97.2	97.5	97.6	97.8	97.9	98	98.					
	A	96.8	97	97.1	97.2	97.3	97.4	97.5	97.	97.6					
Temp. Taken in the evening															
Bert Parish	M	95.	95.5	95.8	96	96.1	96.3	96.4	96.5	96.6	96.6				
	A	95.	95.6	96	96.3	96.6	96.7	96.8	96.9	97.	97.				
Temp taken in the evening.															
Henry Hebenicht	M	95.4	96.2	96.5	96.8	97.	97.2	97.3	97.6	97.6	97.7	97.8	97.9	98.	98.
	A	95.2	96	96.3	96.7	96.8	97.	97.2	97.4	97.5	97.6	97.7	97.8	97.8	
Temp taken in the evening.															
Harry Wiggins	M	97.8	95	95.4	95.6	95.8	96	96.1	96.2	96.4	96.5	96.6	96.6		
	A														

Normal. Temperatures.

		1			2		3		4						5	6	7
Louie Sauer	M	95.5	96	96.5	96.7	96.8	97	97									
	ax	95.5	95.5														
Louie Sauer	M	96.5	96.5	96.7	96.9	97	97.										
	ax	94.5	95.2	95.5	96.	96.3	96.3										
Oscar Knutt		96.5	96.7	97	97.2	97.3	97.4	97.5	97.6	97.8	97.9	97.9					
		93	94	94.5	95	95.4	95.7	96	96.2	96.4	96.6	96.8	96.9	97.			
Bradford (Yuma)	M	95	97.5	97.7	97.8	98	98.1	98.2	98.3	98.4	98.5	98.5					
	ax	94.5	95.2	96	96.5	96.8	97.1	97.3	97.4	97.5	97.6	97.7	97.7				
L Main Romare	M	96.8	97.4	97.5	97.6	97.8	97.9	98.	98.1	98.3	98.4	98.5	98.5				
	ax	95.5	96.3	96.6	97.1	97.3	97.5	97.7	97.8	97.9	97.9						
Paul Wall.	M	96.2	97	97.2	97.4	97.5	98.	98.1	98.2	98.4	98.5	98.6	98.6				
	ax	94.4	95.6	96.4	96.8	97.1	97.3	97.5	97.6	97.8	97.9	98	98.				
Willis Carpenter	M	95.	96	96.8	97.1	97.2	97.4	97.5	97.6	97.7	97.9	98	98.1	98.2	98.2		
	ax	94.5	95.5	96.2	96.7	97.	97.3	97.5	97.6	97.8	98.2	98.3	98.3				
Martin Mortenson	M	97.	97.6	97.8	98.	98.1	98.2	98.2									
	ax	92	94	95	95.8	96.2	96.4	96.6	96.8	97	97.1	97.2	97.3	97.4	97.4		
Elder Walstrom	M	97	97.5	97.8	98.1	98.2	98.3	98.4	98.5	98.5							
	ax	94	95	95.3	96.6	95.8	96.2	96.4	96.6	96.8	96.9	97	97				

		1	2	3	4	5	6	7
W. M. Morse	M	92	93	94	94.5	95	95.2	95.3	95.4	95.7	95.8	96.1	96.2	96.4	96.5
	A	96	97	97.4	97.5	97.6	97.7	97.8	97.9						
Dan Hugelley	M	95.5	96.4	96.5	97	97.1	97.3	97.4	97.5	97.6	97.7	97.8	97.8		
	A	95.5	95.5	96.2	96.5	96.8	96.9	97.	97.1	97.3	97.4	97.4			
Brunson, Elderfie	M	97.	97.6	97.8	97.9	98.	98.1	98.2	98.3						
	A	95	96	96.4	96.5	96.8	97.	97.1	97.2	97.3	97.4	97.4			
H. A. Hellier	M	97.8	98.2	98.4	98.6	98.6									
	A	96	96.8	97.3	97.5	97.8	97.9	98	98.1	98.2	98.3	98.4	98.5	98.5	
N. A. Piazza	M	97	98.4	98.5	98.6	98.7	98.9	99	99.1	99.1					
	A	94	95.4	96.2	96.6	97.	97.2	97.4	97.5	97.6	97.7	97.8	97.9	97.9	
Clinton Acker	M	97.5	97.5	98.	98.2	98.4	98.5	98.6	98.7	98.7					
	A	95.	96.5	97.1	97.6	97.7	97.8	97.9	97.9						
Corry Cameron	M	96.5	97	97.3	97.4	97.6	97.8	98.	98.1	98.2	98.3	98.4	98.4		
	A	96.5	96.5	96.8	96.9	96.9	96.9	96.8	97	97.1	97.1				
Sven Jefferson	M	95.5	95.7	95.9	96.6	96.6									
	A	95.5	96.5	97.4	97.6	97.7	97.8	97.9	98	98.					
Jas. McAllister	M	96.5	97	97.3	97.5	97.6	97.8	98	98	98.1					
	A	96.5	97.1	97.2	97.5	97.2	96.2	97.1	97.2	97.2	97.2	97.6	97.7	97.8	97.8

		1		2		3	4		5		6	7
J. R. Leadsworth	97	97.5	98.1	98.2	98.3	98.3						
	95	96	96.8	97.2	97.5	97.8	97.9	98.1	98.2	98.2		
Julius Paulson	95	95.1	95.2	95.5	96.5	97	97.2	97.4	97.6	97.7	97.8	97.9
	16	96.5	97	97.4	97.6	97.7	97.7					
M. Larson	97.8	97.9	98.1	98.3	98.4	98.5	98.6	98.7	98.8	98.8		
	96	96.8	97.3	97.5	97.7	97.9	98	98.2	98.3	98.4	98.5	98.6	98.7	98.7
Wm. Sadler.	96	97.4	97.6	97.8	97.9	98.0	98.2	98.3	98.4	98.4		
	96	96.8	97.1	97.4	97.5	97.7	97.8	97.8				
Peter Paul.	95	96.5	97	97.2	97.3	97.5	97.6	97.7	97.8	97.9	98	98
	95	96.5	97.4	97.6	97.8	97.9	98	98				
W. S. Richie.	96.5	96.8	97.1	97.3	97.4	97.5	97.6	97.6				
	94	95	95.4	95.6	95.7	95.8	95.8					
Geo Kerr.	90.	95.5	96.2	96.7	97	97.3	98	98.1	98.2	98.4	98.5	98.7	98.7
	90.	94.5	95.2	96.2	96.6	97.8	98	98.3	98.3	98.5	98.6	98.7	98.7
Judson Baper.	97.	98.	98.2	98.3	98.4	98.5	98.6	98.7	98.7			
	93	94.5	95.4	95.6	96.	96.2	96.4	96.7	96.8	96.9	97.1	97.2	97.3	97.3
P. Rennings.	95.5	96.5	97.	97.4	97.8	97.9	98.1	98.2	98.3	98.4	98.4			
	94.	94.8	95.5	96.	96.5	96.7	96.8	97.1	97.2	97.3	97.4	97.5	97.6	97.7

	1	2	3	4	5	6	7							
E. N. Varnell	98.	98.6	99.1	99.4	99.5	99.5	99.7	99.8	99.9	99.9				
	96.5	97.5	98.4	98.7	99.	99.3	99.4	99.5	99.6	99.7	99.8	99.8		
Joe Kingmacher	96.	96.8	97.3	97.5	98.	98.3	98.3	98.4	98.5	98.6	98.7	98.7		
	96.5	97.3	97.7	97.9	98.1	98.3	98.4	98.5	98.6	98.7	98.8	98.8		
P. M. Keller.	97	98.2	98.6	98.8	98.9	98.9								
	95.	96.2	96.5	97.	97.2	97.3	97.4	97.5	97.6	97.7	97.7			
Eric E. Covert.	96.	96.5	96.8	96.9	97.1	97.2	97.3	97.4	97.5	97.6	97.7	97.7		
	94.	94.5	95	95.5	95.8	96	96.3	96.5	96.7	96.8	96.9	97	97.1	97.2
Duane Smith.	96.5	97.5	98.3	98.6	98.7	98.8	98.9	98	99.2	99.3	99.4	99.4		
	96	97.4	97.8	98.3	98.4	98.4	98.5	98.5	98.6	98.7	98.8	98.8		
C. W. Mc. Phail.	96.	96.4	97.	97.2	97.3	97.4	97.6	97.7	97.8	97.8	98	98.2	98.3	98.3
	94.5	95.5	96.5	97.	97.3	97.5	97.6	97.7	97.8	97.9	98	98	98.2	98.
Clark Riggs	94.5	95.	95.6	95.8	96.	96.4	96.8	97.	97.3	97.5	97.6	97.8	97.9	98
	94.5	95.	96.	96.2	96.3	96.8	97.	97.2	97.3	97.5	97.6	97.5	97.9	98.
Era Dilley.	96.	96.7	97.	97.3	97.5	97.8	98.	98	98.3	98.4	98.5	98.5		
	94	94.8	95.2	95.6	96	96.4	96.6	96.8	97.	97.1	97.2	97.4	97.5	97.6
F. J. Otis	95.	95.7	96.	96.3	96.5	96.8	97.	97.2	97.4	97.5	97.6	97.7	97.8	98
	94.	94.8	95.6	96.	96.3	96.5	96.7	96.8	96.9	97.	97.			

		1		2		3		4		5		6	7
Jas. B. Harrison	M	96.7	97.1	97.3	97.6	97.7	97.8	97.9	98	98.1	98.2	98.3	98.3
	A	94.5	95.5	96.1	96.5	97.	97.2	97.4	97.6	97.8	98	98.1	98.2	98.3
Arnold Hare.		95.	95.7	96.	96.4	96.6	96.7	96.8	97.1	97.3	97.6	97.8	97.9	98.	98.
		95.	95.6	96.2	96.5	96.8	97.	97.2	97.3	97.4	97.5	97.6	97.8	97.8
A. J. Howard.		97.	97.3	97.5	97.6	97.7	97.8	97.8						
		94.5	95.	95.5	95.7	96	96.2	96.4	97.6	97.7	97.8	98.	98.1	98.2	98.3
Irving Baker.		98.4	98.5	98.6	98.7	98.8	98.8							
		95.	96.	96.7	97.	97.4	97.4	97.6	97.8	98.	98.2	98.4	98.5	98.5
G. F. Ernst.		97.	97.8	98.	98.1	98.1								
		94.5	95.7	96.5	96.7	97.	97.1	97.2	97.2					
Sam Konigmacher.		95.5	96.2	96.8	97.	97.2	97.4	97.6	97.9	98.	98.2	98.3	98.4	98.5	98.5
		95.	96.2	96.7	97.3	97.6	97.8	98.2	98.3	98.4	98.5	98.5			
Clifton Raynolds.		97.	98.4	98.7	99.	99.1	99.2	99.3	99.4	99.4					
		95.	96.	96.8	97.	97.2	97.3								
G. E. Church.		96	96.												
		96	97.	97.5	98.	98.2	98.5	98.6	98.7	98.8	98.9	98.9			
W. N. Mork.		97	97.2	97.5	97.7	97.8	97.9	98.1	98.2	98.3	98.3				
		96.7	97.	97.4	97.8	98.1	98.2	98.3	98.4	98.6	98.7	98.8	98.8		

			1		2		3		4		5		6	7
J. L. Stevens	M	94.5	95	95.5	96.1	96.4	96.7	97.2	97.5	97.7	97.8	98	98.1	98.1
	A	95	95.8	96	96.1	96.2	96.2	96.5	96.5	97	97.1	97.1		
D Haight.		96.	96.8	97.1	97.2	97.2								
		94.5	95.2	95.5	95.8	96.	96							
Dr Rand		95	96	97	97.2	97.4	97.6	97.7	97.8	97.9	98.	98.		
		94.5	95.5	96	96.4	96.7	96.9	97.1	97.2	97.4	97.5	97.6	97.7	97.8 97.8
C. R. Labier		97.4	97.6	97.7	98.	98.2	98.4	98.4						
		94.5	95.3	95.9	96.4	96.8	97	97.1	97.2	97.4	97.5	97.6	97.6	
Oneal		95.5	97.6	98.2	98.6	100.4	100.5	100.5						
		96.	97.1	97.5	97.8	98.1	98.3	98.4	98.5	98.6	98.7	98.8	98.8	
P Giddings		95.6	97.2	97.6	97.8	98	98.2	98.4	98.4					
		95.6	96.6	97.	97.4	97.4								
D Allen		92.	92.5	92.7	93.	93.6	94.2	95	95.5	95.9	96.4	97	97.	
		95	96.	96.4	96.6	96.8	97	97.						
L J Peterson		95.5	95	95.3	95.6	96.	96.1	96.3	96.5	96.7	96.8	96.9	97	97.
		96	96.2	96.5	96.8	96.9	97	97.1	97.1					
Frank Lindon		95.8	96.2	96.8	97.2	97.5	97.6	97.8	97.9	98	98.2	98.2		
		94.5	96.2	96.6	97.1	97.2	97.3	97.4	97.4					

		1	2	3	4	5	6	7
F O Raymond	m	95.5	96.5	97.2	97.8	98.	98.2	98.2
	a.f.	94.5	95.5	96.8	96.	96.2	96.4	96.4
S F Nesbet		93.5	94.6	96.4	96.6	96.8	97.	97.2 97.3 97.4 97.4
		96.5	97.2	97.6	97.8	98	98	
M Brown		97.6	97.8	98.	98.2	98.4	98.4	
		96.8	96.8	97.2	97.3	97.4	97.5	97.6 97.6
Chas. Yager		97.5	97.8	98.	98.1	98.2	98.3	98.4 98.4
		95	96.2	96.8	97.2	97.5	97.8	97.9 98 98.1 98.2 98.3
Dan McCowen		95.7	96.2	96.5	97.	97.3	97.8	97.9 98 98.1 98.1
		96	97	97.2	97.5	97.8	97.9	98. 98
W. A. Adsit		97.5	98.3	98.7	99.1	99.2	99.3	99.3 99.5
		96	97.5	98.	98.1	98.2	98.2	
J. R. Leadsmith		97.	97.3	97.3	97.7	97.8	98.	98.1 98.1
		95.5	97	97.5	97.8	97.8		
H. A. Hellier		97.5	97.7	97.9	98	98.1	98.1	
		94.5	95.5	96.2	96.5	96.8	97.	97.1 97.2 97.4 97.5 97.6 97.8 97.8
Geo Kerr.		97.5	97.8	98.1	98.3	98.5	98.5	98.8 99 99.1 99.1
		97	97.1	98.2	98.4	98.6	98.7	98.8 98.9 98.9

		1		2		3		4		5		6
R. C. Porter	97.	97.6	97.7	97.8	97.8							
	95.6	96.4	96.8	97	97.1	97.2	97.3	97.4	97.5	97.6	97.7	97
P. O Gilbert	96.	97.3	97.7	98.	98.2	98.3	98.4	98.4				
	96.	97.	97.2	97.4	97.7	97.9	98.	98.				
J. O. Bell.	96.5	97.5	97.7	97.8	98.	98.1	98.1					
	95	95.5	96	96.5	96.6	96.8	96.9	97	97.1	97.1		
G. W Thompson	96.8	96.9	97	97.2	97.3	97.4	97.6	97.6				
	94.5	95.2	96	96.2	96.3	96.4	96.6	97.6	96.8	96.9	96.9	
Paul. Wall.	97	97.6	98.	98.3	98.5	98.8	98.9	99	99.1	99.1		
	96.4	97.2	97.7	98	98.1	98.2	98.2					
Willis Carpenter	97.8	98.4	98.5	98.6	98.6							
	95	96	96.3	96.5	97	97.1	97.2	97.3	97.8	98.8		
Dr Paulson	96.5	96.9	97.5	97.7	97.9	98	98.1	98.2	98.3	98.4	98.4	
	94.5	95.9	96.5	96.8	96.9	97.1	97.4	97.5	97.6	97.7	97.8	97.8
A. G. Bodwell	95	97.8	98	98.2	98.3	98.4	98.6	98.6				
	95	96.2	96.6	97.	97.3	97.5	97.5					
A. G. Bodwell	96.4	96.8	97.2	97.4	97.4							
	96.2	96.4	96.8	97	97							

		1		2		3		4	5			6	7
A G Bodwell	95	97.	97.5	97.6	97.7	97.5	97.9	98.	98.				
	96	96.5	96.6	96.7	96.8	96.8							
A. G. Bodwell.	95	95.6	96.	96.4	96.6	96.8	96.9	97.	97.2	97.4	97.5	97.6	97.6
	95	96.4	96.8	97.	97.2	97.4	97.5	97.6	97.6				
A. G. Bodwell	95	97.	97.1	97.3	97.4	97.6	97.8	98	98.				
	95	95.5	96.	96.6	96.8	97.2	97.8	97.8					
L. F. Hansen.	95	97	98.4	98.8	99	99							
	95	97	97.4	98.	98.								
L. F. Hansen.	97.	97.5	97.8	98	98.2	98.2							
	96	96.2	96.7	96.9	97.	97.3	97.4	97.5	97.7	97.8	97.8		
L. F. Hansen	97.	97.8	98.6	99	99.								
	96.	96.4	96.8	97	97.								
W. Sadler.	97.5	97.8	98.	98.1	98.2	98.3	98.3						
	95.6	96.4	96.6	96.8	96.9	97.	97.1	97.1					
Mr. Sander	95	95.5	95.7	96.	96.4	96.7	97.	97.2	97.4	97.5	97.6	97.7	97.8 97.8
	94	95	95.4	95.5	96	96.4	96.5	96.7	96.8	97	97.1	97.1	
Clark Riggs	96.	97.	97.4	97.8	98.	98.2	98.2						
	94.	94.6	95	95.3	96	96.8	97.4	97.4					

	1.	2	3	4	5	6	7
Dr Dow	95.1	96.2	96.4	96.6	96.7	96.9	97.1	97.1
	95.	95.8	96.	97.1	97.3	97.4	97.5	97.6	97.6
Mr Martindale	96	96.8	97.3	97.8	98.1	98.1
	94	95.2	95.7	96	96.2	96.4	96.5	96.6	96.7	96.7
H. A. Hellier	96.2	96.5	96.6	96.7	96.8	96.9	97.2	97.3
	95.5	96.4	96.8	96.9	97.1	97.3	97.4	97.4
Bert Parish	95.5	96.2	96.5	96.6	97.1	97.3	97.4	97.5	97.6	97.8	97.8
	95.3	95.8	96.1	96.3	96.5	96.6	96.7	96.9	96.9
Ed Howele	97	98.2	98.4	98.5	98.5
	94.5	95.5	95.7	96.2	96.4	96.5	96.8	97	97.1	97.1
Mr Weese	96.5	96.7	96.8	96.8
	94.5	96	96.5	96.7	96.9	97	97.2	97.3	97.4	97.4
Ed Howele	94.5	95.2	95.8	96.2	96.4	96.6	96.8	97.2	97.2
	94.5	95.2	96	96.5	96.6	96.7	96.8	97	97.
R Williamson	99.3	99.6	99.8	99.9	99.9
	98	98.4	98.6	98.7	98.8	98.5
Bert Parish	97.4	97.6	97.9	98	98.1	98.2	98.2
	96.6	97.2	97.5	97.7	97.9	97.9

		1		2		3		4	5		6	7
E N Wolcott	95.4	95.6	95.8	95.9	99.	99.1	99.1					
	95	95.5	95.8	96.	96.5	96.9	97.1	97.3	97.5	97.5		
R. Williamson	97.6	98	98.2	98.3	98.4	98.4						
	94	96.3	97	97.4	97.5	97.6	97.7	97.8	97.9	98.	98.	
W. Sadler.	95.6	96.	96.4	96.6	97.	97.						
	96.2	96.4	96.8	97.	97.							
L Wise	93	97.5	98	98.1	98.2	98.3	98.3					
	94	96	96.5	97	97.2	97.4	98	98				
Eric Cover.	95	97.4	97.4	97.6	98.1	98.3	98.5	98.6	98.6			
	93.1	93.5	94	95.5	95.1	95.3	95.6	95.7	95.9	96	96.2	96.3 96.3
Harry Wiggins	96.5	96.7	96.8	96.8								
	93.5	95.	95.5	96.	96.3	96.6	96.8	97	97.			
H. D. Wolcott.	98.	98.4	98.8	99.1	99.1							
	94	95.4	96.	96.6	97.	97.2	97.4	97.6	97.7	97.7		
Mr Sanders	96	96.4	96.6	96.8	97.2	97.3	97.4	97.6	97.8	98	98.1	98.3 98.4 98.4
	94	94.8	95.2	95.6	96.	96.4	96.6	96.8	97.	97.2	97.5	97.8 98. 98.
C. C. Payne	98	98.4	98.4									
	96.5	97.	97.5	97.8	97.9	98.	98.2	98.3	98.3			

		1		2		3		4		5		6	7
R Williamson	97.8	97.7	98	98.1	98.2	98.3	98.4	98	98.				
	96.2	96.8	96.9	97.	97.1	97.2	97.3	97.4	97.6	97.5	97.7	98.	98.
*													
A Martindale.	96.	97	98	98.2	98.2								
	96	96.5	97.8	97.4	97.8	97.8							
Martin Keller.	99	99.1	99.1										
	95	96.0	97.2	97.5	97.7	98	98.1	98.2	98.3	98.3			
Clifford Bert	98.2	98.2											
	97.2	97.2	97.6	97.6									
A. Martindale.	96.	96.8	97.3	97.8	98.1	98.2							
	94.	95.2	957	96	96.2	96.4	96.5	96.6	96.7	96.7			
H. A. Hellier	96.2	96.5	96.6	96.6	96.7	96.8	97.2	97.2					
	95.5	96.4	96.8	96.9	97.1	97.3	97.4	97.4					
Bert Parish	95.5	96.2	96.5	96.6	96.9	97.1	97.4	97.5	97.6	97.8	97.8		
	95.5	95.8	96.1	96.2	96.5	96.6	96.7	96.9	96.9				
Clark Riggs	97.5	98.2	98.5	98.7	98.9	98.9							
	96	95.6	95.8	96.5	97	97.1	97.2	97.3	97.4	97.5	97.6	97.7	97.8	97.8
Harry Higgins	98.2	98.3	98.4	98.4									
	95	95.2	95.4	95.8	95.8								

* 100 cases.

	1			2		3		4	5	6	7
Ed. Horelle	96.8	97.4	97.5	97.8	97.9	97.9					
	95.5	96.4	97.6	97.8	97.9	97.9					
R. Williamson	97.2	97.3	97.3								
	95.2	96.6	96.9	97.2	97.4	97.5	97.5				
M. Otis	97.2	97.4	97.6	97.7	97.8	97.9	98.	98.1	98.1		
	95	95.5	96	96.5	96.6	96.7	96.9	97	97.1	97.1	
B. Parish	97	97.2	97.4	97.6	97.8	97.8					
	94.4	95.4	95.8	96.2	96.4	96.5	96.6	96.7			
Clark Riggs	96	97.	97.4	97.8	98.	98.2	98.2				
	94	94.6	95	95.5	96	96.8	97.4	97.4			
H. D. Wolcott	98.	98.4	98.8	99.	99.2	99.2					
	97.8	98	98.2	98.4	98.4						
W. Sadler.	98	98.1	98.2	98.3	98.4	98.6	98.7	98.8	98.8		
	95.5	96.	96.5	96.7	97.1	97.2	97.4	97.5	97.5		
Ed Horrelle	97	98.2	98.4	98.5	98.5						
	94.5	95.5	95.7	96.2	96.4	96.5	96.8	97.	97.1	97.1	
A. Martindale.	97.5	98.2	98.4	98.5	98.6	98.7	98.8	98.8			
	96.5	97	97.3	97.6	97.8	98.	98.2	98.2			

		1		2		3		4		5	6	7
Clark Riggs	98.	98.2	98.4	98.5	98.6	98.7	98.7					
	97.5	97.	97.2	97.5	97.5	97.6	97.8	98.	98.			
L. Weese.	97.8	97.9	98.	98.2	98.3	98.4	98.4					
	95.5	96.4	96.9	97.2	97.5	97.6	97.7	97.9	98	98.1	98.1	
Ed Gross.	95.5	96	96.7	96.8	97.1	97.4	97.5	97.6	97.7	97.7		
	95	95.1	95.3	95.7	96.	96.3	96.6	96.7	96.9			
x A. Martindale	95.4	95.8	96.4	97.	97.							
	96.4	96.6	96.6									
x Harry Wiggins	97.	97.6	98.	98.								
	96.2	96.8	97.2	97.4	97.4.							
x H. D. Wolcott.	97	98.2	98.4	98.6	98.6							
	97.	98.	98.									
Harry Wiggins	97.9	98.1	98.4	98.5	98.5							
	96.4	97	97.4	97.5	97.6	97.7	97.7					
Mr House	96.6	96.8	96.9	97.1	97.2	97.4	97.5	97.7	97.8	97.8		
	96.6	96.7	96.9	97.1	97.3	97.5	97.5					
Mr Weese	96	96.1	96.2	96.8	97.	97.3	97.5	97.6	97.7	97.7		
	96.5	96.9	97.1	97.3	97.5	97.7	97.7					

x Careless.

	1	2	3	4	5	6	7
L T. Peterson	95.1 95.5 96.4 96.6 96.8 96.9 97. 97.1 97.2 97.3 97.3						
	96. 96.5 97. 97.1 97.2 97.2						
Ed Hamelle	98.6 98.8 99 99.1 99.1						
	94.6 96. 96.8 97.2 97.5 97.5						
Bert Carter.	97.1 97.5 97.8 98. 98.3 98.4 98.6 98.6						
	96 96.6 96.7 97.1 97.2 97.4 97.6 97.8 97.8						
Alfred Stagg.	95. 95.8 96.7 96.5 96.6 96.9 97.1 97.4 97.4						
	95.5 96. 96.7 96.6 97. 97.						
Howard Burden	97.5 98. 98.2 98.3 98.3						
	95.8 97.1 97.5 97.7 97.8 97.9 97.9						
A. Martindale	97.4 97.7 97.8 98.2 98.4 98.6 98.7 98.8 98.9 98.9						
	97.8 98.2 98.3 98.4 98.6 98.8 98.9 98.9						
Martin Keller	97 97.2 97.5 97.7 97.8 97.9 98. 98.2 98.2.						
	96. 96.3 96.7 96.8 96.9 97.2 97.4 97.5 97.6 97.7 97.7						
W. Dow.	95.5 95.6 95.9 96.4 97 97.4 97.5 97.6 97.8 97.8						
	90.8 96.8 97.1 97.5 97.6 97.7 97.8 97.9 97.9						
Mr Otis	97 97.3 97.6 97.9 98.2 98.3 98.5 98.5						
	96.5 97.2 97.5 97.8 98. 98.1 98.3 98.4 98.5 98.5						

	1			2		3	4		5		6	
Mr Glassock,	95.4	96.2	97.	97.	97.4	98	98.					
	96.7	96.	96.4	96.5	96.6	97.	97.1	97.2	97.2			
Mr Weise	96.2	97.3	97.4	97.5	97.6	97.7	97.8	97.8	98	98.		
	96	97.	97.2	97.4	97.6	97.7	97.8	97.9	98	98.		
Mr Wolcott.	98	98.4	98.6	98.8	98.9	98.9						
	96.6	96.7	96.8	97.1	97.3	97.4	97.5	97.6	97.7	97.7		
Mr Ashor	96.8	97.	97.6	98	98.							
	96.2	97	97.4	97.6	97.6							
Mr Sadler	97.5	96.7	97.	97.1	97.3							
	96	96.6	96.9	97.	97.							
Harry Wiggins	98.5	98.5	9									
	94.8	95.5	95.6	96.3	96.5	96.7	96.8	97	97			
Mr Glassock.	95.8	96.7	97.2	97.4	97.7	98	98.2	98.4	98.6	98.7	98.8	98.8
	95	96	96.5	96.8	97	97.3	97.5	97.8	97.9	98.	98.1	98.2	98.3	98.2
Mr Burd	94.5	96.6	96.5	96.8	97.	97.3	97.6	97.8	98	98.1	98.2	98.3	98.4	1/2 5 98.4
	95	96	96.5	96.8	97.	97.4	97.6	97.8	97.9	98	98.1	98.2	98.3	98.3
A. Martindale.	96.8	97	97.2	97.3	97.5	97.6	97.7	97.8	97.8			
	94.3	96.3	96	96.4	96.6	96.8	97.	97.1	97.3	97.4	97.4	

		1		2		3		4		5		6	7
Clark. Riggs	94.7	96.6	97.2	97.3	97.5	97.7	97.1						+1½
	94.4	95.6	96.6	96.7	96.7	96.2	96.3	96.5	96.8	96.9	97	97.1	97.2 97.2
Ed Gros.	95.6	96.2	96.5	96.7	97.1	97.3	97.7	97.9	97.9				
	95	96.6	96.	96.4	96.6	96.8	96.8						
R. Williamson	96.2	96.7	96.9	97.	97.1	97.2	97.5	97.9	98.2	98.3	98.4	98.5	98.6 98.6
	92.2	93.7	94.6	95.2	95.5	95.9	96.3	96.7	96.8	97.	97.1	97.3	½ m. + 97.4 97.4
Mr Corell.	95.5	96.5	96.8	97.1	97.2	97.4	97.6	97.6	97.7	97.8	97.8		
	95.	95.5	95.6	95.8	96.1	96.2	96.5	96.6	96.7	96.8	96.8		
Mr Fitch	97.5	97.8	98.1	98.2	98.4	98.4							
	94.5	95.5	96.	96.5	97.2	97.4	97.6	97.8	98	98.1	98.1		
Mr Riggs	97.4	97.7	97.8	98.	98.1	98.1							
	97.5	97.6	97.7	97.7	97.7								
Mr House.	96.2	97.2	97.4	97.6	97.6								
	96.6	97	97.2	97.3	97.4	97.6	97.6						
C. C. Payne	97.8	98.	98.1	98.2	98.4	98.4							
	96.5	97.2	97.3	97.5	97.7	97.8	97.8						
R Williamson	97.2	97.6	97.8	98	98								
	95	95.	96	96.2	96.4	96.6							

	1			2		3	4	5		6
H. D. Wolcott	100.5	100.8	100.9	101.1	101.3	101.3				
	99.7	99.8	100.	100.0						
H. A. Hellier	97.4	97.7	97.8	97.8						
	95.7	97.3	97.4	97.5	97.6	97.7	97.7			
L. F. Hanson	96	96.5	96.6	96.9	97.	97.1	97.2	97.4	97.5	97.6 97.6
	95	95.7	96.6	96.8	97	97	97.1	97.2	97.3	97.4 97.4
L. F. Hanson	96.7	97.	97.2	97.3	97.4	97.5	97.5			
	95.	95.7	96.	96.3	96.4	96.5	96.6	96.7	96.7	
Harry Wiggins	97	97.5	97.8	98.	98.1	98.2	98.2			
	96.	96.7	97.	97.1	97.3	97.4	97.5	97.6		
Ed. Gros.	96	96.4	96.8	97.2	97.5	97.7	97.8	97.8		
	96.2	97.	97.2	97.4	97.6	97.8	98.			
Robert Conway	96.6	97	97.2	97.4	97.5	97.6	97.8	97.8		
	95	95.5	96.2	96.8	96.9	97	97.			
Francis Anguiar	96.8	96.8	97.3	97.6	97.8	97.9	98.2	98.3		
	96.6	96.7	96.7							
Francis Anguiar	97.4	98	98.1	98.2	98.3	98.4	98.4			
	98.8	97.	97.2	97.3	97.4	97.5	97.6	97.7	97.8	97.8

	1			2		3	4		5		6	
Francis Anguilar	97.8	97.9	98.2	98.3	98.4	98.5	98.6	98.6				
	96.6	96.8	97.3	97.6	97.8	98.	98.2	98.2				
Harry Wiggins	97.	97.5	97.6	97.8	97.8	98	98.					
	96.	96.8	97.	97.3	97.5	97.7	97.8	97.9	98	98.		
	9											
L. Sanders	94.5	96.5	96	96.4	96.7	97.2	97.3	97.5	97.7	97.9	97.8	
	94.	94.5	95.2	95.5	95.8	96.2	96.3	96.4	96.6	96.8	96.9	97. 97
A. Martindale	96.5	96.6	97.7	97.3	97.4	97.8	97.8					
	96	96.1	96.4	96.3	96.4	96.5	96.7	96.8	96.9	97	97.4	97.4
Mr Glassock	97.	97.6	97.9	98.	98.							
	96.5	97.2	97.5	97.7	97.8	97.9	98	98.1	98.1			
Martin Keller.	96.5	96.8	97	97.3	97.5	97.7	97.8	97.9	98.	98.1	98.2	98.2
	92.2	94.5	95.	95.3	96.2	96.3	96.4	96.7	96.7	97.1	97.4	97.3 97.4 97.4
Mr Huff.	95	97	97.4	97.8	98.	98.1	98.2	98.4	98.4			
	95	95.2	95.4	95.6	95.8	96	96.2	96.4	96.5	96.6	96.7	96.8 97. 97.
Mr S. H. Green	95	95.4	96.	96.6	96.7	96.8	97.	97.2	97.4	97.5	97.5	
	95.	95.2	95.6	95.8	96	96.4	96.5	96.6	96.8	96.8		
A. Martindale	96.5	97	97.2	97.4	97.6	97.7	97.8	97.8				
	96.	96.4	96.6	96.9	97.	97.2	97.3	97.3				

	1			2		3	4		5		6	7
H. G. Wagginer	97.2	97.4	97.6	97.7	97.9	98	98.					
	96.5	96.5	96.5	97	97.1	97.3	97.5	97.5				
E. J. Havella	97.3	97.6	98	98.1	98.4	98.6	98.8	98.8	98.9	98.9		
	95.5	96.	96.5	96.7	97.1	97.4	97.6	97.8	98.	98.1	98.1	
Will. Sadler	96.4	97	97.1	97.3	97.6	97.9	98.	98.2	98.3	98.3		
	95.5	95.6	95.8	96.2	96.7	97.	97.1	97.2	97.4	97.6	97.7	97.7
Harry Wiggins	97.	97.3	97.3	97.3	97.5	97.1	97.7					
	95	95.2	95.5	96	96.4	96.6	96.7	97.	97.3	97.5	97.7	97.5
Clark Riggs	97.3	97.8	98.2	98.5	98.4	98.4						
	96.5	97.	97.4	97.6	97.7	98.	98.1	98.2	98.3	98.4	98.4	
A Martindale	97.8	98.1	98.4	98.5	98.6	98.6						
	96.	96.	96.2	96.4	96.1	96.8	97.	97.2	97.4	97.6	98.6	
Ed. Gros.	97.	97.5	97.8	98.1	98.3	98.4	98.5	98.6	98.6			
	95	97.5	96.5	97.	97.1	97.2	97.5	97.7	97.9	98.1	98.2	98.3 98.3
Bert Parish	97	97.3	97.6	97.7	97.8	97.9	98.	98.1	98.2	98.2		
	95.5	96	96.2	96.5	96.6	96.7	96.8	97.	97.			
R. Williamson	96.9	97.7	97.9	98.1	98.2	98.5	98.6	98.6				
	94.	95.4	96.8	96.6	96.8	97.	97.1	97.3	97.5	97.6	97.7	97.7

		1	2	3	4	5	6	7
Dr Dow	96	96.2	96.3	96.7	96.9	97.1	97.2	97.3
	95.9	96.1	96.2	96.5	96.7	96.8	96.9	96.9
Alfred Stagg	96.2	96.6	97	97.2	97.4	97.5	97.7	97.8
	94	95.4	95.5	95.6	96.2	96.3	96.5	96.6
Ed Howell	97	97.3	97.4	97.5	97.7	97.9	97.9	
	96.3	96.3	96.4	96.4	96.4	96.6	96.7	97
Mr Otis	96.5	96.8	96.9	97	97.3	97.6	97.7	97.8
	95	96.4	96.8	97.2	97.3	97.5	97.6	97.8
Harry Higgins	97.1	97.2	97.3	97.4	97.6	97.6		
	95	95.5	95.8	96	96.2	96.4	96.5	96.7
Ed Gore	97.5	97.8	98	98.2	98.4	98.5	98.5	
	97.2	97.6	97.8	98.1	98.2	98.3	98.3	
Mr Peterson	97.5	98	98.1	98.1				
	96.6	96.8	97	97.1	97.2	97.2		
Mr Hale	96	97	97.2	97.4	97.5	97.7	97.9	98
	96.5	97	97.4	97.5	97.7	97.8	97.9	97.9
Mr Wilcox	96	96.2	96.4	97.8	96.9	97.5	97.6	97.7
	96.5	96.8	97.2	97.3	97.5	97.6	97.7	97.8

Mr Goudy	97.	97.3	97.6	98	98.1	98.2	98.2				
	96.5	96.8	97.1	97.2	97.3	97.4	97.5	97.5	97.6		
Mr Eastman	97	97.6	97.8	97.8	98	98	98.2	98.2	98.2		
	95.6	96.8	96.9	97.	97.1	97.3	97.5	97.6	97.7	97.7	
Mr Buss.	98.	98.1	98.2	98.3	98.3						
	95	95	95.5	95.8	96.1	96.3	96.4	96.5	96.5		
Mr McCulley	96.5	97.	97.5	97.5	97.7	97.9	97.9				
	95	95	95.7	96.2	96.4	96.6					
Mr Wilcox	96.5	97.	97.1	97.4	98	98.1	98.2	98.3	98.4	98.5	98.6
	94	94.2	94.9	95.4	95.8	96.2	96.3	96.6	97.	97.2	97.4	97.6	97.6
Mr Webster.	98.	98.3	98.4	98.5	98.7	98.8	98.9	99	99		
	96	95.2	96	96.4	96.8	97.3	97.4	97.7	97.9	98	98.4	98.4	98.6
Mr Buss	98.4	98.6	98.8	98.9	98.9						
	95	95.8	96.5	97	97.3	97.7	97.9	98.	98.1	98.2	98.2
Mr Goudy	97.2	97.3	97.3	97.7	98.	98.3	98.4	98.5	98.6	98.7	98.8
	94	95.8	96.4	96.7	96.9	97.1	97.2	97.4	97.5	97.7	97.8	97.8
Mr Eastman	96.5	97.	97.7	97.8	98	98.1	98.2	98.3	98.4	98.4	
	96.	96.2	96.3	96.4	96.5	96.7	96.9	97.	97.2	97.3	97.3

195 Cases.

Mr Howse									
Mr Oppegard.									
Mr Hole									
10, page Mr Hopkins									

Pages not

Available

for filming

Record of 10 cases
is taken before and after

1 Hot Foot Bath
Average Temp. in M. before 97.92°. in
2 Salt Glow.
Average Temp. in M. before. 98.29°. after. 98.33°.
3 Hot & Cold to Spine
Average Temp. in M. before 98.14° " 98.46°
4 Hot Full Bath
Average Temp. in " " 98.06° " 99.44°
5 Shampoo.
Average Temp " " " 98.44° " 98.41°
6 Hot Sitz
Average " " " " 98.30° " 99.26°
7 Hot & Cold Spray
Average Temp. " " " 98.10° " 98.30
8. Electric Light Bath " " 98.61° "
Average Temp " 98.61° " 99.72°
9. Ten minute Rub
Average Temp. in M. " 97.97° " 98.82°
10. Drinking Hot Water "
Average Temp. " " " 98.36 " 98.81°
11 Drinking Cold Water
Average Temp. " " " 98.15 " 97.51
12 Alcohol Sponge.
Average Temp " " 98.14° " 98.01°
13 Hot Spray
Average Temp. " " 98.26 " 98.73

"OVER."

in which the Temperature, every ½ m.
treatment, in the mouth and ~~in~~ axilla,

M after. 98.34°. Axilla before. 97.49°. after 97.79°

In Axilla before. 97.89° after 97.42°

" " " 97.54 " 97.94°

" " " 97.58° " 99.42°

" " " 97.76° " 97.90°

" " " 97.65° " 99.64°

" " " 97.84° " 97.99°

" " " 97.78° " 99.37°

" " " 97.47 " 98.85°

" " " 97.74° " 97.78°

" " " 97.34° " 97.09.

" " " 97.47 " 97.93.

" " " 97.77 " 98.60°

14 Cold Spray.
Average Temp. in M. before 98.54° in
15 Turkish
Average Temp. in M. before 97.95° in
16 Russian
Average Temp. in M. before 98.06° in

Recd 16 cases
Mouth and Nasal Douche. before
1 Hot foot Bath.
Average time in M. before 3.25° and after
2 Salt Glow.
Average time in M. " 4.15° " "
3 Hot and Cold to Spine
Average time in M. " before 3.25° " "
" 4 Hot full Bath.
" " in M. before 2.80° " "
5 Shampoo.
" " in M. before 3.16°
6 Hot Sitz.
" " 3.05°
7. Hot and Cold Spray.
" " 3.65°
8 Electric Light Bath
" " 2.50
9 Ten minute Run.
" 2.85°

(over)

M. After 97.39° Axilla before 97.80°. after 95 97.°

" " 99.43° " " 97.64° " 99.96°

" " 100.79° " " 97.18° " 100.84°

in which the average time in and after treatment

180: Axilla before 3.05° and after 1.85°.

3.05° " " 4.70° " " 4.45°

2.85° " " 3.80° " " 3.10°

1.60° " " 3.43° " " 1.65°

3.28° 4.05° 3.90° "

1.55° 4.05° 2.60° "

2.65° 3.25° 3.80° "

1.25° 3.35° 2.05°

" "

2.65° 3.35° 3.20°

		10. Drinking Hot Water.		
Average time	in Min. before	2.60°	and	after.
		11. Drinking Cold Water.		
"	"	3.60°	"	"
		12 Alcohol Sponge.		
"	"	3.30°.	"	"
		13 Hot Spray		
"	"	3.00°	"	"
		14. Cold Spray		
"	"	3.25°	"	"
		15 Turkish Bath.		
"	"	3.95°	"	"
		16 Russian Bath.		
		2.75°	"	"

1.80°	axilla	before	3.70°	and	after	4.00°
4.35°	"	"	4.35°	"	"	4.05°
2.40°	"	"	4.15°	"	"	3.60°
2.45°	"	"	4.00°	"	"	2.80°
3.10°	"	"	4.10°	"	"	4.25°
2.85°	"	"	3.25°	"	"	1.95°
1.10°	"	"	3.85°	"	"	1.35°

Fever

	1			2		3	
De Wolcott	101.	101.6	102	102.2	102.2		
	100.6	101.2	101.4	101.6	101.6		
De Wolcott	101.	101.2	101.5	101.6	101.8	101.8	
	99.	99.6	100	100.4	100.4		
De Wolcott.	102.	102.2	102.3	102.3			
	100.6	101.2	101.4	101.6	101.7	101.8	101.8
De Wolcott	99.6	99.8	99.9	100.2	100.4	100.4	
	98.	98.6	99.	99.2	99.3	99.4	99.6
De Wolcott.	98.4	99.	99.2	99.4	99.6	99.7	99.8 100 100
	96.5	96.5	97.	97.2	97.6	97.8	98. 98.
De Wolcott.	98.2	99.2	99.6	99.8	99.8		
	97.4	98.2	98.4	98.6	99.	99.1	99.1
Hans Peterson.	97.6	98.8	99.2	99.3	99.4	99.4	
	97.6	97.6	97.8	98	98.2	98.3	98.3
Hans Peterson.	98.5	99.2	99.8	99.8			
	96.5	97.5	98.2	98.4	98.4		
Clinton Acker	102.4	102.5	102.6	102.6			
	101	101.6	101.9	102.1	102.2	102.2	

Fever

Clinton Acker	98.2	98.6	98.7	98.8	98.9	98.9			
	97.5	97.6	97.7	97.8.	98.	98.			

Cool Evenings

Harry Wiggins	98.	97.5	97.8	98.	98.1	98.2	98.2				
	96.	96.7	97.	97.1	97.3	97.5	97.5				
							84°	for 5. m.			
Ed. Gros.	96	96.4	96.8	97.2	97.5	97.7	97.8	97.8			
	96.2	97.	97.2	97.4	97.6	97.8	98.	98.			
							84°	for 5 m			
E. S. Howells	97.5	97.8	98	98.1	98.4	98.6	98.8	98.9	98.9		
	95.5	96	96.5	96.7	96.7	97.1	97.4	97.6	97.9	98	98.1	98.1

Cool Emma.

Harry Wiggins	97.2	97.4	97.6	97.7	97.8	97.9	97.9				
	96	96.5	96.6	97.	97.2	97.3	97.3				
Ed Gros.	96.	96.2	96.5	97	97.2	97.4	97.5	97.6	97.8	97.8	
	96.	96.5	96.9	97.1	97.2	97.4	97.5	97.6	97.7	97.8	97.8
Ed J Howells	96	96.7	97	97.3	97.4	97.4					
	94	95	95.5	95.6	96	96.1	96.1				

Cold Enemas.

Cold Cremas.

Feet in water at 110° for 10 minutes.

Hot foot bath.

time in minutes		1		2		3		4	5	6	7
L. D. House	mouth	96.7	97.1	97.2	97.4	97.6	97.7	97.8	97.8		
	axilla	96.	96.7	96.9	97.	97.1	97.2	97.3	97.4	97.4	
								110°.	10, am.		
Clark Rigg		97.4	97.7	97.8	98	98.1	98.1				
		97.5	97.6	97.7	97.7			"	"		
Mr Pole		98	98.3	98.4	98.5	98.6	98.7	98.8	98.8		
		97.2	97.5	97.7	97.8	98.	98.1	98.2	98.2	"	"
Mr Eastman		96.5	97.	97.7	97.8	98.	98.1	98.2	98.3	98.4 98.4	
		96.	96.2	96.3	96.4	96.5	96.7	96.9	97	97.2 97.3 97.3	"
Mr Webster		97.5	97.5	97.9	97.1						
		96.5	95.8	96.2	96.8	96.8			"		"
* Mr. Oppegard.											
Mr. Cross		95.	96.5	97.	97.3	97.6	97.7	97.8	97.8	96.7	
		96	97.3	97.8	97.9	98.	98.1	98.1			"
Mr. Eastman		96.5	97.4	97.5	97.6	97.7	97.8	97.9	98.8	98	
		96.4	96.8	97.2	97.3	97.4	97.5	97.5			"
Mr Buss.		95.5	95.5	95.5	96	96.2	96.5	96.5			
		95.	95.6	96.	96.3	96.3					"

* Faulty.

Hot foot bath.

time	1		2		3		4		5	6	7
L. D. House.	97.2	97.7	98.	98.							
	95.6	96.8	97.	97.							
Clark Rogge	98.	98.3	98.4	98.5	98.5						
	97.3	97.6	97.8	98.	98.1	98.2	98.3	98.3			
Mr Hale	98.6	98.6									
	98.4	98.4									
Mr Eastman	98.6	98.6									
	98.4	98.4									
Mr Webster.	97.	97.2	97.3	97.3							
	95	95	95.	95.6	95.7	95.8	96.	96.			
Mr Sprague	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Mr Cross	97.8	98	98								
	97.3	97.8	97.9	97.9							
Mr. Eastman	98.4	98.5	98.6	98.8	98.8						
	96.8	97.	97.2	97.3	97.4	97.6	97.8	97.8			
Mr Buss.	97.2	97.5	97.7	97.8	97.8						
	95	95	95	96	96.2	96.3	96.3				

Hot foot bath.

Time	1	2	3	4
Mr Hale	95	96.5	96.6	97.
	97.	97.9	98.1	98.3
	97.5	98.	98.1	98.1
	98.4	98.5	98.5	98.5
Mr Wilcox.	95.	96.4	96.8	97.2
	95	95.8	96.3	96.5
	97.4	97.8	97.8	97.8
	96.8	96.9	97.2	97.2

Hot foot bath.

		1		2		3		4		5		6	
Mr Hale	97.6	98.	98.1	98.2	98.3	98.4	98.5	98.6		98.6			
	95	95	95	95.2	95.6	96.2	96.4	96.7	97.	97.2	97.4	97.6	97.7
	97.8	97.8											
Wilcox	98	99	99										
	98.2	99.	99.										

Salt Glow.

Time in M.		1	1½	2		3		4		5		6	7
H. Wolcott.	97	95.2	95.6	95.0									
	97	98	98										
L. T. Peterson.	95.1	95.5	96.4	96.6	96.8	96.9	97	97.1	97.2	97.3	97.3		
	96	96.5	97.	97.1	97.2	97.2							
A Martindale	97.4	97.7	97.8	98.2	98.4	98.6	98.7	98.8	98.9	98.9			
	97.8	98.2	98.3	98.4	98.6	98.8	98.9	99.					
R Williamson	96.2	96.7	96.9	97	97.1	97.2	97.5	97.9	98	98.2	98.3	98.4	98.5 98.5
	93.2	93.7	94.6	95.2	96.5	96.7	96.3	96.7	96.8	97.	97.1	97.3	97.4 97.5
Ed Gros	96.4	97.2	97.6	97.7	97.8	98.	98.1	98.2	98.3	98.4	98.4		
	93.7	96.4	96.	96.3.	96.5	96.6	96.7	96.9	97.	97.1	97.3	97.3	
W Fitch	97.5	97.8	98.1	98.2	98.4	98.4							
	94.5	95.5	96	96.5	97.2	97.4	97.6	97.8	98	98.1	98.2	98.2	
Harry Wiggins	97	97.5	97.6	97.8	97.9	98	98						
	96	96.8	97	97.3	97.5	97.7	97.8	97.9	98	98.			
Will Sadler.	96.4	97	97.1	97.3	97.6	97.9	98.	98.2	98.3	98.4	98.4		
	95.6	95.5	96.8	96.2	96.7	97	97.1	97.2	97.4	97.5	97.6	97.7	97.7
Ed Gros.	97.	97.5	97.8	98.1	98.3	98.4	98.5	98.6	98.6				
	95	97.5	97.9	97.1	97.2	97.3	97.5	97.7	97.9	98.	98.1	98.2	98.2 98.2

Salt Glow.

Time in Ill.		1		2		3		4		5		6		7
H. T. Wolcott.	97.8	98.2	98.6	98.6										
	97.3	97.8	98.4	98.4										
C. T. Peterson.	95.2	95.0	95.7	96.4	96.8	97.	97.4	97.5	97.6	97.7	97.8	97.9	97.9	
	95	96.0	96.2	96.5	96.6	96.8	97	97.1	97.2	97.3	97.3			
A. Martindale	97.8	98.2	98.6	98.7	98.8	99.2	99.3	99.3						
	96.8	97.4	97.7	98.	98.1	98.3	98.5	98.5						
R. Williamson	97.5	98.	98.2	98.3	98.4	98.5	98.6	98.7	98.8	98.9				
	92.5	93	93.3	93.6	94.1	94.4	94.8	95.5	93.8	96.	96.3	96.1	96.7	96.7
Ed Gros.	95.5	96.2	96.5	96.7	97.1	97.5	97.8	97.8						
	96.	95.5	96	96.4	96.7	96.8	96.8							
Mr Fitch	98	98.1	98.4	98.6	98.7	98.8	98.8							
	94.	95.	95.5	95.8	96.	96.2	96.5	96.8	97.	97.2	97.3	97.3	9	
Harry Wiggins	97.8	98	98.											
	95.5	95.8	96.1	96.3	96.5	96.7	96.8	96.9	96.9					
Will Sadler	98.2	98.3	98.4	98.4										
	95	95	95.5	95.7	96.	96.2	96.3	96.4	96.6	96.7	96.8	96.9	97.	97.
Ed Gros.	97	97.8	98.	98.3	98.4	98.4								
	96	97	97.1	97.2	97.3	97.5	97.5							

Salt Glow

time	1			2		3		4		5	6
Mr Otis	96.5	96.8	96.9	97.	97.3	97.6	97.10	98	98	98	
	95	96.4	96.8	97.2	97.3	97.5	97.6	97.8	97.8	98	98
* Mr Peterson	97.5	96	98.1	98.1							
	96	96.6	97	97.1	97.2	97.2					

* Not used.

Salt Glow.

Time		1		2		3		4		5		6		7
Mr Otis	96.5	97.	97.3	97.4	97.8	98	98.1	98.1						
	95	95	95.3	95.8	96.2	96.4	96.5	96.6	96.8	97.	97.	97.2	97.2	97.2
Mr Peterson	98.5	99.	99.1	99.2	99.2									
	99.5	[illegible]	[illegible]											

Salt Glow.

Hot and Cold to Spine.

Time	1			2		3	4	5	6
Berl Parish	97.	97.2	97.4	97.6	97.8	97.8			
	94.4	95.4	95.8	96.2	96.4	96.5	96.6	96.7	
Mr. Wiese.	96.2	96.6	96.8	97	97.2	97.2			
	96.4	96.8	97	97.1	97.2	97.4	97.4		
* Mr. Kellier	95.8	96.3	96.8	96.9	96.9	97	97.2	97.5	97.5
	94.8	95.2	95.5	96	96.2	96.2			
Mr Eastman.	96.5	97.2	97.5	97.6	97.9	98.	98.2	98.2	
	96.	97	97.3	97.5	97.7	97.8	97.9	97.9	
Hale, Mr.	97.4	97.5	97.8	97.9	98.1	98.3	98.4	98.5	98.6 98.6
	97.2	97.8	98.	98.2	98.4	98.5	98.6	98.7	98.8 98.8
Mr. Burlingame	94.8	96	96.3	96.7	96.9	97.2	97.4	97.5	97.6 97.6
	96.6	97.5	97.6	97.7	97.7				
* Mr Phelps.	96.5	96.5	96.5	96.6	97	97.4	97.7	97.8	98. 98.2 98.2
	96.5	97.2	97.8	98	98.2	98.4	98.4		
* Mr. Wise	97.5	97.8	97.9	98	98.1	98.2	98.3	98.3	
	96	96.8	97.3	97.7	97.8	97.8			
* Mr Goudy.	96.2	96.5	97	97.2	97.3	97.5	97.7	97.7	} Revised.
	97.5	97.6	98.1	98.2	98.4	98.5	98.5		

* Faulty

Hot + cold to Spine.

Time	1	2	3	4	5	6
Bert Parisell	96.5 96.8 97.3 97.5 97.6 97.7 97.8 97.9 97.9					
	95.5 96.2 96.5 96.7 96.8 96.9 97. 97.1 97.1					
Mr. Wiese.	97. 97.5 97.8 97.9 98 98.1 98.2 98.3 98.3					
	96. 97.2 97.5 97.6 97.8 97.8.					
* Feet not in hot water	97 97.5 97.5					
	95 96 96.5 96.7 96.8 97 97					
Mr Eastman.	98. 98. 98.1 98.2 98.2					
	96.6 97 97.2 97.4					
Mr Hale.	97.9 98.5 98.7 98.8					
	96.6 98.2 98.6 98.8 99 99					
Mr Burlingame	96.1 96.9 97 97.2 97.5 97.6 97.7 97.8 98 98.					
	96. 97.1 97.3 97.4 97.5 97.6 97.6					
*	95.5 95.5					
	97.4 98. 98.3 99 99					
*						
*	99.8 100 100					
	99.7 100 100					
* Faulty.						

Hot & Cold to Spring

Time		1		2		3		4	5	6
Mr Wilcox.	96.5	96.6	96.8	97.2	97.4	97.5	97.7	97.7		
	96.	96.5	96.8	97	97.2	97.2	97.3	97.4	97.4	
Mr. Webster.	97.5	98	98.1	98.1						
	95	95.8	96.2	96.5	96.8	96.9	97	97.2	97.2	
Mr. Gandy.	97.8	98.	98.1	98.2	98.3	98.3				
	96	96.6	96.9	97	97.2	97.4	97.5	97.5		
Mr. Oppegard	96.	97	97.1	97.2	97.5	97.8	97.9	98.1	98.3	98.4 98.4
	95.5	97	97.2	97.3	97.4	97.6	97.7	97.8	97.8	
Mr. Webster	97	97.5	97.7	97.9	98	98				
	94	94.7	95.2	95.5	95.7	96	96.1	96.5	96.7 97.1	97.1 97.2 97.2

Hot & Cold to Spinal.

Time	1		2			3		4	5		6	7
Mr Wilcox.	99.1	99.2	99.3	99.3								
	98.6	98.9	99.	99.								
Mr Webster.	97.5	97.9	98.2	98.4	98.4							
	97.5	97.5	97.5									
Mr Gordy.	98.6	98.7	98.8	98.9	99	99						
	94.7	95.2	95.7	96.2	96.7	96.9	97	97.2	97.5	97.6	97.7	97.9	97.9
Mr Offegard	94.5	96	96.8	97.5	98	98						
	97.0	97.4	97.6	97.8	98.	98.						
Mr Webster.	97.5	97.7	97.9	98.	98.2	98.3	98.3					
	94.6	95.4	96.	96.4	96.7	96.8	96.9	97	97.	97.2	97.3	97.5-97.5

Hot full bath.

time	1	2	3	4	5	6
Mr. Otis	97.2 97.4 97.6	97.8 97.9	98 98.1 98.1			
	95.5 95.5 96	96.2 96.5	96.6 96.7 96.9	97 97.1 97.1		
			106° for 10 m			
A. Martindale	95.4 95.5 96.4	97 97.				
	96.4 96.6 96.6					
			106° for 10 m			
Mr House	96.5 97.2 97.4	97.6 97.6				
	96.5 97 97.2	97.3 97.4	97.6 97.6			
			106° 10 m.			
H. G. Wiggins	97. 97.1 97.2	97.3 97.5	97.7 97.7			
	95. 95.2 95.5	96. 96.4	96.6 96.7 97	97.3 97.5	97.7 97.7	
			106° for 10 m.			
A. Martindale.	96.5 96.6 97.7	97.3 97.4	97.5 97.8			
	96. 95.8 96.	96.2 96.5	96.7 96.8 97	97.2 97.2		
			106 for 10 m			
Mr Rose	98 98.2 98.2					
	96. 97.2 97.4	97.5 97.7	97.8 97.9 97.9			
					106 for 10 m	
Mr Webster	97.8 98.2 98.3	98.4 98.5	98.7 98.8 98.8			
	95.6 96.4 96.8	96.9 97.2	97.5 97.8 97.9	97.9		
					106 for 10 m	
Mr Sheppard.	97.8 98. 98.2	98.3 98.4	98.5 98.6 98.6			
	97.8 98.2 98.3	98.4 98.5	98.5			
					106 for 10.	
Mr. Gordy	96.2 96.5 97	97.2 97.3	97.6 97.6		} Reverse	
	97.5 97.5 97.6	98.1 98.2	98.4 98.5 98.5			

Hot full bath.

	1			2		3	4	5	6	7
Mr Olive	98.8	98.8								
	100.0	100.2	100.2							
A Martindale.	100.6	101.2	101.2							
	100.4	101	101.							
Mr House	98.6	98.8	99.	99						
	99.3	99.5	99.5							
H. G. Wiggins	99.4	99.6	99.8	100	100					
	98.7	99.0	99.8	99.8						
A. Martindale.	97	98.	98.1	98.2	98.3	98.4	98.5	98.6	98.7	98.7.
	96.6	97.	97.5	97.5	97.8	97.9	98	98.2	98.2	
Mr Ross.	98.6	98.8	98.8							
	97	97.5	97.7	97.8	97.9	97.9				
Mr Webster.	98.4	99.2	99.2	0						
	97.8	98.4	98.6	98.7	98.9	98.9				
Mr Oppegard	98.5	98.8	99.	99.						
	99.5	99.5								
Mr Goudy.	99.8	100	100							
	99.7	100	100							

Hot full bath.

Time		1			2		3	4	5	6
Mr	Weise.	97.5	97.8	97.9	98.	98.1	98.2	98.3	98.3	
		96	96.8	97.3	97.5	97.7	97.7			

Hot full bath.

time	1		2		3	4	5	6
	99.5	99.6	99.7	99.7				
	98.8	99	99.2	99.2				

Shampoo.

Bert Parish	95.5	96.2	96.5	96.6	97.1	97.2	97.4	97.5	97.6	97.8	97.8
	95.5	95.8	96.1	96.2	96.5	96.6	96.7	96.9	97	97.	
Clark Riggs	98.	98.2	98.4	98.5	98.6	98.7	98.7				
	95.5	97	97.2	97.5	97.6	97.8	98.1	98.1			
L. Weise.	97.8	97.9	98.1	98.2	98.3	98.4	98.4				
	95.5	96.4	96.9	97.2	97.5	97.6	97.7	97.9	98	98	98.1
Howard Burden.	97.2	98	98.2	98.3	98.6	98.6					
	95.1	96.1	96.7	97.1	97.3	97.4	97.5	97.5			
Bert Castle.	98.4	98.5	98.5.								
	96.2	96.7	97.	97.2	97.5	97.6	98	98.3	98.3		
Mr Oppegard	97.9	98.1	98.5	98.5	98.5						
	97	97.7	97.8	98	98.	98.2	98.3	98.3			
Mr Webster	96.6	96.7	96.8	97.1	97.2	97.5	97.6	97.7	97.8	97.8	
	93.2	95.9	96.2	96.6	96.7	96.7					
Mr Buse	98.4	98.6	98.8	98.9	98.9						
	95	95.8	96.5	97	97.3	97.7	97.9	98	98.1	98.2	98.4
Mr Gordy.	97.2	97.3	97.5	97.7	98	98.2	98.3	98.3	98.6	98.7	98.8 98.8
	94.5	95.8	96.4	96.7	96.9	97.1	97.2	97.4	97.5	97.7	97.8 97.8

Shampoo.

	1			2		3		4	5				
Bert Parish	97	97.3	97.6	97.6	97.7	97.8	97.8						
	94.2	95	95.5	95.8	96.2	96.5	96.7	96.8	96.8				
Clark Riggs	97.2	97.5	97.6	97.7	98.	98.2	98.3	98.3					
	97.2	97.2	97.2	97.3	97.5	97.7	97.7						
L. Wiese.	97.8	98.	98.2	98.4	98.5	98.6	98.7	98.8	98.8				
	97.5	97.8	97.9	98.1	98.3	98.4	98.5	98.6	98.6				
H. Burden	98.6	98.6	98.7	98.7	98.8								
	96.8	97.3	97.5	97.7	97.9	98	98.						
Bert Castle	98.6	98.1	98.8	98.9	99.	99							
	96.8	97.3	97.4	98.	98.1	98.2	98.3	98.4	98.5	98.6	98.7	98.7	
Mr Offegard	96.2	96.8	96.9	97.	97.4	98.2	98.3	98.5	98.5				
	98	98.4	98.5	98.6	98.6								
Mr Meister.	96.5	97	97.2	97.5	97.6	97.6							
	96.	96.	96.4	96.8	96.9	97.2	97.2						
Mr Buse	96.2	96.9	97.	97.4	98.	98.1	98.2	98.3	98.3				
	95	96.4	97.	97.5	97.8	97.9	98	98.1	98.2	98.2			
Mr Gandy.	97.3	97.8	97.9	98	98.1	98.2	98.4	98.6	98.6				
	94.3	95.	95.3	95.5	95.7	96.5	96.8	97.	97.1	97.3	97.3		

Shampoo

Shampoo

time	Act. Z. (before) 1			2			4		5	6
C. C. Payne.	98	98.4	98.4							
	96.5	97	97.5	97.8	97.9	98	98.2	98.3	98.3	
							108°		for 10 m.	
Ed. Howell	98.6	98.8	99	99.1	99.1					
	94.6	96.	96.8	97.2	97.5	97.5				
							108°		"	"
W. Sadler.	98.1	98.1	98.2	98.3	98.4	98.6	98.7	98.8	98.8	
	95.5	96.	96.5	96.7	97.1	97.2	97.4	97.5	97.5	
							108°		"	"
Ed Gros.	95.5	96.	96.7	96.8	97.1	97.4	97.5	97.6	97.7	97.7
	95.	95.1	95.3	95.7	96	96.4	96.6	96.7	96.8	97. 97.
							108°		"	"
Harry Wiggins	97.9	98.1	98.4	98.6	98.5					
	96.4	97.	97.4	97.5	97.6	97.7	97.7			
							108°		"	"
L. Weise.	96.	96.1	96.2	96.8	97.	97.3	97.5	97.6	97.7	97.7
	96.5	96.8	97.1	97.3	97.5	97.7	97.7			
							108°		"	"
Clark Rigge	94.9	96.6	97.2	97.3	97.5	97.7	97.7			
	94.4	95.5	95.6	95.7	95.9	96.2	96.3	96.5	96.8	96.9 97	97 97.2 97
							108°		"	"
W. Gandy	97.	97.3	97.6	98.	98.1	98.2	98.2			
	96.5	96.8	97.1	98.2	97.3	97.4	97.5	97.5	97.5	
							108°		"	"
W. Eastman	97	97.6	97.8	97.9	97.9	98.1	98.2	98.5	98.3	
	95.6	96.8	96.9	97.	97.1	97.3	97.5	97.6	97.7	97.7
							108	for 10 m.		

Hot Z. (after)

	1	2	3	4	5	6	7					
C. C. Payne.	99.	99.										
	96.8	97.2	97.5	97.6	97.8	97.9	97.9					
Ed Howell.	100.5	100.6	100.6									
	99.	99.5	99.8	99.9	99.9							
W. Sadler.	98.6	98.5	99.	99.								
	97.	97.1	97.3	97.6	97.8	98.	98.					
Ed Gros	100	100										
	98	98.4	98.6	98.9	98.9							
Harry Wiggins	99.2	99.5	99.3									
	96.5	96.9	97.	97.1	97.2	97.3	97.5	97.6	97.7	97.8	98	98.
E. Wise,	98.6	99	99.1	99.1								
	98.4	99.3	99.5	99.5								
Clark Riggs	96.5	97.8	97.9	98.1	98.2	98.3	98.3					
	96.5	96.9	97.1	97.3	97.4	97.5	97.5					
W Gordy	98.6	99.	99.3	99.3								
	97.3	98.	98.3	98.6	98.8	98.9	99	99				
W Eastman	99.1	99.3	99.4	99.4								
	98.8	99.7	99.7									

Hot Z.

Time		1		2		3		4		5		6
Mr House.	96.5	97.5	97.1	98.2	98.5	98.0	98.6	98.6				
	96.5	96.5	97.	97.0	97.6	97.7	97.8	98.	98.1	98.1		
								1.0	for 10 m.			

Hot Z.

		1	2	3	4	5	6	7
Mr House	97.4	98.	98.2	98.2	98.4	98.5	98.6	98.4
	96.8	97.7	98.	98.				

Cool L.

Cool. Z.

Cool Z.

Harry Wiggins	96.5	96.7	96.8	96.8						
	93.5	96	95.5	96.	96.3	96.0	96.8	97	97	

Cool 7.

Harry Wiggins	97.2	97.5	97.6	97.5	97.9	98.	98.2	98.		
	94.5	95.5	96	96.1	96.1					

Hot and Cold Spray

time	1	2	3	4	5	6
P. E. Lane	100 100.3 100.4	100.5 100.6	100.7 100.7			
	98.5 99.3 99.6	99.8 99.9	100 100			
Dr Dow.	95.5 95.6 96.9	96.4 97.	97.4 97.5 97.6	97.8 97.8		
	95.8 96.8 97.1	97.5 97.6	97.7 97.8 97.9	97.9		
Mr Olis	97. 97.3 97.6	97.9 98.2	98.3 98.5 98.5			
	96.5 97.2 97.5	97.8 98.	98.1 98.3 98.4	98.5 98.5		
H. G. Wiggins	97.2 97.4 97.6	97.7 97.9	98 98			
	95.3 96.5 96.8	97. 97.1	97.3 97.5 97.5			
Mr. Buss.	95.3 95.5 95.5	96 96.2	96.3 96.5			
	95. 95.6 96.3	96.3				
Mr. Hale.	96. 96.3 96.6	96.8 97.2	97.5 98 98	98		
	97. 97.9 98.1	98.3 98.4	98.5 98.5			
Mr. Eastman.	96.5 97. 97.2	97.3 97.5	97.6 97.8 98	98 98		
	96.4 96.8 97.2	97.3 97.4	97.5 97.5			
Mr. Webster.	97. 97.2 97.5	97.9 97.9				
	96.5 96.6 96.7	96.8 96.8				
Mr. Hale	96.7 97.3 97.5	97.7 97.9	98 98			
	94.3 97 97.4	97.5 97.6	97.8 98	98		

Hot and Cold Spray

	1			2		3		4		5		6	7
P E Lane	98.5	99.1	99.6	100.3	100.4	100.4							
	97	98.6	99.	99.2	99.4	99.1	99.8	99.8					
Dr Dow.	95.5	95.8	96.1	96.5	96.8	97.2	97.4	97.5	97.5				
	95.	96.4	96.7	96.9	97.	97.1	97.2	97.4					
Mr Otis.	97.4	97.6	97.8	98.2	98.4	98.4							
	95.5	95.6	96.1	96.4	96.6	96.8	97.	97.3	97.4	97.5	97.6	97.7	97.8 97.8
H. G. Wiggins	97.2	97.4	95.	95.1	95.1								
	92.5	97	94.8	95.3	95.5	95.9	96.1	96.3	96.5	96.6	96.8	96.9	97 97
Mr Cuss.	95.5	96.	96.2	96.3	96.4	96.5	96.6	96.7	96.8				
	94	94.5	95.	95.3	95.6	95.7	96.	96.2	96.4	96.5	96.6	96.6	
Mr Hale.	98.2	98.4	98.6	98.7	98.7								
	95	97.5	97.6	97.7	97.8	97.9	97.9						
Mr Eastman	97	97.2	97.3	97.5	97.8	97.9	98.1	98.1					
	97.1	97.2	97.6	97.8	97.9	98.	98.						
Mr Webster.	96.2	96.4	96.8	97	97.3	97.4	97.5	97.6	97.6				
	95	95.5	95.7	95.8	96	96.3	96.7	96.8	96.8				
Mr Hale.	99.3	99.3											
	99.	99.2	99.5	99.5									

Hot or Cold Spray

		Time	1	2	3	4	5	6		
Mr. Eastman.		95.7	95.8	96.	96.4	96.6	96.7	96.8	97	97.2	97.3	97.4	97.5	97.5
		95.7	96.4	96.7	96.9	97.	97.1	97.2	97.3	97.4	97.4			
~~Harry Shoalmater~~		°												
Edith Hostetler	m	~~x~~	96.0	96.1	96.2									
	x	~~x~~	96.1	97.2	97.4	97.4								
Josie Hyatt.	m	101	102.4	102.7	102.8	102.8								
	x	100	101.6	101.8	102	102.								
Miss Redmond.	m													
	x	100	101.5	102.2	102.4	102.4								
Harry Shoalmater	m	99.2	99.3	99.3										
	x	98.4	98.6	98.7	98.7									
Sophie Turner		97.6	97.7	97.8	97.9	98.	98.							
		96.6	96.8	97	97.									
Hattie Lake.		96.5	97.8	98	98.2	98.2								
		95.8	97.2	97.4	97.6	97.6								
J. J. Hoschkiss		98.1	98.5	98.5										
		97	97.6	98	98.1	98.1								
Louis Randall.		98	98.5	98.8	99.2	99.4	99.6	99.6						
		97	97.8	98.3	98.7	99.3	99.5	99.7	100	100				
Elmer Goff.		98.1	98.6	99.2	99.4	99.5	99.5							
			96.5	98.1	99	99.2	99.3	99.3						
Curtis Arnold.		101.5	103.4	103.6	103.7	103.7								
		100	100.6	101.2	101.7	102.	102.3	102.3						
Orin Higley.		100	102.2	102.2										
		99	99.9	100.4	100.4									

Fevers

Note, The Temperature Pills every

Hot and Cold Spray

	1	2	3	4
Mr Eastman	97.8	98.	98.1	98.1
	99.2	99.3	99.3	
Ernest Hoyt	100	102	102.4	102.4
	99.	102.2	102.2	102.6
Anna Fry	100.	102.	102.5	102.2	102.2
	99.	100.2	100.5	100.5	101.	101.2	101.3	101.3
Mrs Lake								
Etta Gnester								
Wina Fleetwood								

Fever

is taken in the mouth and 3/4 minute.

(Not used)

~~Record of the cases in which the Thermometer, Time to register~~

~~The time was noted in the registering was noted in Oroville and Orilla.~~

Electric Light. before.

time	1	2	3	4	5	6						
R Williamson	97.3	98.4	97.7	98.1	98.6	98.3						
	9[illegible]	98.7	98.0	98.1	98.5	98.5						
Clark Riggs	95.2	96.3	96.4	96.8	97.2	97.4	97.6	97.6				
	95.8	96.4	97.	97.2	97.4	97.6	97.6					
Harry Wiggins	97.	97.6	98.	98.								
	96.2	96.8	97.2	97.4	97.4							
Martin Keller	97.	97.2	97.5	97.7	97.8	97.9	98.	98.2	98.2			
	96.	96.3	96.7	96.8	96.9	97.2	97.4	97.5	97.6	97.7	97.7	
H. D. Wolcott.	100.5	100.8	100.9	101.1	101.3	101.3						
	99.4	99.8	100	100								
Alfred Stagg.	97.4	97.6	97.9	97.9								
	95.4	95.9	96.4	96.6	96.8	97	97.1	97.2	97.3	97.4	97.5	97.5
H. A. Hellier	97.4	97.7	97.8	97.8								
	95.7	97.3	97.4	97.5	97.6	97.7	97.7					
Mr Glassock.	97.	97.6	97.9	98	98.							
	96.5	97.2	97.5	97.7	97.8	97.9	98	98.1	98.1			
Geo Wilcox	96.5	97	97.1	97.4	97.8	97.9	98.1	98.2	98.5	98.7	98.7	
	94.	94.2	94.9	95.4	95.8	96.2	96.3	96.5	96.6	96.7		

Electric Light (after)

	1		2		3	4		5	6	7
R Williamson	98.5	99.4	99.4							
	97.5	98.2	98.5	98.5	98.8	99	99.			
Clark Raggs	97.6	98.	98.4	98.4						
	98.2	98.4	98.6	98.8	98.8					
Harry Weggins	99.8	100.4	100.6	100.6						
	99	99.4	99.6	99.6						
Martin Keller	99.9	99.9								
	98.4	98.9	99.1	99.1						
N. D. Wolcott	101.5	101.6	101.8	101.8						
	101.5	101.6	101.8	101.8						
	99.2	99.5	99.5							
Alfred Stagg	99.2	99.6	99.7	99.7						
	98.4	98.4								
H. A. Heller	96.8	97.3	97.6	97.7	97.9	98.	98.1	98.2	98.2	
W Glasscock.	98.8	99.1	99.5	99.5						
	99	99.2	99.4	99.5	99.5					
Ira Wilcox	98.4	98.6	98.6							
	99.2	99.3	99.4	99.4						

Electric Light

Time	1			2		3		4		5	6
Mr Effinc.	98.2	98.8	98.8								
	95	95.6	96	96.2	96.4	96.6	97	97.2	97.8	98	

Electric Light.

	1		2		3	4
Mr Hopkins	97.	97.4	98.2	98.6	98.6	98.6
	98	98.3	98.4	98.6	98.6	

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Name	1	2	3	4	5	6	7	8	9	10
J. J. Deberaup	97.5	100.	100.5	100.5	101.2	101.4	101.5	101.5		
	100.5	101	101.4	101.5	101.5					
Jas McAllister	99.4	99.5	99.5	99.7	99.7					
	95	98.6	95.7	99.1	99.1					
L. T. Hanson	97	98	99	100	100.					
	95	97	98	98.5	99.	99.				
Jas. McAllister	98.4	98.5	99.1	99.2	99.5	99.6	99.7	99.8	99.8	
	98	98.4	98.6	98.8	98.8					
P. E. Lane	100	100.3	100.4	100.5	100.6	100.7	100.7			
	98.5	99.3	99.6	99.8	99.9	100	100.			
P. E. Lane	98.5	99.7	99.8	100.3	100.4	100.4				
	97.	98.6	99.	99.2	99.4	99.7	99.8	99.8		
* Robert Conway	96.6	97.	97.2	97.4	97.5	97.6	97.8	97.8		
	95	95.5	96.2	96.8	96.9	97	97.			
M. J. Clark.	98.8	99.4	99.4							
	97.	97.6	98	98.2	98.2					
A. Millard	100.8	101.5	101.6	101.8	101.9	102.	102.2	102.2		
	100.6	101.2	101.3	101.7	101.8	101.9	101.9			

Fevers

	1			2		3	4		
A. Millard.	101.2	102	102.4	102.6	102.6				
	101.2	102	102.	102.2	102.2				
A. Millard.	100.9	101.3	101.5	101.6	101.1	101.5	101.8		
	100.8	101.2	101.4	101.5	101.6	101.7	101.7		
Hans Peterson	99.8	100.6	100.8	100.8					
	95.2	97.	98.	98.4	99.	99.1	99.3	99.3	
Han Peterson	101.2	101.3	101.3						
	100.	101.4	100.8	100.8					
Hans Peterson	101.4	101.5	101.5						
	99.8	100.4	100.5	100.7	101.1	101.1			
Hans Peterson	100.5	101.1	101.2	101.4	101.4				
	96.6	100.4	100.5	100.6	100.7	100.7			
Hans Peterson	102.4	102.6	102.8	103.	103.				
	101.2	101.8	102.	102.2					
Hans Peterson	101.	101.2	101.4	101.4					
	99.2	99.6	100	100.2	100.4	100.4			
Hans Peterson	99	100	100.2	100.4	100.4				
	96.	98.	99	99.2	99.4	99.8			

Fever

Hans Peterson.	99.6	100.2	100.6	100.8	100.8			
	99.2	99.8	99.9	100	100			
Hans Peterson	100.8	101.2	101.3	101.4	101.4			
	99.2	100	100.2	100.3	100.3	100.6	100.6	
Hans Peterson	99.2	99.8	100.2	100.4	100.4			
	96.8	97.8	98.4	98.6	98.8	98.8		
Mr Walcott	102.	102.2	102.4	102.5	102.5			
	101.2	102	102.4	102.5	102.6	102.6		
Han Peterson	98.5	99.5	99.8	100	100			
	97.5	98.4	98.8	99	99.			
Mr Wood	98.6	101.4	101.7	101.9	102.	102.		
	98.4	99.2	99.8	99.8.				
Mr Wood	99.4	100.3	100.9	101.3	101.5	101.7	101.7	
	100.	100.8	101.1	101.4	101.6	101.7	101.7	
Dr. Wolcott	101.	101.5	101.8	102.	102.1	102.1		
	99.	99.7	100	100.4	100.6	100.8	100.8	
Dr Wolcott	100.2	100.6	101.2	101.4	101.6	101.6		
	100.2	101.4	101.8	101.2				

Fevers

	1	2	3						
Hans Peterson	100.4	100.8	101.2	101.2	101.2	101.4	101.4		
	99.2	99.6	99.8	100.	100.2	100.3	100.4	100.4	
Hans Peterson	100.4	100.6	100.8	100.8					
	99	99.2	99.4	99.6	99.6				
Hans Peterson	99	99.4	99.6	99.6					
	97.8	98	98.2	98.2	98.4	98.4			
Hans Peterson	99.8	100.2	100.4	100.5	100.5				
	97.6	98.4	98.8	99.2	99.2				
De Wolcott.	98.4	99.2	99.4	99.4	101.2	101.4	101.8		
	100.2	101.	101.2	101.2					
De Wolcott.	101	101.4	101.8	101.8					
	100.8	101.2	101.2						
De Wolcott.	100.4	100.8	101	101.					
	99.4	100.4	101	101.					
De Wolcott.	101.2	101.8	102	102.2	102.2				
	101.6	101.8	102.	102.					
De Wolcott.	98	99.4	100.	100.4	100.6	100.6			
	99.4	100.2	100.4	100.4					

Rest for 10 Minutes

time	1			2		3		4		5		6
Harry Wiggins	97.4	97.6	98	98.								
	95.8	96.4	96.6	96.8	97.	97.2	97.2					
Ed Howells.	94.5	95.2	96.8	96.2	96.4	96.6	96.8	97.2	97.4			
	94.5	95.2	96.	96.5	96.6	96.7	96.9	97	97.			
* Mr Wolcott	98	98.4	98.6	98.8	98.9	98.9						
	96.5	96.7	96.9	97.1	97.2	97.3	97.4	97.5	97.6	97.6		
Mr Acher	96.8	97	97.6	98.	98.							
	96.2	97	97.4	97.6	97.6							
A. Martindale	96.8	97	97.2	97.5	97.6	97.7	97.8	97.8				
	94.3	95.3	96.	96.4	96.6	96.8	97.	97.1	97.3	97.4	97.4	
Willie Sadler.	97.5	96.7	97	97.1	97.3	97.3						
	94	96.0	96.9	97.	97.							
Harry Wiggins	98.5	98.5										
	94.5	95.5	95.6	96.3	96.5	96.7	96.8	97	97.			
* Mr Glascock.	95.8	96.7	97.2	97.4	97.7	98	98.2	98.4	98.6	98.6	98.7	98.8	98.8	
	95	96	96.5	96.8	97.	97.3	97.5	97.8	97.9	98	98.1	98.2	98.3	½ 98.3
Mr Burd	94.5	95.	96.5	96.8	97.	97.3	97.6	97.8	97.8	98	98.1	98.2	98.3	98.4	½ 98.
	95	96.	96.5	96.8	97.	97.4	97.6	97.8	97.8	98.	98.1	98.2	98.3	98.

* Strike out.

Rest for 10 minutes

		1		2		3		4	5	6	7
Harry Wiggins	97.2	97.8	98.	98.							
	96.	97.2	97.4	98.							
Ed Howelle	95	95.8	96.3	96.7	97.1	97.5	97.7	98	98		
	95	96.5	97.3	97.7	97.8	98.	98.1	98.1			
Mr Wolcott	96.8	97.2	98.1	98.2	98.4	98.4					
	95	96.2	97	97.5	98.2	98.3	98.4	98.4			
Mr Achor.	95.2	96.8	96.6	96.8	97	97.4	97.6	97.8	98.2	98.2	
	96	96.2	96.4	96.8	97	97.4	97.6	97.6	97.6		
A. Martindale	99.	99.4	99.5	99.5							
	95.6	97.2	98.2	98.6	98.7	98.7					
W. Sadler	98	98.4	98.7	98.9	99.	99.2	99.2				
	94.8	95.5	96	96.7	97.5	97.8	98	98.2	98.4	98.4	
Harry Wiggins	96.5	97.5	97.8	98.2	98.5	98.7	98.9	99.	99.1	99.1	
	94.8	95.5	96.8	97.1	97.5	97.7	97.9	98.4	98.6	98.6	98.6
Mr Glassock.	95	95.5	96.5	97.4	97.7	98.	98.1	98.4	98.5	98.5	
Mr Bird.	99.2	99.5	99.6	99.7	99.7						
	97.8	98.4	98.6	98.7	98.8	98.8.					

Run for 16 minutes

time		1		2		3		4		5		6
Paul Wall	98	98.4	98.7	99	99							
	96.8	97.5	97.8	98.	98.8	98.4	98.6	98.7	96.7			
Del Dear.	96.	96.2	96.	96.8	96.2	97.1	97.2	97.	97.4	97.5	97.5	97.6
	95.7	96.1	96.	96.8	96.7	96.5	96.3	96.				

Run for 10 minutes

Time		1		2		3	4	5	6	7
Paul Wall.	99.2	99.4	99.5	99.7	99.1					
	97.	98	98.2	98.4	98.6	98.6				
Ed Dow.	96.8	97.	97.4	97.7	97.8	97.9	98. 98.			
	95	95	95.2	95.3	95.5	95.6	95 96.	96.1	96.2	96.3 96.4 96.4

Drinking cold water.

time	1			2		3		4	5	6
Mr Glassock.	95.4	96.2	97.	97.2	97.4	97.8	98	98.	.	
	96.7	96	96.4	96.5	96.6	97	97.1	97.2	97.2	
							1 pt	wait 5 m.		
Mr Weese.	96.2	97.2	97.4	97.5	97.6	97.7	97.8	98.	98.	
	96	97	97.2	97.4	97.6	97.7	97.8	97.9	97.9	
							1 pt	"	"	
Eric. E. Covert.	96.9	97.2	97.4	97.5	97.6	97.7	97.8	97.9	97.9	
	93.	94.	95	95.5	95.7	95.9	96.1	96.3	96.4	96.4
							1 pt.	"	"	
Ed Grer.	97.3	97.4	97.4							
	95.7	96.4	96.6	96.9	97.	97.1	97.2	97.3	97.4	97.5 97.5
							1 pt.	ice water.	"	"
Mr Culley	96.5	97.	97.5	97.7	97.9	97.9				
	95.	95	95.5	96.2	96.4	96.6	96.6		"	"
Mr Wilcox	96.0	97.	97.1	97.4	98	98.1	98.2	98.3	98.5	98.7 98.7
	94	97.2	94.9	95.4	95.8	96.2	96.3	96.5	96.6	96.7 96.8
								1 pt	ice water	" "
Webster	98.	98.3	98.4	98.5	98.7	98.8	98.9	99.	99.	
	95.2	96.	96.4	96.8	97.3	97.4	97.7	97.9	98.	98.2 98.4 98.6 98.6
							1 pt	ice water		
Mr Eastman	96.5	97.	97.7	97.8	98.	98.1	98.2	98.3	98.4	98.4
	96.	96.2	96.3	96.4	96.5	96.7	96.9	97.	97.2	97.2
							1 pt	ice water.		

* Drinking cold water.

	1			2		3		4	5	6	7
Mr Glassock.	95.6	96	96.2	96.6	96.6						
	96.2	96.8	97.1	97.5	97.6	97.6					
Mr Wise,	95.	95.2	95.4	95.8	95.9	96.1	96.5	96.8	96.8		
	95.6	96.2	96.4	96.8	96.9	97.1	97.2	97.2			
Eric C. Corcut	96.7	96.8	96.9	97.	97.3	97.4	97.5	97.5			
	95.6	95.9	96	96.1	96.2	96.3	96.3				
Ed Grove.	96.5	96.6	96.8	96.9	97	97					
	95	95.7	96	96.1	96.2	96.3	96.3				
Mc Culley.	95	96.3	96.8	96.9	97	97.2	97.3	97.5	97.6	97.7	97.7
	94.5	95.5	95.6	96	96.2	96.4	96.6	96.8	96.9	96.9	
Mr Wilcox	95.	95	95	96.3	96.	96.6	96.7	97.2	97.3	97.5	97.8	97.8
	95	95.8	96.3	96.8	97.	97.1	97.2	97.5	97.6	97.6	
Mr Webster	96.8	97	97.2	97.6	97.8	98	98.2	98.3	98.4	98.5	98.5	98.7	98.7
	95	95.5	95.6	96.	96.2	96.5	96.6	96.8	97.2	97.3	97.5	97.5	
Mr Eastman	96.2	96.3	96.5	96.8	97.	97.1	97.4	97.5	97.6	97.7	97.8	97.9	98	98
	94.7	95	95.4	95.7	96.2	96.4	96.6	96.7	96.8	96.9	97	97.		

* Temp. taken 5 m. after drinking

Drinking cold water

	time		1	2	3	4	5	6	7
Mr Hale		98.	98.3	98.4	98.5	98.6	98.7	98.8	98.8
		97.2	97.5	97.7	97.8	98.	98.1	98.2	98.2
Wilson Mr.		95.5	96.5	96.6	96.7	96.8	97.1	97.2	97.4	97.4
"		95.5	96.	96.3	96.4	96.6	96.8	96.8	97	97.1	97.4

Drinking cold water.

	1			2		3		4		5	6	7
Mr Bazle.	96.5	96.6	97.	97.2	97.5	97.3	97.7	97.8	97.8			
	96.3	96.3	96.7	96.8	97	97.2	97.3	97.3	97.6	97.6		
Mr Wilcox.	95	95.7	95.3	95.3	95.8	96.1	96.4	96.3	96.6	96.6		
	95	95	95.3	95.5	95.6	95.8	96.	96.1	96.1			

Drinking hot water (before)

Name	1		2		3		4		5		6
R Williamson	97.6	98.	98.2	98.3	98.4	98.4					
	94	96.3	97.	97.4	97.5	97.6	97.7	97.8	97.9	98.	98.
			Waited 5		on.			1 pt.			
W. Sadler.	95.6	96	96.4	96.6	97	97.					
	96.4	96.5	96.8	97.	97.						
								1½ pt.			
H A Hellier	96.2	96.5	96.6	96.7	96.8	96.9	97.2	97.2			
	95.5	96.4	96.8	96.9	97.1	97.3	97.4	97.4			
								½ pt.			
C C Payne.	97.8	98.	98.1	98.2	98.4	98.4					
	96.5	97.2	97.3	97.5	97.7	97.8	97.8	98	98.		
* N. D. Wolcott.	100.5	100.8	100.9	101.1	101.3	101.3.					
	99.4	99.8	100.	100.							
								1 pt			
A. Martindale	96.5	97	97.2	97.4	97.6	97.7	97.8	97.8			
	96	96.4	96.6	96.9	97	97.2	97.3	97.3			
								1½ pts.			
Clark Riggs	97.3	97.8	98.2	98.3	98.4	98.4					
	96.5	97.	97.4	97.5	97.7	98	98.1	98.2	98.3	98.4	98.4
A. Martindale	97.8	98.1	98.4	98.6	98.6	98.6	98.6				
	96.	96.	96	96.2	96.4	96.7	96.8	97	97.2	97.4 97.6	97.7 97.8 97.8
Bert Parish	97	97.5	97.6	97.8	97.9	98	98.1	98.2	98.2		
	95.5	96	96.2	96.5	96.7	96.8	97	97.			

* Been bouncing bag.

*Drinking hot water (after)

	1			2		3		4		5		6	7
R. Williamson	96.5	98.9	99	99.1	99.1								
	95.2	96.6	96.9	97.2	97.4	97.6	97.6						
W. Sadler.	96.8	96.7	96.9	97.	97.2	97.4	97.5	97.7	97.8	98	98.		
	96.2	96.8	96.3	96.5	96.7	96.8	96.9	97	97.1	97.2	97.2		
H. A. Heller	99.6	97.7	98.1	98.1									
	94.	95.5	96.	96.1	96.3	96.5	96.7	96.8	96.9	97	97.1	97.1	
C. C. Pagnet.	100.8	100.8											
	96.3	96.5	96.8	96.9	97.	97.3	97.4	97.5	97.6	97.7	97.7		
H. D. Wolcott.	101.8	102.	102.1	102.1									
	100.	100.5	100.7	100.8	100.8								
A. Martindale.	97.8	98.2	98.3	98.3									
	95.3	96.3	96.4	96.5	96.7	96.8	96.9	96.9					
Clark Riggs	97	97.2	97.3	97.3									
	96.8	97.3	97.5	97.6	97.9	98.	98.2	98.3	98.3				
A. Martindale	97.6	98.	98.2	98.2									
	93	94.5	94.8	95.4	95.7	96.	96.3	96.6	96.7	96.8	97	97.1	
Bert Parish	97.2	97.2	97.4	97.8	98	98							
	95.6	96.3	96.9	97.2	97.4	97.5	97.6	97.7	97.8	97.9	97.9		

Temp taken 5 m. after drinking.

Drinking hot water

	time	0	1	2	3	4	5	6
Mr. Bruce		98.	98.1	98.2	98.3	98.3		½ pt.
		95	95	95.5	95.8	96	96.3	96.3	96.5	96.5

Drinking hot water

	1	2	3	4	5
Mr Burr.	97.5 98. 98.1 98.2 98.2				
	95 95.5 95.8 96.4 96.6 96.8 97.2 97.2				

Alcohol Spring (before)

	1		2		3		4		5		6	
G. W. Thompson	96.8	96.8	97	97.2	97.3	97.4	97.6	97.6	97.5	97.5	97.6	
	96.5	96.8	96.	96.2	96.3	96.5	96.6	96.5	96.5	96.7	96.7	
A. Martindale	97.5	98.2	98.3	98.7	98.9	98.9						
	96.	96.6	96.8	96.5	97.1	97.2	97.3	97.4	97.5	97.6	97.7	97.8	97.8
Clark Riggs	97.5	98.2	98.4	98.5	98.6	98.7	98.8	98.8				
	96.5	97	97.3	97.6	97.8	98	98.2	98.2				
Bert Parish	95.5	96.2	96.4	97	97							
	94.5	95.6	96.	96.2	96.4	96.6	97	97				
Harry Wiggins	97.	97.2	97.3	97.4	97.6	97.7	97.7					
	95.	95.5	95.8	96	96.2	96.5	96.5	96.5	96.2	96.5	96.8	
Alfred Stagg.	96.2	96.6	97.4	97.2	97.4	97.5	97.7	97.8				
	94	95.7	95.3	95.6	96.2	96.3	96.5	96.6	96.7	97	97	
Ed Fonella	97	97.5	97.4	97.5	97.7	97.9	97.9					
	96.3	96.5	96.4	96.4	96.5	96.6	96.7	97	97	97.2	97.2	
Ed. Gree.	97.5	97.8	98.	98.2	98.4	98.5	98.5					
	97.2	97.6	97.8	97.9	98.2	98.2						
Will Hopkins	98.5	98.6	98.7	98.8	98.9	99	99					
	95.8	96.8	97.2	97.4	97.5	97.7	97.7					

Alcohol Spring (after)

	1			2		3		4	5		6		7
G. H. Thompson	95.2	98.4	99.4										
	95.5	95	95.4	95.7	96	96.1	96.2	96.2					
A Martindale	97.	97.1	97.5	97.6	97.7	97.8	97.8						
	95.	95.5	95.8	96.1	96.5	96.6	96.7	96.8	97.	97.1	97.2	97.3	97.4	97.4
Clark Rigge	98.5	98.9	99	99.									
	92	92.8	93.2	93.6	94	94.2	94.5	94.8	95.1	95.2	95.4	95.8	95.8
Bert. Parish	97.	97.2	97.4	97.6	97.7	97.7							
	95.5	96.2	97.5	97.0	97.6								
Harry Higgins	98.2	98.2											
	92	93.5	93.7	94.6	95.7	95.9	95.1	95.3	95.6	95.7	96	96	
Alfred Stagg.	95.5	96.	96.4	96.5	96.9	97.	97.1	97.2	97.3	97.4	97.4		
	96.	96.2	96.5	96.6	96.7	96.8	96.9	97.	97.				
Ed Bonella	97	97.5	97.6	97.7	97.8	97.8							
	95	95.5	96.	96.1	96.3	96.4	96.5	96.7	96.8	96.9	96.9		
Ed Gree.	96.2	96.2	97.3	97.6	97.9	98.1	98.2	98.3	98.3				
	95.3	95.7	96.1	96.4	96.7	96.9	97.	97.2	97.3	97.4	97.5	97.6	97.7	97.7
Mr Hofheins	97.8	98.1	98.4	98.4									
	94.5	95.5	96.2	96.8	97.2	97.6	97.6						

Alcohol Spring

		1	2	3	4						
DW	Hale	96	97	97.2	97.4	97.5	97.7	97.7	98	98.98	
		95	97	97.4	97.7	97.8	97.7	97.7			

Alcohol Spring

	1	2	3	4	5	6	7	8	9	10
Mr Hale	97.3	97.5	97.6	97.7	97.9	97.9				
	95.	95.6	96.5	96.6	96.7	96.8	96.9	97.	97.	

Hot Spray (before)

	1	2	3	4	5	6	7	8	9	10	11	12
A. Martindale	97.5	98.	98.2	98.4	98.5	98.5						
	95.	96	96.5	96.8	96.9	97.	97.1	97.2	97.2			
					Hot Spray at 110 for 2 m.							
L. Wuse	96.5	96.7	96.8	96.8								
	97.0	96	96.5	96.7	96.9	97	97.2	97.3	97.4	97.4		
								"		"		
* E. N. Wolcott.	98.4	98.6	98.8	99	99.1	99.1						
	95	95.5	95.8	96	96.5	96.9	97.1	97.4	97.5	97.5		
								"		"		
Edwin Howell	97.3	97.8	98	98.1	98.1							
	97.7	97.9	98.	98.				"		"		"
C C Payne	97.8	98	98.1	98.2	98.4	98.4						
	96.5	97.2	97.3	97.5	97.3	97.8	97.8	"		"		"
R Williamson	96.9	97.7	97.9	98.1	98.2	98.5	98.6	98.6		"		"
	94.	95.4	95.8	96.6	96.8	97	97.1	97.4	97.5	97.6	97.7	97.7
Mr. J. E. Cross.	96.7	97.	97.1	97.3	97.7	97.8	97.9	98	98.	"		"
	95.2	96.7	97.2	97.5	97.8	98.	98.1	98.2	98.3	98.4	98.4	
Mr Wilcox	96.	96.2	96.4	96.8	97	97.4	97.6	97.7	97.7	"		"
	96.5	96.8	97.2	97.3	97.5	97.6	97.7	97.8	97.9	97.9		
* Mr Oppegard.	97.7	98.4	98.6	99	99.3	99.5	99.5	"		"		"
	97.	98.2	98.5	98.7	98.9	99	99.2	99.2				

* Faulty.

Hot Spray. (after)

	1	2	3	4	5						
A. Martendale	98.4	98.9	99.	99.3	99.3						
	95.2	97.	97.1	97.4	97.6	97.7	97.9	98	98.1	98.2	98.2
L. Wuse.	95.9	96.6	97	97.1	97.2	97.3	97.4	97.4			
	98.5	98.8	99.	99.							
E. N. Wolcott	97.5	97.7	97.9	98.3	98.3						
	96.5	97	97.3	97.5	97.7	97.8	97.9	97.9			
Edwin Howell	99.8	99.9	100.1	100.2	100.3	100.3					
	97.6	97.9	98.2	98.2							
C. C. Payne.	98.5	98.7	98.9	98.9							
	97.8	98.	98.2	98.3	98.4						
R. Williamson.	98.4	98.4	98.6	98.7	98.7						
	99.5	99.5	99.8	100	100						
Mr J. E. Cross.	97.2	97.4	97.7	98.	98.1	98.3	98.5	98.5			
	96.5	97.5	97.7	98	98.1	98.2	98.3	98.3			
Mr Wilcox	97.5	97.7	97.8	98.3	98.4	98.6	98.6				
	97.8	98.2	98.3	98.4	98.6	98.6					
Mr. Oppegard.	96.5	96.7	97.2	97.3							

Hot Spring

Time	7	1	2	3	7	8				
Hale.	96.1	96.2	96.6	97	97.6	97.2	97.3	97.5	97.5	
	94.	95.8	96.5	96.8	96.8	97	97.2	97.3	97.4	97.4
Bass.	96.5	97.5	97.6	97.7	97.8	97.9	98.	98.		
	96.8	97.8	98.1	98.2	98.3	98.3	9			

Hot Spring.

	1		2		3		4		5	
Mr Hale	97.6	97.9	98.2	98.3	98.5	98.6	98.6			
	98.4	98.6	98.8	99	99					
Mr Cuss.	97.5	97.6	97.8	97.8						
	96.3	97.2	97.3	97.6	97.7	98.1	98.2	98.3	98.4	98.4

*Cold Spray (before)

Time	1	2	3	4	5	6	7
Paul Wall	96	96.2	96.8	97.2	97.4	97.7	98. 98.2 98.6 98.2 98.4 98.4
	96.3	96.	96.3	96.8	97.2	97.4	97.6 97.8 97.9 98. 98. 98.3 98.3 98.3
							at 60°
Willie Carpenter	97.8	98.4	98.6	98.6	98.6		
	96	96	96.2	96.5	97	97.1	97.2 97.2 97.8 97.8
							at 60°
Will Sadler	97.5	97.8	98	98.1	98.2	98.3	98.3
	96.3	96.4	96.6	96.8	96.9	97.0	97.1 97.1
							at 60°
Clark Rugge	96	97	97.4	97.8	98	98.2	98.2
	94	94.6	95.	96.3	96.5	96.8	96.9 97.4
							at 60°
H. D. Wolcott.	98	98.4	98.8	99.	99.2	99.2	
	97.8	98.	98.2	98.4	98.4		
							at 60°
L. Sanders.	96.	96.4	96.6	96.8	97.2	97.3	97.4 97.6 97.8 98. 98.1 98.3 98.4 98.
	94	94.8	95.2	96.6	96	96.4	96.8 97. 97.2 97.5 97.8 98. 98.
							at 60°
*Bert Parish	97.4	97.6	97.9	98	98.1	98.2	98.2
	96.6	97.2	97.5	97.1	97.9	97.9	
							at 60°
R. Williamson	97.8	97.8	98.	98.1	98.2	98.3	98.4 98.6 98.6
	96.2	96.8	96.9	97.	97.1	97.2	97.3 97.4 97.6 97.8 97.9 98. 98.
							at 60°
A. Martindale	96	97	98	98.2	98.2		
	96	96.4	97.	97.4	97.8	97.8	
							at 60.

*Faulty

The Cold Spray taken as long

Cold Spray (after)

time	1		2		3		4		5		6	7
Paul Wall.	97	97.6	98.	98.3	98.5	98.8	98.9	99	98	99.1		
	96.4	97.2	97.7	98	98.1	98.2	98.2					
Willis Carpenter	97.2	97.8	98.2	98.4	98.5	98.7	98.8	98.9	99.1			
	95	96	96.0	96.8	97.	97.3	97.5	97.6	97.8	97.9	97.9	
Will Sadler	95.5	95.5										
	92.5	93	93.5	93.8	94.	94.2	94.6	94.8	95	95.2	95.4	95.4
Clark Riggs	96.5	97.3	97.7	97.8	97.8.							
	94.5	95	95.5	95.7	96	96.3	96.4	96.5	96.7	96.8	96.8	
H. W. Wolcott.	97	97.4	98	98.4	98.6	98.8	99.2	99.2				
	94.8	94.8	95.4	96.2	96.4	97	97.4	97.8	98.2	98.2		
L. Sanders.	94.5	94.5	95.2	95.6	95.8	95.9	96.2	96.7	96.8	96.8		
	91.5	92.	93.2	93.8	94.	94.5	94.8	95.	95.			
Bert Parish.												
R. Williamson.	96.5	96.5										
	91.5	91.5										
A. Martindale	95.	95.4	95.6	97.	97.2	97.2	97.7	98	98.2	98.2		
	92	93.9	94.2	95.	95.4	95.9	96.2	96.8	96.4			

as the subject could easily take it.

Cold Spray (before)

time	1			2		3		4	5	6
Martin Keller	99	99.1	99.1							
	95°	96.5	97.2	97.0	97.2	98	98.4	98.2	98.3 98.3 at 60°	
L. J. Peterson.	94.5	94.8	95.8	96.4	96.7	96.9	96.9			
	96.5	96.3	96.5	96.6	96.9	96.9				

Cold Spray (after)

		2	3	4	5	6	7
Martin Keller	97.2	97.6	97.6	97.7	97.9	98.	98.1	98.2	98.2				
	92.	93.7	94.3	94.6	95.	95.1	95.3	95.6	95.7	95.7			
L. T Peterson	95.2	96.2	96.5	97.1	97.5	97.6	97.7						
	92.7	92.8	92.9	93.2	93.3	93.6	94	94.5	94.6	94.7	94.8	96.	95.1	95.1*

*It stopped at 9. am at 96.7.

Turkish (before)

Name	1			2		3			5	
R. Williamson	97.6	98	98.1	98.3	98.6	98.6	98	98		
	97.4	97.8	98	98.2	98.2					
Mr. Weese	96.2	96.5	96.7	97.	97.1	97.2	97.3	97.4	97.4	
	96.	96.5	96.7	97.	97.1	97.2	97.3	97.4	97.4	
C. C. Payne	96.8	96.9	96.9							
	96.5	97.2	97.5	97.7	98.	98.				
W. Sadler.	97.	97.4	97.6	97.6						
	96.	96.2	96.4	96.6	96.8	97.	97.2	97.3	97.3	
Bert Castle	97.1	97.5	97.8	98.	98.3	98.4	98.6	98.6		
	96	96.6	96.7	97.1	97.2	97.4	97.6	97.8	97.8	
Alfred Staff	95.	95.8	96.2	96.5	96.6	97	97.1	97.4	97.7	
	95.5	96.	96.4	96.6	97.	97.				
* W. House	96.6	96.8	96.9	97.1	97.2	97.4	97.5	97.7	97.8	97.8
	96.6	96.7	96.9	97.1	97.3	97.5				
Harry Wiggins	97.1	97.8	98.	98.						
	94.8	95.7	96.	96.5	96.7	97.1	97.1			
Clark Riggs	97.5	97.8	98.	98.1	98.2	98.3	98.3			
	96	96.8	97	97.1	97.2	97.3	97.4	97.5	97.6	97.6

* Faulty.

Turkish (after)

	1			2								
R Williamson	100.5	100.7	100.7									
	99.2	100	100.1	100.2	100.3	100.4	100.4					
Mr Weece	98.5	98.9	99.	99.								
	99	99.4	99.4									
C C Payne	99.2	99.5	99.8	99.7								
	99	99.7	101.	102	102.							
W Sadler	97.2	98.5	99.2	99.4	99.4							
	98	98.4	98.6	98.6								
Bert Castle	99.	99.5	99.6	99.7	99.7							
	98.2	99.	99.2	99.3	99.4	99.4						
Alfred Stagg.	99.5	99.8	100.2	100.3	100.4	100.4						
	99.8	99.9	100.1	100.2	100.3	100.3						
Harry Wiggins	97.4	97.7	97.9	98.2	98.5	98.6	98.7	99	99.1	99.3	99.4	99.4
	97.	98.	98.6	98.7	99.	99.1	99.2	99.4	99.5	99.5		
Clark Riggs	95.	96.8	96.9	97	97.7	98.1	98.3	98.4	98.5	98.6	98.4	
	99.	99.8	99.8									

Turkish.

time		1		2		3		4		
Mr Weese	97.4	97.5	97.7	97.8	98.1	98.2	98.3	98.4	98.4	
	96.3	97.2	97.8	97.9	98.2	98.3	98.4	98.4		
A. Martindale	96.5	97.	97.3	97.5	97.7	97.8	97.9	97.9		
	95.6	97	97.1	97.2	97.4	97.5	97.6	97.6		
Mr De Wakott	/									

Turkish

Mr Weese	102	102									
	100.8	100.8									
R Martindale	99.4	99.4									
	99.4	99.4									

Russian

	1			2		3		4		5		6	
L Sanders	94.5	95.5	96.	96.4	96.7	97.2	97.3	97.0	97.7	97.9	97.3		
	94.	94.5	95.2	95.5	96.8	96.2	96.3	96.8	96.6	96.8	96.9	97	97.
Martin Keller	96.5	96.8	97.	97.3	97.5	97.7	97.8	97.7	98	98.1	98.1		
	92.2	94.0	95.	95.3	96.2	96.3	96.4	96.5	96.7	96.9	97.1	97.2	97.3 97.

Russian.

	1		2						
L Sandere.	99.2	99.5	99.7	99.7					
	98.4	99.2	99.5	99.6	99.6				
Martin Keller	100.5	101.3	101.4	101.4					
	100	100	101.2	101.3	101.3				

Russian (before)

time	1	1½	2	3	4	5	6				
Eric Cover	95	97	97.4	97.6	98.1	98.4	98.5	98.6	98.6		
	93.1	93.5	94	94.8	95.1	95.3	95.6	95.7	95.9	96	96.2	96.3	96.4	9
A. Martindale.	96	96.8	97.3	97.8	98	98.1	98.2	98.2						
	94	95.2	95.7	96.	96.2	96.4	96.5	96.6	96.7	96.7				
H. W. Wolcott.	95.8	96.2	96.4	97.	97.									
	94.6	95.6	96.	96.3	96.4	96.6	97.	97.						
Harry. Wiggins	98.2	98.3	98.4	98.4										
	95.	95.2	95.4	95.8	95.8									
Edwin. Howelle	96.8	97.4	97.5	97.8	97.9	97.9								
	95.5	96.4	97.	97.8	97.9	97.9								
R. Williamson	97.2	97.3	97.3											
	95.2	96.6	96.9	97.2	97.4	97.5	97.5							
Martin Keller	97.8	98.2	98.3	98.4	98.5	98.5								
	96.5	97.4	97.7	97.9	98	98.1	98.2	98.3	98.3					
* Clark Riggs	96.4	97.	97.4	97.6	98.	98.1	98.2							
	95.4	95.8	96.2	96.4	96.6	96.8	97.	97.1	97.2	97.2				
A. Martindale.	97	98	98.2	98.4	98.6	98.6								
	97	97.4	97.8	98.	98.									

Russian. (after)

	1	2	3	4	5	6	7
Eric Cover.	99.5	100.5	100.6	100.6			
	99.5	100.	100.3	100.3			
A. Martindale	98.6	99.2	99.2				
	99	99.2	99.2				
H. D. Wolcott.	99.4	99.8	99.9	99.9			
	98.8	99.	99.				
Harry Wiggins	101.8	102.4	102.4				
	102.2	102.4	102.4				
Ed. Howells	102.4	102.5	102.5				
	102.2	102.4	102.4				
R Williamson	103.2	103.2					
	103.2	103.2					
Martin Keller.	102.2	102.4					
	103.5	103.5	103.5				
Clark Riggs.	98	98.4	98.4				
	97	97.6	98	98.2	98.4	98.4	
A Martindale	99.2	99.6	99.8				
	99.4	99.6	99.8	100	100.		

* Recopied on Page 28. (The entire page).

* Record of 10 cases. Temp. taken before & after treatment, except fevers.

Russian.	average	Tr.	before,	98.06	in M after.	100.79
"	"	Tr	"	97.18	in Ax "	100.84.
"	"	Ti	"	2.75	in M. "	1.10
"	"	Ti	"	3.85.	in Ax "	1.35.
Turkish	average	Temp.	"	97.95	in M.	" 99.43
"	"	"	"	97.64	in Ax	" 99.96
"	"	Time	"	3.95	in M	" 2.85
"	"		"	3.35	in Ax	" 1.95.
Cold Spray	"	Temp	"	98.44	in M.	" 97.39
" " "	"	"	"	97.80	in Ax	" 95.97.
" "	"	Time	"	3.25	in M.	" 3.10
" "	"	"	"	4.10	in Ax	" 4.55
Fevers	"	Temp in M.		101.17	in Ax	* 100.64
	"	Time in M		2.25	in Ax	2.32
Electric Light.	Temp.	"	"	98.61	in M. after	98.72
"	h. aver.	Temp	"	Ax. 97.78	in Ax	" 99.37
10 Minute Run.	"	"	M.	97.97	in M.	" 98.82.
" "	"	"	"	Ax 97.46	" Ax	" 98.08
Alcohol Spg.	"	"	M.	98.14	" M	" 98.09
" "	"	"	"	Ax 97.47	" Ax	" 97.93
Hot Spray.	"	"	M	98.28	" M.	" 98.73
" "	"	"	"	Ax 97.77	" Ax	" 98.60
Shampoo.	"	"	M.			

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Lectures on Hygiene and Temperance

delivered at

Battle Creek College.

by

J. H. Kellogg M.D.

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Subject – Health.

What is Health? Technically speaking we say, it is that condition of the body in which all its functions are properly performed.
Such a person is wholly unconscious of the internal workings of this wonderful machine we call the body. From a scientific point of view the body must be looked upon as a wonderfully intricate machine, each part performing its alloted work, and all working together in perfect harmony, in that condition we call health.
A person in perfect health knows nothing of his internal anatomy till something is out of gear.
But we find a very small number of people who can be said to have perfect health.
Probably one half the people who think they are well are not.
They become accustomed to a morbid condition & do not notice it. We are often sick & yet do not know it. Often we may have some serious trouble. The experience of the physician may detect what has escaped our notice.
So the experienced ear of the

engineer will detect some flaw in the working of his engine when to the casual observer all goes well.

Perfect health will carry a person far beyond the average length of life.

This average is at present less than forty years.

One third of all human beings die before the age of five years.

How long ought a person to live?

Naturalists have discovered a law in regard to animals which ought also to apply to man.

It takes the elephant twenty years to attain his growth.

His average length of life is about one hundred years.

So with other animals it is found that the length of life is about five times the number of years required to attain maturity.

This will give to man a life of one hundred years.

The famous Englishman lived to one hundred + sixty. Even then he might have lived longer but the king hearing of him invited him to a banquet + he died from the effects of this unusual indulgence.

a great many persons live to be over 100 years.
At the present time there is living in France an old lady of 124 years of age who is said to be still hale & hearty & to show but little the ravages of time.
Death at forty signifies a sacrifice of life.
Three fifths of all lives are thus sacrificed.
There is something necessary to perfect health besides integrity of the bodily organs.
We have constitutions. What do we mean by this term?
Appearances are deceptive. We see a man large, strong & robust & we say "he has a good constitution" but we are very likely to be mistaken.
A good constitution is a condition of the body in which there is a good physical balance.
Physical balance is the property possessed by the diaconus one-horse chaise, which we are told was so perfectly constructed & the wear & tear so evenly distributed to all parts that it lasted for a long time, till without any warning it went to pieces.

"all at once & nothing first
Just like a bubble when it burst"
So it is with a good constitution.
The wear-tear of the body is
evenly distributed, each organ
does its proportional share of
work & no one is overtaxed at
the expense of others.
What we call robustness is
not an essential in this condition.
We all know of men who
seemed never well & yet who
lived to a good old age doing
much, while the robust man
suddenly became a wreck.
For example a man may have
a good stomach but a poor
liver. These organs are engaged
in the same work.
The stomach does the preliminary
work in digestion & the liver
puts on the finishing touches
preparing crude substances
for the blood.
Now if the liver does its work
poorly, the blood is affected &
the organs of the body clogged
with crude & impure matters.
So a man may have too strong
a heart, in this case too much
blood is pumped into the
system & the head bring nearest
the heart receive too great a
supply

It is very important that each part should receive its proper allowance of blood.
Our various organs grow to a proper size by reason of the wonderful mechanism by which each receives its due portion of blood.
Let this balance be disturbed & deformity is the result.
This can be clearly shown in the ear of the rabbit. If the nerves controlling the supply of blood to the ear are cut, it receives more than its proper proportion & becomes greatly enlarged.
In this way we account for the drunkards rum-blossom, and this may occur in any of the organs.
Now when the heart pumps too much blood to the brain this organ soon wears out & the person dies of some brain trouble.
The strength of the whole body then is like that of a chain, not stronger than its weakest link.
If all parts of the body are equally weak there is a better chance for life, for one part is not so likely to be overworked.

Now let us consider for a moment the physical advantages of health. In looking over the history of men of mark, we find that the men who have achieved great success, who have been powers for good in every walk of life have been men who possessed healthy bodies.
In our time Gladstone is a good example of this. At the age of nearly 88 years he still conducts his party with a master hand in the face of the greatest discouragements, to a certain victory.
The younger men of opposite parties are unable to compete with his giant intellect backed by a magnificent physique.
Wm. Cullen Bryant, famous in our own land as a poet and philanthropist, ~~was also~~ gave great attention to his health & attributed much of his success to his simple life.
Stanley, who had successfully explored the mysteries of Africa & gone where hardly another white man dared to venture, attributes his success as well to his careful & simple habits.

College students in particular are apt to neglect their health.
Coming from farms and out-door life & filled with an ambition to succeed in their classes, they neglect the very thing which must be at the bottom of all success.
Such men may win the prize they seek, but soon close the world near of them afterwards.
Careful statistics go to show that in the English universities the men who hold the first place seldom make their mark in the world afterwards.
While those who hold the 3d & 4th places are much more apt to make a success of life.
The first class expend all their energies in this one supreme effort & can do no more.
A sound mind cannot exist without a sound body.
The old Greeks expressed it tersely, "a sound mind in a sound body"
The two must go ~~the~~ together.
Many people have dyspepsia in the head! that is they imagine the brain is diseased when it is only the stomach.
The brain itself is not apt to be diseased.

it can do a large amount of work if only the rest of the body is well.
The brain is a ready servant but it is greatly affected by the general condition of the body.
In indigestion poisons are formed & circulating in the blood poison the brain, just as they would if directly introduced into the blood.
The nerve tone is diminished by disease & the will power depreciated. Moral power is weakened in the same way.
There is then distinctly a moral advantage in being well.
The other day a man came to me & said he did not know what was the matter with him, he was getting to be so cross & hateful & mean to those about him.
The trouble was he was sick.
So many criminals are made.
We all know how cross children are when sick, however amiable they may be in health, and men & women are but children "grown tall".
From simple nervousness ~~up~~ there are gradations up to the actual ~~criminal~~ commital of great crimes.

Poor health fills our jails & courts of justice.
The lower classes brought up in crowded tenements with the most unhygienic surroundings must almost inevitably turn out bad.
We all have constant impulses to do wrong. The insane man yields to these impulses, the sane man uses his will & reason & does not.
The more the will power is depreciated by ill-health, the more will impulses be carried out in acts.
It is the duty of every person to be well. This must be evident to all since not only our physical but our mental & moral welfare depend on good health.
It is also our duty to teach others how to be well.
Suppose we knew that at exactly noon to-day a great earthquake would shake this building & the earth would open & swallow it up with all in it, and yet we gave no warning. What a terrible thing that would be! And yet thousands are going down to premature deaths

through ignorance of nature's laws and we who have light are responsible if we do not let that light shine.
Many years ago this great light came down to us from from heaven. It did not originate among us, but is in reality a part of that grand system of truth which we call present truth. It has been in the past greatly neglected, let us see to it that we may in the future do our duty in this respect to our fellow-men.

Lecture II.

Anatomy & Physiology of Digestion.

This is one of the most practical of all subjects, one we consider at least twice a day, & many persons four or even five times & more.

Before we can understand the hygiene of digestion we must be acquainted with ~~the~~ the essential facts of its anatomy & Physiology.

Organs of digestion are found in & in connection with the alimentary canal, which may be briefly described as a hollow tube, beginning at the mouth, being variously constricted in different parts & having various glands connected with it.

Its length is about 30 ft. or five times the height of the person.

The mouth opens at the back into a straight tube, about 9 inches in length called the oesophagus, this enlarges to form the stomach which is a somewhat pear shaped organ, lying under the lower ribs on the left side. Next to the stomach come the small intestines, nearly 25 ft

in length & of great importance.
This part of the alimentary canal has at its upper part a small opening through which the liver & pancreas pour their secretions, their seperate ducts uniting into one.
Finally we have the large intestine which begins low down on the right side, passes up, then across to the left & finally down on the left side.
Now let us briefly consider the various organs connected with this tract.
First we have the teeth. Of these there are four classes.
First the incisors or cutting teeth of which in adult life there are four in each jaw, next to these are the canine teeth, so called from their supposed resemblance to a dog's tooth, though this is fanciful. Of these there are two in each jaw, back of these we have the bicuspids four in each jaw and so called because they have on their crowns two points or "cusps" and lastly the molars six in each jaw, the last one being developed from the 18th to the 21st year of life. These are the largest & strongest teeth having four

or more pointe on their crowne.
There is therefore a regular gradation from the cutting teeth in front to the grinders or molars behind.
In early life there is a temporary set of teeth, 20 in number which are afterwarde displaced by the permanent set.
Besides the teeth there are three paire of glands, called the salivary glands, these are the parotids situated at the sides of & below the eare; the submaxillary beneath the lower edge of the jaw: and the sublingual at the root of the tongue.
The Esophagus is a straight tube with its wall lying in contact and containing both circular & longitudinal muscles.
It simply connects the mouth with the stomach and is lined with mucous membrane.
It terminates in the stomach which is a somewhat pear-shaped organ, its lower border being much longer than the upper. It also contains strong muscular fibres so arranged as to enable it to move

the food about in it constantly.
Its inner surface is also lined with mucous membrane which contains important secreting structures.
These are like little pockets gathered together in groups & extending down into its substance. Looking down upon them from above we would see little circular openings.
Under the microscope we find each of these little pockets lined with cells, each of which is a living creature whose business it is to secrete the gastric juice, preparing it from the blood.
Having passed the stomach we come ~~to~~ to the first part of the small intestine called the duodenum. Into this empty through one opening the ducts from the liver & pancreas.
The liver is a very large organ lying close up under the border of the ribs on the right side. It secretes the bile.
Lying as it does below the stomach bile is not found normally in that organ as many people suppose.
The pancreas is a smaller organ like the salivary glands in its

construction & lying lengthwise just behind the stomach.
It secretes the pancreatic juice a very important secretion as we shall find out later.
We now come to the small intestine in which the principal part of digestion is carried on.
It contains along its whole course various little glands, the combined secretion of which is known as intestinal juice.
The process of digestion pertains to the whole alimentary canal
Before we can understand digestion we must know something about foods
All articles of diet contain various substances.
For example if we take any flour & wash it we obtain gluten a very important element of food,
Starch is the most abundant material in grains & is found to some extent in fruits & vegetables.
If we examine it under the microscope we find it is made up of little granules, Each kind of grain having a different form of granule
Starch constitutes over 2/3 of some grains.

The next most important constituent of food is gluten or albumen. such as the white of egg, gluten of wheat etc.
And third we have fat or oil which is found in both animal & vegetable foods.
It exists in the grains & especially in nuts & some fruits as the olive, but is found very sparingly in vegetables.
In the fourth class we find sugars of various kinds, of which cane sugar is the sweetest & most important.
Grape sugar & milk sugar are also of considerable importance.
The fifth and last class includes the various salts, such as common salt, salts of magnesium, sodium & potassium etc. These are found in the ash remaining after burning foods. It should be remembered however that as thus found they are dead salts & not in the same condition as they exist in foods.
We find then that there are five food elements namely
Starch, albumen, oils or fats, sugar and salts.
We are ready now to consider the

action of the various digestive fluids upon these different elements of food.
If we take a peice of dry bread or ~~a~~ cracker & chew it a while we notice that it becomes continually sweeter the more we chew it. The starch is converted into sugar by the action of the saliva to a very considerable extent.
This then is the specific action of saliva.
In the same way we find that the specific action of the gastric juice is to digest albumen, gluten & caseine which are all of this class.
Caseine is the albuminous constituent of milk.
It is also found in peas & beans, so that in China & Japan these are utilized for the manufacture of cheese.
The third digestive fluid, the bile, we find has the power to digest fats. In this process no great chemical change occurs, but the fat is emulsified or divided up into very minute particles.
We come now to one of the most important & most remarkable of the digestive fluids, the pancreatic juice, for we find

that it has the power to digest or complete the digestion of the three food elements already mentioned
Passing on to the last digestive fluid, the intestinal juice we find that this had the power to digest not only the three elements already mentioned but in addition sugar & the salts. These last are also digested by all the fluids mentioned.
To sum up then we have starch digested by saliva pancreatic juice & intestinal juice.
Albumens digested by the gastric juice & also intestinal juice & pancreatic juice:
Fats digested by bile, pancreatic juice & intestinal juice:
Sugar by intestinal juice
& Lastly salts by all the digestive fluids.
These facts are important in order to understand the value of foods, their proper combination etc.
It is worthy of note that each of the three most important food elements has three fluids to digest it.

Lecture III.

We now come to consider more closely the various steps in the process of digestion from the time the food enters the mouth until it is completely elaborated & prepared to properly nourish the tissues, by the liver.

The first act of this process is that known as mastication or chewing the food preparatory to swallowing.

By means of the grinding action of the teeth the coarser food is subdivided, moistened & subjected to the action of the saliva & by the tongue is ~~[illegible]~~ shaped into a rounded mass termed the alimentary bolus.

While this process is going on the saliva is carrying on its special work of converting starch into sugar which does not stop as soon as the food enters the stomach as was formerly supposed but continues for some time especially in the centre of the bolus.

This part of the digestive process is found to vary greatly in different animals. For instance in the chicken there are no teeth, but the grinding process is carried on in a strong muscular organ termed the gizzard.

In the carnivorous birds there is no gizzard - The salivary glands are so small as to be practically useless.
As a general rule where no chewing is done there are no salivary glands.
Herbivorous animals have very large glands as a rule.
In the dog saliva is found, but it does not act upon starch.
In man the flow of saliva is abundant, excited by the act of chewing, by the character + presence of food in the mouth + even by mental impression as when the mouth "waters" at the thought of food.
We have then as the 2nd step in the process, salivary digestion
The 3rd step is the passage of the food from the mouth to the stomach. This is an involuntary act. The bolus of food is carried by the tongue to the back part of the throat where it is seized upon by the muscular fibres of the esophagus + is immediately beyond the control of the will + is carried down by a series of wave like contractions.
The esophagus is not as many suppose an open tube through which the food drops directly into

into the stomach, but its walls lie in contact except when seperated by the passage of food or drink.
This act of swallowing is technically known as deglutition.
The peculiar choking sensation we experience when we try to swallow too fast is due to the contraction of these muscular fibres in the oesophagus.
The process of swallowing is continued with some modification along the whole length of the alimentary canal.
In the stomach the food is moved continually around from left to right with a sort of churning motion which subjects all parts to the action of the gastric juice.
This process continues about 3 hours when the ~~digested~~ ~~of~~ fluid portions of food begin to pass the pylorus. It was formerly supposed that this constricting muscle or 'gate-keeper' as the term pylorus signifies, had the power of discriminating as to what foods were sufficiently digested & what were not & that it allowed only the former to pass.
It is ~~to~~ now known that this is not so. As digestion goes on the contents of the stomach become

more & more acid and this acting as a stimulant increases the movements of the stomach until they overcome the resistance of the pylorus & the fluid part of the food is forced through, a little at a time.

All these interesting facts have been learned largely through an accident which occurred some years ago to a Canadian, Alexis St Martin, by which a portion of the chest wall was carried away by a charge of duck-shot.

Under the care of Dr. Beaumont St. Martin recovered but a permanent opening was left into the stomach.

Dr. Beaumont again this the long-looked for chance to settle many of the disputed questions of physiology & keeping the man in his employ, he made many interesting experiments,

actually watching the whole process of digestion through this curious little window in the stomach.

It was thus noted that as soon as food reached the stomach its surface began to sweat, as it were, little drops of gastric juice which ran together down to mix with the food

This lasted as long as food remained in the stomach and constitutes the 4th step in the process of stomach digestion.
The 5th step is the action of the bile on the fats, or "biliary digestion" and then we come to the important action of the pancreatic juice, by which the work of the three preceeding fluids is completed, constituting the 6th step in the process of digestion.
The food is now passing through the great length of the small intestines, where it is subjected to the action of the intestinal juice. which as we have learned has the power of digesting all food elements.
But this is made possible only by the constant wave-like motion of the walls of the intestines by which the mass is moved constantly onward. This we may term "intestinal action"
In addition, to these two important process, still a third is going on throughout the whole length of this portion of the alimentary canal.
We find that the mucous membrane has a velvety appearance and under the microscope it is seen

to be covered with finger-like projections or papillae which greatly increase the extent of surface. Through these the process of absorption goes on, by which the fluid portions of the ~~food~~ digested food passes into the small veins & into another set of vessels called the lacteals which run together to form one larger vessel, which finally empties into the large vein coming from the left arm.
This act of absorption constitutes the 9th step in the process of digestion.
But even now that process is not fully completed. There is yet one more step before the food is sufficiently elaborated to be used by the tissues of the body and that is "liver digestion" The veins coming from the stomach, intestines, pancreas & spleen unite to form the portal vein which carries the blood to the liver.
This organ has now a very important work to do. It is the great refinery of the body & its action is particularly upon albumen sugars & starch.

albumen is still further elaborated. Sugar strange to say is converted back into a form of starch called liver-starch or glycogen which is insoluble & is stored up in the liver itself. It is then slowly converted back into sugar & doled out a little at a time to the system. This is indeed a very wise provision for the large quantity of sugar formed during the digestion of an ordinary meal if carried at once into the blood would tend to clog the system, injure the blood cells & be a source of great harm.
It is found that the liver also has the power to make sugar out of almost any substance.
The process of digestion is now completed and to review briefly we find it consists of ten important steps namely:

(1.) Mastication
(2.) Salivary Digestion.
(3.) Deglutition.
(4.) Stomach digestion
(5.) Biliary "
(6.) Pancreatic "
(7.) Intestinal "
(8.) Intestinal action
(9.) Absorption
(10.) Liver digestion.

Before closing this branch of our subject it might be well to mention some other valuable properties possessed by some of the ~~gastric~~ digestive fluids.

The gastric juice besides its specific action on albumen is found to be both antiseptic & disinfectant: that is it not only prevents fermentation which would otherwise take place at the temperature of the body, but it has the power of destroying the odor of food which has already begun to putrefy.

An experiment to demonstrate this has been tried upon the dog, the animal being fed a peice of very putrid meat & killed about half an hour afterwards the meat was found to be perfectly sweet.

Bile is also a powerful antiseptic. If secreted in proper quantity & quality no decomposition can take place in the food.

I have here several specimens of food stuffs.

Gluten is prepared by washing out the insoluble starch from flour, you will notice that it is elastic & not at all sticky

In raised bread the lining of the cavities have a shining appearance which is due to the presence of gluten.
Flour possessing much gluten makes light bread.
I have here also some specimens of food consisting largely of starch such as corn starch rice, potatoes etc.
Now if I boil a little for a moment & then add a drop or two of the common tincture of iodine I get at once a beautiful blue color due to the formation of the blue iodide of starch.
By this means we can detect the presence of very minute quantities of starch.
Now I apply the same test to this gluten & there is no reaction
I shall show to you, now the change from starch to sugar which is produced by the action of saliva. This blue solution I hold in my hand is known as Fehlinge solution. If added to any thing containing sugar it will give a reddish color.
Now I add it to a little of this boiled starch diluted & there is no reaction, the color remains blue, but I add it to some of this cracker I have been chewing

for some time & at once you will notice the change to red.
This is a sure indication of the presence of sugar.
As food is ordinarily chewed it would be impossible to get this reaction.
Thus we clearly prove the importance of thoroughly masticating all starchy foods.

Lecture IV
Disorders of Digestion.

All the digestive acts are under the control of the nervous system all are carried on largely without the intervention of the will.
We shall learn the importance of this fact as we continue our study.
Hunger & thirst are demands of the whole system for food and drink, yet we refer hunger to the ~~throat~~ stomach & thirst to the throat.
In nausea and vomiting the influence of the nervous system is clearly seen.
A repulsive sight or disagreeable odor, or even the thought of something of this kind may cause great nausea and even actual vomiting the sensation of nausea originates in the stomach.
Vomiting is simply a reversed movement of the stomach and esophagus. This often extends to the beginning of the small intestines and then bile is vomited.
The act is performed largely by the violent contraction of the

abdominal muscles and diaphragm
Regurgitation of food is a somewhat similar process.
It is a natural condition in such animals as ~~the~~ "chew the cud".
Here the food may be hastily ~~of~~ eaten and afterwards it is returned to the mouth a little at a time and leisurely chewed.
Some persons get to be ruminants acquire this habit which is a difficult one to break.
Air may be swallowed into the stomach by practice.
This habit is sometimes acquired as it affords temporary relief in irritable condition of the stomach by seperating the inflamed surfaces.
Colic may be caused by the presence of air or gas in the ~~stomach~~ intestines being moved slowly along.
This may cause much more serious trouble than the mere pain occasioned, as it result in pushing one part of the bowel into another causing serious obstruction which is often difficult to relieve.
The feeling of weight and heaviness at the stomach soon after eating is due to a relaxed

condition of its walls.
This is very apt to follow frequent overdistension of the stomach with food & drink.
In some cases a pouch may be formed in the mucous membrane & food be retained for a considerable time.
The story is told of an intoxicated sailor who seeing a juggler swallow a sword as he supposed, declared he could do as well and immediately swallowed his pocket knife.
At succeeding times he repeated this performance to convince his friends of the truth of his statements until after a few years he was obliged to go to hospital for treatment where he died.
At the post mortem examination a distinct pouch was found in the stomach in which were the remains of the knives previously swallowed.
Pain in the stomach may be due to gas or an irritable and inflamed condition of the lining membrane
Biliousness so called, or the vomiting of bile is not due to any disorder of the liver but to indigestion.

The presence of bile in the stomach will cause nausea & vomiting
The tongue is a very important indicator of the state of the stomach.
It is important to remember however that persons who sleep with the mouth open are apt to have coated tongues from the formation of a species of mold on it during the night.
All persons addicted to smoking have coated tongues from this cause.
When the tongue is white with red edges it indicates an irritable condition of the stomach
A foul tongue shows chronic dyspepsia.
A very red tongue fissured on its surface ~~shows~~ is due to a sour stomach.
Ulcers in the mouth indicate a bad state of the stomach and are brought about through the agency of the sympathetic nervous system.
Many persons complain of a bad taste in the mouth particularly on first getting up in the morning, showing that the food has not been properly digested and has undergone decomposition.

a bitter taste is not due to the liver but to a sour saliva which is powerless to act on starch as its normal condition is alkaline
a metallic or brassy taste is usually due to a torpid liver.
a dull frontal headache coming on soon after eating is caused by poor digestion.
a nervous headache confined to one side of the head & very painful has the same cause.
Sick-headache where the patient awakes in the morning with a feeling "as if his head would split" & soon begins to vomit, often vomiting bile is due to errors in diet, usually to late & hearty suppers.
another form of headache, a dull dizzy feeling in the back of the head usually comes on from 3 to 4 hours after a meal and when the ordinary hour for a meal is delayed. This is due to the fermentation of the food.
Many persons seem to think there is no harm in a moderate amount of fermentation, but this is a great mistake.
We are composed of what we eat. Our food must be thoroughly & properly prepared before it can nourish the system.

In dyspepsia the system is starved. When fermentation takes place a number of poisonous substances are formed, such as alcohol, acetic acid, butyric acid such as occurs in rancid butter and many others. Among the most poisonous is one recently discovered as the cause of fatal poisoning from old cheese, namely tyrotoxicon or cheese-poison.

This is formed in butyric fermentation in varied quantities and is coming to be considered as the cause of that terribly fatal disease, cholera infantum in children and of cholera morbus in adults.

All these poisons are absorbed into the system & act directly upon the delicate nerve tissues & the brain & in fact weaken and disturb the whole vital machinery.

Lecture V.

~~Errors of Digestion.~~

Hygiene of Digestion

(1.) Eating too fast.

It is a well known fact, well known at least in other countries that Americans are a nation of dyspeptics & this is no doubt justly attributed to the common fault of eating too fast.

We eat as we live on the high-pressure system.

The story is told of an ingenious Frenchman who being unable to swallow on account of paralysis invented an ingenious ~~machine~~ electrical machine by means of which, by touching a button an electric current was made to pass down the esophagus & muscular action took place. When his food was sufficiently chewed he had only to touch the button & immediately it was swallowed.

Such an arrangement would be an excellent thing for most Americans.

It is highly important that we eat slowly not only that the food may be thoroughly moistened but that it may have time to be acted upon by the saliva.

the act of chewing as well as the presence of food causes an increased flow of saliva.
It is also important to chew on both sides that both may be equally used. Often the habit of chewing on one side is formed on account of a sensitive tooth. This should be attended to.
The use of soft foods is a very common cause of the early decay of the teeth.
The necessity of using some hard food in order to preserve the ~~food~~ teeth from decay has been clearly shown in some experiments on cows in New York. It was found that cows that were shut up and fed on the soft swill from the distilleries wholly, soon began to lose their teeth from decay. Nature always disposes of what we do not use.
If we confine a muscle so that it cannot be used it soon wastes away & the muscle fibre may be wholly displaced by fat. So with the eye, the brain or any other organ.
It is found that the fish in the Mammoth cave, which never see the light are totally blind.

and recently some curious creatures have been found in the bed of the ocean, so deep down that no light reached them, and they too are found to be without eyes.

Cooking starchy foods does not convert them into sugar and however soft they are it is necessary to eat some hard cracker or other hard substance with them in order that they may be thoroughly chewed.

It is said that Mr. Gladstone laid down a law for his children that every mouthful of food should be chewed at least forty times. Doubtless this may be carrying the matter too far but more of us err on the other side & would no doubt be benefited by such a plan.

One of the most common & most harmful practices is that of drinking largely at meals.

This habit is usually a result of the preceeding. We are in too great a hurry to chew our food properly so we are obliged to wash it down.

The gastric juice must be concentrated in order to do its work properly. Often the contents of the stomach are so greatly diluted

that digestion is greatly retarded and fermentation takes place.
The drinking of very cold fluids, the use of ice-cream etc is harmful for still another reason.
In the case of Alexis St Martin Dr. Beaumont discovered that after drinking a glass of cold water the temperature of the stomach was greatly lowered & very slowly recovered its normal temperature.
He also found that digestion went on properly only at the natural temperature of the body & was greatly hindered by a lower temperature.
How often shall we eat? This is an important question. Its solution must be based on the fact that the stomach is a muscle and requires rest just as any other organ.
There is not an organ in the body that does not require its periods of ~~the~~ rest.
Even the heart which we commonly think of as never resting does actually rest after each beat for a longer time than it works.
When the stomach does not have time to recuperate the gastric

juice becomes deteriorated.
Eating too often thus becomes a cause of indigestion.
If we look at the civilized countries of the world to-day we shall find a great difference in regard to the frequency of meals.
In England the better classes eat four, five and even six times a day: In Germany 3 or 4 times. In France as a rule only twice and in our own country three meals a day is the prevailing custom.
If however we go back to ancient times we shall find that two meals a day was the custom among the Greeks and Romans.
Pythagoras an ancient Greek author tells us that in his day the custom of eating twice a day was coming into vogue the former custom having been one meal.
The custom of eating two meals a day seems to have very much in its favor & is being adopted considerably among brain-workers & in many of our hospitals
It is the custom in the army hospitals ~~Navy~~ of France & is becoming quite popular in Washington society

In fact we cannot physiologically eat more than two meals a day. We require at least six hours for the food to be properly digested & the stomach have time to rest.

Now let us suppose we have breakfast at 6 a.m. then properly dinner should come at 12.30 and supper at 7 P.m. We require four hours of digestion before ~~food~~ sleep should be taken so that we should not get to bed before 11. P.m. Now allowing eight hours sleep we could not have breakfast the next day before 7 a.m. Thus we would soon convert night into day.

Still another fact which goes to shew that two meals is better than three, is that the majority even of those who eat but twice a day have a much better appetite for dinner than for breakfast, thus shewing that there is a greater waste of the tissues between breakfast and dinner than between dinner & breakfast.

It is no doubt better to have the hearty meal of the day after the days work is done, so that enough time may be taken for

it. This we have already shown to be very important in order that salivary digestion may be properly carried on, but there is still another important reason. It has been found that the presence of the saliva in the stomach retards the flow of saliva & so it is throughout the alimentary canal, each process aids the next in order.

We should never eat when tired. At such times sleep will do more good than food. The blood is then drawn away to the muscles & the nervous system & nerve centres which preside over the digestive process are exhausted.

Sleeping right after eating is injurious for the reason that during sleep all the vital processes are in abeyance. The heart beats more slowly, the lungs fill almost imperceptibly. the blood has left the higher centres & in sound sleep there is no consciousness.

Now if the stomach is still filled with food it is constantly making demands on the brain for nerve energy which the latter cannot properly supply, as a result digestion is hindered and at

the same time the brain is disturbed and bad dreams & nightmares are the result.

These are actually harmful for they are realities to us & are an actual drain upon the vital forces almost as much so as if they really happened.

But some will say, "I know it is better for me to eat three meals a day, for if I do not, when night comes I have an "all gone" feeling in my stomach".

No doubt this is true with many but an 'all gone' feeling is not hunger, in fact this feeling is not a demand of the stomach for food, but for rest.

This truth of this statement may be easily proven.

Let any one who has this "all gone" feeling take a few sips of water & go to bed without eating and when he wakes in the morning the "all gone" feeling is all gone.

This shows clearly that what the stomach wanted was rest, not food.

Lecture VI.

Hygiene of Digestion (continued.)

The use at one meal of too many kinds of food is often a cause of indigestion and is a practice to be condemned for this reason: it is found that the quality of the gastric juice varies with the kind of food taken, so that when a great variety is eaten it cannot all be properly digested.

Three or four kinds of food is amply sufficient for one meal.

A full bath whether cold or hot should be avoided soon before or soon after eating as the blood is drawn away from the internal organs to the surface.

If taken within an hour it should be of the temperature of the body

One of the most important questions relating to the hygiene of digestion is that in regard to the quantity of food to be taken.

No absolute and general law can be laid down.

One person can eat with benefit what would be injurious to another.

It is safe to say however that the great majority of people eat too much & thus the digestive organs are overtasked.

The food is imperfectly digested & crude substances are allowed to circulate in the blood.

We may have a condition of over-nutrition in which the excessive amount of food is stored up as fat or the liver & kidneys being overtasked to dispose of the excess may become diseased.

There are some persons who eat too little especially among dyspeptics.

About the average amount of food required is 17 ounces a ~~per~~ day of solid nutriment. The amount required depends upon the work to be done.

Brain workers actually require more food than muscle workers but it is also true that they are able to dispose of less.

For this reason brain-workers when called upon for an extra exertion, break down their digestion because they eat much more than they can dispose of.

Each class should eat just what they can digest & no more.

It is much better for the brain-worker to lose flesh & come out of the ordeal with sound digestion than to overlay the system & allow the digestive organs to break down.

But we should not only eat according to the work to be done but also according to the weather. In cold weather much of the food eaten is used as fuel to keep up the bodily warmth, and consequently more food is needed than in hot weather.

Each person must judge for himself what is the proper amount of food for him to ~~x~~ eat.

We should eat only what we can digest well.

If a person is dull and stupid after eating it is very generally an indication that he has eaten too much.

It is what we digest that does us good not what we eat.

The quality of the food we eat is a matter of the greatest importance.

The German proverb that "as a man eateth so is he" is exceedingly true. The man who feeds largely upon coarse and crude foods becomes coarse himself.

Pure food begets pure thoughts.
The process of cooking is a part of preliminary digestion by which we avail ourselves of articles not otherwise digestible.
Fruits and animal foods are the only ones that can be eaten raw. The grains & vegetables contain a large amount of starch enclosed in fibrous cells which the human saliva cannot affect. It becomes necessary then to boil it so that the cells are burst open & the starch exposed to the direct action of the ~~gastric~~ saliva.
By long heating starch is partially converted into sugar, ~~and~~ albumen into peptones and sugar into glucose especially in the presence of an acid.
This change occurs when fruit is cooked in sugar for preserving, and as glucose is not nearly as sweet as cane sugar a larger amount is wasted.
This can be avoided by adding the sugar after the fruit is ready to be put up.
Fats are not digested by cooking but ~~and~~ are made

much more indigestible.
Especially is this true of frying or burning fat by which process a certain amount of a poisonous and very irritating acid is formed,
Often wholesome foods are rendered indigestible by cooking in fat.
In such cases the food becomes saturated with fat which forms a thin film over each particle. Now as we have already learned fat is not acted upon either by the saliva or the gastric juice consequently the particles of starch and albumen cannot be acted upon until set free by the action of the bile upon the fat. Meanwhile both the starch and the fat are liable to undergo decomposition particularly as the former cannot be exposed to the antiseptic action of the gastric juice.
For this reason all fried foods rich cake & pies are dietetic abominations & such foods are the most prolific cause of sick-headache. So that it is really a disgrace for a reasonable man to have

sick-headache
The use of decayed food is another source of harm, especially in those of weak digestion where the antiseptic action of the gastric juice is not sufficient to prevent the progress of decay.
But in addition to this reason, there is yet another and that is that in the process of decay especially in fish some exceedingly poisonous substances are formed. This is very apt to take place in canned meats & fish which are not eaten as soon as opened. No change may be noticed in taste or smell & yet all who eat of it become exceedingly sick & many die as has frequently been the case
Moldy food, such as cheese bread & decaying fruit may be harmful in the same way

Lecture VII.

Hygiene of Digestion (continued.)

It is not only necessary that we should eat wholesome foods but that we should have the various elements of the food combined in proper proportion.

Let us consider more particularly the uses of these various elements.

Three of these elements are used for so nearly the same purposes that we may class them together in this consideration, these are starch, sugar & fat.

From the fact that these element undergo oxidation & thus produce heat they are called carbonaceous elements. But this is not their only use; they are expended not only in the production of heat, but also in the production of force and of adipose or fatty tissue which is not necessarily diseased tissue. Too much may be an evidence of disease.

The carbonaceous elements are the most important class at least so far as quantity is concerned.

We require seven parts of this class to one of the albuminous or

nitrogenous class.
This latter class of foods such as albumen, caseine, fibrine etc. have a very important part to play in supplying the waste of the tissues especially of the muscles and nerves.
As a class they are more important than the carbonaceous.
The salts are chiefly concerned in the nourishment of bone and of nerve tissue.
They are found chiefly in the nitrogenous foods and are therefore ~~seemt~~ reckoned with them in the above comparison.
It is found that we require on an average about three ounces of nitrogenous foods each day & consequently about twenty four ounces of carbonaceous elements.
This gives us a higher total for the whole day than the one previously given of 17 ounces a day.
The latter is probably sufficient for the average person but 24 ounces is probably a safer estimate as it is better to eat a little too much than to eat too little.
Nature can dispose of an excess but cannot supply a deficiency

Now let us consider briefly the effect of an excess of these elements.

From what we have already learned the carbonaceous elements must be disposed of in one of three ways so that an excess will result in the production of too much heat or of adipose tissue. If this excess can be expended in force no harm is done so that the laboring man does not suffer where much harm would be done a person of sedentary habits.

If not expended in force most will be stored up as adipose tissue because there is a heat regulating centre in the nervous system which regulates the production of heat & does not permit of any great excess.

As an illustration of this tendency to the production of fatty tissue we have some very interesting facts in the history of that table delicacy highly esteemed by many namely "pattè de foie gras".

Geese are confined in a dark cellar, tied so that they can get no exercise and then subjected to a systematic process of stuffing. By this means they

soon become very fat & the liver in particular becomes greatly enlarged from fatty deposits, filling the abdomen.
This diseased liver is then is then prepared for the table.
Now this change which takes place in the liver of the goose also occurs to a less degree where an excess of carbonaceous elements is taken.
The process is known as fatty degeneration & consists of a deposit of fat globules in the cells of the tissues.
If we examine the structure of the liver under the microscope we shall find that the blood vessels of the portal vein and in little lobules which are very curiously constructed. On each side of the vessel as it ends are two layers of cells & beyond these is another smaller vessel in which the current flows in an opposite direction. This is the beginning of the bile ducts and it is the business of the cells to take out of the blood the waste poisonous matters & pass them through to the bile ducts where they go to make up the substance of the bile.

Now in fatty degeneration an examination with the microscope reveals these little cells filled with fat so that they cannot do their proper work. The liver is actually "clogged". Physiologists have discovered by experiments on animals that when an excess of fat was fed the amount of bile was proportionately decreased. When we remember that it is one of the functions of the bile to digest fat the evil consequences of this condition will be clearly seen.

But fat in excess has yet another harmful influence. It clogs not only the ~~system~~ liver but the whole system where it circulates in large quantity in the blood. The smallest blood vessels of the body, the capillaries, are seen under the microscope to be so very minute as in many cases to allow only of the passage of a single blood cell at a time. In the abnormal condition above referred to these may be seen to be filled with particles of fat. Now when the capillary divides into two becoming still smaller a deposit of fat is very apt to take place at this point completely cutting off the blood supply.

When this occurs in the skin boils are formed. The part dies & nature attempts to throw it off by setting up an inflammation around it. Pus is poured out until the boil "comes to a head" and bursts discharging the core which contains the dead tissue. Then repair takes place.

This same evil may occur in the liver causing an abscess or in any other organ, the results being often very serious, especially where the circulation is cut off from any part of the brain.

It being the duty of the liver to eliminate all harmful substances from the blood, it attempts to do this with the excess of fat and consequently is unable to carry on its other work properly.

Fats also cause indigestion by causing fermentation as we have already learned.

We come now to consider the effects of too much sugar.

This as we have learned is digested in the small intestines & not before. Consequently it must lie in the stomach until the food passes on.

In some persons this does not occur till another meal is taken. The stomach seems to

become exhausted & allows the food to remain until it is excited to renewed action by the presence of a new supply.

Persons suffering in this way have no appetites for meals until they begin to eat. In this way too eating a hearty meal may give temporary relief to a sick headache.

Hot water, drunk an hour before meals will accomplish the same thing much better.

In such conditions as these the sugar remaining so long without being digested undergoes fermentation. Outside of the body bread containing sugar may ferment in less than 3 hours. In the stomach the conditions are especially favorable for this action to go on were it not for the antiseptic influence of the gastric juice.

Where sugar is taken in moderation this is sufficient to prevent fermentation, but when in excess it is not sufficient & the process is also favored by the presence of saliva which is not only lacking in antiseptic properties but is itself a cause of fermentation.

But again sugar is an irritant as can be shown by placing a little in the eye, and in large quantities it irritates the mucous membrane of the stomach exciting a flow of mucus which is not only indigestible itself but surrounding the particles of food renders them indigestible.

The liver too is overtaxed by an excess of sugar or starchy foods and biliousness is the result, accompanied by a metallic taste in the mouth on first waking in the morning depondency, constipation & many other symptoms.

Lastly so much sugar may be taken that the liver cannot change it all & it may pass at once into the circulation. Its action then is to destroy the blood cells.

The kidneys are now called into action to eliminate this harmful substance & this is often the foundation of an almost incurable disease, diabetes in which sugar is always found in the urine & the liver seems to get in the habit of neglecting its proper work.

an excess of albuminous elements is the most common of all errors. About one pound of beef represents 3 oz's of albumen, the necessary amount. Many people eat much more than this in meat alone during the th twenty-four hours. Besides this we must take into account the nitrogenous elements contained in bread & other articles of diet.

Of ordinary bread it would take about 36 oz's to get the required amount of nitrogenous elements and of parsnips 270 oz's

Thus it is seen that the vegetables alone would be a very poor diet.

Graham bread contains the various elements in almost exactly the required proportions & so it is with most of the grains as wheat, oats and barley.

When an excess of albumen is taken the system cannot use it and it is treated exactly as the waste products are.

These are converted by the liver into urea & are eliminated by the kidneys.

It often happens that the liver is unable to do this work thoroughly and the waste matter remains in the system as uric acid.

This is often the basis of renal & biliary calculi, collecting about the joints it sets up acute or chronic rheumatism; muscular rheumatism, gout & many neuralgias are due to the same cause.

A torpid liver always precedes an attack of Rheumatism.

Albumen serves yet another purpose besides those mentioned. It acts as the bellows does to the fire, stimulating the heat-making processes of the body.

Lecture VIII
Condiments.

All vegetable & animal substances in their natural condition contain certain substances which give them their peculiar flavor.
These are infinite in variety and in all wholesome foods are pleasant to the taste.
As an almost general rule those things which have mild, pleasant flavors are wholesome, while those having, bitter, acrid & pungent flavors are not only hatmful but often exceedingly poisonous.
Yet in spite of this fact civilized man has brought into use many of these poisonous principles to add to our natural food as condiments.
The untutored savage following his natural instincts when he finds himself deprived of his ordinary food. Uses this very distinction we have noted in deciding whether or no some untried fruit or plant be wholesome.
Such condiments as mustard, pepper, ginger etc are in reality poisonous. The pure oil of cayenne is a deadly poison

were more so than prussic acid.
If we place the smallest particle of any of these combined in the eye we shall at once excite an inflammation in which the tears will be poured out in profusion to protect the delicate membrane.
Essentially the same effect is produced on the stomach & gastric juice is poured out in increased quantity.
Thus digestion is temporarily improved, but the stomach cannot long stand this unnatural stimulus and soon wears out, a greater & constantly increasing stimulus is required to make it do its work and finally it breaks down entirely.
The whip applied to a horse is an example of just such a stimulation, at first it spurs him up to increased speed but if often used he soon comes to need it less & less and the stimulus must be constantly increased.
Such treatment will ruin a good horse as well as a good stomach.
But, these stimulating substances ~~are~~ not only act upon the

lining membrane of the stomach but they are absorbed unchanged into the blood and exert their harmful influence upon all the organs of the body. but particularly upon the liver to which they must first go.

The liver is excited & becomes congested & diseased.

So it is a well established fact that in hot countries where all manner of spices are largely used diseases of the liver are the most common of all.

The delicate nerve centres of the body are particularly sensitive to the presence of these unnatural substances, and are excited & irritated thus bringing about not only ~~mental~~ physical but mental & moral harm.

Vinegar while not coming strictly under the head of condiments is yet used so largely for this purpose that we shall consider it here.

Vinegar is the product of the fermentation of substances containing sugar, alcohol being first formed & vinegar resulting from a further fermentation

Now if we place a peice of tendon, one of the hardest of all tissues, in vinegar we shall find it becomes softened & it has a similar action upon the mucous membrane of the stomach.

Besides this effect its acidity hinders the proper secretion of gastric juice, for as we have already learned this secretion is excited by the presence of the saliva which is an alkaline fluid.

Vinegar is often adulterated, but of this we shall have occasion to speak further on.

Even the best cider vinegar is not free from objections, for this above all other kinds is ~~too~~ usually swarming with a form of animal life, known as "vinegar ~~eels~~ eels."

Of the many harmful substances commonly used with foods the alkalies particularly as used in making bread, in the form of saleratus, ~~tartar~~ & the most of baking powders are particularly harmful & should never be used.

These strong chemicals have a marked effect upon the delicate membrane of the stomach besides neutralizing the acidity

of the gastric juice.
If it be true it is said that in good baking powders the acid & the alkalies are so evenly balanced that neither predominates, but the result of such a union is a neutral salt which of itself is harmful.
Most baking powders contain borides, alum and ammonia which are very injurious & irritating.
In an experiment performed with dogs, it was found that those fed on breads raised with baking & killed after a certain length of time had their stomach inflamed & irritated.
Cold food is another frequent cause of dyspepsia.
The reason of this has been made very plain.
Dr. Beaumont found that after giving Alexis St Martin a glass-ful of ice water the temperature of the ~~body~~ ~~was~~ stomach was greatly lowered & the normal temperature was not recovered for one half hour, digestion meanwhile being almost entirely suspended.

There are three reasons why cold hinders digestion.
First as we have already noticed the temperature of the stomach must be normal or about 100° F for the process to be properly carried on.
Again the secretion of gastric juice depends upon the action of the delicate nerves of the stomach & these nerves are deadened by cold.
Lastly the flow of saliva is preceded & accompanied by an increased flow of blood to the mucous membranes here again, the effect of cold is to drive the blood away & constrict the blood vessels.
From the above considerations the evil effects of drinking ice water at meals & of using frozen foods such as ice-cream can be readily seen.
The use of too much salt is doubtless a source of harm.
In fact we can do without it altogether, without harm & probably with benefit, for nature provides it for us in the foods we eat.
Salt is an antiseptic. The process of digestion is one of fermentation, so that physiologic

speak of the digestive ferment of the saliva, of the gastric juice etc.

The effect of too much salt then will be to hinder & prevent this process.

This is the physiological objection to its use, but within the last year an eminent French chemist has proved by experiment that this is so.

By making artificial openings into the stomach of dogs so that the ~~pa~~ contents of the stomach could be examined from time to time he found that salt did actually delay the digestion of the food.

Lecture IX.
Condiments (continued) Salt.

From a scientific stand point salt must be considered as a condiment it cannot be considered as a food where it is artificially added to other foods.

It is a chemical inorganic compound and as such cannot be assimilated and used as food by any animal.

Vegetables as a class are distinguished from animals by the the fact that they can take up mineral substances from the earth & water & convert them into organized tissue.

Animals subsist on the tissue thus formed either directly by the use of fruits, grains etc or indirectly by the use of other animals.

Salt is irritating. — If a strong solution be placed in the eye it is greatly irritated. Its action upon the system is evidenced by the excessive thirst occasioned by its use, which is a demand of the system for water to wash away the offending substance.

Salt is found in our natural foods as well as other chemical substances & there is really no

reason why we should to add it to our food, any more than carbonate of soda, or of potash or any other of the salts found in food naturally.

We surely cannot believe that the Creator placed the proper quantity of other salts in our food + neglected to supply us with this particular salt in sufficient quantity!

But it is argued that a certain amount of salt added to water, and applied to the eye or mucous membrane of the nose is not only irritating but is actually soothing in its effect. This is true.

The tears normally contain a small amount of salt and when we add salt to water in the proportion of a teaspoonful to the pint, we have what is called, a normal saline solution because it contains the same proportion of salt as the tears.

But this fact does not prove that an excess is not irritating.

The idea is commonly taught + commonly received that salt is a necessity first because it is used instinctively by all races of men and second because animals show a

decided fondness for it.
In reply to the first argument we can say that this is not strictly true, for while the majority of the human race do use it, and the same may be said for alcohol & many other harmful things, there are races of men who do not use it at all. In the interior of Africa where salt is not found the natives knew nothing of its use till it was introduced among them by foreigners. The Hottentots in the south of Africa where salt is plentiful have laws against its use. The natives of northern Siberia & other places seem to have no natural liking for it.
It is said again that human beings & cattle deprived of salt suffer great deterioration, but the experience of many prove that this is not true.
A convincing argument however is supposed to be found in the fact that animals show a decided fondness for salt, as shown by the visit of such to "salt-licks" and that this must show that it is an actual necessity

In answer to this let us examine the various classes of the animal kingdom & see to what extent this is true.

Lowest down in the scale of animal life we have the Infusoria, far outnumbering all other classes. We have no indication that salt is a necessity for them for they can exist in fresh water as well as salt.

We may say the same of the Radiata and the Mollusta. We have these in both fresh & salt water.

In the Articulate class, comprising the myriad varieties of insects we have no evidence of any predilection for salt.

Lastly we examine the Vertebrates. Of these fishes subsist both in fresh and in salt water, many as the salmon trout seeking fresh water in the face of the greatest difficulties at the spawning season.

Birds too do not seem to require salt. We do not hear of chickens being "salted" as cattle sometimes are.

Coming now to the last class of the vertebrates, the mammals we find only a very few

& these among the herbivora that can be said to shew any fondness for salt.

The facts are these Buffalos are known, at certain seasons to visit places where salt is deposited on the surface & to eat it. Deer in a similar manner also visit such places and in some districts cattlemen drive their cattle great distances once or twice a year to salt springs or "salt licks"

In the first place we notice that here is not a constant use of salt but it is only at long intervals obtained, nor is the habit universal. The antelope of central africa can obtain no salt & yet live & thrive & even in Southern Africa where salt is plentiful, old hunters state that it has no attractions for them.

In regard to the salting of cattle this too is only done occasionally. Many cattlemen give their herds no salt at all & yet they thrive & grow fat.

The taste has to be acquired. It is not natural to the cattle & when once acquired they can be broken of it again.

But granting all that the advocates of sale claim for it on this ground, there is no reason why man should follow the habits of animals, especially as we have every reason to believe that they as well as man may acquire bad habits.

Lecture X.

The Proper Diet for Man.

In order to treat this subject from an unbiased standpoint we must consider the structure of man just as the comparative anatomist would consider the structure of some fossil animal in order to ascertain its habits of life. It is possible for those well skilled in this science to tell from even a single bone the structure & probable habits of some unknown species. Certain classes of animals are marked by certain peculiarities of structure which serve to identify them.

The proper diet of any species is particularly shewn by the structure of the teeth, as well as by the size of the salivary glands, the length and other peculiarities of the alimentary canal.

We shall therefore assume that we know nothing of the diet of man & proceed to compare his structure with that of animals whose habits we know.

The ~~Herbivorous~~ Mammals are divided into four great classes The Herbivora, such as the ox, horse deer, elephant etc.

The Carnivora or flesh eating animals, as the lion, dog, cat and panther;
The Omnivora of which class the bear & hog are the best known examples and lastly the Frugivora or fruit eating animals of which the monkey is a type.

Examining the teeth of these four classes we shall find that in the Herbivora, whose food as we know is composed of coarse grains, grasses & leaves, the teeth are made up of alternate vertical layers of enamel & the softer dentine. As a result of this arrangement we have a rough irregular face to the teeth well suited to the grinding work they are called upon to perform.

The incisor teeth are much longer and stronger than in man.

In the Carnivorous class the front teeth are chisel shaped, the back ~~saw~~ shaped like the teeth of a saw so that when the jaw is closed they fit in closely between each other. But there is another very marked peculiarity of this class and that is the fangs or canine teeth one on each side in each jaw, seperated by a

marked interval from the other teeth and considerably longer. In the Omnivorous class of which the hog is the best example the front teeth are chisel-shaped but project forward for the purpose of aiding the animal in digging up roots & tubers which are its natural food.

We come now to the last class of which the monkey is the best example. In the monkey the teeth are described as follows: four incisor or cutting teeth in each jaw, next to these on each side one cuspid tooth, then two bicuspids on each side and lastly three molars or grinders. The teeth are enclosed in enamel.

Now if we compare our fossil man with these four classes we shall find no resemblance to any of the three first, but when we come to the last class we find a most striking resemblance. The teeth of man & of the monkey are the same in number, the same in ~~of~~ shape and the same in construction, and the young of both have a temporary set of twenty.

In all candor then, as far as this part of our argument is concerned we shall be obliged to place man in the frugivorous class.

But says one, man has canine teeth & that shows that his diet must be, partly at least, flesh.

This is not true. Man has no canine teeth even though his cuspid teeth are so-called. The true canine teeth are separated from those adjoining. Man's are not. They are longer than the others. Man's are all of equal length, and moreover we have in the elephant an example of immensely long canine teeth, and even in the monkey who is strictly a frugivorous animal the so called canine teeth are longer than the others.

An argument based on this supposed fact is as absurd as it is unscientific.

So much for the teeth. The next structures of interest are the salivary glands.

Let us suppose we have discovered the body of a man frozen in an iceberg as the mammoth has been found.

We shall find in him three pairs of salivary glands rather

small. Carrying out our comparison again with the four classes of animals we find that the Herbivora as we would naturally expect have very large glands.

The Carnivora have scarcely any at all and the saliva has no action on starch.

In the Frugivora and the Omnivora the glands closely resemble those of man.

Coming now to the consideration of the alimentary canal we notice that in the Herbivora there are four stomachs showing that the natural food of this class is very coarse.

The length of the alimentary canal as compared with the length of the body, is a very important indication of the natural diet.

Naturalists have laid it down as a general rule that this comparative length is much greater in the herbivora than in the Carnivora.

In the Carnivora this is found to be about six times the length of the body. In the herbivora from twelve to thirty times ~~the length~~ and in the frugivora from six to twelve times the

length of the body. These measurements are invariably taken from the tip of the snout to the end of the back bone, but strange to say when we come to man the advocates of flesh diet take his measurement from the top of the head to the bottom of the heel and by this adroit manouvre place him among the carnivora.

~~However~~ a proper measurement will give his comparition length as from ten to twelve times the length of the body thus placing him in the frugivorous class.

To sum up then all that we have learned from comparitive anatomy man is a frugivorous animal.

Lecture XI.

The Proper Diet for Man (continued)

We shall now proceed to consider some further evidence in regard to the natural diet for man from the study of comparative physiology.

The first act in the ~~study~~ of process of digestion is that of prehension or the taking of food.

In the Herbivora this is accomplished by the mouth & tongue.

In the Carnivora the fore-feet are provided with sharp claws for holding & tearing the food. The frugivora have hands well adapted to grasping & holding their food & carrying it to the mouth. In this respect they approach more nearly to man than any other class if we should stop to study in detail the various steps in the process of digestion we should find a striking resemblance between man & this class throughout.

But there are other cogent reasons against the use of meat besides the fact that man's physical make up shew him to be a frugivorous animal, ~~besides~~ in the nature of meat.

itself.

Meat is stimulating. After a full meal of meat the heart is more active + all the vital processes are exaggerated.

Travellers report that in Abyssinia where the flesh is devoured raw in great quantities its effect is to produce a species of intoxication in which the natives become wild + excited + finally fall in a stupor.

These and many other facts go to show that meat is stimulating to a very considerable degree + when we seek for the cause of this we find that meat contains stimulating elements.

If we make a strong beef-tea + filter it we shall have left a substance almost if not quite as stimulating as whiskey.

This fact is now so well known that this is often substituted for whiskey.

It is stimulating for the same reason that whiskey is because it contains poison.

A stimulant is something which is so hostile to the tissues as to cause them to make great exertions to throw it off.

Beef essence extract of beef and similar preparations have no food value but are purely stimulants.

Prof. Claude Bernard a leading French physiologist conducted experiments to prove this point. Two dogs were selected and the one given beef extract, the other only pure water. The dog which received the extract was the first to die, because it hastened the waste of the body without supplying any real nourishment

Prof. Liebig himself recognized this fact and classed his extract with tea, coffee and similar stimulants.

In fact it is only the poisonous, excrementitious substance that can be disabored sit in this way. The actual destruction of the body takes place more rapidly during life than after death. Judging from the amount of the excretions thrown off by the lungs, liver, kidneys etc it is ~~found~~ found that an amount equal to the weight of the body is thrown off in a little more than one month. During life the supply of food compensates for this daily loss.

powerful poisons are formed in the body which will cause death unless thrown off.
Cut off the action of the lungs and death almost immediately results.
Let the eliminative work of the liver or kidneys be completely cut off and death results in a few days from systemic poisoning.
Even the skin has such an important part to play in this work than when its pores are completely closed death may result.
At the coronation of one of the popes a boy who was completely covered with gold leaf, to represent an angel, sickened & died from the effect of on the system of this complete checking of the action of the skin.
The venous blood as it comes away from the tissues is charged with these poisons and thereby rendered dark colored.
When an animal is killed the bright pure arterial blood is drained away while the impure venous blood remains in the meat giving it its red color & its taste.

moreover even after the death of the animal the tissues may remain alive for some time & changes go on resulting in the increased formation of waste matter.

This state of things exists till rigor mortis sets in.

This is the condition of flesh food under the best circumstances.

A short time before his death Prof Austin Flint of New York one of the foremost physicians in the world made a chemical examination of horse flesh and found it to be filled with these poisonous waste matters.

If meat is thoroughly washed in salt water as is the custom of the Jews these excrementitious substances are removed, but the meat becomes perfectly tasteless & does not stimulate.

If now we look over the animal kingdom & pick out the strongest animals we shall find that they are vegetarians, the elephant, the ox and the horse are good examples of this class.

The same is true of natives.

The laboring classes of all Europe are largely vegetarians even among the English the extensive use of meat is quite a modern innovation. Outside of Europe we have almost the whole of Asia classed among vegetarians.

From an economic standpoint the use of the grains is much cheaper as one pound of oatmeal is equal to about three of beef in nutritive value and at the same time immensely cheaper.

Besides this in growing cattle for market it is estimated that it takes about ten pounds of grain to make one of meat.

Lecture XII.

Objections to the use of Flesh Food.

The flesh of all animals is liable to be diseased. The same diseases which affect the human family are also found among animals. Fever may exist, the animal may take cold just as a man does; it may become bilious also. In this condition as in man the system is filled with crude and foul matters. The flesh is filled with the poisonous effete products and can hardly be considered as fit for food.

Animals may suffer from dyspepsia and in fact from any functional disease ~~which~~ to which man is liable.

Animals as fattened for market are diseased. The process of fattening is essentially an abnormal & diseased process. In some cases, such mineral poisons as antimony are used to increase the amount of fat by increasing the diseased condition.

Small-pox, cholera and other grave disorders are found among animals as well as among men. The latter is particularly common among hogs.

Scrofula is almost universal among these animals.

To some extent especially in our large cities the law provides for the inspection of animals before ~~they~~ their flesh is placed on the market, but this inspection is usually very superficial so that a vast amount of diseased flesh is still sold.

In the immense slaughtering & packing establishments of Armour in Chicago where about 5000 hogs are killed each day, the animals are driven up an inclined plane and are seized and killed as they reach the top.

The ability to reach the top is considered sufficient proof of their good health. Those who fail in accomplishing this and fall out on the way up are taken up to be converted into steam refined lard, oleomargarine butter & other delicacies, so that they are eaten after all.

Almost, if not every hog has a diseased liver. It is stated on good authority that nearly all are found to have abscesses in this organ when killed.

But of late years another formidable ~~scam~~ source of disease has been found to exist in these animals.

When examined under the microscope the flesh of these hogs is found to be filled with little cysts each one of which contains coiled up within it a minute worm.

This is known as the trichina and the affected animal is said to have "trichinosis".

The disease is communicated to man in the following manner: when the flesh of the hog is eaten rare enough so that the trichinae are not destroyed by the heat, the shells which enclose them are digested off in the stomach and the worm is liberated. Soon each worm gives birth to hundreds like itself and these at once penetrate the walls of the stomach and find their way into the muscles, where they finally come to stand-still, become encysted & thus remain till death.

It is during their passage to the muscles that the greatest disturbance to the system takes

place. This is often so great as to cause the death of the individual thus affected.

Prof. Janeway of Bellevue College New York, after many years of investigation states that about one out of seventeen bodies brought to the dissecting room are thus affected.

A careful investigation made in Indiana some time ago showed that one out of every ten hogs was affected with the disease.

Human beings may be inhabited by trichinae without suffering great inconvenience, the intensity of the effects depending on the number of trichinae present in the body.

Reproduction occurs but once in the body.

Still another parasite, the much dreaded tape-worm who is in the habit of preempting our small intestines - there making himself at home, can be traced to the use of flesh meat especially of beef.

In ~~the~~ beef may be found at times small cysts, smaller than the trichinae which contain the embryo's of the tape-worm. When these are taken into the

human stomach the tiny worm is liberated and fastens itself to the mucous membrane.
Here it begins to develope adding to its body link after link until it may attain the length of from 50-100 ft.
Besides the unpleasantness of having such a creature within us persons may die from the emaciation caused by its presence.
It has been found that rats are frequently affected by trichinae which in all probability they obtain from human flesh.
Dogs sometimes catch & devour rats while alive & often when dead & thus become themselves infected and man receiving the trichinae from the flesh of dogs, a vicious circle is formed.
The tape worm produces an immense number of eggs.
In fact each segment of the worm is capable of life by itself & each produces eggs.
These are carried off in the waste of the body and getting in great numbers into drinking water are thus taken into the stomach by other

animals. Here the eggs develope into living embryos who find their way into the muscles and there become encysted, making what is known as measly flesh.
Thus in the history of the tape worm another vicious circle is formed.
In some cases the eggs of the tape worm may pass up from the small intestines into the stomach & be thus taken into the system, the person becoming self-infected.
The little cysts of the embryo of the tape worm are thus sometimes found in the eye itself.
In Iceland tape worms are very common, being received from dogs.
An interesting fact in connection with the consideration of a flesh diet is that carnivorous animals do not feed upon those of the same class but upon the Herbivora. The same is true of man. The flesh of the Carnivora is found to be so rank and coarse as to be unfit for food. In the Mosaic laws the distinction between clean and unclean animals is based

is not returned as such. It has undergone some change in the body. But this is no proof that it is a food for many substances as strychnia and other poisons undergoe a similar change and yet no one would think of calling them foods.
But even granting all that is claimed for it the amount used for food would be so very small as to place it beyond the reach of any but the rich. it would be absurd to advocate its use as a food when so much better food could be obtained that was wholesome beyond all doubt, at a very large fraction of the cost.
However actual experiments shew that alcohol does not add either force or heat to the body as it should do were it a food.
It is found that a mans temper-
-ature is actually lower after taking liquor than before & in this way apoplexy may be the [illegible]

distinguished from a dead drunk. For in the former the temperature is above normal & in the latter it is below.
So well established is this fact that in expeditions to the North Pole no liquor is allowed to the sailors. In the last expedition sent out from this country only teetotalers were taken.
After taking alcohol a man feels warmer because the blood rushes to the surface.
So it is in regard to force a laborer takes a glass of whiskey and he feels stronger but here too many careful experiments show that he is actually weaker.
When a man is hungry alcohol takes the place of food simply by benumbing the sensibility of stomach so that the want of food is no longer felt.
Thus alcohol is proved to be a deceiver in every respect.

The Circassian consists largely

on this fact the nucleus being almost without exception the predatory tribe.

If herbivorous animals are fed on a flesh diet, their own flesh becomes unfit for use. The reason for this has an important bearing upon this subject. If the eating of flesh food causes such a change in the flesh of animals must it not have a marked effect also on man and must it not affect his whole character detrimentally? That it does so, reason and experience clearly prove.

Taking the history of all nations into consideration we find that the longest lived people, the handsomest and the strongest are vegetarian races. This is very clearly shown in a comparison between the Circassians and the Calmuck Tartars who are originally from the same stock. The former are noted for their grace and beauty, their women being considered the most beautiful in the world, while the Calmucks are exceedingly coarse & ugly. The food of the Circassian consists largely

of barley, millet, roots and milk while the Calmuck rides his horse as long as he can be used & then devours him.

Lastly we come to the moral argument against the use of flesh and this is the strongest of all.

Since we have found that the use of flesh is entirely unnecessary, what right have we to take the lives of inferior creatures simply to gratify a depraved taste?

The desire for flesh is low & debasing to our moral nature.

Animals have a right to live. They enjoy life, freedom and love of their fellows and of their young just as man does.

To deprive them of these blessings and of life, cannot but tend to lessen the value of life in the minds of men.

The first time we see an animal killed the sight is painful & repulsive to us. If we smother these promptings of our better nature we only do ourselves great harm.

So true is this that in England butchers are not allowed to sit on juries in cases of murder because they are incapable of

placing a proper estimate on the value of human life.
Pythagoras an ancient philosopher as quoted by Ovid has very vividly summed up the moral argument against the use of flesh and in our own times a largely increasing number of persons are coming to realize the force of what he taught so many centuries ago.

Lecture XIII.
"Alcohol"

Alcohol is a chemical compound, a member of a series of compounds having much the same properties and being closely allied in other respects, which we may call the Alcohol family.

The five ~~most familiar~~ members of this family with which we are most familiar are Methylic Alcohol, or wood Naptha, Ethylic Alcohol the intoxicating principle of all wines & liquors and with which we shall have most to do, Propylic Alcohol, Butylic Alcohol produced in the decomposition of such substances as butter & cheese and last of the five Amylic Alcohol or Fusel oil which gives to bad whiskey its powerful & often fatal effects. Every one of the Alcohols mentioned are intoxicating, each one being more so than the preceding until we come to Fusel oil which is intensely poisonous even in a very small quantity.

We call especial attention to the fact that all the members of this group are poisons, as it is manifestly absurd to claim

that one member of the family is a harmless food when the rest are known to be violent poisons.

Alcohol is produced by the process of fermentation, which is one of decay.

It is not found in nature.

Alcohol itself is obtained from fermented liquors by the process of distillation.

The following list gives the amount of pure alcohol found in the most common liquors

Ginger Beer.	1. per cent
Small Beer.	1-3 " "
Cider.	5-10 " "
Lager Beer.	5 " "
Ale	5-20 " "
Wine	8-22 " "
Gin	40-50 " "
Rum	40-50 " "
Brandy	50-54 " "
Whiskey	45-55 " "
Proof Spirits	49.5 " "
Bitters	5-60 " "

It is a noticeable fact that all ~~so called~~ "bitters" contain a large amount of alcohol.

Even the so called "Temperance Bitters" contain a very appreciable amount.

all the alcohols are antiseptic. Being themselves the final product of decay they cannot themselves ferment & they prevent decay in other things with which they are brought in contact

For this reason some have advocated the use of alcohol to prevent the decay of the tissues & thus insure long life. And indeed, we do occasionally find a man who has lived to a great age and has constantly used alcohol. Yet such men might just as well have died years before so utterly useless are their lives, and as we contemplate one of these shriveled, dried up creatures devoid almost of every manifestation of life, we are lead to think that they must indeed be dead but that their friends had forgotten to bury them.

Alcohol is an anesthetic that is it paralyzes the nerves of sensation. All the common anesthetics such as Ether & chloroform are derived from it. If we apply alcohol to a plant or animal its

sensibility is decreased.
This is especially well shown in the effect upon the sensitive plant.
Before the discovery of Ether & chloroform surgical operations were performed under the influence of alcohol
If we hold some alcohol in the mouth it soon becomes numbed so that we cannot taste anything. Its effect upon the stomach and every other part of the body with which it may come in contact is the same.
It is for this reason that the drinker thinks he is getting no harm, when his stomach & other organs may be in a terrible condition.
Alcohol hardens the tissues.
If we drop a raw egg into pure alcohol we shall see that it soon begins to harden & looks as if cooked.
This is due to the great affinity that alcohol has for water by means of which the albumen of the egg is destroyed.
Its action upon the body is similar though less marked.

Lecture XIV.

The effects of Alcohol upon the Body.

We have seen that alcohol is a poison to plants and animals and to man.

Its effect is much more marked when the person is not accustomed to the use of it, so that cases of sudden death have been recorded from its use by children and others who took a considerable amount for the first time.

The effect of this poison upon the stomach has been very carefully studied by Dr Beaumonts experiments on Alexis St Martin + by careful post mortem examinations.

The first effect of a moderate dose of alcohol is to produce an reddened and congested appearance of the mucous membrane which is normally of a uniform tint.

The blood vessels stand out clearly as they do in an inflamed eye.

This condition is found in the stomach of moderate drinkers.

The next step in the process

is the production of a catarrh of the stomach which is a very common cause of dyspepsia & kindred disorders.
The stomach is then in an actual state of chronic inflammation.
If liquor is taken to still greater excess the above condition is greatly intensified ulcers form the tissues actually sloughing away at times.
In delirium tremens the stomach is in a frightful condition, and digestion almost entirely ceases
The color of the membrane is then varied, yellowish, greenish, dark blue or even black like a bruise.
This condition has often been observed in sudden deaths from delirium tremens.
Yet so great is the paralyzing effect of alcohol that the patient is not conscious of anything wrong with the stomach.
The use of alcohol is sometimes a cause of that dread disease, cancer of the stomach.
This usually occurs at the pyloric orifice growing under

it entirely prevents the passage of the food when death occurs. Cancer of the stomach is often due to other causes but it is found to be much more common in habitual drinkers than in any other class.

When Alcohol is absorbed from the stomach its next most marked effect is upon the blood.

The blood consists of a liquid in which float myriads of little cells both red & white. The former are much the more numerous and are bi-concave discs with perfectly regular outlines & an even light red common color. Their work is a very important one, namely to carry the oxygen from the lungs to all the tissues of the body. When the supply of blood is cut off from any part of the body, it becomes blue & livid on account of a change of color in the blood cells caused by the lack of oxygen and the increase of carbonic acid & other poisons.

Alcohol has the power to partially paralyze the blood

cells so that they cannot properly perform their important work. Under the microscope they are seen to have lost their regular ~~out~~ outline & color.

If alcohol be applied directly to the blood cells outside of the body, they at once become shriveled up!

The much boasted of "blue blood" of the English nobility is caused by this action of alcohol the old English nobles having been excessive drinkers.

Alcohol also coagulates the fibrin in the blood forming small clots which stop up the capillaries, thereby producing boils and abscesses & where it occurs in the brain & spinal cord causing various diseases of these important organs, resulting often in paralysis.

Again alcohol causes an accumulation of fat in the blood.

In the normal condition of the body fat may be seen in the blood soon after it has been eaten but it soon disappears.

However in persons addicted to the use of alcohol the fat is not so soon disposed of.
Nature recognizes these fat globules as harmful in the blood & so removes them only to deposit them in all the tissues in place of the proper elements.
Sometimes the fat may almost completely take the place of the original tissue
This change is known as fatty degeneration and is the basis of many serious troubles.
In the eye old drinkers may often be seen a deposit of fat as a yellowish ring just inside the margin of the cornea.
Nature hangs out this sign as a warning that similar deposits are taking place in all the internal organs.
As a result of this change in the heart that organ becomes greatly weakened so that on the least extra exertion it gives out entirely & the person falls suddenly dead.
In the light of these facts it is important to know how much

alcohol is capable of producing these serious changes.

Dr. Carpenter of England one of the foremost physiologists of the present time, after careful experiments has stated that so small a quantity of alcohol as one part to five hundred of blood is sufficient. Now as we know the quantity of blood in the body and the percentage of alcohol in various liquors we can ~~easil~~ easily estimate how much must be drunk to do actual harm.

~~Since~~ Since there is about one pint or 160 ounces of blood in the body it would take about 1/3 of an ounce of alcohol to do harm.

Taking the mildest of alcoholic drinks or small beer which contains one per cent of alcohol we find that it would take only about two pints to give the required amount of alcohol. Thus we see that moderate drinking is not safe as many suppose.

When a man is dead drunk he has about one part of

alcohol to ~~one hundred~~ two-hundred of blood.
When the proportion becomes one to one hundred death occurs.
This sometimes happens where one glass after another is taken rapidly, but where drink more slowly the condition known as being "dead drunk" prevents the man from killing himself thus.

Lecture XV.

Physical Effects of Alcohol (continued.)

After leaving the stomach the alcohol passes by the portal vein to the liver. This organ has the property of taking out of the blood poisonous substances & storing them up in itself, thus sacrificing itself for the rest of the body.

Toward alcohol it acts in the same way, and in consequence of the large amount stored in itself the liver becomes greatly disturbed in the performance of its proper functions. It often becomes dried and shrivelled to 1/2 or 1/3 its normal size.

Alcohol also shows its effect upon this organ in many other ways. Sometimes rounded protuberances are formed on the surface of the organ a condition known as hob-nailed liver from its resemblance to the hob-nailed sole of an English cartmans boot.

This condition is so marked that it can be felt by an external examination

Cancer of the liver is also a very common disease among hard drinkers as also are simple inflammation and fatty degeneration

The next organ in order of time to be affected by the alcohol is the heart. Here the first effect is one of stimulation. The heart recognizes alcohol as a poisonous substance and is excited to increased action in order to drive it away. But this action is not accompanied by any real increase in the strength of the heart and consequently must be followed by corresponding depression. If we suppose that the heart expends five pounds of force in one contraction, that is as much as the arm would expend in lifting five pounds one foot high in one second, and this is a reasonable estimate: then if the heart is caused to beat four times each minute faster than it ought to, 20 pounds of force is wasted in that length of time or about 12 tons each day. As a result the heart must give out sooner than it otherwise would & life is greatly shortened. Actual experience shows that this is the case even among moderate drinkers.

The ultimate effect of alcohol is to paralyze the heart so that it cannot beat so strong.

This can be clearly shewn by means of a little instrument called the sphygmograph, which by means of a little lever and revolving cylinder on which the long arm is made to mark while the short arm is moved by the radial pulse, clearly indicates the condition of the heart.

In a healthy person this tracing is found to be a rather sudden upward stroke followed by a gradual decline, the intervals being regular.

But even in moderate drinkers this regular tracing is not found and in case of delirium tremens the tracing is extremely irregular and feeble! the heart acts like an engine without its "governor"

After leaving the right side of the heart the blood passes to the lungs and here alcohol produces effects similar to those produced in other organs. The first effect is to induce ~~consumption~~ congestion and it is for this reason that Pneumonia is so very prevalent among intemperate persons. It has long been a prevalent opinion before physical examination of the lungs was as perfect as it now is, that alcohol

had some specific power in curing consumption and thus many drunkards were made and a few seemed to be benefited.

But modern research has shown that it has not the slightest effect upon the diseased process and not only that, but it is found to be the actual cause of the most rapidly fatal form of consumption.

This fact has been clearly demonstrated by the eminent Dr. Richardson of London and the use of alcohol in this disease is being rapidly abandoned by the most intelligent and pro-gressive physicians.

In the lungs a certain part of the alcohol is thrown off with the breath, but a large part is re-turned to the left side of the heart and from thence passes into the general circulation.

The brain being nearest to the heart and receiving a very large supply of blood is thus particularly exposed to the action of the poison. Here as else-where the blood vessels are partially paralyzed and too much blood is allowed to go into the capillaries

now it has been found from experiments on monkeys and other observations that during sleep the blood leaves the brain and that the greater the activity of the brain the greater is the blood supply. This brings to the first effect of alcohol is to cause greater activity, the man becomes talkative & jolly, dull care is dispelled and he thinks he is getting great benefit.

This dilitation of the blood vessels in the brain and all over the body is due to a partial paralysis of the nerves controlling the supply of blood sent to any part, for there exist in the lower brain and spinal cord certain centres, whose duty it is to regulate the size of the small blood vessels, nerves bring sent out from them to all the small arteries and capillaries. The effect of destroying these nerves is very clearly shewn in an experiment made on the white rabbit. The nerve controlling the circulation of one ear is dissected out & cut as a result the ear becomes red & filled with blood - after a few months the may be greatly enlarged

This fact accounts for the formation of the so called "rum blossom" of drunkards and the bloating of the face sometimes observed.

The staggering gait coming on before total insensibility takes place is also an evidence of paralysis in the small brain or cerebellum particularly are certain nerve centres whose office it is to bring about perfect coordination of muscular movements. Thus when we stand erect with the eyes closed or try to place the finger on the tip of the nose, all the muscles brought into action must be perfectly balanced to bring about the desired result. Alcohol causes a temporary paralysis of these centres - when continually used this may become permanent producing the disease known as "Locomotor Ataxia"

But while the lower centres of the brain are sometimes affected by alcohol the higher centres as of the will, memory etc do not escape. The marked forgetfulness, the vacillating purpose, the changed character are all so many indications of the poisonous effects of alcohol upon those wonderfully delicate structures which preside over all the higher functions of life. When the higher centres are overcome

completely all consciousness ceases for the time being and the man is said to be dead-drunk.

These are some of the marked effects of alcohol upon the brain. The brain substance in the habitual drinker becomes so hardened that it can easily be recognized after death.

The evils effects of alcohol upon the kidneys is very great.

A fatty degeneration resulting in a greatly increased size of the organ & a white color is quite common. In hard drinkers especially in those who use gin much the kidney becomes small & shriveled up & is no longer able to perform its task of removing impurities from the body.

Similar changes occur in other organs and in the ~~ba~~ muscles. These may retain their form but are weak & flabby. The natural muscle substance is changed into fat. The man under the influence of his dram thinks he is stronger when he is actually weaker

With this hasty review of the effects of alcohol upon the various organs and tissues of the body we are ready to consider briefly some of the claims set up for its use

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Reliquien
Adolf Bs. auch
Margarete

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Glückbringer
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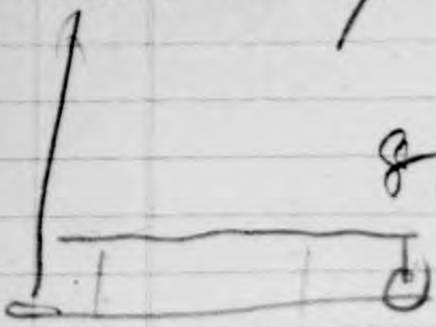

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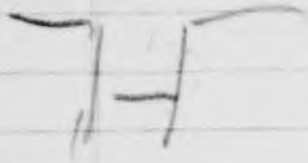

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Soja cheese

Tofu (Chinese) meat without bones. - Chinese proverb

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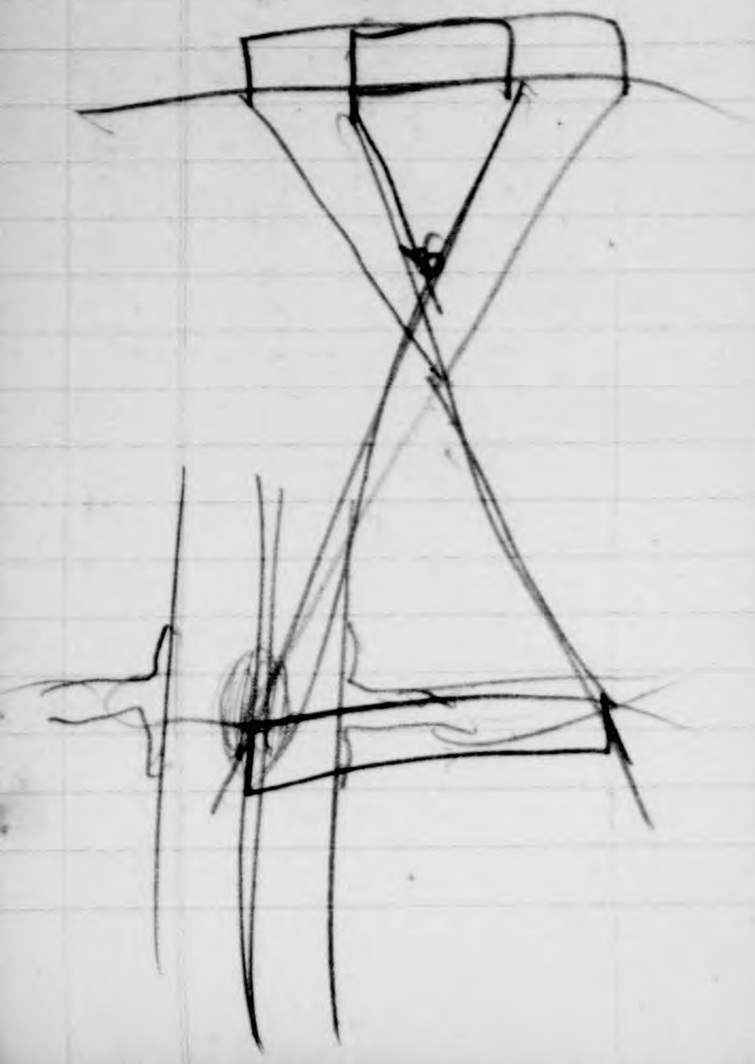

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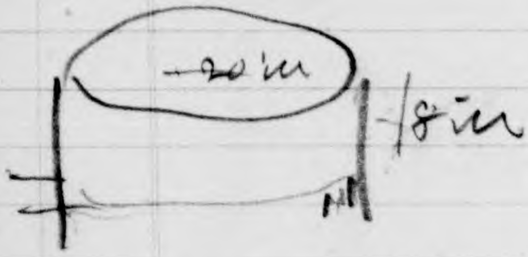
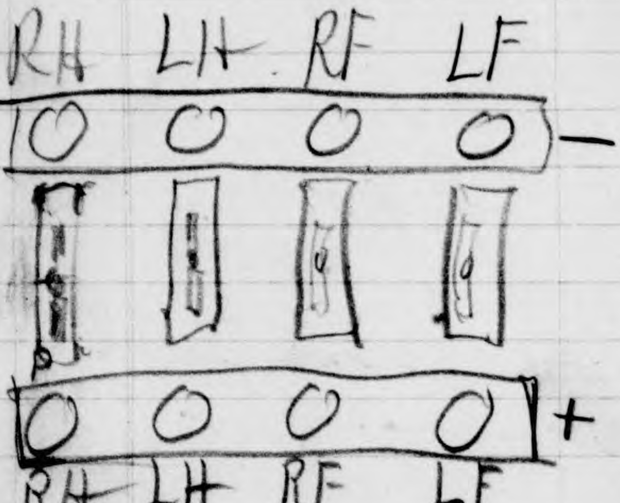
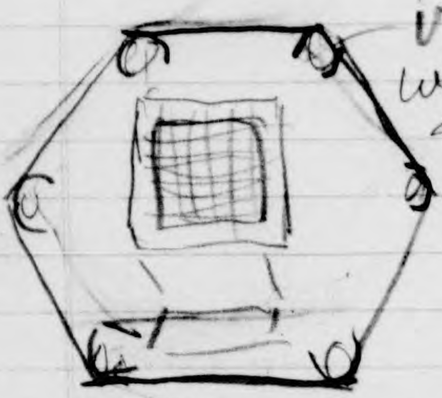
Running foot ball





Switchboard

Portable Electric Bath Cabinet



walls & cover of white muslin
30 lamps

Lehmann

glass box on roof sun bath in cold weather

Bath 25°C, 1-5 min.

Knoke

Left Knee reflex. Found very active

Dr Elmer
Ehrasenbiazer
Oct 19
Stom fluid
Congo paper test
for free HCl.
No free HCl.
Ch cancer, early
stage
No combined HCl
atrophy.

Must aero be
minus.

Woman anemic?
pale. No Exam
of Hemoglobin
or blood count.
Gastric Ex showed
no free HCl. &
no combined HCl.
(atrophy) Elmer
thinks the anemia
primary, atrophy secondary.
Pres. 10 ss dil HCl
5 or 6 times a
day.

Man

Membranous Colitis, very bad
Gives oil Enema
250 gr. linseed oil at
night to be retained
much pain in Chest
on exercise, pseudo
angina pectoris.

Gastroscopy

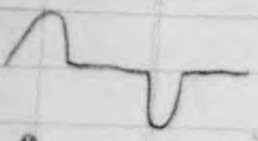
Elsner's Gastro.
applies 5% cocaine
3 or 4 times very
thoroughly, and to pharynx
deeply in Oesophagus
Lubricate end of
tube with glycerine
Patient lies on
left side; tube
directed with
finger holding
tongue

Kuttner
Pr Zachow
Statim 1/1
Virchow.

Kaus Theoretische
Pathologie

Haus & Mörai
Das Electrocardiogr.

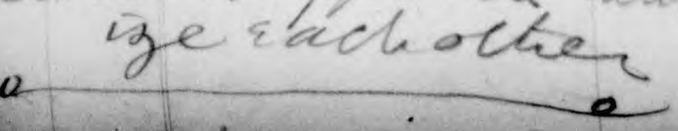
Dr Nicolai



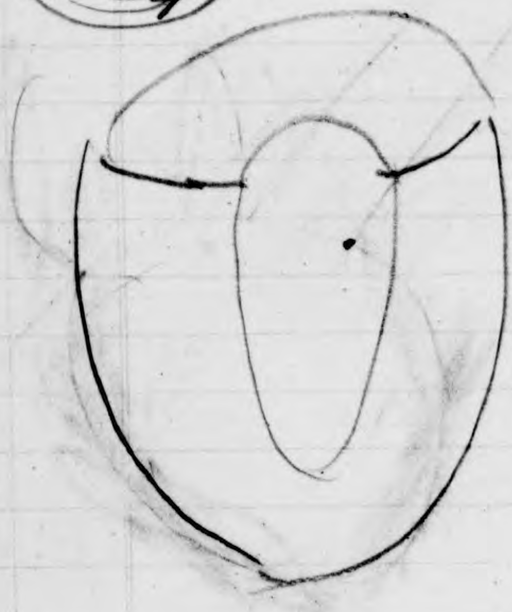
Current is reversed at the end.

current augmented when two fibres are contracting

Currents opposite neutralize each other



0 current



Indigestible
Vegetables

Betts Buckhardly
Karsten 31

Elsner Oct. 20

Colitis
When memb.
are always present,
Free HCl - ord
C HCl is only of interest when HCl is absent. When HCl is sufficient the amt of C is always the same. May have good digestion with no free HCl. if C is sufficient

Microscopic
mucus in stool
means catarrh
of superior colon
(cæcum, ascending
& trans. colon)

Constipation.

Urchow 1 to 5

Dr Falkenhoff

Zincon oxide for gastric & ray

Two deaths from oxychloride, one in Nürnberg & one Cologne

muriatic acid. Dr Chemtoff

Gives diagnostic dose for motility, leaves a half hour or more. Kultzer uses for tumors only.

Tryptophane

Nitroprusside reaction

Neugebauer method

Small amt of stomach contents taken before breakfast.

put in a bottle containing 10 grams of polypeptide 1 gram of gastric contents

put 24 hr in incubator at 37° C

Then add one drop of marine water. If red color appears, there are polypeptides present, if not none.

Red cheese is thought to signify carcinoma,
Gall bladder
Hepatic cirrhosis
Pulmonary pleurisy
Ulcus pylori
Pernicious anemia
Mangelsdorf was first to say this indicates cancer.

Reaction may be caused by pancreatic juice, which is often found in the stomach.

Vollhardt breakfast for cholelith & duodenum & pancreatic juice

200 cc olive oil with stem tube, in morning before breakfast

Patient must take 2 ~~Epsom~~ breakfast ~~into the oil~~

over

Purpose of the oil is to cause regurgitation of duodenal contents 4½ min. after end of breakfast in which find

Pepsin
Rennin - lab.
Lipase
Amylopsin
Trypsine
Bile

Dis. of pancreas especially occlusion and acute pancreatitis

also in cancer when it occludes the duct.

also in cholecystitis caused by b. coli. especially by Colon & typhus

further must make ex. stenosis, oil, hands, mouth (boracic water)

only significant
when stomach
has sufficient
HCl. ~~otherwise~~
in other words:
there must
be no lact in
the stomach
should make
an Ex before
a Exam for
HCl + lact.

Ellsner Oct. 91

Gastric contents

Liquid { water
gastric juice
thinning secretion (serum, sugars, albumen)

Gastric juice
Same acidity.
In hyperacidity – the gastric juice more acid.

Habitus Enteroptoticus identisch mit habitus phthisicus. Young tumbler vagus vorth stomach tumbler.

Hyperacidity.
very bad case
Belladonna. ~~cocaine~~
soda, no benefit.
Used hematogen
patient relieved at
once. (a teaspoonful
3. t. d.)
Try gluten powder
instead, with soda
water perhaps.
Try to make a soda
solution of gluten.
or 5%

.17. H

Cystoscopy.

1/3 grain morphia
20-30 min before
(Day before practice
the patient with
a smooth flexible
sound)
Paint the pharynx
repeatedly with
cocaine, 5% sol

& squeeze out
all surplus. Wait
5 min. after the
cocaine.

Haertner Ergostät
in Vienna.
Reiner, Hebbert
Universität Klinik
N. 12

Tapeworm
New method
male fern by
stomach tube, fasting
stomach, laxative
only after 5 hours
(Sulph magnesia)
This gives the
drug time to act.
Formula.
Male fern 6 grm.
Hydrol 1 gr
Gum Acacia 4 sol 150 gm

Quartz lamp.
Small with stand
& rheostat 110 V.
uses 6 amp current
with water cooling.
Price 545 Marks
1/40 off

Nagelschmidt model
large quartz lamp.
" Hg water cooling
4 amp. 110 V
Price 250 Marks.

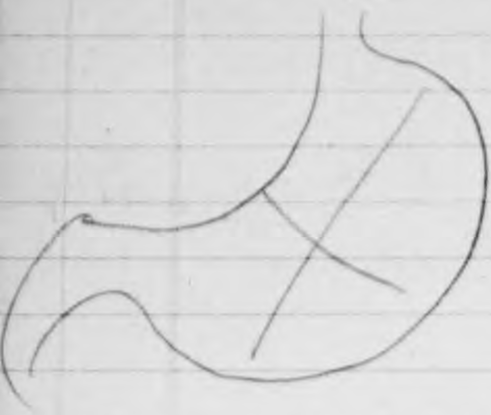
4) 545
136
4) 378

4) 250
62
188 M

See Dr. Nagelschmidt

Elsner

Therapy (ed 2)



2 movements
1. vert. peristole
2. longitudinal
peristalsis
when vert mus. are
lost, assimilates an
relaxed or weakened
— atony.

When long. muscles
are involved, disturbed
motility.

Where microscopical
found remnants in
stomach, then always
organic obstruction
of ~~stomach~~ pylorus.

Dr Jacoby

Man - hematuria

urethra very sensitive

Put 2 oz. of solution of

Novocaine 2% into

urethra for 5 min

Pt. Showed tumor and

two ulcers. malignant

"Das sind "ca" carcin-

oma.

Next patient the brother

"in law (Schwager)"

beau-pere" of Prof. Lutze

Oct. 24

Nicolai

Left +
Right −
Right gives curve
below line

Pregnancy arteriosclerosis -
is phasic
1 Auricular larger
2 Ventricle next
3 Final curve lowest
4 " " sink in
last stage
Mitral stenosis
like arteriosclerosis
except I is
smaller

Myocarditis
Murmur by low
E or F apex
in bad cases
I very low and
both a & F low

initial insufficiency
with no compensation
F is too small

arterio sclerosis
at 1

no good heart
no organic change

often found in weak
hearts

hemgenetal

Extra systole
may have all forms.
May be very
irregular

9

Baruch
mentioned

Cit Dr. Nicolai Oct 25

Saw Dr Mazkowski who has been 8 mos at a time in New Guinea. fed his men & ate himself unpolished rice, had no Beri-Beri, thinks disease is due to lack of lecithin. Will eat food containing no lecithin and try to get Beri-Beri.

Will eat only polished rice and pepper and fruit juices & sugar.

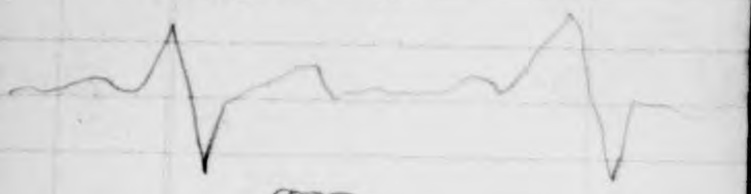
Beans Especially East India beans are very rich in lecithin.

120 C does not destroy lecithin. Chinese and Hindians prefer polished rice. "The more the rice is polished, the more the master is good."

Saw also Dr. Caspari. He speaks no English.

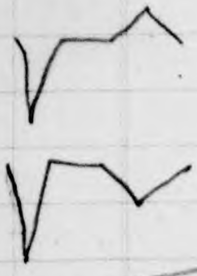
Congenital mitral insuff.

Disseminated myocarditis



or

very rare.

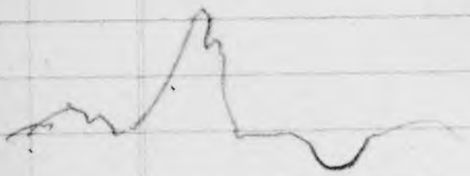


disseminated myocarditis

dextrocardia

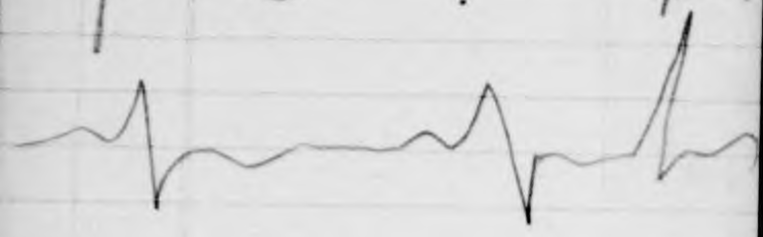
---

abnormal I means myocarditis



arteriosclerosis with myocarditis

The extra systole may be regular and more normal than the regular systole.



About Dr Prof Nicolai Oct. 27.
ark.

1. Dangerous forms of cardiogram.
2. Danger in heart block
3. Blood pressure app.
4. Ef of HK
5. make cardiograms arrange-tread device
6. What curves indicate atropin
7. What digitalin
9. Hydrotherapy, Exercise, Electricity.

Augusta Hosh.

Oct 20.

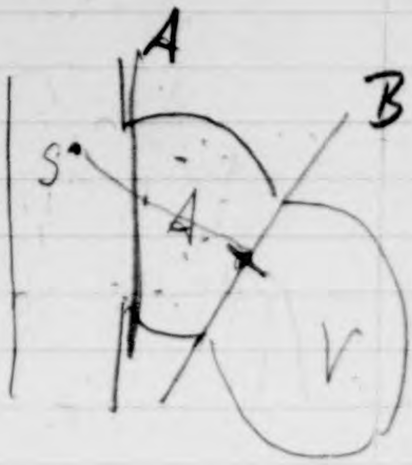
appointment with
Dr Cretz for
Tuesday at
11 a.m.

Questions

1. Hyperhydrochloria
cause, treatment
2. Ulcer
3. When operation
recommended

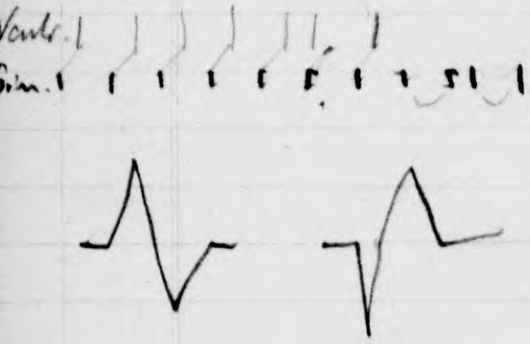
4. Auto-intoxication
intestinal tract,
5. Constipation
Schmidt's, Olyagar, agpulin +
6. Diabetes
7. Gastroscopy
8. Frequent feeding

Schering
Grün & Bilke

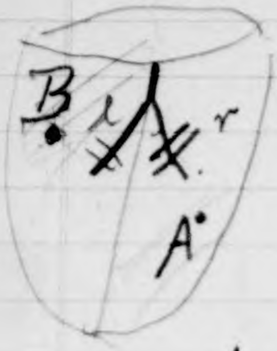


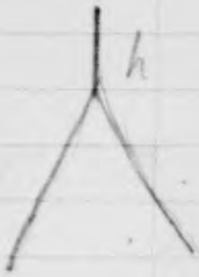
above A — no Tauc Sinus
below A — " —

above B normal for appr. + atrv.
below — a — —

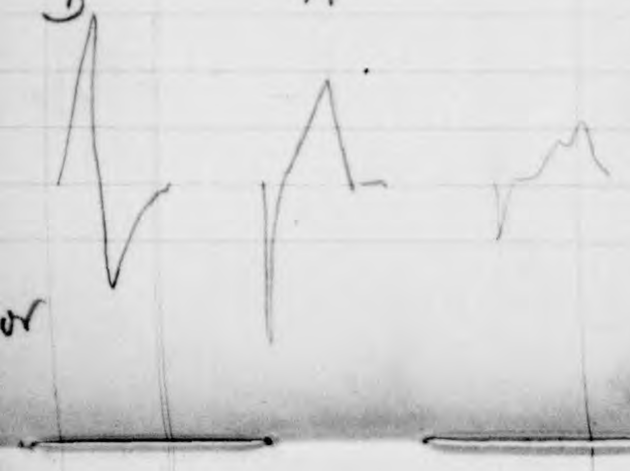


left brain branch.

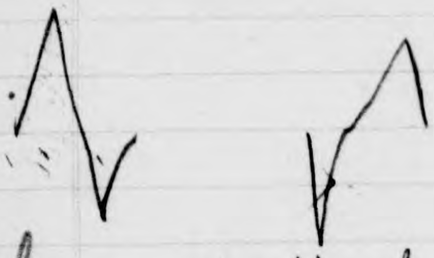




B A



or

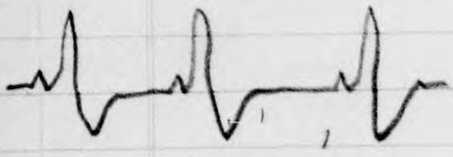


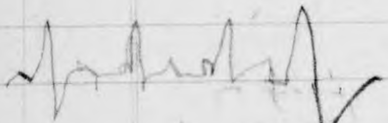
that from irritated results if

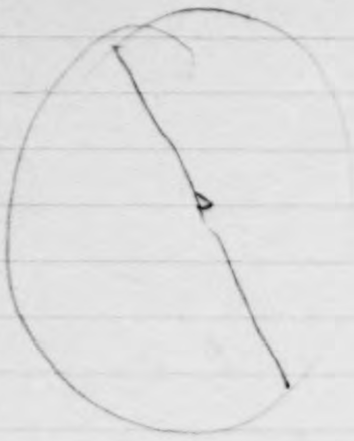
at B A.

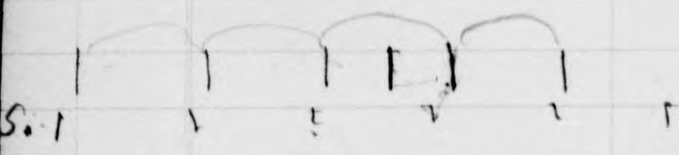
or if rat

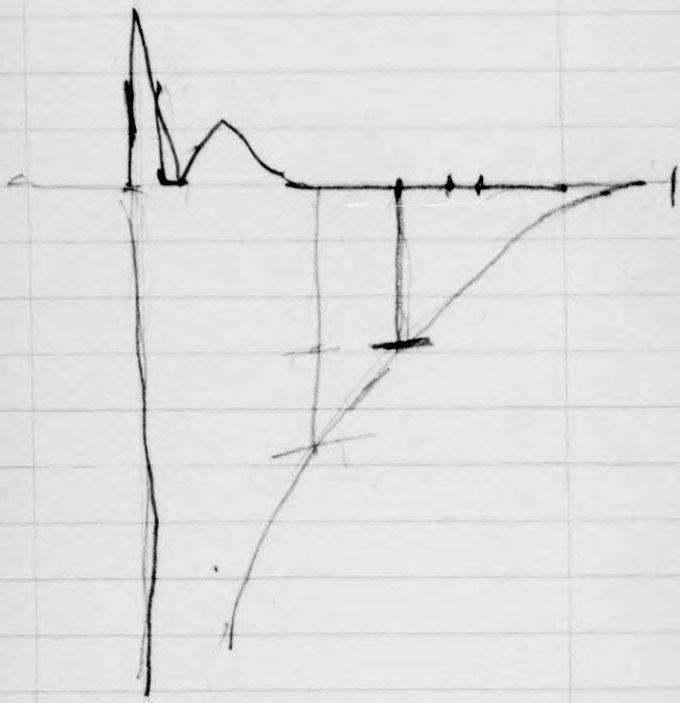
r l. branch.

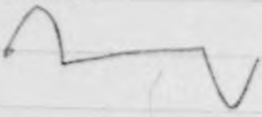


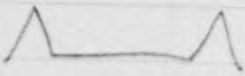


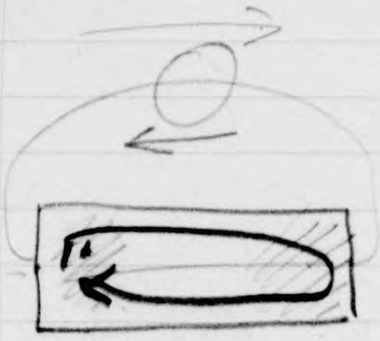


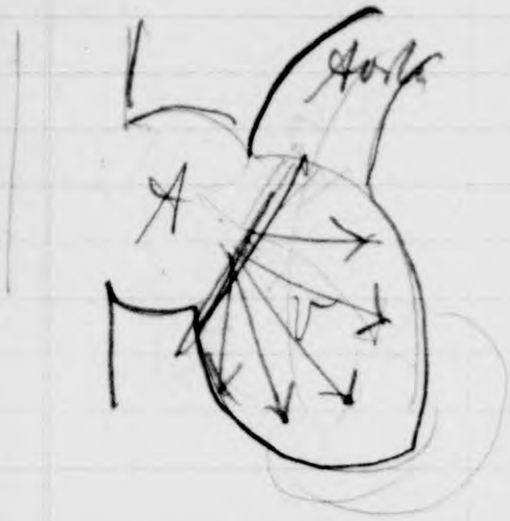


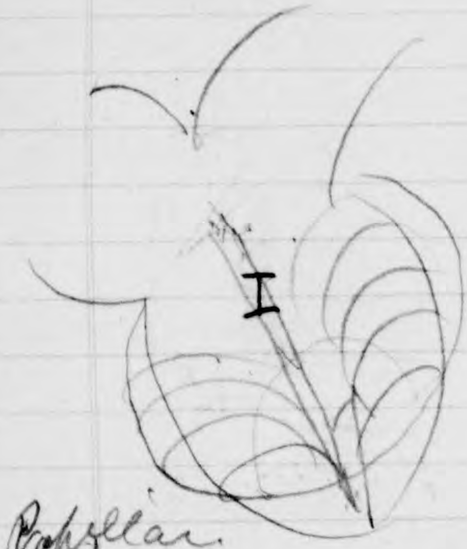




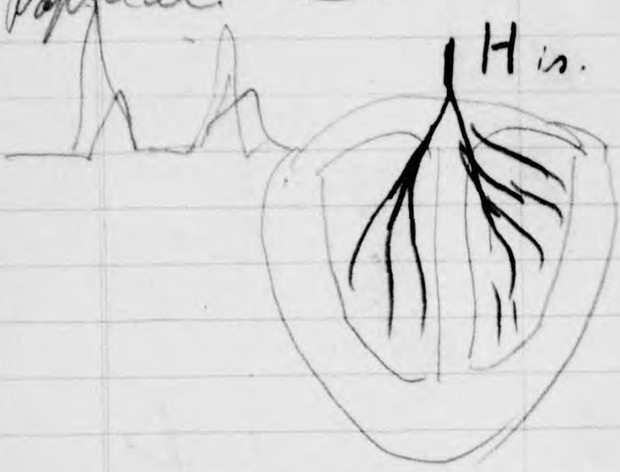


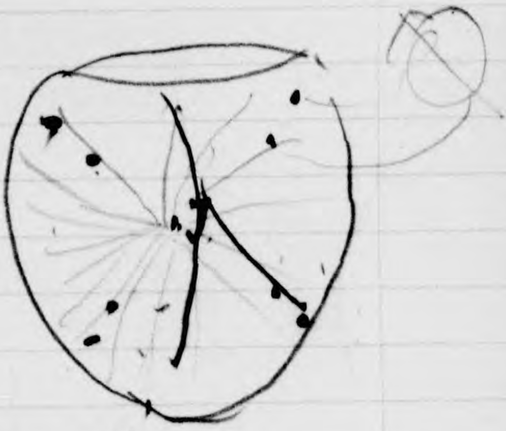


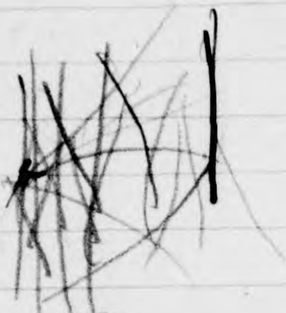




Papillar.







~~Rem~~

Hyper

Li Bell ,2

Bi Carb

Mag Usta 7.4

Citrate Soda 14

1/2 teas t. i. d.
immediately after eating
Beans.

Belladonna inhibits sec

Mag Usta to induce
peristalsis

Citrate of soda in place
of Carbonate since

Or formulation in
Mint Stain Sec.

New solution which
neutralizes juice
acidity

Alum Citrate in
powder
teas. several times
just before each
meal

Alimentary hyperacid
powder before or
after meals.

Gastroenterica
before meals.

alimentary after meal

H_2O_2 has been used as pure ~~mineral~~ water 3:00 aqua 1-2 tablespoonfuls 3% H_2O_2

Have seen no results. Patients complain of nausea. Don't like it at all

Several cases of bronchitis.

Dan Jabora asst of Riegel Strassburg.

~~Student of~~

1/2 milligram of atropine hypodermically time 1 milligram given 1/2 - 2 in day. Time not important.

Cultivate for 2-3 wks. May cure for years.

Meat food, eggs. to 8 in a day. Veg. good in form of puree, all fruits. Pears very good in puree. Shine bean milk well other not.

New preparation of milk. Peptine made by Van Duyzeen & Van Antwerpen Schering.

Milk fat, nuts, are very good because milk albumen & fat & no salts. Walnuts, almonds, also emulsion. or so called almond butter or cream butter. Cream. Olive oil, maybe

given with tube
No animal fats
but butter & cream
Avoid all other animal
fats.

Ulcer suspicion.
avoid fluids because
dilates & hinders
contraction.
Cane sugar in small
amount, not too
much carbohydrate.

Avoid broths & meats
on account of meat
extract.

Ulcer

3 treatment
1. Lo rube - rest diet
cure.
2. Leuhardy (crowded)
3. Sanator.

Lamb - milk only.

Ano good results with Lean of Gm.

Enema

milk 250

eggs 2

Protein 5 grams

artificial albumen

Pinch of Kitchen salt & sugar

One enema

use 3 t. d.

Enema in morning only one a day.

1st enema an hour after.

give Opium 5-8 drops if necessary to help patient retain.

hourly inject oil (sterilized) under skin in bad cases.

also Kalodal which can be assimilate

malt sugar & malted foods much better than Cane sugar

Constipation

stool every day not necessary, Mayent well with stool 1, 2, or 3 days.

Regulin with excellent results. Ewald likes it very much

also Pararegulin Cascara and paraffin

No Ex with Mg agar

~~Rectal~~

Fleiner Heidelberg oil enemas at night

now better than in paraffine 38° melting point

warm before giving in the intestine

Has consistence of
cream & protects
intestine, hinders
absorption & the
production of
toxins.

200 grms at night
1st week.

100 2nd week
q. o. d.
& so continue for
4 wks.

Deutsche Paraffin Vertriebs
Gesellschaft. Berlin Tr.
Haberlandstr. 7

No pt. in operation
for ~~[illegible]~~
constipation Has
seen no cases
needing operation.

A surgeon at Vienna
removed 85 cm
of colon. in acct
of autointoxication
Does not believe
in autointoxication

Chr. Gonorrhea
14-16 days. Chr.
Much indican
in urine. "but that
makes no harm"

Op. in Ulcer
1. Perforation or imminent perforation
2. Hemorrhage: be most patients die
3. Perigastric adhesions

---

seldom op. because adhesions always return. no good results.
Use better fibrolysin, see some good results after other treatments no good
Use one injection (2 cc) daily 5 or 6 weeks. made by Merck

4. of ulcer relapses
2 or 3 times of penetr.
5. Ulcer with gastric
~~Hostility~~ stasis
gastroenterostomy
6.

motility slow in most ulcer.

Microscopical residue in empty stomach
muscle fibre
fat
yeast
sarcina
bact.

---

6. Ozenate in duodenal ulcer
~~because obstruction~~
~~& difficult~~ when sens total.

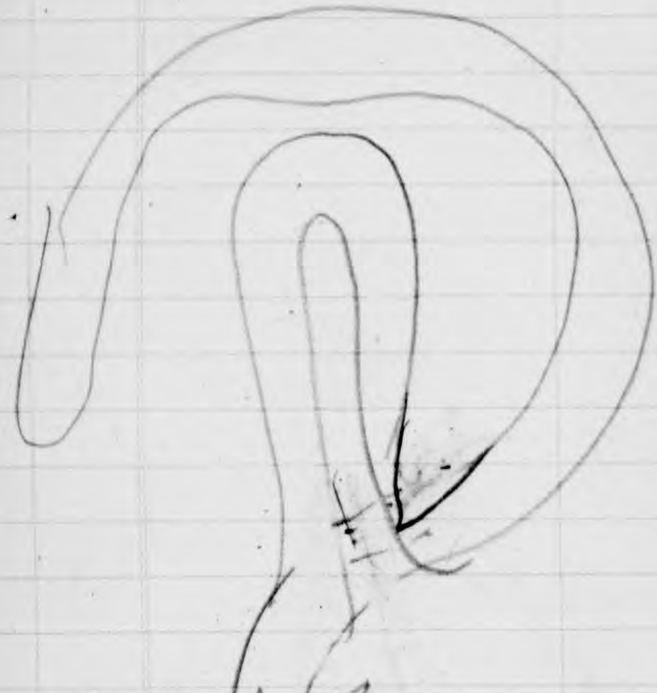
7. Make gastro in adhesions of pylorus
adhesions return.

8.

Constipation
reject
Hormonal (extract of spleen) ~~like~~
~~this like other~~

Hormonal makes peristalsis. Inject 20 cc at time only. One injection (intravenous, may be in muscles) Per has healed CMR for 8 months.

Especial function of hormone of spleen can buy from use in bad case in several cases found it good.



Wood Opera

Hormonal is sold made by Schering

Dr. Jr
Susmann
Bayreuther Str.
Berlin 44

Flexible gastro-
scope.

Diabetes

Give the amt
of Carbohydrates
of which the
patient absorbs,
irrespective of
amt of sugar,
~~CO_2~~ Carbohydrates
lost are determined
by sugar in urine

~~New~~ Cancer hypsin

Sol albumen more in malignant achylia than in benign achylia

Ferment meal (Ewald)

filter. make two sol.

1-10 } filtrate
1-400

Test by adding Phosphor wolfram acid in HCl sol.

Formula

ac. P. wolfr	.3
HCl	10.
alcohol 90%	200.

Albumen present ring in fluid.

In normal 1-40

In cancer 1-200-4000

May be due ferments or drainage

Test supper

Calf meat 110-200 grams
Rice 100-200
Strawberries.

This furnishes something which can be recognized.

Hydrotherapeutic Institute

Bringer

wave batt

stream batt

air pressure

Sharpt blast batt

filter

perforated pipes

Better than CO_2 batt

many metal coils + caps for heat
shed arranged so batts can be
used for same patient

Dr. Fuchs.

New Standpoint. Changed in last year by new facts.

1. Animals can be inoculated. All syph products infections.

2. Nature of infection a protozoon, an animal. This fact has changed the therapy.

Wassermann reaction developed in 4 yrs. Diagnosis possible without clinical symp.

Methods:

3 forms.

1. Prophylactic
2. Palliative.
3. Curative.

Prophylaxis

Best is vaccination. Not all men get syphilis. Statistical fact very hopeful at first. But now we know that by annual vaccination, vaccine is not weakened. by when passed through animals is made stronger. Metchnikoff inoc. Chimpanz. then dried vac. another monkey that had only hand showers. He concluded that the vac. produced only local dis. like variola vaccination. Neisser

We now believe that the more the skin

manifestations, the ~~[illegible]~~ the internal effects. the better for after life.

Chemical ~~effects~~ means of ~~increasing~~ virus have failed.

Best means are preventive. This is

1. Calomel ointment 30% found effective by Metch. ~~[illegible]~~ to be used immediately before or after exposure

℞ Calomel 10
Lanoline 30

Experience shows that this is not certain. Disser has shown this.

2d Preventive method. active immunization, same as ~~that~~ used ~~for~~ against rabies. This to be done during first 3 wks. during which the disease is ~~still~~ local. Method of Kraus. Increase the antibodies by injection of the debris of hard chancre ~~[illegible]~~ killed by carbolic acid. Proved to be ineffective

3. Passive immunization. Langered. Use of serum of animals that do not contract syphilis. Also from patients who had syph. Wholly unsuccessful.

4. Excision of hard chancre, and begin at once with antisyphilitic treatment. Seems to be the method of future.

Curative methods

Only 2
1. Mercury.
2. Salvarsan

At first very enthusiastic. We hoped would all diseases by Sal. We found that when Syph. not always cured by Sal.

Ehrlich's remedy began with discovery of fuchsin. He was experimentally in sleeping sickness. Found 606th & successful in killing spirochete of sleeping relapsing fever as well as syph. and sleeping sickness.

Salvarsan is certainly ~~the~~ a better remedy than mercury, one of the best examples of a remedy for disease

Disadvantages

1. Condition of body, diabetes, bronchitis, arteriosc. heart of any advanced age. all gen. diseases, nephritis, brain & nerve effec. also eye & ear diseases

2. Salvarsan has special inf. on nerves, eye, ear, nerves, brain. at first thought to be nerve effects. now known to be protoplasm of arsenic effects ~~with~~ syph. because arsenic weakens nerves

so that syph produces its natural effects.

Recurrences are as often as after mercury.

One injection supposed by Ehrlich to be sufficient, but ~~[illegible]~~ now known to be wholly an error.

~~Doubtful if~~

Salvarsan not the ideal remedy for syph. That is mercury.

Indications for Salvarsan

1. Abortive preventive

Salvarsan is more effective than mercury. in 2-3 wks. syph glands are indurated. One dose may kill all the Spirochete

2. Man who does not support mercury.

3. Lethal indications

Patient in imminent danger. Patient unconscious brain pressure. Threatening suffocation (mercury might kill) Sal. will save.

4. Distinctive effects of syph...

5. Cases treated without results by mercury.

6.

do not use Salvarsan in congenital syph. of children. So much antibodies are produced that may kill the child.

In Vienna we do not treat all cases with Sal.

If a man comes with fear of syph.

Examine: cauterize with hot iron. Silver nitrate not good - superficial. If ~~I H have~~ of I H but has passed ~~nothing to be done but~~

to watch patient & make examine every 3 or 4 days until spirochaete. Positive is syph. but neg. is nothing. May appear next hour. If find spirochaete. Chancre excise at once and leave wound open & touch with iodine daily.

Then Salvarsal injection if patient is occupied, intravenous, ~~use of~~ intravenous or intramuscular is mostly a matter of taste.

wait until skin symptoms appear, then apply mercury inunction

Wasserman reaction positive.

Chronic, intermittent treatment needed in all cases.

Only 2 forms of mercury treatment

1. Inunction
   2 grams gray ointment in 30 ~~liver~~ doses
2. Salicylate of mercury 10% in liquid paraffine

weekly 1 cc injected intermuscularly

6-10 injections ~~within 70 days~~.

This is a complete cure. Must have 6 or 7 complete treatments

~~Rule for married~~ people said to be cured if:

1 Salvarsan test.
7 complete mercury cures
4 yrs since injection
2 yrs. since Wassermann or other symptoms

We now find that
Mercury & Salvarsan
together are followed
by fewer relapses.
But can never say
positively if syphilis
is cured. We hope to
have such a remedy but
we have not now.

Principal writing is
use of Roentgen rays.
Should amount of
R only alpha
rays not in use.
In cases of external
dis., radium/radiation
not needed!
a very weak
preparation useful

Showed me porcelain dish, brown from radium, in 2 hrs. color went clear through overnight.

a = canal = 90%
B = cathode elec.
q = Reagent - 1%

a = in not homogeneous
B = 3 Kinds
q = with filter

Wendy is best
most helped
Saverna,
Good in bath.
Reynolds Sacs
best helped.

10,000 L hitchberg contain
1 gram of Ra
10,000,000 to 1

1000.000

Closed peritoneum. Gauze to be removed in part at end of 4 days, balance by degrees in next 4 days.
(Cark abt draining abd cavity)

#

Radiumtherapie von Wickham und Degrais

#

also in French

Bookseller Teutlike Wien I.
Helfersdorferstrasse

(Never measure more than 100 m.c. in the instrument (Herz))

Joachimsthal 1023.

Girl inf. paralysis. 1 yr. Paralyzed 3 yrs. in both legs. wholly helpless. In 3 wks walking. in 6 wks walked upstairs nearly well. Daughter of Austrian officer.

Daulnitz

Removed tatoo in 8 hrs.

Can cure x-ray cancer by Radium.

Showed me 10 mgm of Radium "Träger" which causes erythema of skin in 1 min.

Radical Hysterectomy
Weidlein:
Frances Klinik Nov. 7.

Trendelenburg's position, extreme.
Free incision.
Broke up adhesions and began by cutting post. ligaments of left side (on which he stood). Dissected broad ligaments back to uterus and pulled peritoneum over glands and worked the mass loose, on upper side of broad lig., leaving a strip of about 2½ in of peritoneum at outer end of broad lig. Next loosened peritoneum on lower left side of B. Lig. Then stripped peritoneum in front of uterus at junction of bladder and loosened bladder. Loosened incised peritoneum by picking up folds and snipping with scissors. This avoided large vessels. Then finished left side of broad lig.

Next ligated in mass the to upper border of broad lig. 3 in. from ~~ileum~~ ileum. Separated layers of B. lig & continued ligating tissues & vessels in mass, until uterus was held only by junction with vagina. Facilitated matters by passing index finger under and trimming out tissues over end of finger. Assistant made strong traction on uterus, Dissection was carried down outside of vagina 3 in or more. Clamped below the disease after carefully cleaning, then cut off, left vagina open. Packed iodoform gauze down into vag left a mass to fill space (per)

in cancer tissue. If it is involved so that it must be cut, insert in bladder by very simple operation.
Fix bladder to abd. wall to prevent moving, make small slit in bladder, insert urethra and fix by stitches to peritoneum.
Wertheim op. in many cases refused by other operators.
Has now over 500 cases operated more than 5 yrs ago. 60 % ~~alive~~ no return of disease. Prof. Schauta has about the same, but he refuses to op. more frequently. "Wertheim operate 60 % of all cases that come. Schauta only 45 %."
(Ask what cases does he refuse)

~~Has a new operation for~~ vagina artificialis, made from sigmoid flexure, less dangerous than to make fine small intestine.

Make incision between anus & bladder. Remove coccyx. Bring down loop of sigmoid, fix section in place for vagina, attach intestine to lower part of rectum which is left intact.

Wertheim's Operation for Total Removal of Uterus and Adnexa including Glands.

Interview with Wagner (~~Pathers~~ Chief of Clinic)

Not needed in cancer of body of Uterus, as this not not extend to glands of Adnexa. Those cases usually removed by vaginal route, sometimes lately by abdomen.

Only trouble in these cases is with paralysis of bladder. All never cut off, no action of bladder for 2 or 3 weeks. Much catheterize 3 t.i.d. 70% get cystitis. Wash out 3 t.i.d. with 1-1000 mercuric sol. (Oxycyanure Hydrargyrum?) after 2 wks apply faradization. Most always get well in time.

Sometimes stay water 2 3 inches or more. Then may slough. However the slough is usually quite small, only one side, & gets well. We know this has happened by finding fistulae all wet. ~~Do not do~~ Usually comes on 10 days after all has been going well. Do not put drain in vag wound. Only paint with tr iodine or Balsam Peru to prevent infection. If obstinate, may operate & insert ureter in bladder or if kidney becomes infected by extension ~~to~~ from the vaginal wound, remove kidney.

~~If~~ Ureter is seldom involved in the disease even when embedded

Wertheim's Clinic
Frauen Klinik
Wagner Nov. 7.

Wertheim's op. for prolapse. no bad effects. Always successful. ~~Often~~ must restore perineum well. In one case by another surgeon perineum not good - result of suppuration - prolapse returned.

Uterus lies when normal, on levator ani muscles. When these separate, uterus slips down between them. They must be brought together again.

Good point - When retroversion, or post ligaments very long, draw uterus well forward and take up slack by a purse string suture.

No dressing on ~~out~~ perineal wound. "The thighs are together. This is protection enough. Wash next day. Have patient urinate naturally if possible. Remove perineal sutures in six days. vaginal in 12-14 days.

No Gloves. "We wear gloves all the time when not in operation, when we touch anything dirty. We always examine patients with gloves (when not prepared for operation I suppose) wash hands 5 minutes, ~~then~~ (seemed to me about 2 min) then rinse in 1-1000 corrosive sublimate solution.

To see him again Thursday 4 P.M. ask Kabt preparation of patient.

Eiselberg Klinik
Nov 1/6.
Removal of Gall bladder.
Chronic Jaundice
Big bladder, apparently full of stones, very
thick, many adhesions

Broke up adhesions.
Exposed cystic duct,
double ligated, dissected
up gall bladder from
below with fingers
only.
Large incision,
assistant pulled
liver partly out with
fingers & held during
most of op. Covered
in seat of wound
with peritoneum (?)

Put in drain to
seat of wound, but
did not drain.
~~gall bladder~~ liver.
No evidence that
common duct was
opened or cleared.

Operation by 2d or
3d assistant.

To see Wagner
at Frauen
Klinik 4 P.M.
Tuesday. Nov. 7.

Questions,

1. Prolapse of.

1. How long sutures remain.
2. Dressing.
3. Antiseptic lotions
4. Sutures
5. Urine & bladder.
6. Preparation.
7.

Gauze to be removed in 24 hrs.
Used silk interrupted sutures. Followed by

Perineal Operation

Holding sutures like mine (except bottom and no protection of anus.)
Removed triangular section of mucous memb.

including ½ in. of skin at fourchette. Dissection with knife beginning at apex.

Closed ⅓ vag wound with int. silk sutures joining edges only, then opened fascia on each side and exposed freely the levator and brought these together by 4 silk sutures. Then closed vag. wound completely, then 4 buried sut. in perineal fascia, then skin of perineum.

Cystic ovary
Removed by vag incision ant. to cervix, thus:

Wertheim's Clinic
at Frauen Klinik
Nov. 6, 1911
Met Wagner, 1st Ass't

Case of Procidentia
may begin with
cystocele or ~~prolapse~~
and retroversion +
prolapse.

Operation (by assistant)

Incision - median ant
wall vagina, upper
end ½ behind urethra,
point marked and tissues
held by traction suture.
Careful dissection
on each side, ~~+ below~~,
just under mucous
membrane until
bladder clearly de-
fined, then separation
behind till opening of
peritoneum. Suture
inserted (traction) in
anterior flap of peritoneal
opening and held
up by assistant.
Turned fundus for-
ward and wound
attached peritoneum
about ~~[illegible]~~ middle
of fundus. Pushed
fundus back ~~until~~
and closed upper half
of wound by sutures
including mucous
membrane and fundus,
~~lower~~ half only mucous
membrane. Packed
in a long piece gauze
from vagina (2 yds) to

very well in constipation ~~the~~ bowels to rest in peritonitis. It makes very powerful peristalsis. A case is reported in the literature in which the action was so violent it caused rupture of the bowels. In some cases of very obstinate constipation

---

it might be good. I have not tried it. My chief does not use it.

"Regulin is good, very good two large spoonfuls 3 times a day.

When regulin fails Massage of muscles, hydrotherapy, Colypsinus.

Ad Schmidt
Halle Oct. 30
Asst Dr. Strauffer

Models of stools
infants & adults.
Adders
Medizinische Waaren
Hause. Berlin.
Kurlstrasse.
Pancreas Schmidt-Kashwido
Capsules containing
thymus & lycopodium
(without emetin) prepared
by Merck. Nuclei stain
blue, not digested
when pancreatic secretion
is lacking.

This is the test used
by Schmidt in all
doubtful cases.

Lugol's ~~test~~ by
Hosse.

Reinstalled as seen
in book of
Schmidt

Harmonal

Smiled. "Yes, but chief
does not use it. He
thinks it too dan-
gerous. It is now
being tried in the
surgical depart-
ment. In one case

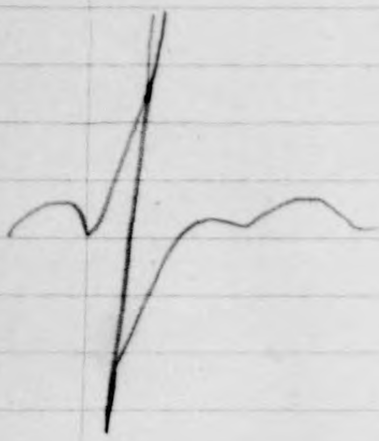
Kern
Kemporte nach
Schmidt - Kaschirado
Schmidt - Kaschirado
Merck & Co.

Eder Schmidt Jeges
Pepsine probe
nach Grosse
10 test tubes
each 5 cc casein
solution made
by
Schmidt & Strasburger

Lippitsche
Bunsenbrenner
Grosse Kinderhospital
Kempport office

Die Farben des
gesunden und
kranken Magens
Schmidt
Halle

Lecithin



Jacoby
Oct. 27,

1222, Early initial Memoro

Send Blue book

to

Prof. Nicolai
" Caspari
" Jacoby
a Klonek
Von Bergmann

Hildebrand
Charité Oct 24.

Man: Jaundice
Longitudinal parallel
with ribs (6 in)
Gall bladder small
adhesions, perforation,
removed gall stones
through perforation
passed through
ducts, soaked up bile
with sponges.
No gloves.
Nurse handled instru-
ments without gloves.

Iodoform gauze
Plain gauze
Small ~~rubber~~
rubber tube 2 feet
long through penis
in bladder.
Longettes (long)
Tuches (small sponges)

Elsner

Microscopic stagnation.

Always due to spastic contraction of pylorus.

Under microscope liquid showing to naked eye no sediment, shows.
starch
muscle fibre
rotten cells.
fat drops
growing yeast cells

Saw three cases gastroscopically

operation only in cases of

Cicatrization of pyloric.

Hemorrhage and painful ulcer

excision of ulcer.

not enterostomies

Ulcer treatment

bed

2 qts milk with cream or

with cereals to make sufficient calories.

small amount every 2 hrs.

If pain is relieved by rest in bed & no food. this is proof of ulcer. When pain does not disappear, suspect something else.

Ether. Oct 24

~~Hydrochlor~~ hydrid.
no coffee
Ex show it
increases HCl.
Nicotine the same
no great bread
no raw meat
all food passed through
Colander
Sugar is good by
causing stomach
to secrete much
diluting juice.
Cane sugar is good
2 teas. N.t.d.
Glucose is best

woman age d 44 -
hyperacidity, 1 year
10 cc juice in
fasting stomach

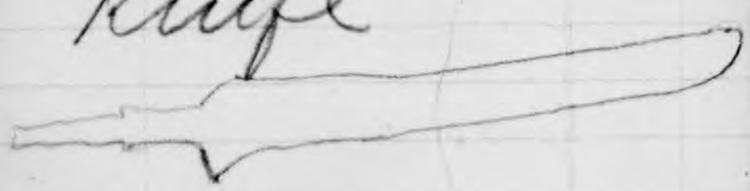
normal acidity 40-60
corrected 80 for each
cc of 1/10 normal soda sol.
in 5 cc of stom fluid.
80 very suspicious
1 ulcer, almost
certain.
100 ulcer almost
certain.
we do not cure
ulcer, we only bring
it to latent state.
It will return.
In many years maybe

Jacoby,
Inspect

Young men, normal
too often. Urine
appeared clear, boric
out with cc 8 of
3% sol boric acid,
unknown.

Bronze Age

Safety pin
Sheers
Tweezers (hair tinge)
pins
Nippers
Fish hook
of modern type
Shell make
knife



nail cleaner
shaving knife
Sugar spoon
Bone comb for
ladies back hair
& combing flax
Tattoo needle
Plaything
rattle box

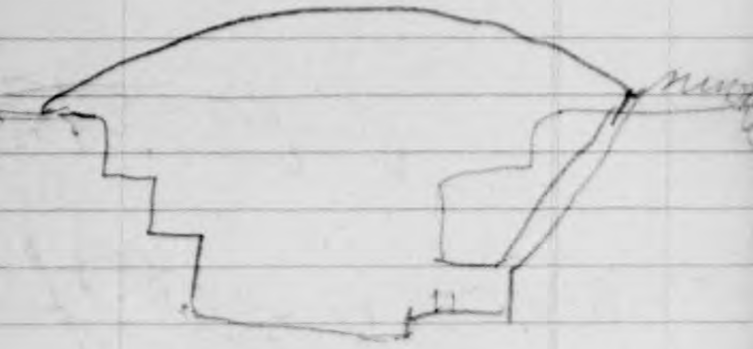
Kneading trough
Mallno elliptical
dish frame

Monge age
Tomb.

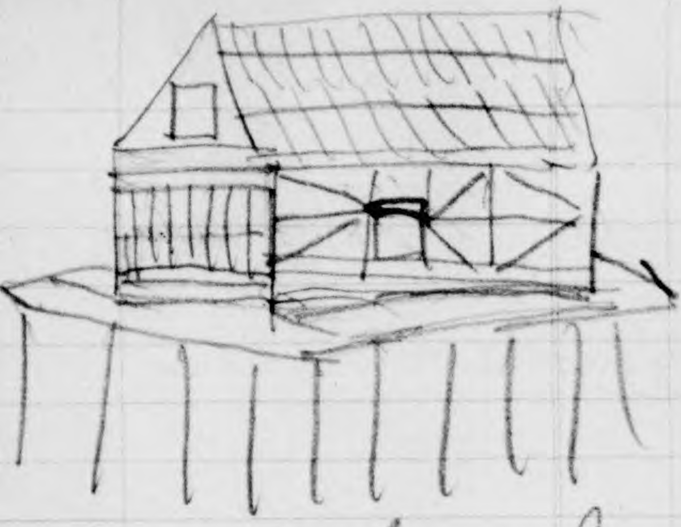
Coffin

Lohlingau
tomb

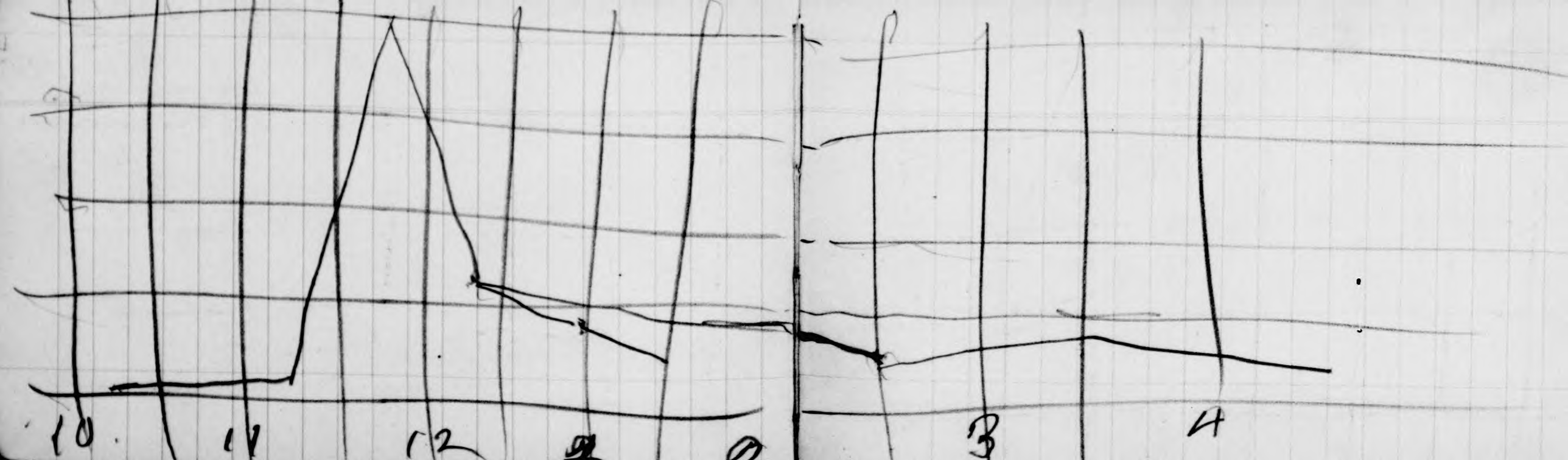
Stone age house



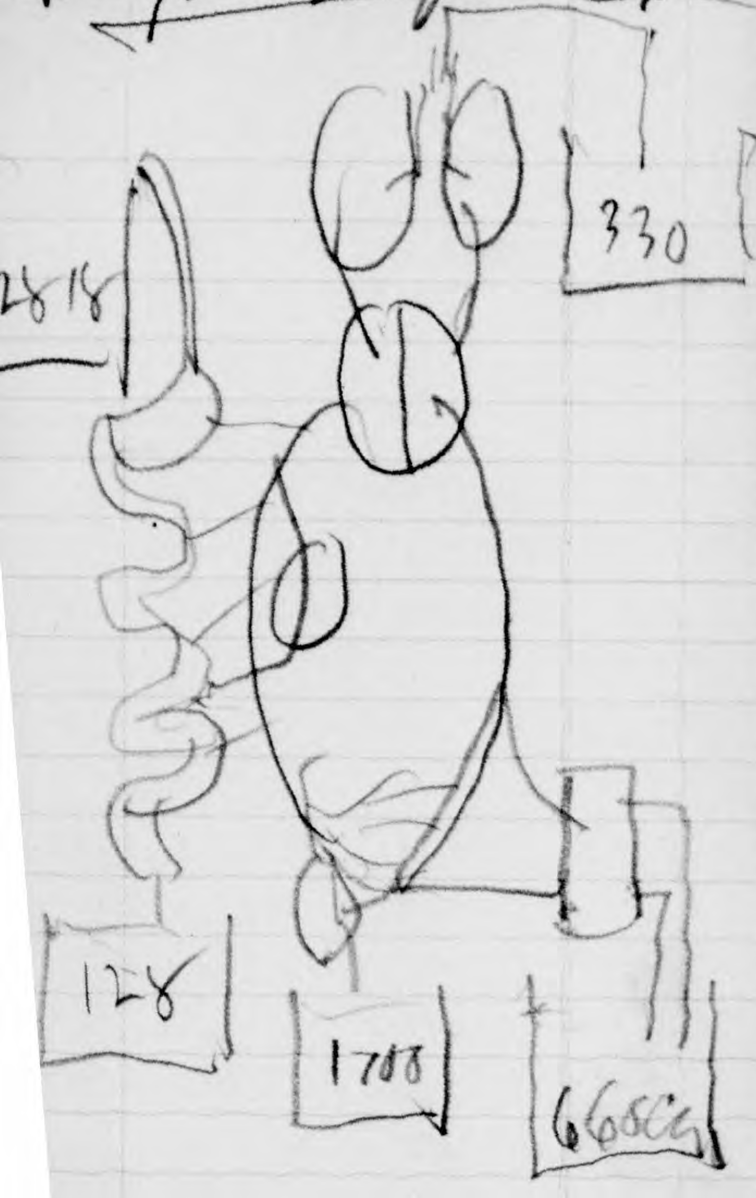
Prehistoric house with smoke flue.
2.8 M long
2.10 wide



Lake dwellers House


10
12
3
4

Phys. Graphics



Fissier finds 60% of unusual bacteria in intestine must be low proteine and veg proteine.

Lucas Lewkoslow 2/E
Pecarsa
Russ. Poland

Restaurant Veg
Montstrasse 14
Wettinerstrasse 5

C. A. Herrmann
Stuttgart
Ger
Toasted Cornflakes.

Dr. Harry Campbell
London
Humanitarian
admits

Van Somerjn
Venice

Ed. Gros
Paris
Head of American
hospital.
23 Rue du bois
de Boulogne

Kenneth Scott
London

Reinigen Urbach
& schall
Abnehmen
Gaslicht

Kellogg 8.7

$$\frac{5}{24 \times .1} = 2$$

$$\frac{5}{24 \times .2} = \frac{1}{1}$$

Dr. Fedor Haenisch
Albers-Schönberg
Institute

St. Georg. Krankenhaus
Hamburg

Dr. Emil Bang
II Clinic, Charité
Diathermia

1911

Van Noorden (Clinic
Prof Falta

Nitrogen injection of Chest

Method
See Jegie

Greatest Indicated	
used in cases of Pleurisy + tuberculosis especially cases of 2d stage	
Bad Effects	
None	

Exophthalmic Goitre

My opinion. Just studies
whole literature

Statistics of Surg very good
on other side. If doing Ex
with large thymus status lymphat
& sp. further cases must work
& cannot spend months & years
in treatment.

Early cases diet is pt. In advanced cases
diet. [illegible] time
[illegible] harmful. Stop [illegible]
give much meat & [illegible]
lost. This is [illegible] right
increases activity of thyroid
Caff. liquors act. less injury the
better. [illegible] glycerin, glycerin
mixture, peace & rest.
Sugar due to hyperthyroidism.
After x-ray sugar disappears
[illegible]
x-ray very good treatment in all
cases. Use it when [illegible] & [illegible]
quite slowly than [illegible].

almost [illegible]
of any use

Colitis

Leukemia x-ray & arsenic
good results but relapses
Hodgkins x-ray good 2d & 3d
No new light but [illegible]
Gastric Ulcer

Arteriosclerosis
Be more wary by [illegible]
angina pect. [illegible] very good

Low blood pressure.

Less [illegible] bad nails
[illegible] falling hair.

Obesity. Moccasin [illegible]
often does harm with
low diet. Use thyroid -
Dallor & [illegible] - [illegible]
& [illegible]. [illegible]

Exophthalmic Goitre

my opinion. Just studies
whole literature
Statistics of surg very good
on other side. Of dang. Es.
with large thymus status lymph.
of sp. further studies must work
& cannot spend months & years
in treatment.
Early cases diet is pt. in three cases
forced diet. or not, too far. Two times
harmful. Stop & thyroid
give much meat & sp. of
cont. This is right
increases action of thyroid
Caff. lessens act. less injest the
better. Veg. protein, glucose
maltose place & meat
in sugar due to hyperthyroidism.
After x-ray sugar disappears
wholly
x-ray very good treatment in all
cases, else ½ hr. then wait & repeat
quite strong than wait.

almost always
of any use

Colitis

Leukemia x ray & arsenic
good results but returns.
Hodgkins x-ray good 2d & 3d
No new light but frequently fors
Gastric Ulcer

Arteriosclerosis
be more wat by remedies
angina pect. sometimes very good
Lens white & bad nails
arc. falling hair.
Obesity. Moccasin
often does harm with
low diet. Use thyroid.
Dallor & puffiness. Hypnotics
& anemia. Also here.

Blood pressure.

Obesity Deficience by Lymph,
or lesser ovarian.
local Glandly. Eschyroid
Lymph liquor
very fat hearts
" " lungs
use thyroid Ex
In some cases obesity after
menopause, Ovarian
tablets.

Intestinal antiseptics

Radium D. of Gudgeon.

Hm

Secretine

Neuclein

Van Noorden's Clinic

Nov. 27. 1911

Study of Nitrogen injections has been made in Van N.'s Clinic by Jacobi. Results were good, no bad results, but not applicable to many cases. Used in pleurisy and in 2d stage of T.B.

Statistics in cases of large thymus.

Very dangerous

Exophthalmic goitre. - The statistics of surgeons good. Operation a little dangerous. Good for working people and advancing cases. Beginning cases much benefited by X-ray. Use in cases that are able to give the time. Use nothing done, then wait 2 weeks then repeat. Diet is of first importance. There is lack of nitrogen. At first it was thought necessary

to give large assortment of wheat to remove this loss. This found to be an error. The less meat the better. Patients do best getting much Carbo. Hyd in diet. When very thin & losing flesh, put to bed & try forced feeding, but carefully. Sometimes this excites the heart. Meat excites activity of thyroid. Carbo Hyd has opposite effect. Veg proteins, gluten etc. should take place of meat.

In diabetes age to hyperthyroidism, X-ray. Is to be used. Glycosuria indications. Sugar disappears after X-ray in these cases.

"Are any drugs helpful in these cases?" Almost no drugs of any use (Falls) Tried anti thyroid, gave it up.

Leukemia. From X-ray good results, for a time, often year or two, then disease returns. Then X-ray may help a second & third time. Effect finally lost. (Probable that antitoxic diet might prevent return. Fox)

Hodgkin's Disease. No new light. Sometimes F.B.

Arterio-sclerosis.

Two nature cures. It is very good. Does not cure of course. but is very good. Help much. Angina much helped usually.

Obesity.

Several kinds of cases.

1. ~~Hyp~~ Insufficient thyroid. Sluggish. pale. broad features. slow slow pulse. pallor, ~~puffiness~~ dry hair & dry skin, obscure symptoms of myxoedema, so-called adult myxoedema.

Low diet often does more harm than good. let them eat as they will.

Dried thyroid is best

2. Deficient secretion of thyroxin. Increase of local obesity, very fat thighs (in men or women) fat breasts, the humble is due to deficient secretion of hypophysis. Give dried thyroid. In women who get fat at menopause. Give dried ovaries.

Use use very few drugs.

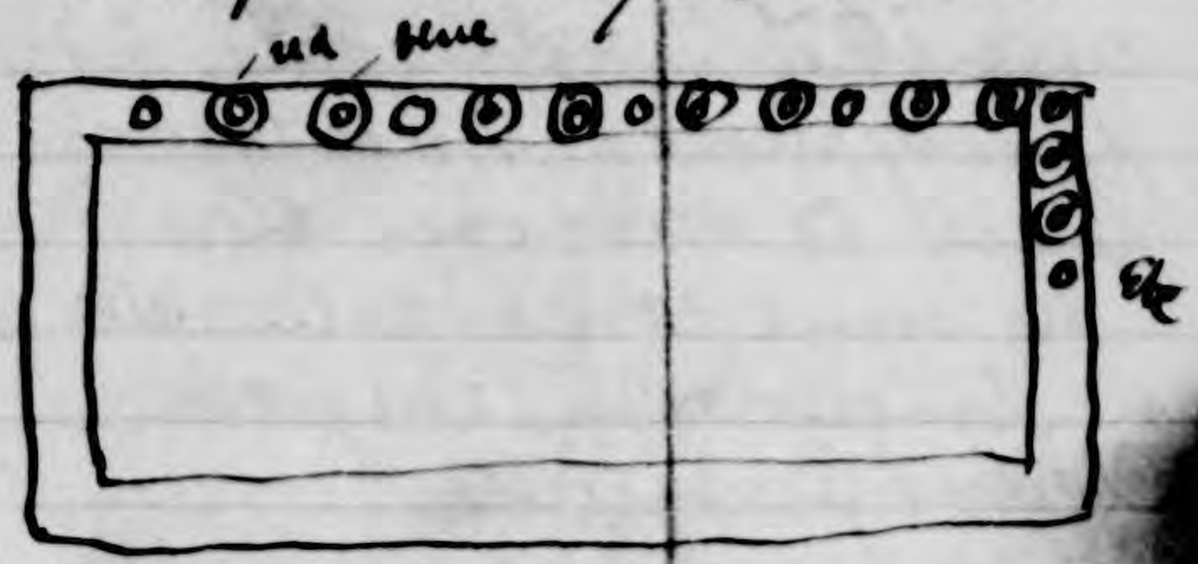
Iron sometimes, in chlorosis. Arsenic by hypodermic injection (of such preparation) lecithin, nucleïn, not.

Cottage Sanatorium
Vienna. Nov. 27.

Introduced to Mr. Teraunes, the business manager, by his brother, the business manager of the Kurhaus at Gmuenden.
(Send him Blue Book)

Pretty building, 500 ft long, accommodates 81 patients. much waste space. Treatment rooms in basement, & Platters dark and not at all elegant. Not by any means as good as Oirs. Wooden bath tubes. Crude appliances
· Electric light bath,
Wooden box vapor bath,
Wood tub & bath, very crude
4-Cell E. bath, improved
Switch board on wall.
Inhalation room. 7 cu m
(To the business manager said arranged for 3 patients, very crowded, 1 lying, 2 sitting ordinary chairs.)

Combined Electric light & water bath. A square box of plate glass, with red, blue, and ordinary incandescent lamps arranged around.



The lamps placed below water level alongside tub. Probably of most use for psychological effect.

D.M. apparatus from Wiesbaden
(We ought to have a heater for each department,
Also a few others.
O_2 & CO_2 baths.

Laboratory 2 men, one did bacit work the other the chemical. (Ignera he did most of work of both kinds. Make plate cultures of feces for cholera, dysentery, typhoid, and paratyphoid. No attention paid to anaerobes etc.
In some cases estimate Nitrogen & fat in feces. & Ex. for bile etc.

Rooms large & well furnished.
Smoking room (?) a smell of smoke. Kitchens & basements did not see them.

Fees.

Room 27 to 53 Kr a day,
House doctor 3 Kr "
Attend doctor 40 "
Emanation 6 "
E.L. water bath 6 "
O_2 & O_2 bath 4 "
Urine Ex 2 "
Feces " 3 "
Blood " 6 "
Nothing said about first examination.
Average cost, according to manager, 75 to 100 Kr a day, which is $15 to $25 a day. Pretty steep for Vienna. Supposed to be another cheap place to live.
Van Norden sends his patients to the place. The manager's brother told me Van Norden is a stockholder or partner in the business.

O. Neupert. Vienna. XIII/2
Hemoplaty. 8
Nov. 47.

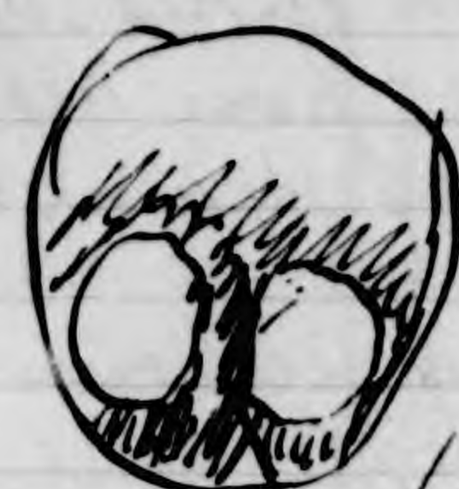
Bought 3 Kilos of Natrium Kalium Per Superoxide. Gas marking Oxygen.

Gives off pure O_2 when water is added. 1 Kilo yields 180 litres of pure O_2. Gives off O_2 slow when exposed to moist air.

Told me that the Dentwitz Radium Activäler is not patented in the U.S. but is in Austria & England. He add "Wir nehmen patent nicht Amerika." I should look the matter up in Wash. D.C.

Eiselberg's Klinik.
Nov. 28.

Eiselberg made two large openings in back of skull to relieve pressure from supposed tumor.



left fistula bridge between.
Gave ~~intro~~ subdermic salim sol.

over

Eisendberg specially invited me to come at ~~9:00~~ 7:45 to-morrow morning to see him do an operation on lung in the "high pressure room

Exploration of Kidney.
Claimant.

Pain in region r. kid. blood & in urine, from right ureter. X-ray showed nothing. no pus.
Op. made long incision, from ribs to upper third posterior lip. some adhesions about kidney. exposed it fully, examined all vessels by palpation. found nothing. then clamped vessels and opened kidney along greater curvature. splitting nearly in two. examined calyces very carefully. found nothing. closed up with 8 or 10 silk ligatures deep in kidney substance.

Eiselbergs Klinik

Nov. 27.

Gallbladder case. Man much jaundiced.

Nearly adherens, allted off. Tr

Made long incision prolonged well up so as to expose as much liver as possible. This made possible to roll the liver upward and expose gall ducts.

Fixed gall bladder from pan above & dived it to fill up gall ducts. Stone apparently in common duct lower ex filled. Put drain in hepatic duct, a rubber catheter.

Zorget.

Nov. 27

Found him at his home IX Schlickplatz. N. H. very amiable and agreeable indeed. Invited me to see him work at his hospital on Tuesday, Thursday & Saturday.

Rudolf Innerhaus.

XIX Billrothstrasse 78

(Founded by Billroth)

Nov. 28. Found a m[illegible] little hospital.

Showed me use of his vectoroscope. It is certainly very good, also the little battery, which costs only 4 Kr. This battery is made by Leiter and by Müller of Chicago.

(Get address of ~~the~~ Leiter)

Soper prefers dorsal horizontal. Has cushions to bolster patient into necessary position.

When in knee chest position the bowel balloons out so that walls are tense. On back, as the bulb is worked the influence of the air on the bowel wall may be seen. This is very useful in determining the presence of thickenings, etc.

Showed me his instruments, the which I have purchase. Will use for cleansing esophageal cotton carrier I think. Possibly forceps & gauze may be better

Sure.

Proposed that Pasteur (Rothschild Hospital) wrapped his finger with gauze & saturated with glycerine before examining a rectum.

Boiler told me that rubber catheters & all rubber should be kept all the time in glycerine. Has kept rubber good & in perfect condition for 3 years by this means.

Dr. Kerr said Rutherford's book is best on Rectum.

High Blood Pressure

High. 2 kinds
1. Sclerosis of small vessels
2. Interstitial Nephritis

Int. Neph.
Often sclerosis of arterioles simultaneously. Often high pressure due to vessel tension.
Though to be due to adrenaline, not proved, but probable.
Excessive secretion of adrenaline. After a time small vessels become sclerotic of kidneys.

Ex. Eye
Riva Rocci 100-120
Gaertner 80-100

In sclerosis of small vessels high pressure is always present

In marked sclerosis of the large vessels (aorta & radial arteries as felt under finger) pressure not so high only in aorta, iliac arteries, vessels and other peripheral arteries

In all cases of sclerosis of small vessels, hypertrophy of abdom. vessels, nodular liver, hyperemia of intestines, often in brain.
Stasis of blood, necessary result of accumulation of blood in veins & especially portal veins.
Splanchnic vessels alone are sclerotic, not necessarily high blood pressure, the regulating [illegible] of splanchnics is lost.
Note + adds much more to heart, ~~heart~~ pulse very fluctuating (labile)

Treatment.

1/ One method we use very often with good effect. We often decrease the amt. of fluid. Give only 1200, sometimes only 800, which we call thirst cure. Suppressive symp. & blood pressure improved. In 10-12 cases treatment continued for 2-3.

Carlsbad cure not good in these cases.

Emanation. Have seen very good effects. Seen in 2 cases enema precious results. Some fall of blood pressure. Found seen cases of fall but not usual.

High Blood Pressure with threatened Uremia.

very high pressure app. when uremia threatens. Bleed patient. Take 300 to 500 cc of blood.

Dietetic treatment very important.

In acute nephritis no condiments, no boullon only milk & cereal no alcohol, no salt no tobacco or tea or coffee.

In chronic nephr. with albumen, give a diet "as harmless as possible". Cut fat which are burned to CO_2 in body. Little protein as possible. No meat when patient is satisfied.

Q. "Is no meat at all better if patient is satisfied?" "Of course" - Falta

Treatment.

One method we use very often & with very good effect. We often decrease the amt. of fluid. Give only 1200, sometimes only 800, which we call thirst cure. Subjective symp. & blood pressure improved. In 10-12 cases treatment continued for 2-3.

Carlsbad gave not good in these cases.

Emanation. Have seen very good effects. Seen in 2 cases angina pectoris with fall of blood pressure. Found seen cases of fall but not usual.

High Blood Pressure with threatened Uremia.

very high pressure esp. when threatening. Bleed patient. Take 300 to 500 cc of blood.

Dietetic treatment very important.

In acute nephritis no condiments, no bouillon only milk & cereal no alcohol, no salt no tobacco or tea or coffee.

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Treatment.

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Carlsbad gave not good in these cases.

Emanation. Have seen very good effects. Seen in 2 cases enema precedes uremic fit. Some fall of blood pressure. Found seen cases of fall but not usual.

Dr. "[illegible]" [illegible]

high [illegible] very [illegible] app. [illegible] 30

Diet important

In [illegible] and [illegible] only no [illegible] no [illegible] coffee

1911

[illegible] uremia.

[illegible] treat. Take [illegible] of blood.

[illegible] treatment very

[illegible] no [illegible] bouillon [illegible] cereal [illegible] no [illegible] tea or

In chronic nephr. with albumen, give "diet as harmless as possible". Cut fat which are burned to CO_2 in body. Little protein as possible. No meat when patient is satisfied.

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Re Bath 50,000 to 100,000

High frequency
ran good results

when pressure very
high 250. use
laxatives, avoid
salines, which tax
the kidneys.
very good in uremia
use ~~[illegible]~~ large
~~[illegible]~~ of infusions
treating ~~[illegible]~~ every 2-3 hrs
Well good effect
obtained

In acute uremia
& beginning food
which will tax
the kidneys especially

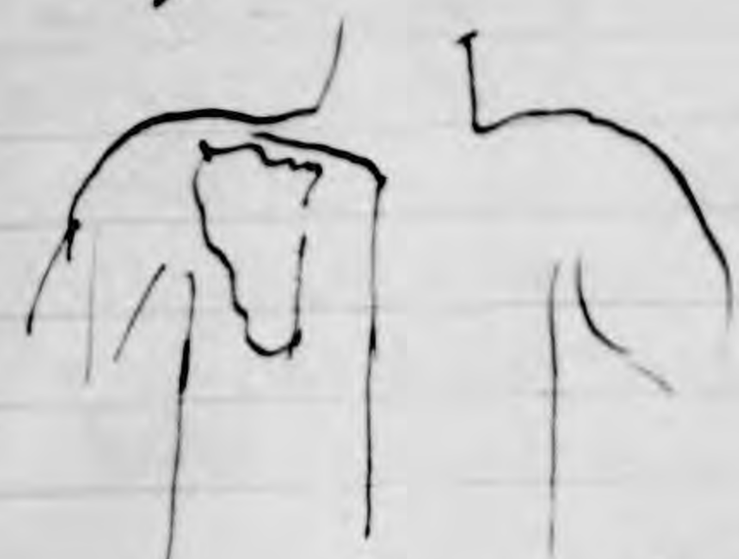
fruit juice, coal
fresh, 2 bottles
a day, very good
indeed, malt sugar
good, cane sugar
irritating.

Radium Bath
at Jastrem they give in
200 litres of water 30,000
we use often 50,000 to 100,000
often good results in
high pressure, but ema-
ciation is better.

Radium
We make much
use of Zink preps
with good effects.
to prepare for emanation
begin 7.500 M.E.
a day, after two weeks, we
give emanations.
In acute rheumatism
begin at once with
30-40 M.E. may increase
to 100 M.E. per litre.

High Frequency
Good for case of high
blood pressure. Have seen
good results in several
case. ~~especially in cases~~
Not permanently curative
of course.

Eiselberg's Clinic
Nov. 29. High Pressure.
Operation on lung for
unresolved Pneumonia and
abscess as shown by x-ray.
Removed 2-3 inches of fifth
rib posterior axis. Long
incision near middle line, and
short one scapula, so that
scapula could be lifted.



By means of a pressure blower,
air was forced into lungs
through a mask. Chloroform
dropped in to the ~~nose~~ tube.
Can arrange similar with
fan we are buying from
Reinigan Gebhart & Shaw.

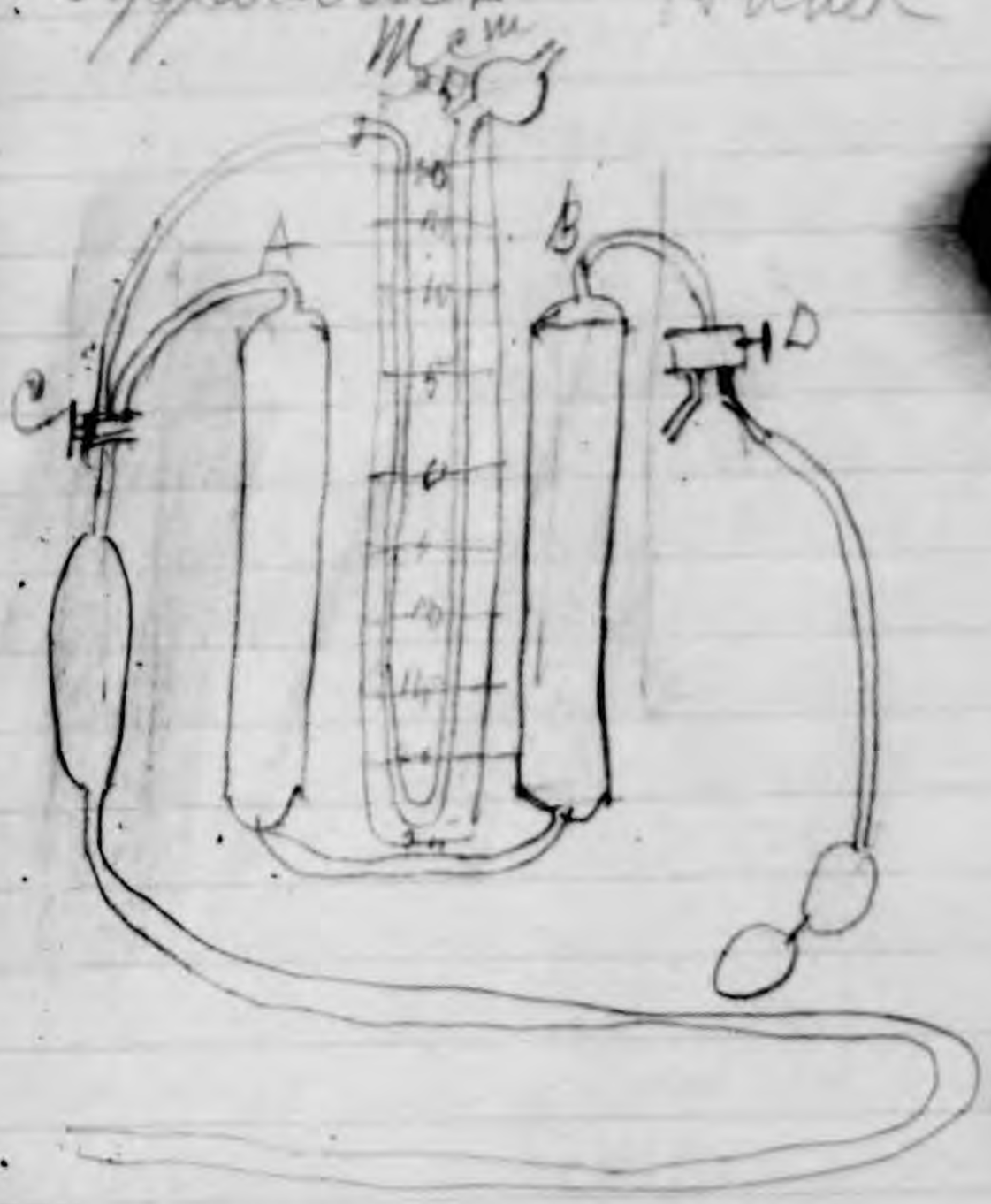
Patient nearly collapsed under anesthetic. Gave O2 did not open lung. Put in large tubes in wound. ~~tube~~ Think will give chance for aseptic healing of wound. Will open lung later.

Was invited by Eiselberg to see this op. at 7:45 a.m. He noticed me and took me to see new apparatus for nitrogen inflating of chest. The following will answer as well:

Van Hoorden Clinic
Nov. 30.

Apparatus of Dr. of Davos
Is in use in Davos.
Here is used with good results
in pleurisy. Fluid let out
and nitrogen gas let in

Apparatus Hack



the cylinder A is filled with O_2 from cylinder.

A short needle just

(Thick chest longer needle.)

long enough to go through skin & muscle, no long enough to pierce pleura is introduced, then a long trocar (blunt) is passed into chest. fluid let out, and stop cock C is turned so as to connect chest with manometer M. If the manometer fluctuates, this indicates that the tube is in the chest cavity. Oxygen is introduced first to avoid danger of gas embolism. After N is introduced. Can be see cases treated to-morrow

Case 1.
Van Norden Clinic
Jagie's Assist

Gave man 300 cc of Nitrogen. Man comes for treatment every 10-14 days. Give 300 cc.

O_2 is used first only to make sure that the needle is in the cavity. Only a little ~~at first~~ O_2 is needed for this purpose 50-100. When O_2 has been introduced, turn cock so as to connect lung cavity to manometer, and see if the water column moves with negative pressure. If in vein will not move. Then inject Nitrogen

If removed 100 cc of fluid, inject 700 cc of Nitrogen. Continues

Result Results
Treatment for months &
patient does well. &
make injection always
in axillary line.

Pleurisy

B.

Adhesions.

Unresolved Pneumonia

Wertheims Clinic.
Weibel

Frauen Klinik. 12T Exam.
Non Surgical treatment.

Queries

Local applications?

Vag. Catarrh
1% protargol in vaseline
10% ichthyol with pledgets

Gonorrhoea acute
Only rest in bed & vaginaleis
with permang (weak), later
silver sol protargol or colargol 1%
in water & vaseline

Vag. Pregnancy

Pledgets: incl. menses
cases 1% lauric
10% ichthyol

Pessaries.

Abd. bandages.

Vaginal douches
Yeast etc. 120°F
10 litres. Hot as can
bear.

Electricity, uses alone
and with massage.

Pelv. Mass. - Often uses; in
connection with hot air and
other treatment.

Prolapse
Relation to Diseases

Endometritis & Erosions
Hemorrhagic - Hysterine or slippery elm
5 tablets Veleman daily
Ext Ergotin 1 gm - 2 gm daily
Hydrastis
No effect Ergotin in
Chronic Erg & Glycerol

use glycerin between times.
then try roentgen rays.

℞ aero
5 cc antitoxin serum.
repeat later, repeat
Good for bad pain in young girls
curetting does no good
If necessary combine with
warm climate by
sea good in many

Retained placenta.
no symp. wait a
day or two.

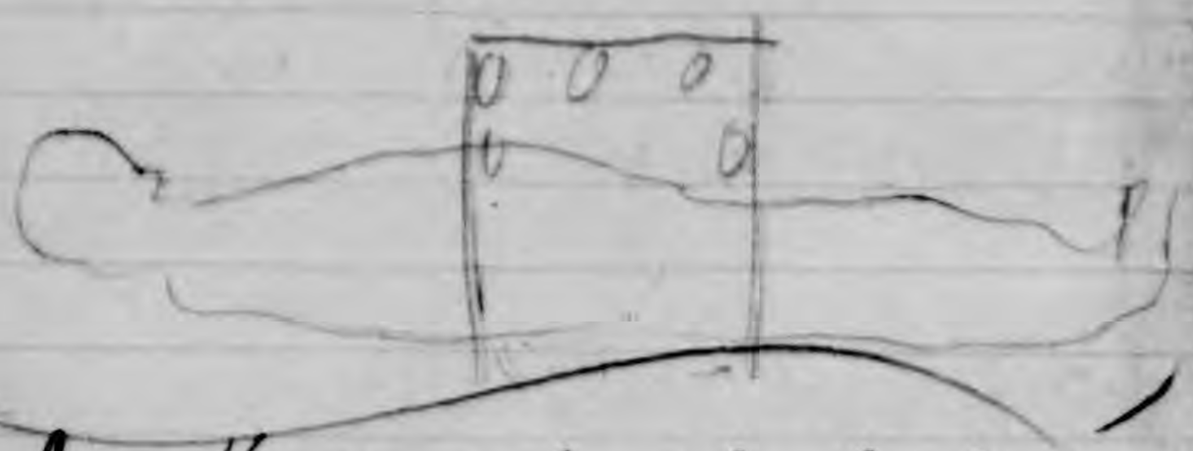
Get Copy of record
book.

For chronic inf. of
ovaries & tubes & old
exudates. What are
treatment the best
of all.
Temp. 120° C
Dry air cette Ca Cl
Time 20 ½ 120° C End

---

fixed retroversion & exu-
dates. Colpaurynter
filled with Mercury
& placed in Trendelen-
burg position 15-20°. with
shot bags on abdomen
Vag fill warm sac
with shot, then add
mercury & tie end.

(Make special E. l. aff. for these cases)



In Hemorrhagic Endometritis try all internal methods first before surgery.

1. Hydrastis
2. Ergotin 1-2 gms day.
3. Ergotin Clysma.

Ex Ergot 5
Glycerine 10 gms
Water 35 "
ac Salicylic 1/10 "

Use 1 teas to 2 tablespoonfuls of water by Enema once a day. Use a week, then skip a week

If Antistreptococcic serum. 5 cc. not more, repeat in a few days. Often stops bleeding at once.

If X-ray. Use 1 hour once in 2 wks (just begun to use)

mentioned case of girl Hemorrhage every 10 days from 12-18. Tried all pharm. treatment result. Removed uterus & found v. large, fibroids hem. due in such cases to disease ovs. Examination usually shows v. large. Would now recommend X-ray, never tried long cold baths.

Dysmenorrhoea. Dilate, curette, if necessary. Slit uterus on each side & join the edges of mucous memb.

Cervi. Calculi. If Ines.

New tables.

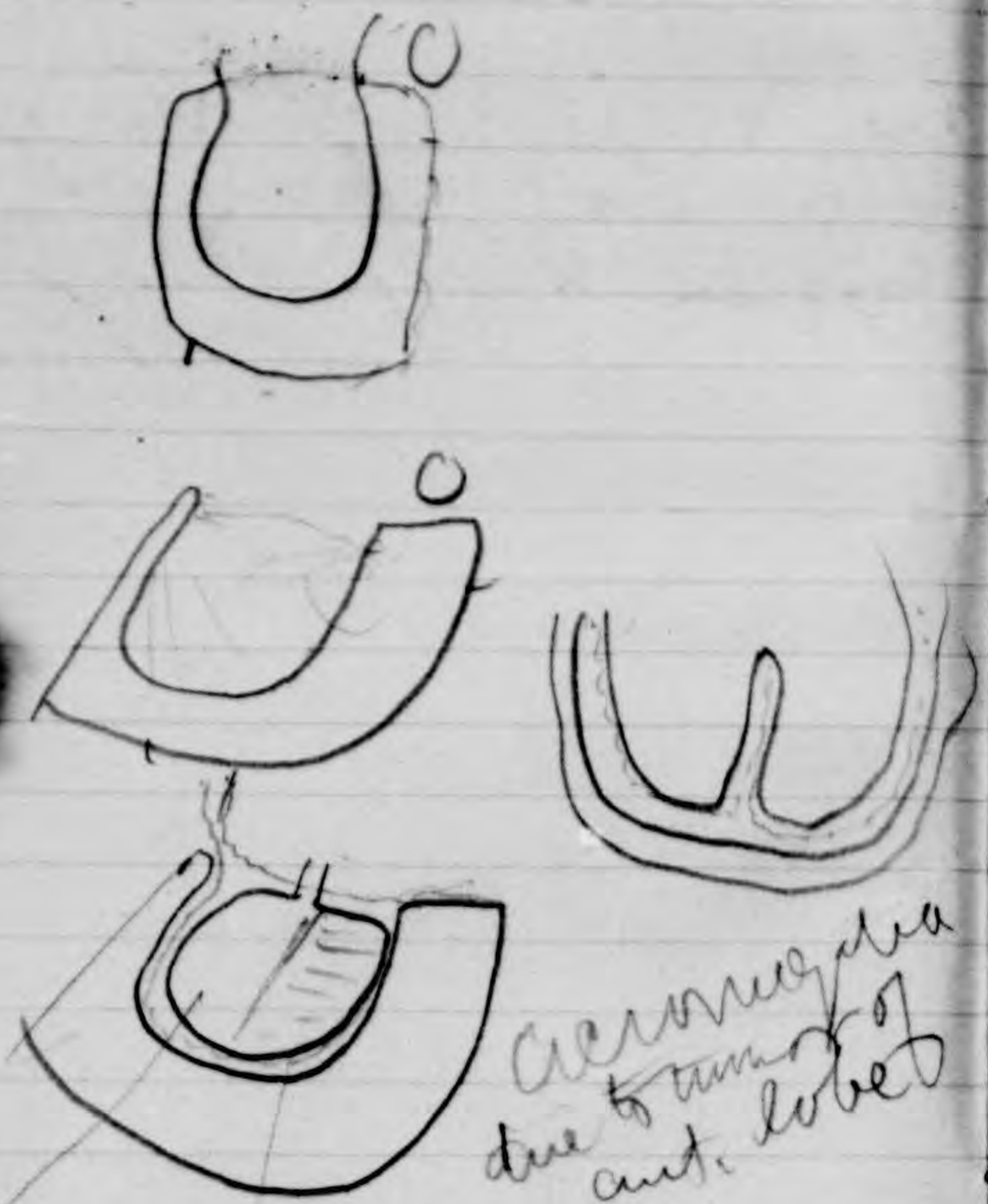
Have made special tables for ~~Colpo~~ colporrhynteur.
Use air compression instead of shot bags.

Get colporrhynteurs here in Wien

See about Bier's treatment.

Combine cupping with E. Le. as well as with Electricity.

Dr Hirsch



only carcinoma or adenoma of ant. lobe cause acromegalia

makes opinion & letting up when seat room.

creates 5 - 7 days

& blindness

adipositas is due to tumor of either lobe which causes trouble by pressure on 3rd vent.

Dr

Adipositus

Neck, spine, ~~not~~ especially hips, abdomen

Dry hair, hair falls out.

Birch Rose

dme 18 - 2 deaths

1 pneumonia

1 by hernia into 3rd back

Blanchet's Method

~~Bilateral~~ incision

Removes all vomer + turbinates of both sides

Chisels nasal bones of both sides.

Chiari's Method

Pituline, Extract of
Pituitary body recom-
mend & used in ~~Vienna~~
Vienna for stopping
uterine hemorrhage
and for starting pains
in uterus in child-
birth. Get some
also get some bilen
in Heidelberg,

Eiselberg Nov. 28.

Brain tumble, supposed tumor

~~Neuheit~~

Deutsche Wien I

Helfersdorferstrasse

Radium Therapie.

Dr. Hirsch

98 Blüchersstrasse

V 3

Dr. Hirsch pituitary gland

Wälzingerstrasse

No. 3.

II Stock.

Radium

write Dr. S. Lauberman

Carlottenburg

Berlin

Howard Pirie

St Bartholomews Lond

Synchronous Stereoscopic screen

Radium Hilfsgesellschaft

Carlottenburg

Berlin

Theme of Sermon.

Edler

Wordagen

1907

Mem. Finsen's Light Institute

1. Arc light baths.

(2) Inclined couches. 100 ampere

(3) Fifty volts.

(4) Improved by large lenses, making rays parallel if possible

5. Used reflectors.

(7) Improved single model, 600 Kronens.

(8) Small local model with iron 125 Kronen.

(9) No blue lens used with arc light.

(10) One arc light bath, burns skin of some patients.

(12) Finsen states treatment cures acne, red nevus, rosacea

(13) hairs, epithelioma, as well as lupus.

(13) Suggestions - - - Have

arc electric lights in out door gym.

(14) Arrange baths around light, radiating heat.

Friedman

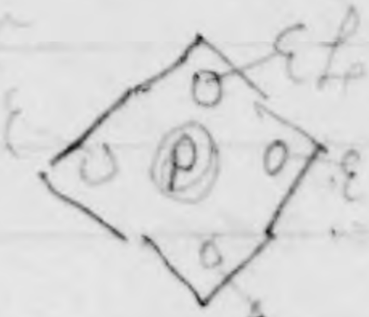
leaning machine

Sanitarium

Sloyd for patients

Electric light baths for maintaining prol. fac + incandescent.

adjustable up & down



Upright support with heavy base arranged so that 2 or more can be used in giving a bath.

Prof. Dr. A. Hoffa
am Cirkus 9.
Berlin

Dr. Willy Müller
Gotha

Dr. M. Maurer
Malstatt-Burbach
bei Saarbrücken

Dr. R. Nöuchen, Düsseldorf

Verworfen
Dr. Lehmann

Vienna

American Carbon

I Stock in Eisenplatz

Vienna

dical Book Store

stock on obstetrics.

ber shop. Set douch

zles, app. for acc. douche

bly sitz baths. Douche

pparatus

Light Supply Co.

Establishment including

e light for skin treatment.

. for joints + local

pliances.

Medical Movement

apparatus.

netic Vibratory treatment

. app for high tension

current.

iternity (outdoor gym)

ngo baths.

Vienna

American Car

I Stock - in - Eisen

Vienna

Medical Book Store
stock on obstetrics.
Plumber shop. Get douch
nozzles, app. for acc. douche
possibly sitz baths. Douche
apparatus.
Elec. Light Supply Co.
Establishment including
arc light for skin treatment.
app. for joints + local
appliances.
Herz Swedish Movement
apparatus.
Magnetic Vibratory treatment.
Elec. app for high tension
current.
Hutternitz (outdoor gym)
Fango baths.

Dr. Beer
Maximilian Strasse
Magnetismus

Janoga Heilanstalt
Hagenbergasse

Mr Safar VIII
Schlosselgasse

Urban & Schwarzenberg
I Maximilianstr 4.

Vienna
Electric & E. L. Affinity
Reinigen, Lebert & Schall
Graellig asse. 2

Bernd

Institut für
electromagnetische
Therapie

Berlin W. (50)
Augsburgerstrasse 62

(Prof. Erwalt
Prof. Eulenburg

Dr. Kaiser.
Wellringerstrasse
No 24

Electro Therapy
D'Arsonval comfant

J. H. Kellogg
~~Battle Creek~~
Chicago Ill

look at Lehnpanns Wohnungsanzeiger
I work for
Uebersetzungs Bureau
or literarisches Bureau.

Nordbahn
Schönbrunn change
the tram for
Graefenberg

Dozent Dr.
Kolisch
Karlsbad
Krank Papier
m. Diabetes

Ewald's Lab. 12 yrs Ewalds assist

Prof. L. Kuttner.

1. Emp. stain.
Nor. little mucus, little Hcl. sec.
Not much, " Catarrh
much mucus + Hcl.
100 ccm = Gastromucorrhoea
5 cc is pathological.
to measure to Ex dif times.
The 1st ex. of a patient,
undimitation by the tube.
Mucus from stomach
always opaque
when opaque ref.
may be alternately
~~mucus~~
with test meal
always mixed
with food.

When food from
previous day, there
is disorder of motility
~~etc~~ + of 2d degree.

~~When food leaves~~
When test B leaves
in 2-3 hrs. or
test D. in 8-10 hrs.
this is 1st degr.
This is stasis,
motility may be good,
but stasis due to
fluoris.

Bile in empty stom-
ach cannot digest
or use Ex. often
accurs. Not significant
when always bile
stenosis of duodenum
suspect

Many times stool
green, may be due
to bile, no always
sometimes due to
infusoria & ~~then~~ Algae,
comes in with vege-
tables. (See last
weeks copy. Contact
blatt for Internal Med.)
~~article by~~ "Rostock"

Make Ex before
breakfast.
~~Caution to~~
Nothing after 8 P.M.,
No food or drink.

Many take test break.
fast immediately
after ex
3 specimens { describe fermentation 3
stasis - 2

Lent break.
2 beds, no butter
2 cups tea no milk.
meals. 70 gms.
teas 300 gms.
(ordinary bread)
always use small
type, open end
pt ex patient lies
on 2 of a 1/2 flexed
by raising head &
shoulders
uses aspirator like a
3 ~~specimens~~.
Kaltzer bag, a little
different.
Pneumo more dangerous than aspiration in hemorrhage.

In normal cases after
1 hr. first
50-100 cc fluid,
most cases, a ~~little~~ color
of light urine
If hep. test meal should
be passed out of
stom.
If large part remains
~~after~~ at end of ~~two~~
2 hrs. diminished motility.
If at end of hour 200 to
300 cc. probable
trouble of motility
In such cases suspect
~~probable~~ hour to
motility, give test
left dinner, larger
amount.

Test dinner
(Leube) ~~Riegel~~

150 gm. Bouillon
150 " beefsteak
35 gm. white bread (1)
50 " potatoes purée"

Riegel prefers test dinner in all cases.
Says test breakfast is too little.
Ewald uses only for motility.

If great dilat of 7 hrs food is found to stay then d. calling. trouble of motility.
See if it 1st or 2d degree
Necessary to examine patient with abnormal appetite,
If food in empty stom. then 2d degree

If food after dinner, not before breakfast, only 1st degree,
If motility is slow, but food goes out, most cases by 2d degree
Operation necessary.

Examining of test breakfasts

1st Reaching Citrus, normal acid.

2d ~~Total~~ acidity

filter. (Some do not but is better).

Take 10 cc.

use decinormal,

organic acid always pathologic, that is, with the test he uses. 4 minute quantity not significant

work Hcl at end of 40 min.

During 1st 10 min. only Conc. Hcl,

later Hcl free, more than enough to combine.

See if A. is due to A. salts by Hcl. use Congo paper

Congo: free Hcl. ~~blue~~

Acid salts, red.

all fr acids.

Greenberg.—

Rp. Phloroglucin 2,0

Van Ellen 1,0

Alkohol (60%) 30,0

use in porcelain spoon, 2 drops each

heat over ~~alco~~ flame, blow on it, red color Hcl free

Dr Kuttner

Augusta Hospital
Wife, no school, no street

David
4 Rauchstrasse

Frieda Schlesinger
age 20 F
single
house

James Smith

Where excess means,
free HCl.
Very concentrated
square needed
Veiner Range
reaction, only
with great Natrio.

Concentration Estimation
of HCl;
most simple & practical
is Dimethyl-amido-
azobenzol
0,5% alkoholic sol
as
an indicator.
When Sol still
color ~~direct~~
bacemus, light orange
pure color.

This neutralizes the free HCl it is ready for titr.

If free HCl present, fully examine for quant. of same.

If no free. ~~Ex~~ is not present, then Ex. for Combined.

Best method for Cl Ex is that of Sjöquist as follows:

Add to juice $BaCO_3$

$2HCl + BaCO_3 = BaCl_2 + H_2O + CO_2$

Then Ex for BaCl. No presence proves acid HCl. If no free acid, then the Cl must come from Combined Chlorine.

Take 10 cc of juice in platinum crucible add a little $BaCO_3$, 2-3 grams (not weighed) stir with glass rod. Heat in flame until the $BaCO_3$ is ~~dissolved~~ (boiled well. Now do ~~not~~ a water bath is better. Solution must ~~become~~ be evaporated ~~clear of sediment~~ be evaporated to dryness, then calcine (BLACK) ~~then~~ add

water and dissolve. Rub up with glass tube. Heat, as Hcl dissolves, insert in hot water. Then filter. Add by washing the crucible till obtain 50 cc.

Add $NaCO_3$. If Hcl is present $NaCl$ will be precipitated.

If Hcl free is absent Hcl combined is present use conical glass so as to

For quantitive estimation use the method of Leo & but this is not necessary for diagnosis.

In normal Cases
$YA = HO - CO$
If reaction is neutral, we say not acid.

O acid = Anacid
$+HO -$ Subacid
$' CO +$ Hyperacid

After test dinner
Recently fractionally. 80 – 110

C. { A.S.
A. Le.
A - Le.

Hcl 2 O – 4 O = Euchlo. Hydric acid.
Hcl A.O = Achlorhydric.
Hypo-Chlorhydric $-2O-$

after ext dinner
normal Hb 40-60
total A 80-110.

Cont of Hb depends on
Blood
Nerves
Skin glands
Changes in Hb in
diseases of blood
If ~~[illegible]~~ the blood and
nerves are normal,
then changes must
be due to disease of
glands of mucus.

Achlorhydria.
Gastritis extreme
atrophied
cancer
Pyloroctomy dis
In same cases
at beginning
anemia chlorosis, fever.
tuberculosis. etc
Hyperchlor. in
Nervous diseases
& ulcerations,

In nervous dis. may find
all forms of alteration of
Hcl.
achlor & Hypo in de-
pression,
Hyper in irritation of

Organic Acids

Old theory of 3 stages
1 Lactic acid
2 Lactic + Alk
3 Alk only.

We now know that lactic acid is not normally present unless introduced in food, milk, cheese or wine. If present after last breakfast, it is pathological.

Exam for Ac Lactic

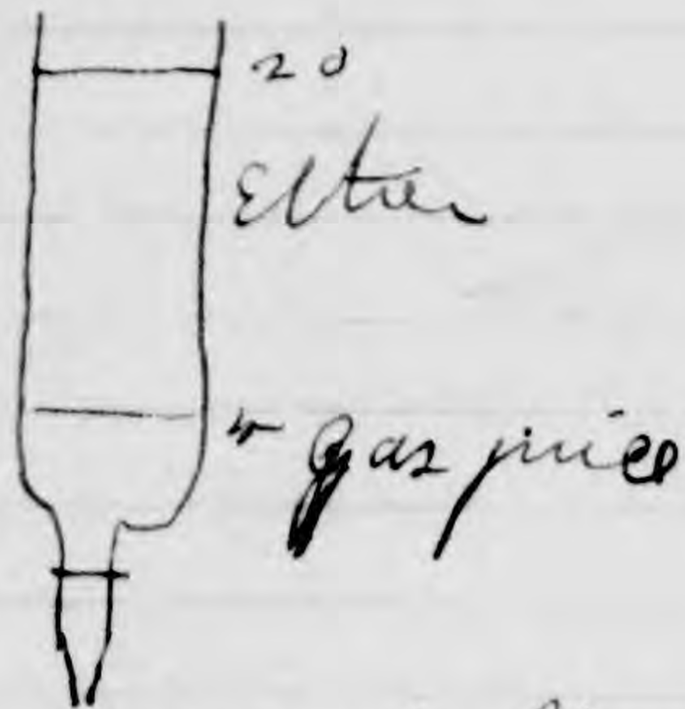
Uffelman Reaction.
Ferric chloride sol.
10 % sol.
Add water till the color is a little green. Show color divide in 2 tubes. Put drop of lactic acid in one. Notice gives a greenish.
If darling with better add 1-10 Carbolic sol in water make purple. Ac lactic destroys the purple color. Luttner prefers the original without Carbolic

Many claim Uffelman not reliable; the green color induced by other morphines alcohol, ~~etc~~ mg an, peptones, etc, acids. oxalic etc. Were not present in sufficient to make trouble.

Reaction is of no account unless very strong. When green color not strong enough to see no acct.

Modification of Uffelman!

When reaction is not clear, green not quite certain.



5 cc of fluid & 15 of Ether. Mix & shake very well (must mix very strong) open tube & let all but 5 cc run out at bottom. 5 cc Ether left. Now add 1.5 cc of water & 2 drops of 10% Sesquioxide iron. Mix. Green color appears if Phenacetin is present

Acelac is very important for diagnosis. Dr Ross thought specific sign of cancer, not true, Ross no given up.

Conditions for formation of acelac.

1. Apep or hypo. no acelac with free HCl. (never)
2. Sinking motility, deficient. Acidlac bacillus always in mouth + intestines. Cannot grow in stm only when stm motility lessened. Acelac not always present in impaired motility.
3. Least or lessened pepsin (leab ferment not so important). Some think it necessary the skin of Cm HCl as well. Should not cause significance of acelac is, that all above conditions exist. There is generally cancer, also may be always suspect cancer.

May be stenosis of pylorus. peritonitis, intestinal obstruction, great dilitation from any cause.

These conditions always present in cancer.

butyric acid seldom
only when butter rancid
generally swellings
caused by Stasis.
acetic acid ditto
formic " very rare "
very strong smell.

Exam for Ferments.
Pepsin & Lab.
Method of Mett is
best for Pepsin

Tube 1 ft long 2 mm diam
Fill with Egg albumen,
~~blow out~~ put the tube in boiling
water till egg is coag. & add
10 cc juice, with 2 pieces
of ~~gut albumen~~ tubing 20 mm long
Keep 24 hrs. temp. 32-37 R
(above normal)

after 24 hrs measure
amount of digestion.
In normal 4.4 m.m.
Less hypopepsia.
more hyperpepsia

When HCl. free is absent
add HCl to the amount
of 30 Chlorhydric.
(1 de 1/10 decinormal sol)

In hyper. make 2 test,
(1) juice only.
(2) juice reduced to 30

Moraczewski pepsin diminishes
only in organic, not in
nervous. Kuttner & Ewald
Ultimo not distinction.

Test for Leabs

16 cc milk Jenal
2-3 drops juice
Put in incubator at
Body temp 37°C.
In ½ hour - 20 min
Coagulated. by rennet
Casein.

Denaturature
add water. & juice
Egna 100
juice 1
add two drops, get
coagulation in normal
cases. This ex. seldom
necessary.
In children HCl
always hypo. no
free HCl except

in gastric dilitation
had same in both
Children & adults

Physical Methods

Always ex the size of stom.
We make it with percussion for both small & large curvature.
Often def. to find, because the colon is next under & covers over. When diff. by percussion, use insufflation. Put in tube & pump in air.
Many prefer $NaHCO_3$ & tartaric. This is not agreeable to patients. Often spasm of pylorus & cardia. Patient dyspnea & must put in tube to remove gas.

If this method used, not too much. Small tsp of $NaHCO_3$, ~~bottle~~ in small cup of water, after a ~~bottle~~ tsp tartaric. After eating out test meal, pump in air & ex. stom. Often even stom hard if muscles strong or contracted, or when pylorus is insufficient. Seldom. By pumping in air quickly pylorus contracts.
Many use gastrodiaphane the same & modification but we seldom use it in tumor, & then to differentiate from tumor of liver, gallbladder, etc.

Lincks gastrocele not used, not approved by Gould. "Too dangerous" causes blood.
Suggestion for nervous cases.

Greater curvature in man comes to umbilicus when distended, and to 5th costal space in mammary line.
In child ~~small~~ line is above umbilicus.
Enlargement, two cases,
1. Megalogastric large, normal motility
2 dilatation. large & motility lessened to second degree.

In practice, develops often suppose dil. when the stomach is large only.
In both cases, the large curvature is lower, may be low as the pubis.

Gastroptosis.
Both small & large curvatures are lower than normal
May have gastroptosis & dilatation. Must determine ~~the~~ which is most by condition of motility.
They have disturbed motility in small stomachs & ~~bad~~ good motility in big stomach
Motility is the chief matter

atony, loss of tone, but motility forbest breakfast being emptied from stomach in 2 hrs. (Test by passing tube and washing if no prodenness without) motility generally weakened. as shown by food always passes out in night. never food left over

always bigger with food or fluid. but returns to normal size when emptied. ~~It is large~~

self between dilatation is that in dil. stomach large when empty in atony. not.

Atony goes with general loss of tone, often associated with gastroptosis. Atony is shown by dilatation after 1 glass of water, or succussion in emptying after 1 glass is loss of atony & pathological must be then if there is also dilatation.

Kuhn July 31.

In hypersecretion of gastric secretion, pancreatic hypersecretion, all the same always a little starch left when in morning

Test for mucus. Urine from one glass bottle

Dif. diag. Hyper & Ulcer

Hypersecretion

May be independent or sympathetic

Generally consequence of ulceration, or dilitation

When ulceration, hyperacidity usually found, this often relieve hypersecretion

In ulceration food adheres & irritates the glands, thus increases ulceration.

Gil-Stairs, - irritation thus hypersecretion,

Hypersecretion may cause ulcer & dil. by hyperHCl which causes ulcer

Hypersecretion may be caused by ulceration.

1. Delay of fluid in stomach detains ingesta

2. HCl prevents digestion of starch ferments, yeast causes dilitation, to accumulation of secretion & ulceration

3. Pasm of pylorus causes by excess of HCl secretion accumulation & causes dilitation

Hard to determine which is 1st dil. or Hyper secretion.

To determine, use test supper, and again in morning. Use test breakfast & Pill. or Bread & bread.

~~to~~ If fluid in empty stom., then known it is hypersecretion.

Many cases in which hypersecretion disease of itself. — a nervous disease often in young men, especially smokers, & who are neurasthenic.

Often atony, HCl + & Hyper secretion.

Best treatment for these case of Hypersecretion, is rest in bed no food by stomach for 3 days. If relat feeding only. If no food no secretion. Wash stomach every morning. Rectal feeding.

200 cc. milk, 2 eggs, Salt 4 gms. 8-10. ~~starch~~ gms of ~~starch~~, flour, cook & cool, then mix with milk to prevent hard curd. Give every 3 hrs. temp 30°K-37°C body temp. Enema in the morning, then 1st Nutritive enema, 8 — 11 — 3 P.M. nothing after 3-4 P.M.

Give enema very slowly with stimulant after 3 days. Give milk.

Rectal ~~feed~~ feeding never not always possible, patients must work. Then wash stomach in morning. If this is not possible, give 1/2 lt water, with 15-30 gms of glucose, but not give sugar in diabetes not starvs.

Some ex. pepsin beef, some vegetable soup are best.

Well y fam.

7 A.M.

200 gms. milk & tea
30 " toast
20-30 " butter.
80-100 " beef.

10 A.M.

250 gm milk very rich
2 eggs. or 75 gm meat
~~75 gms~~
30 gm toast
20 gm butter.

2 P.M.

200 gms spinach (best fall) or other veg.
150 " beef
200 " compote or fruit puree,
no soup or berries
after meal some alkaline water if desired

P.M.

4 or 5 o'clock

250 gms milk & tea.
30 " toast
20 " butter,

8 P.M.

Hot or cold beef. 150 gms
or 2 eggs
vegetables 100 "
or fruit 200 "
toast 30 to 40 "
Butter 30 "

no wine, no tobacco,
all condiments and
acetic & citric acid
tea, very hot & cold, coarse
veg.
may use apples, cherries, prunes
all fruits except berries.

During night muscular
inspiration evening
then flannel and all
wring out of water 15 R

In room. Sitz 32°C 10'
Cold for 3 min in cases
of constipation at 20° R.

Medication. Dr Morrison.

Give morphia or other
narcotics, not good. they
aggravate the secretion.
~~Algo~~ Riegel gives
atropia, that is right,
it lessens secretion,
but only while being
used. Often alkalies,
very good to neutralize,
but does not cure.

Best medication is sugar.

Give sugar in morning before each meal give vichy water "Hopital" ~~after~~ 10 min.

After meal ~~soda~~ Magnesia Calcined. 15 grains
Nitr. Subnit 15
Soda Bicarb 5
~~Ext~~ Belladonna (dry 0.2
Take 1 tea in water each hour oftener meal

also treat for neurasthenia & complication with ulcer for ulcer.

Rest in bed. No food or drink - only rectal feeding 3-4 days, or already milk pain disappears. The pain generally leaves after 1st day. 3 days usually enough

Warm stomach if there is stasis or ulcer near the pylorus.

Hot fomentations or thermophore during day, mustard at night gutta pedetia.

When blood in vomit, ice instead of hot bandage. Ice for 3 hrs. Then renew when gases come again 3 hrs. If patient ~~says~~ 3 days vomit-blood last 3 hours no hot bandage.

After 3 days, 4 oz. milk given every 3 hrs. during day.

If acid dyspep. after meals,
add lime water
In morning. 250 grms
Carlsbad water at
35°C. Every 2 days
add 2 tablespoonfuls
Carlsbad salts, for
bowels. If not suf-
ficient, Enema.
If no pain after
~~to~~ first day feeding
next day more.
75 to 100 g fats each
feeding. Also add bouillon,
oatmeal porridge, no beef
tea no condensed beef extracts.
May add Plasmon or
Roborat. later eggs,
potato purée, spinach
peas or beans purée. later
little lean ham. Increase
gradually, very slow. For
long time no very hot or
cold food, no berries or
vinegar.
May use sour milk
or Kumyss in place of
milk. May use nuts
almonds pieces & milk
etc.
Stay in bed 2-3 wks.
~~If patient~~ When patient
begins to go about to
bed an hour after each
meal, an masseuse.
No medicine necessary
Only wash ~~with~~ in
morning with pure water

when ulcer very dep. is impossible to get a good cicatrix, pain obstinate. Give bismuth, give 1 or 2 tablespoonfuls 5-10 gm. in water before eating. After washing stom. introduce through tube.

Other doctor's paper Ag Nitrate, give solution 0.2 gm. in 120 cc water before each meal one tablespoonful of this solution. Second supply of this solution make stronger, 0.3.

Paper this submit. Sometimes Ag Nitrat is better. Use this first. Change to Ag Nit if pain remains very good to give sol of Chloroform & Mix.

℞ Chloroform 0.5-1.0 gm.
Mix. mucilage 10.0 gm.
Water 150.0 "

In Sparge glass, shake well, give a. every 4 hrs. 1 tablespoonful

Only give narcotics in very acute pain as morphia irritates the glands.

If vomiting blood. Nourish from rectum. Ice over abdomen. ~~vomit~~ no food or drink in stomach. May swallow a little ice if thirsty. Hydrastis & other drugs no effect.

may inject Ergotin.
subcutaneous.

℞. Ergotin.	2.5 gm.
Glycerine	5.0 "
Water	5.0 "

℞ Use 1-2 gm

Obstinate cases, wash
stump with ice water
200-300 grms. several
repetition, not much
at one sitting.
Ulcer. First try O
irrigation in 1% Alum
240 grms. in pieces
of ice in recline.
Repeat every 7 hrs.
If still obstinate,
thirst operate, very
dangerous. difficult

to find the place, come
from the spleen
or pancreatic artery.
Some surgeons have
cured by cauterizing
ulcer. Repit abscess
of bowel ~~[illegible]~~
Pregnant blood
vomiting, but little.
Also for one year
old cases in which
pain remain in spite
of treatment, patient
cannot live be restal
Hematin. Also cure
for Q. when circulating
at hylorus with
dil & loss of motility.

Pavlov finds that
diplicine alone does
not help hyperpepsinemia.
must & diet also best.

Sugar in Hyperacidity.

Causes. Neutralization
of serum, given before
meals, hyperacidity than
& less with meals.
Sugar not given when
lack of motility. when
giving sugar must
dilute water.
use 36 grms in
morning an hour before
eating.
Grape sugar is best
milk sugar good for
constipation.

use chemical pure
grape sugar made
from grapes, not glucose
(Aug 1 1901) Butler
For Constipation 3 or 4
tablespoonfuls daily
1 in glass of water, 1
on arising
~~Dec~~ 1 tablespoon at
each meal.
Very good for bowels
Hard if due to spasm
valvy.
Often spasm of
colon, due to enteroptosis
neurasthenia,
Time passing.
Indicated by small narrow
stool, also due to obstruction

Constipation also due to Colica mucosa &

(2) Enteritis membranacea

(1) Paroxysmal pain, stomach and upper bowels more. Search mucus in feces. Looks like tapeworm. Put in lime water is dissolved, not fibrine. only mucus. Often thought to be due to gastralgia, many cases so-called gastralgia due to colon colica.

When patient has pain, give warm water enema, little below body temp (30° C). m and find membranes the cause is known

~~Colicitis membranacea~~

Frequent in women at climacteric. Many have menstrual disorders, very nervous, very obstipated, indigestions in all forms. Often only nervous illness, no mucus, no pain. Others mucus pain always, sometimes pain as bad as in colica mucosa, no mucus at first, later mucus. No organic stages of menses.

Enteritis membranacea

Inf. of glands mucosa. caused by constipation, contact of feces excites glands to mucus. very obstinate often must retain whole life may be involute Jacoby

Olsner Rosa, July 31 — After 1 week 9992
old lady 60 — Anacal.
Lease of Niall Farm — unchanged.
may be opened — Not some total cold
in Colon. Often may — over stomach increased
be confounded! — HCl.

Removal of whole — Sweating good in
stomach not now — Hyperch because it
recommended, the — takes away the
statistics are very bad. — chlorides!
If in functional dyspep.
Ach cannot be ofer.
glad. If at hysteria,
may be.

Young man 20
apepsia,
many such cases,
uses no pepsin or Hcl
Ord-Regn. Stomach

(See other book)

Stomach objectively, does
not contain food
but stomach gives some
[illegible] fluids
[illegible]

Glenner Ava, July 31
Case of old lady 60
Many the spasm
in colon. Often may
be confounded!

Removal of whole
stomach not now
recommended, the
statistics are very bad
If in funduse of stom
ach cannot be ope.
rated. If at pylorus
may be.

Young man 20
Apepsia,
many such cases,
uses no pepsin or Hel
dial-Regn. Formaldehyde

After 1 week 1892
Clinical.
unsatisfactory.
Not sure that cold
over stomach increases
HCl.

Sweating good in
Hyperch because it
takes away the
chlorides!

Urine offensive, odor
like rotten liver

Pepsin Test.

Hammerschlag's method

2 Esbach tubes

(1) ~~5 cc Egg albumen~~ water ~~5 cc water~~ to mark U

(2) ~~5 cc albumen~~
5 " stom fluid.

1. Water 5 cc
Egg albumen sol to mark U.

2. Stom fluid 5 cc
Egg albumen to mark U.

Put in oven for 1 hour at ~~50~~ 37°C body temp. Remove and add to mark R esbach sol.

Esbach Sol

Picric ~~ac~~	10 gms
" Citric	20 gms.
Water	1000 cc

Albumen Sol

Egg whites	15 gms
Water	1000 cc
Ac Acet	16 cc

Officinal double strength of the dilute

mean age, also, used in-
terchangeable.

~~Cold~~

Umschlag causes first
constriction then relaxing.
It is well for the stomach
to have some blood. In
atony the vessels are
empty, organ pale.
Need more blood.

Achylia

In 300 cases in
11 yrs of achylia, only 2 not
cancer.

Atrophy of pyloric
~~without ulcer~~ stenosis,
& no pre-ulcer achylia.

Hammerschlag of brain
says achylia depends
on lack of pepsin. The
last not true. We have
seen many cases of
carcinoma who had
pepsin, in considerable
amt, but not abscent.
Achylia there is also
ways less of permanent

not barrist. For help of digest, must give 300 or 400 drops.

2 t. d. 1 teas Kissingen salt in 1/2 glass of water. If constipation cold water. If diarrhoea in hot water. Take ~~at~~ on rising and at 6 P.M. with stomach empty.

Salt water just as good. 1/2 teaspoonful the same as Kissingen

Hydrotherapia,
~~all baths, gas~~
very good, warm baths fol. by cold shower, also half baths.
If constipation, short (5 min) cold (22-18 R). If diarrhoea warm (30 R) for 20-15 min) no foot bath
No special hydrotherapie for stomach, only general.
Many patients anemic, not good baths bad for head, ~~and~~ brain being anemic. In cases of pain, warm not good.
Obstinate cases, faradic current outside, good for atony of stom & bowels, obstipation

much. no fried or cooked fats. only cold butter, milk, fruit, cereal food, is milk. not sour milk. Magnesium + Carlsbad salts, vichy water in obstipation. Good for ~~stomach~~ acidity + stool.
Toast especially good, yolk of eggs, raw or cooked soft. not hard. Omelet
most cases of hyper-acidity have/also bence-not much water at meals. Eat often and a little very light. Eat 6 times daily or every. Ulcers usually with hyperpepsia.

with hypopep. Acidity there is usually good resistity.
In hypopepsia the long delay of food in the stomach excites the glands.
(Very primitive arrangements. Wide couch in the waiting room on which the patient lies down to take examination in knee-chest, or enema etc. Gives enema with ~~same~~ stomach tube.)

~~Gastric Catarrh.~~
~~Gastritis~~ Chronic
When much mucus. Lissingen water or salt water. Sometimes pepsin suggestion 10 drops ~~ten~~ before. This does

· Boas - Klinick

Elsasserstrasse 89.

Dr. Elsener Asst
Boas out of town.

Boas method of Examination
same as Ewald only
different in pathology.

Heat. different. Ewald gives
medicine for every disease.
Boas almost no med at all.
diet - special in all cases, first
first importance. massage, electric
Water treatment.

Dyspepsia and Apepsia
mostly ~~starch~~ farina-
ceous ~~foods~~ + milk.
Sandwiches. fish. ~~a little~~
veal "roe".

Hyperpepsia. Mixed. flesh & ~~least~~
farinaceous. Same as hypo.
only more flesh, must be
bland, no pepper or mustard
very little salt, butter very

Berlin

Augustastrasse Hospital
Prof. Lazarus.
asst Dr Aron.

Augusta Hospital
Schamhorstrasse

Bras Poliklinik
Elsasserstrasse
Residence
alexandernfer 6

Charity
Kriebelbeckstrasse
8-9.
Blood Spam,

Berlin

Dr Seligmann
Pinkenwerder
Stettiner Bahnhof
Sanitorium
Wobold
Ein Prof Lazarus
Pneumothorax

Dr Aron, asst to
Prof. Lazarus.
Augusta Strassa Hospital

Brookstone
Anslen Karlshassen.

Swedish Move-
ment Apparatus
London - Sloane St.

Soul

Höffding, Prof. of Philos-
ophy & Psychology,
University of Copenhagen.

Matter instrument
Life (God) the player
Soul is the music

Paris

H. Bordier of Lyon
Electrical device for
producing a definite
amount of heat.
See Bordier about it.

Jaussen

Ordered one his
single outfits, cost
with 2 companions
to be more than
$40 Kronors, & to
be ready in 2 mos.

Was tested French
lance, fires from
1/4 that of his own.

Fredericksham
Sandviken

Heads.
Engines & Engine for
C. L. baths.
2 E baths (Upright)
There is an 8 horse power
boiler 90 lb pressure

2 Pneumatic dynamos
and 1 air pump.

Committee agreed to
raise enough to pay
for the above. Medal
also some mus-
ment machines.

Stockholm

Göransson - mechanical
workshop

Ref. Magazine 13

Dr Busch
photo
Took photo through
the forearm for
1:30 exposure
with Concentrated
sunlight. Sun
shine trying the
Electric ray.

Lupus

The head nurse said that many cases return 4 or 5 times. Cases are always put under care of local doctor who sends patient on first return of disease.

Diseases prevailed no less in negros.

Finsen said that the effect of actinic ray appears in as many hours as the X ray requires days, and it more effective

Finsen never cured case both ways. + my one check curing one and left the other. X ray cases taken to be sick in 2 days, slough of chap and gray hair on one side + chair of the red light set out

Chloride of Zinc Eve

Calc. Chlorite 1

aqua 60

Use in case which smell bad, for ~~a few~~ 24 times, repeating for some days till clean, then bandage ac or Silver nitrate Sol.

Lupus of mucous membr

Lenkus

Emulsion

Zinc oint

Zinc oxide	10	Use as before
Vaseline	40	mitigate
Lanoline	60	treatment after

Pyrogallic Oint.

ac Pyrogal	5
Vaseline	50

use before treatment to clean surface and indicate where the lupus centres are.

Local ointment.

Diacetylen - Sulphanilamide ac Sal - 3%

Silver Sal nitis

argent nitrat	5
aq. dest.	25

Thomas J. Sargent.

Edle

Wrage

Brunstad

Eczema

Must avoid irritants & stop
wherever
wash with benzine
then pick off dead
with tweezers

Give ammonia to hasten
parts during healing
of other parts

Size of part healed
bases of acne rosacea
Alopecia areata
Epithelioma

When applied it usually
surface before treatment
begins, ~~which~~ on account
of pain, unless point is small

Nevus

Saw a case in young woman, on the cheek 1 in. by ¼ in.
Go over whole surface, then wait 2 weeks, using gine ointment, then begin again. Must repeat many times. The color will improve for a year after treatment

June 12 Dance 1/4 / 2

Acne Rosacea

Same treatment as for Nevus. Lime Sparkes. Always improved also Psoriasis.

Epithelioma.

Spero woman on side of nose & face. Treatment given along the edge of patient while the extension
Have said treatment will cure.
Case of Guillemier next to on and
The indication is small and superficial. Light is a more specific agent for epithelioma than for lupus.
Never dismiss any person of cancer by curette or caustic, depend on light alone

Finsen.

Pyrogallic ointment

Apply in large capes to allow where ~~be~~ the centers are. The ointment is applied 2-4 days, then the tubercles undergo separate leaving excavations, which indicate the points for treatment. Then 3% boric acid solution for 2 or 3 days. & zinc oint if necessary.

Lead ointment to remove the crusts, for 2-3 days before beginning light treatment. The surface must be clean before treatment begins

Finsen.

G.V. Child 2 years
Small point in leg.
Small lamp. 15 min.
Strong reaction in chest after 1½ min. Small lamp more active than large ones. one burn with small equal to 1 burn 10-25 with both large lamps
Blister appears by night or daneday, or by next morning.

Iod. Sol for lunch
medicinal
Iodine 1 nose & throat
K.I 2
Water 2
always uncertain of cure
of lupus in underlying tissues
Sarcoma case & return on face
tissue due to incomplete
cure & inside of flesh
perforated.
also the gaseous eruptions
Erythema elosus not lupus
4-7 different genera
those obliterate tissue.
Has made return in
very bad cases see T/3.

1907

Wm. Finsen's Light Institute

1. Arc light baths.

(2) Inclined couches. 100 ampere

(3) Fifty volts.

(4) Improved by large lenses, making rays parallel if possible

6. Used reflectors.

(7) Improved single model, 60 Krones.

(8) Small local model with iron 125 Krones.

(9) No blue lens used with arc light.

(10) One arc light bath, burns skin of some patients.

(12) Finsen State treatment cures acne, red nevus, without hairs, epithelioma, as well as lupus.

(13) Suggestions --- Have

arc electric lights in out door gym.

(14) Arrange baths around light, radiating heat.

Friedman

learning machine

Heidelberg. Monday 9 a.m.

Prof. Wilms.

Man with stiff shoulder - diseased ones. Other with mask covering whole face. Had patient hold arms well erect to show when relaxed. Reduced by traction & manipulation.

Prof. seemed not very strong. Tall pale, pathetic looking, in very relaxed attitude.

Cancer by

Cancer or

Cancer Sarcoma

Memorandum Rockefeller
Institute for Med
Research.
Feb. 15, 1911
Studies in Biology
of Tumor Cells.

Dr Ehrling
Welchs

Dr E. Bettac
at Cancer Research
Laboratory

Showed me animals
which are under experiment
White mice with lung &
tumors:
Rabbits & monkeys
Told me that Schmidt's fluid
was found of no use.
Dr. Bettac is from Russia
He speaks French German
and very good English.

Prof Czerny

Medium height, hair & beard very white. Very amiable. Speaks English quite well.

Cases.

1. Woman 50 yrs with many cancer nodules of skin 5 years after amputation of breast for cancer.

2. Cancer of oesophagus in mediastinum, man. Will do gastrotomy, would operate on cancer of neck, but "to operate on cancer in mediastinum is not yet in fashion".

3. Man 40 cancer of liver. Has been exposed, large opening below right 2 in × 3 in. Stuffed with gauze.

1. Has pleurisy right side exudate fluid has been removed 4 times. Has injected radium, of 500,000 volt tension. "5 cases in 100 cured."

"We treat all who come, some are helped."

4. Man 40. Perforating cancer of palate.

Czerny invites me to see him operate on recheum to-morrow, Tuesday morning.

Also to see implant re-move cancer of breast at 9 A.M.

Case 4. Man with cancer stomach, inoperable. Has injected "Ehrlich's preparation" without result, and now we will use "radium".

called in afternoon of a
Sec H. M

Dr. A Dilger
Academisches
Krankenhaus.
Heidelberg.
Dr. Willms Chief Surgeon.

Dr. D. showed me much courtesy and promised to send him stereoscopic pictures of the stomach and colon, prints of Dr. Carey's slides. Also send him copies of the Mayo reprints, which I have and copies, and put his name on the mailing list. also a copy of the B. C. San System.

Information got from Dr. Dilger.

1. about movable coecum. He said:

Dr. Wilms is not doing it so much since the surgical Congress at Berlin. That was a defeat for him. The surgeons did not approve of his ideas. It was neglected that the benefit was derived from

the operation made on the appendix at the same time. I myself am not at all sure that his views are right. I saw a case in which he operated which had to have the abdomen opened again for another cause some time after. The coecum was not attached as expected from the operation.

In other cases patients are constipated.

Sometimes the patient can not stand erect without pain.

The operation consists 1. in opening abd. in median line,
2 separate peritoneum outward on coecum
3. Split by transverse cut, fix ileum behind coecum, the other is inpant. No stitches.

2. For Lane's kind Dr. Wilms cuts off ileum and makes end to side anastomoses with ascending or transverse colon. Sometimes cuts out coecum. In a recent case he made a side to side anastomosis of ileum with transverse colon without cutting off ileum or acct. of many adhesions. Wilms does not put ileum into the rectum as Lane does.

3. How about Normal? Ans. We made much use of it. It works well. In one case of very bad constipation, (the girl took 4 drams of glycerine) bowels were regular daily for 3 mos after one intravenous injection.

Regulin is good too, but not in worst cases. Had not tried paraffine oil.

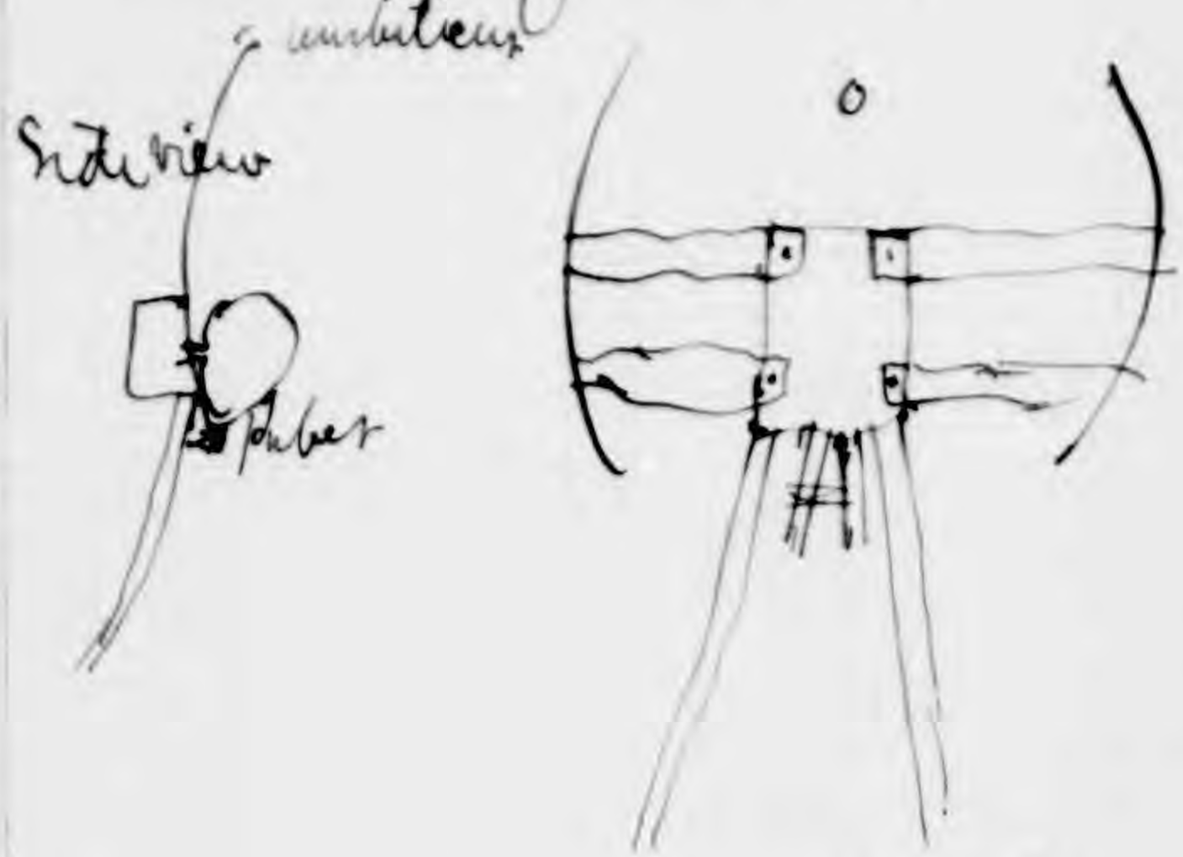
4. Case of idiopathic epilepsy to be operated by Dr. Gilbert Shattuck. He removed a part of bone of skull and thrust dura under muscles to make better drain of brain. He (Wilms) thinks defective drainage cause of epilepsy.

5. We treat tuberculous gland with X-ray. Never ulcerate except when infiltrated, lime full dose. Protecting skin. Repeat in 2 weeks.

6. Man with abd. tumor. ~~Found~~ growth just beneath scar of abd. wound, a desmoid tumor due to silk, a condition frequent not by an Italian physician. Will use X-ray on it (not malignant)

7. Case of carcinoma of bladder & suprapubic opening, case being inoperable; a cup placed over opening furnished with bands to hold in place & drain tubes of clay & rubber. Prevent soreness of skin by keeping smeared with vaseline ointment - 1dr to ounce.

Skeleta of uterus



8. Local anesthesia succeeded in dilatation.

10% sol. Novocaine for local anesthesia. Max 100 cc of sol but 8 or 10 drops of 1-1000 adrenalin sol. ~~Never use~~ May use as much as 10 cc of the solution without ill effects. The method has been perfected by Dr. Herschel. See his papers on the subject.

use spinal anesthesia very much. For this purpose use tropocaine

1 cc of sol. in syringe. Feel if fluid drops run from the needle. Then draw out 3 or 4 cc into the syringe. Then return the syringe to the spinal canal.

9. Hemorrhoids. Wilms always cauterizes with Jaschenbach's clamp & Paquelin's cautery. Narra, his predecessor used fleur to do volutetreat operation Kirchell does so get.

10. Prof. Wilms has a new way of joining stomach and intestine after hysterectomy. He makes a side anastomosis to the lower part of stump of stomach instead of to greater curvature. Other surgeons oppose the method as it pulls the stomach down in twisted way as to form kinks, and yet these cases do surprisingly well (Silger). There is a weak spot at the upper side of the band

Joined part of duodenum.

11. Uses a sort of letter S catheter for draining bladder after prostatectomy. Puts catheter in after the day when the perineal drain is removed, so as to allow perineal wound to heal.

The only objection to the catheter is that allows a leak at end of penis. The purpose is to allow urine to wash the urethral membrane.

12. Employs only women nurse. They do all the work. Trained nurse with one woman pupil in each ward of 20 beds, do all work. Cleaning, etc.

Graduate nurse of 10-15 years experience have 40 marks a month & board. That is $360 a month.

Dr Nardette gave accession of Dr Welling

Tabes

Melbrothe

Prof. Welins
Klinik Dec 5 –
Dr. Leilger
Dr Zuckerkandl
Zuckerkandl
Dr Zuckerkandl ap-
pendicitis for
fracture of leg

Doing many operations
with ~~cocaine~~ novocain
Hernia, gastrostomy, exten-
sive resection of ribs, tre-
phanation for epilepsy etc.
In large operations use as
much as 150cc of 1% sol.
of Novocaine

old tuberculosis, with
much expectoration cavities
Resect 6 or 7 ribs before &
behind removing a small
portion of ribs. Cough &
expectoration cease in 3 or 4
week. Must wait till
fever disappears. Does
with cocaine.

Czerny's Klinik.
Dec. 5,

Dr. — Oberarzt
Op. for carcinoma of
breast & axilla.

Incision

Closed with, nil catgut
silk suture. Put in 2
rubber tube drains

Czerny's Klinik
Dr. Carr

Cancer of oesophagus
1) Applied radium in sponge
capsule protected by a celluloid shield. 20 Mgms
Patient vomited art. breakfast again. Same result. used cocaine.

2) Cancer oesophagus
After three treats, made tube stay in place by pushing it into the tumor. End seems to bleed. Shall like my tracer better. Think.
application 1 hour.

5) Sarcoma of face
Boy of 19 yrs.
Almost well right cheek. Almost completely cicatrized. Applied 10 Mgms for 10 minutes

4. Cancer of oesophagus
Prof. Czerny in-
troduced radium
sound. 10 mg. 1 hr.

5. Woman. Lupus
of side of nose. X-ray
& cautery failed.
Radium producing
good result. 10 mg.
for 1 hour. In
4 days. Sore
in 2 weeks dis-
appeared. Now
3 wks after appli-
cation smooth "healed
"good cicatrix"

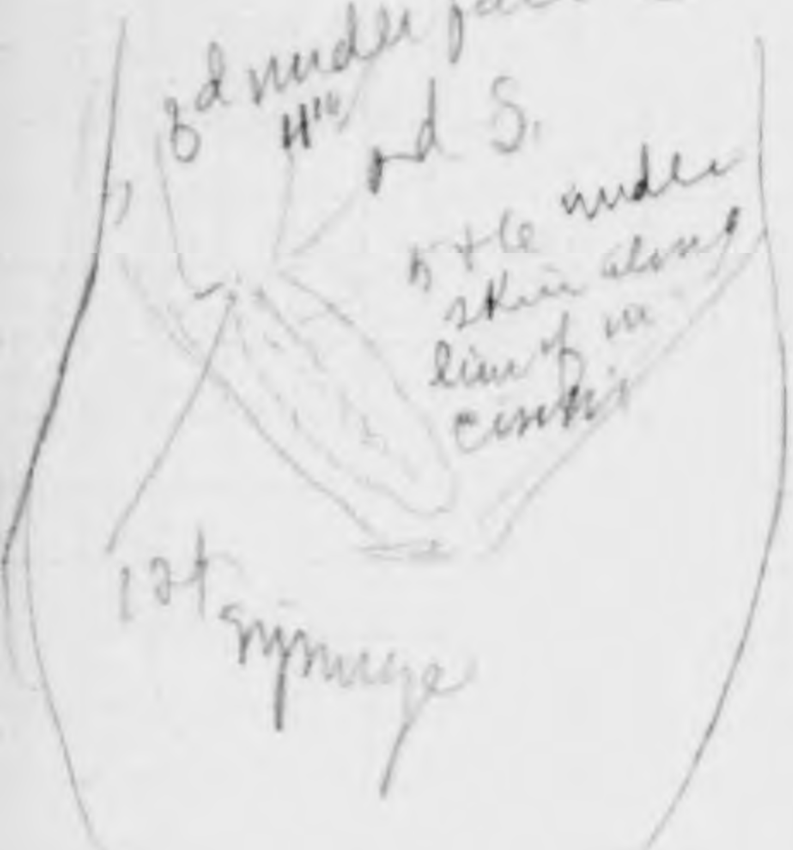
Wilms Bruce
11 a.m.

Cystic by Wilms
hitherto no cocaine
dissection and rather
raggedly. assistant
complained of difficulty
in making tails
match
when working under
neath, made patient
shoulder flexed to
test for recurrent nerve
when picking up
vessels.

Effervescing mixture

Cancer of stomach
general enlargement of glands
"too late" closed without any

Hernia
Dr. Dilger
Novocaine
80 cc 1% sol



Very little pain
Stitched internal oblique
to poupart's ligament.

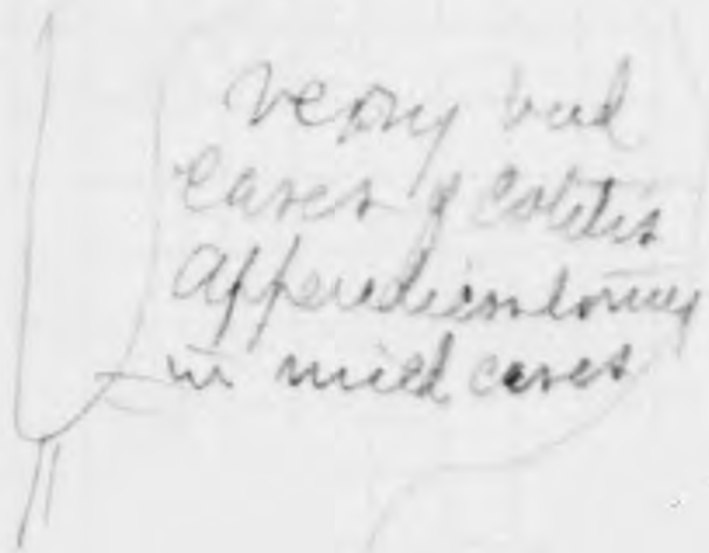
Femoral Hernia

Incision open the
abdomen and makes
a graft of the fascia
lata to inside of
abdomen over the
hernial opening:
graft 2½ by 4 inches
attached with two
or three sutures.

Movable Cecum
not so many cases here as in Prof. Daly do it when there is constipation and colic pains.

Hirschsprungs Disease

Kink always here just above rectum
never drawes colon only in L.B.



wash out daily with sol of lanum. Get well in a few months. Then make anastomosis of ileum with transverse colon

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Dröll
Berkheimer St.
Springe

Czerny Klinik
P.M. Lee

Deutsche Gasglühlicht
Aktiengesellschaft
(Auergesellschaft)
Berlin O. 17.
Rathenst. 8–12.

Mesothorium

Dr. Albert Caan.
Samariterhaus
Czerny Klinik
Heidelberg
Lee 5. 4 pm.
(Case of hypertrophied scar

A man from S. Am. speaks good Eng, French & Spanish
Bad scars in groin.
Under treatment by Mesothorium, a 2 centimetre träger, with glass face, containing 40 mgms of Meso-thorium
Effect good. Applies 1 hour.

Dr. Caan says Mesothorium has half the power and costs 1/4 as much as radium. Likes it better. Must apply of double strength or longer time.
10 mgms cost 4000 marks.
while 10 mgms of Radium cost 40000 marks

Can be bought from
Deutsche Gasglühlicht,
Aktiengesellschaft
(Auergesellschaft)
Berlin. O. 17.
Rotherstrasse 8-12.
(Write these parties at once for full information)

Angioma

Case of girl of 12 yrs.
Whole whole left cheek had been seat of angioma cured by 12 applications of Aktinium. "The action of aktinium is just the same as that of radium" Caan.

Dr Caan showed me ~~a~~ a radium compresses containing 1/500 of a milligram of radium. He said it was very good for rheumatism. Also gave me a bottle of radium solution prepared for injection. Said the latter was good for temporary effect but not permanent. Showed me apparatus for emanation and for preparing drink preparations of radium. Said emanation of ~~200~~ use in cancer.

Dr. Caan wished to write to the Mayor and ask for a place for him next year for six months. Said Dr. Czerny desired him to get this experience.

Dr. Caan urged me to come back in January and he will show me everything about the use of radium. I am to write him in advance. I must try to do this.

Weltner's Klinik.

Saw assistants do several operations for hernia. 5 op. were done during the morning and 2 goitres. Only the muscle was sewed to Poupart's lig. Saw op for hernia by Dr. Seiger.

Strangulated hernia, an old woman came in during Klinik. Was operated upon under novocaine (all hernias done under novocaine). 6 inches of black intestine and as many of black omentum cut off. End to end anastomosis, 2 rows of sutures. Some rotting of parts by inlet contents. Wound closed loosely with iodoform catgut, Rubber tube drain and small bit of iodoform gauze beside it pushed down into the ~~[illegible]~~ cavity. (Assistant remarked this was his first resection of the ileum)

Dr. Wilms asked me about number of cases operated by Mayo's. I told him about 7,000 by the Mayos, an average of 1700 or thereabouts. He said he did 2600 cases a year "too much" he added.

Walter Jensen
Complete
Heidelberg.

Burschenschaft
Duel fighting

Place Sec 16.
Special for this purpose for 50 years.
Fighting Club's meet here every day but Monday & Sunday.
Each member must fight 5 duels every term, 2 terms a year.
If a fox until 3 duels then becomes a Burschen or full member. If he does not fight well, must fight 5 or more duels

Duelist must show no sign of pain, must not even turn head. If does, is ~~turned out~~ warned. 2d time is turned out of club.

Place a restaurant outside place over looking meeting over the old bridge. Hall with 2 stories of windows. Watched from window in attic, arranged for the purpose.

3 Clubs. Red high caps, red flat caps, and blue caps.

Some delay waiting for doctor. Eating rolls, playing cards.

A place on floor covered with saw dust to catch blood.

Two young fellows with arms & eyes & chest protected.

Seconds stopped at 6 strokes

at second bout one seemed weak & face very red, breathing heart excited

At 3d bout young fellow cut down nostrils & forehead

2d fight.

Young fellow got 2 bad cuts on left temple. Doctor stopped fight & took time out to sew up wound. The sign of a manly victory depends on the

number of
stitches the doc-
tor makes, a
man reckons his
standing by the
number of stitches
to his credit. A
record is made
of number of stitches

wear aprons
covered with all
blood like butcher
aprons.

3d duel

neuralgia
cut on right
cheek
other cut on forehead

Placed foot
the length
sword apart,
long words
very short

Footwork
Fencing

Prof. Ehrlich
Paul Ehrlichstrasse
Krankenhaus

Teifa Werk
Mainzerland St.
1448

Empfehlen Sie
welch einen zu dauta
Fleisch — kein Peptony
Sunde Amidosäuren,
die leicht resorbirbar
sind per Cysmon!

Höchst a/Main
Farbwerke Meister
Lucius & Brüning

Abwhalden

Distilled water
[illegible] 606
[illegible]
health [illegible]

Bullock [illegible] Miles
Fan. Hospital Cat
James McCloud

Get report for
this year
must use flour
[illegible] drops in
fresh cases

Increase [illegible]
0.10 cent [illegible]
0.15 " 2
Gradually increase
to 0.30
[illegible]

[illegible]

[illegible]

"I don't care much
for tablets" [illegible]

[illegible]

[illegible]

Gradfor
Trombosis
Pseudo Syphilis
Africa,
700 cases
cured by 1 injection
each 1 dose of
hope

Rheumatism
1 dose cures
Pneumonia of
nose
1 dose cures
Lung Congestion
1 dose cures

Prof. Ewald
"I have many friends
in America. Kindly
regards to Cuthbertson
Hirschberg, + Dr. Bulloch
of Leadon

Dorlich will send me small canarons mice in a cage & I will give him a week's notice of my sailing. Write to Dr. Roth to have a supply of mice ready.

Cole is especially good for all ulcerations of the mouth. It destroys the normal spirochetes of the mouth whole are present in ulcerations such

mercurial
rectorsders.
pyorrhoea of gums.
(rub in salt mixed
with a little water)
good to kill nerves
of teeth

E.

Ehrlich told me that he is having prepared a concentrated solution in which the 300 cc is reduced to 10 cc. To be given put up in a small syringe with fine point.

Ehrlich said he had for 2 years been giving all his time to salvarsan.

how he will again begin the study of cancer. The world is rather quiet just now about cancer. Not not had time to read the work of Ross Liverpool does not know whether high protein diet causes cancer or not.

mice fed on rice, just on the border of starvation, the tumors appear very rarely.

Ehrlich said he had had much trouble. Hadbeen called a wonder which hurt his feelings very much. He wants to be one again.

Ehrlich said that Czerny has used his 600 watts Cancer, but he had not himself had any effence. It is good for all spirochetes.

Kreuznach-Bad

Office

Left Frankfurt 6 PM, arrived 6 AM. Got a room and went to the bath and found the manager who told showed me the establishment. Very nice have a prospecting mining juice.

Afterbaths showed preparations

Radiol - Concentrated salts of the water "Sol brunnen" chiefly having zeolite said to contain Radium, Actinium and Radio-thor.

100 grams produces 1000 M.E. 1 hour

Brink Preparate - 100 cc contain 1000 M.E.

Compress 10 gms of Radiol

Ballas small bulbs with 2 cc of liquid, uncertain amount of radium, each contained some radiol undissolved.

Pills, gelatine varnish, suppositories, ointments

the claims of true, there about 1/6 mgm of Ra in a kilo of material, or about the same amount as the ore of pechblende.

Prices - Compress $1.50
Radiol 10 gm 1.00
Water 100 cc (1000 m.c) 10 cts
Bulbs B.18 + $1.25

Offered to sell me 1000 gms of Radiol for 25 ml $5.00 or $500.00 a kilo which is 3 times the price of pure Radium

Frankfort Dec 6

Called on Vefa-Werk

They are making a new "Kino". Cost of changing plate apparatus will be about $200.00. Will make 6 in 1 week.

Thermopenetration apparatus - not quite completed. Claim it will be 20% stronger than Reiniger Gebbert + Schall.

"Universal" seems to be as good a R.G.+S and cost much less.

Ola
Bleitz - Interrupter
Pedestal Exposures
of 1/300 second. Claim
to have measured it.

13. Douche outside of stomach
a. hot
b. cold

14. hot & cold to various parts of the body
general bath, etc.

15. Thermophoresis-tion.

16. X-ray to heart

17. Radium emanations.

18. Drink fresh of radium emanations

19. Subcutaneous Salt Solution

20. 606

21. H Cell & bath.

22. Massage.

23. Eating a meal

24. Relat applications of heat, cold, electricity.

25. High frequency

26. E. wind

27. Pyle to head.

28. abdominal compression

29. Walking

Suggestions.

1. Measure the strength of anal muscle by

a. By measuring with a measuring column and a dilator

b. By inflating a bulb in the rectum and leaving patient force it out.

2. Test kind and degree of sensibility of the rectum by

using various
tests such as

a. size
b. weight
c. acid
d. alkalies
e. neutral
f. heat (internal
g. cold (external
h. acrid subs.
i. electricity
j. vibration
k. percussion

Electrocardiograph

1. Use as diff. general under Cerving Zif. a definite indicator where a definite fact as a finger

2. Test individual muscles in cases of disease {muscles / nerves}

3. Include heart by mouth to arms connection, or r. + l. hand connection.

to determine the nat. of electricity produced by heat or contraction and estimate the amount produced by all measures of the body.

Effervescence or heat with effervescence

Surfaces

1. Exercise
2. Cold varying heat
3. Heat (or heart) " "
4. Vibration
5. Percussion
6. Electricity over heart & to nerves of heart in neck & Diaphragm
7. Effervescent bath.
8. Oxygen
9. Drinking hot water
10. " " cold water
11. Meals.
12. Swallowing. prev

13. Douche & nozzle
of various
a. hot
b. cold

14. Hot & cold to various
parts of the body
(general bath etc.)

15. Thermo-insulation.

16. X-ray to heart

17. Radium emanations.

18. Drink fresh of
radium emanations

19. Subcutaneous
Salt Solution

20. 606

21. 4 Cell E. bath.

22. Massage.

23. Eating a meal

24. Rectal applications of heat. cold.
electricity.

25. High frequency

26. E. wind

27. Pyle to head.

28. abdominal compression

29. Drinking
Water

E. SANNE, ANTIQU.
BUCH- & PAPIERHANDLUNG
NOVALISSTRASSE 15

85.

B

Radium

1911

Collar

3.10.

3.10.

venous pulse

1. Tricuspid regurgitation

2. Aortic incompetence

1A.

negative / normal venous pulse

A

positive / tricuspid venous pulse

1911

Bei Bestellungen wolle angegeben werden: Stärke des Präparates in Prozenten, ob Chlorid oder Carbonat, sowie die gewünschte Menge in Milligramm reinen Radiumsalzes oder Radium-Elementes.

z. B. zirka 1·5 *mg* Ra Cl_2 in 70% gem. Präparate
„ 3 „ Ra CO_3 „ 38% „ „

hienach werden 2.140 *mg* Präparat à 70% mit dem Reingehalte von 1.498 *mg* Ra Cl_2
oder 7.900 „ „ „ 38% „ „ „ „ 3.002 *mg* Ra CO_3
dosiert werden.

Verpackung.

Die Präparate werden in der Regel in runde Radiumzellen von 21 *mm* Durchmesser und 9 *mm* Höhe verpackt. Diese können **bis zu 30 *mg*** Präparat aufnehmen. Die Zellen bestehen aus einem verschraubbaren Gehäuse aus vernickeltem Messingbleche. Der Bodenteil ist mit Blei ausgegossen, an dessen Oberfläche eine quadratische Vertiefung zur Aufnahme des Präparates hergestellt ist. Der Abschluß wird durch eine Glimmerplatte, welche durch den mit einer entsprechenden kreisrunden Öffnung versehenen Oberteil der Zelle niedergehalten und außerdem durch einen Balsam abgedichtet wird, gebildet. Bestrahlungen können sonach ohne Öffnung der Zelle vorgenommen werden. Am Boden der Zelle befindet sich eine amtliche Punze (Adler) sowie die fortlaufende Nummer.

Auf Wunsch werden auch plombierte Zellen geliefert, welche nicht geöffnet werden können, ohne die auf der Verlötung angebrachte Punze sowie die ganze Zelle zu beschädigen und unbrauchbar zu machen.

Größere Mengen als 30 *mg* Präparat werden in Gläschen verpackt, welche, mit eingeriebenem Stöpsel versehen, in einer kurzen Eprouvette in Glaswolle eingebettet werden. Die Eprouvette wird mit einem Korkpfropfen geschlossen und versiegelt.

Die Zellen und Gläschen werden, in Watte und Bleiblech gehüllt, in eine kleine Schachtel verpackt, eine amtliche Bescheinigung über Nummer der Zelle oder des Gläschens, Gewicht und Prozenthalt des Präparates beigegeben und wird sodann die Schachtel mit einem die Nummer der Zelle oder des Gläschens tragenden Verschlußstreifen geschlossen. Die Versendung erfolgt auf Kosten und Gefahr des Käufers (versiegelt) als Wertpaket.

Zahlungsbedingungen.

Nach eingelangter Bestellung wird die Dosierung durchgeführt und dem Besteller Faktura — bei Inländern unter Beigabe eines Posterlagscheines der k. k. Postsparkasse — erteilt, nach deren Bezahlung die Absendung per Post erfolgt. Bei anderer Bezahlung als per Postsparkasse muß die Zahlung frankiert werden.

Zuschriften von k. k. Behörden und Ämtern unterliegen als portofreie Dienstsache keiner Portogebühr. Alle Anfragen in Angelegenheit des Ankaufes von Radiumpräparaten sind stempelfrei.

Verzeichnis der verfügbaren Radiumpräparate.

mit einem Halte von		
Ra Cl_2	Ra CO_3	
% = % Ra	% = % Ra	% = % Ra
% = % Ra	% = % Ra	% = % Ra
% = % Ra	% = % Ra	% = % Ra
% = % Ra	% = % Ra	% = % Ra
% = % Ra	% = % Ra	% = % Ra
% = % Ra	% = % Ra	% = % Ra
% = % Ra	% = % Ra	% = % Ra

M. SALZER 'N WIEN. 187211

Wien, den 1911.

Amtssitz: Wien, IX/1 Porzellangasse 33a.
Briefadresse: Wien, IX/1, Postfach.
Telegrammadresse: „Fiskus Wien".

Telephon Nr. 12.400.
Postsparkasse:
Konto Nr. 842.114.

Preiskurant

der

k. k. Bergwerksprodukten-Verschleißdirektion über

Radiumpräparate

von St. Joachimsthal in Böhmen.

Ohne Verbindlichkeit für die Dauer der gegenwärtigen Preise sowie für disponible Vorräte.

Offerte nur gegen umgehende Annahme und Zahlung gültig.

Die verfügbaren Radiumpräparate werden in Form von Radium-Barium-Chlorid und von Radium-Barium-Carbonat abgegeben. Gegenwärtig sind die am Schlusse verzeichneten Präparate verfügbar.

Haltbestimmung.

Der Halt der Präparate wird vom Institute für Radiumforschung der kaiserlichen Akademie der Wissenschaften in Wien in nachstehender Weise bestimmt und in Prozenten angegeben. Die Haltbestimmung erfolgt durch Messung der Gammastrahlen-Aktivität und Vergleichung mit einem Standardpräparat. Als solcher Standard wird jene Kopffraktion des im Institute für Radiumforschung vorhandenen Radiumpräparates anerkannt, an welcher von den Herren Professor Dr. Egon Ritter von Schweidler und Dozent Dr. Hess bei Bestimmung des Wärmeeffektes des Radiums 118 Grammkalorien pro Stunde gefunden wurden. Der bei dieser Messung gefundene Halt dient als Grundlage der Fakturenberechnung.

Angaben in Aktivitätseinheiten für $U = 1$ sind physikalisch unzweckmäßig, weil die Aktivität nicht nur von der Menge, sondern auch von der Form der Präparate (Größe der Oberfläche etc.) abhängt, und werden deshalb derartige Angaben von uns nicht ausgegeben.

Anerkennung des Haltes.

Die auf vorstehende Art vorgenommene Haltbestimmung gilt für beide Teile als inappellabel und es werden die Präparate nur unter der Bedingung abgegeben, daß ein Einspruch gegen den Halt nach Abschluß des Kaufes mit rechtlicher Wirkung nicht mehr erfolgen kann. Bei Abgaben größerer Mengen (von 100 *mg* reinen Radiumsalzes und darüber) auf einmal steht dem Käufer das Recht zu, einer Kontrollmessung im Institute für Radiumforschung beizuwohnen. Präparate, welche die staatliche Verkaufsstelle verlassen haben, werden weder zurückgenommen noch umgetauscht.

Preise.

Der Preis für je ein in dem betreffenden Präparate enthaltenes Milligramm Radium-Element beträgt inklusive Verpackung K 525·— (dies entspricht für 1 Milligramm $Ra\,Cl_2$ K 400·—, 1 *mg* $Ra\,CO_3$ K 415·20 und würde entsprechen für 1 *mg* $Ra\,Br_2$ K 307·70) ohne Skonto ab Verkaufsstelle Wien.

g Ra in equil. gives $2 \cdot 10^6$ electrost.
Emanation liefern $2 \cdot 10^6$ "
in one day 16½% $0{\cdot}165 \cdot 2 \cdot 10^6$ "

$0{\cdot}330 \cdot 10^6$

$0{\cdot}330 \cdot 10^6$

$= 3{\cdot}3 \cdot 10^5$

$= 330\,000$ E.S.E.

if you take the amount
in 1000 cc of air
then is the emanation-content of this air
20,000,000. Mache-Units.

If you want 100,000 M.U. per liter.
then you would must a quantities of radium
of.

$$\frac{100000}{3{,}30 \cdot 100000} = \frac{1}{3300} = 0{\cdot}3 \text{ mg Ra.}$$

$RaCl_2$ 0·4 mg Ra = 160 K.

226 1·30
71

Fontaktoinheiten nach Mache u. Meyer
Firma Günther & Tegetmeyer
Braunschweig
(Germany)
(.10 M.)

1 Ampere = 3×10^9 Elec. Stat
current units

1 E. Stat unit = 1/3 Microhm

1. 2,000.000 6 kom.

330,000

$Q_t = Q(1 - e^{-\lambda t})$

$\lambda = 0.180$ (days)

$r = e^{-\lambda t}$ $(1 - 0.835) = 0.165$

$(1 - 0.69) = 0.31$

1 day $\lambda t = 0.18$ in one day 16.5 %

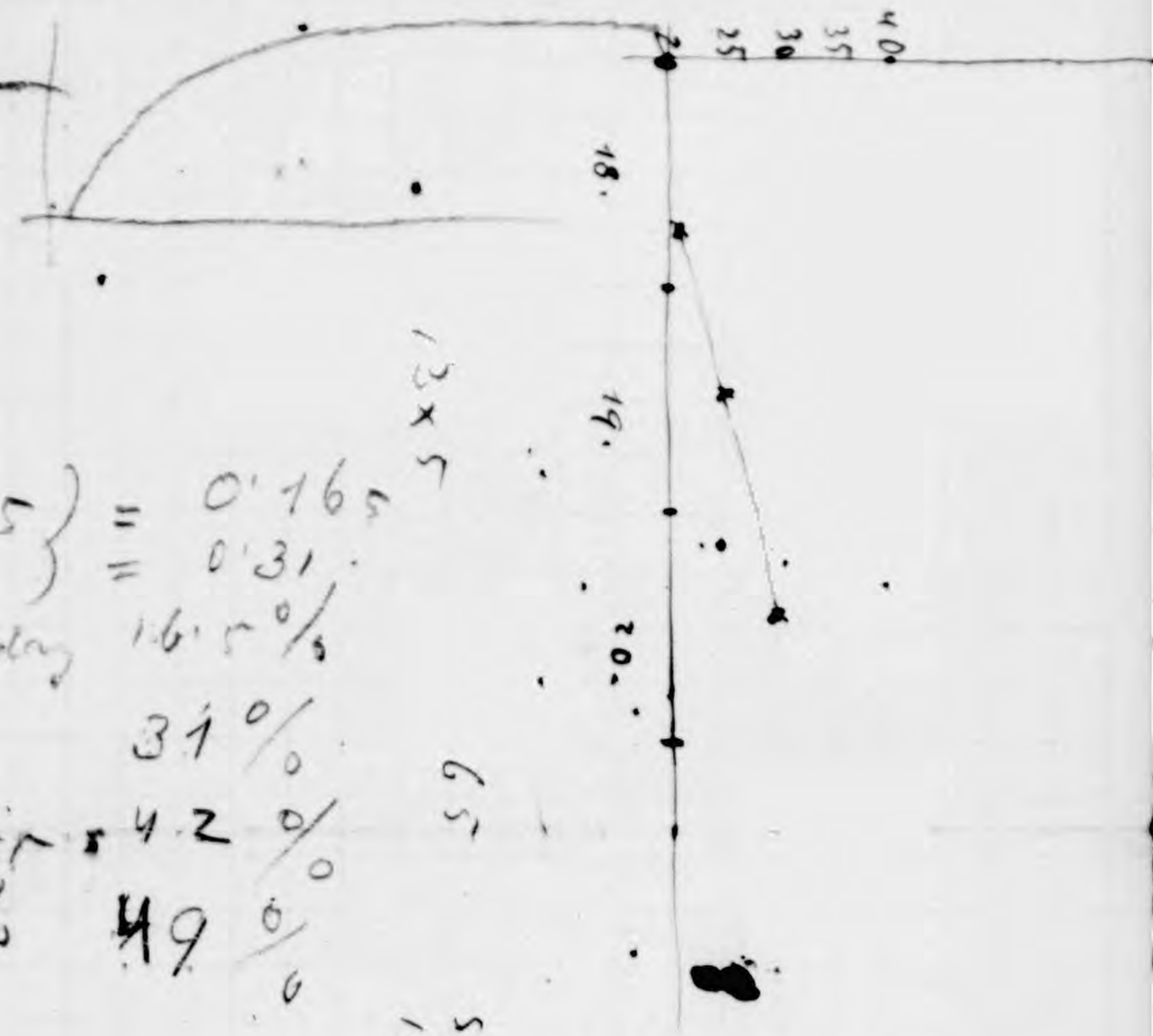
2 dn $\lambda t = 0.36$ 0.04 31 %

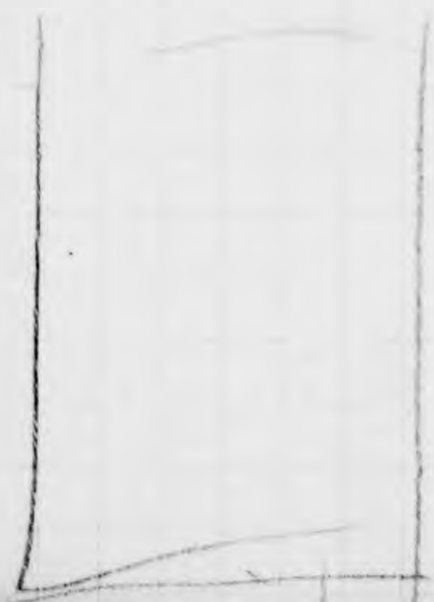
3 1 − 0.95 = 4.2 %

= 4½ % 49 %

$t = \frac{1}{4}$ day $\lambda t = 0.18 \cdot \frac{1}{4}$

$= \underline{0.045}$



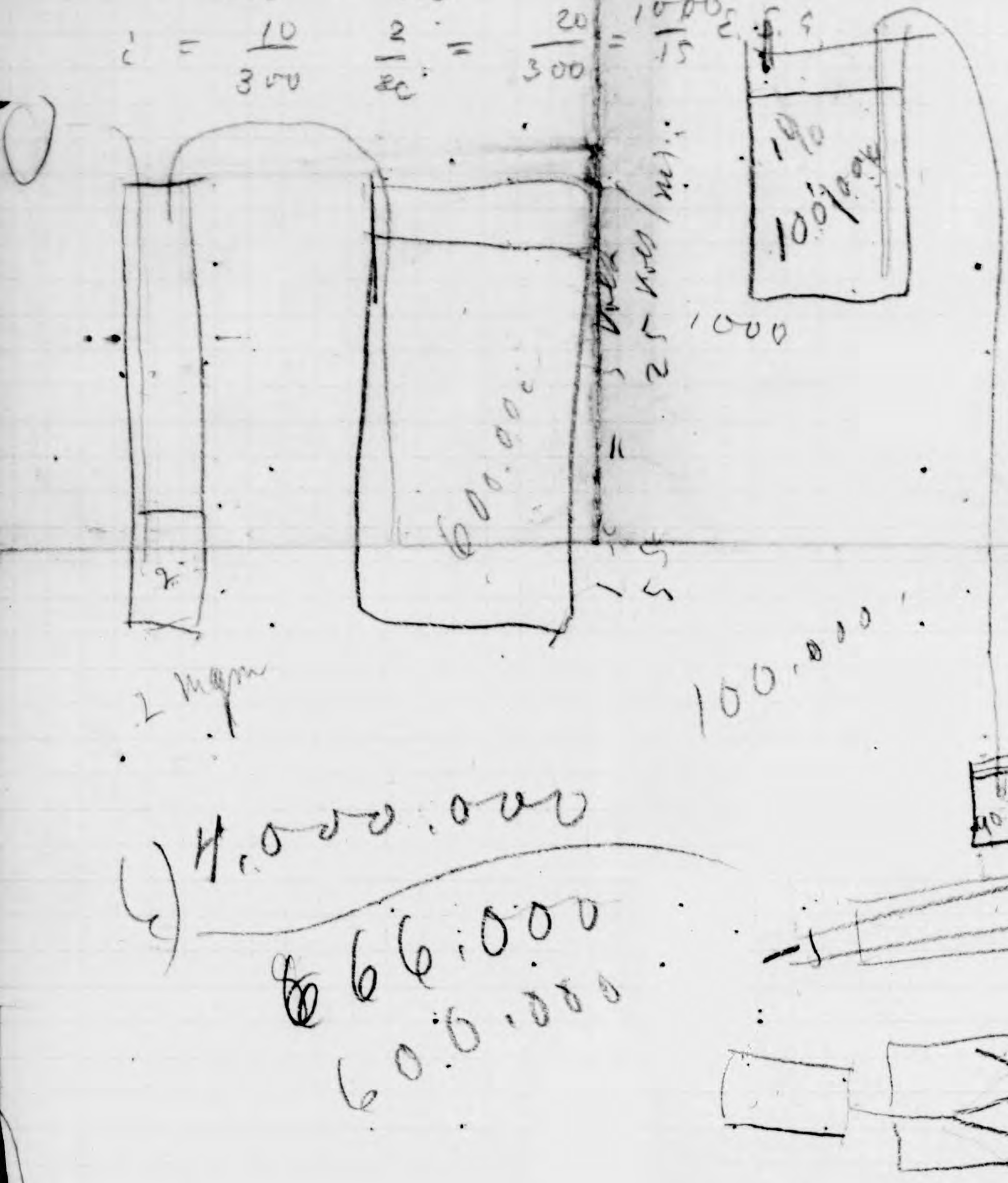


b) 12
24
9.6

5.25
9.6
3150
4725
46300

$i = \frac{C}{300}$ $\frac{Volt}{sec}$ $C = 10cm$

$i = \frac{10}{300}$ $\frac{2}{sec} = \frac{20}{300} = \frac{1000}{15}$ c.f.s



4.000.000

666.000

600.000

Elmer Clinic
39 Eleanor Street
Oct. 22 Monday

woman 35 yrs old.
Stricture of rectum due to
lues?

Ulcer of Stomach
Pain
Blood
Hypersecretion
Vomits after eating.

all cases of hypersecretion
are more or less organic
with gastroscope the
finds practically all
cases of hypersecretion
show Ulcer or erosion

Uses gastroscope for diagnosis when cannot make in any other way.

Cannot determine ulcer by location of pain. Pain is always at same place, except when ulcer is in pylorus or duodenum when pain is felt in right side under ribs.

Sensibility of skin is nothing except in gall stones.

Saw man had ulcer for 10 yrs, caused by cigarettes under treatment for 2 years no better. Still smokes. Ulcer most likely to be on small curv. because very few + slight foods stay there, sauce in alone stomic foods project surface.

Carbolic Colon

always patient should
in pyloric obs.
may be remains.
Remove with tube.
Do not rinse with
water as too much
water remains.
In bad cases may
wash out stomach, but
must raise pelvis by
lifting table (Elsner's)
which will allow
~~pieces~~ contents to run
out. (see p. 96 of book)

Cocaine gangrene Morphine
Must be through
morph. 2 centigrams
1/3 grain of morph
80-30 min of

Difficulties

There are two one at each end of oesophagus

If neck short or upper fibro fibroid may be impossible

Porter & patient has no teeth & dep enteroptosis. In latter lower angle is straightened. Both upper & lower angles are very pronounced in that people with "habitus apoplecticus"

Operation of Gastroscopy

20-30 before
1/3 grain morphia
hypodermic.

Then 3 applications
of 5 % cocaine
a. Uvula & fauces
b. pharynx & back
of uvula.
c. Deep down oesoph.
as far as possible.

Reflex must be
wholly lost before
passing tube

It is best to exercise
patient first for one
or two times with
flexible sound
to train.

Patient lies on left
side with head
elevated on hard
pad light y shoulder
Tube introduced with
knob to front.

Treatment of Boils

What is a boil
Dont squeeze
Dont abuse
Dont linseed

1st stage
· Cabalic or pinta
match or inject
carbolic with
hypo.

2d cuff-glass-alcohol
Compress of salt +
water &
Sodium citrate 1 tea
Salt 2½ "
Water 1 glassful

apply with cheese cloth
Compress every 2 hrs.
Cuf. 3 t.d.
Shave skin around
boil, clean skin with
benzine, apply Iodine
1/2 alcohol 3/4, then cover
with zinc ointment
Sodium citrate 15 gr 3 t.d.
Immunization by
vaccination with
staphylococcus aureus
Carbuncle- cut out
use Paquelin cautery.
and pure liquid
Phenol.

Patents

991560 } Engyme
991561 }
992205 - x-ray plate holder & funnel
992302 - electric machine

F. Lanelette

Children's garment
Burns easily, many
accidents
Non-inflammable, knows
some sold as non-
which are inf.
Stamped out,
Fear against false
statement makers

Pain with out a brain

Dr. Leri of Paris,
Child no face or brain
Lived 3 days
Cried & struggled
when pinched on
back or legs.

Eastman's peritoneal forceps.

Riley's vindication

malta fever
or mediterranean
broke out in
Texas and may
be in other place

Legal decision
R.R Cos not liable
for damages to patients
healed in their
workhouses

ask Hurd and R.R.
vs Pearson 21 R.
135 S.W. R. 917

Cancer caused by
injury
Dr. W. B. Coley of N.Y.
conclusions
1. Localizing may
cause cancer of
all tissues. Irritation
may be chronic irritation
or single bruise
(Long been known
for breast.
Ross 1879 reported
144 cases Sarcoma
of which injury in 63
Eventual a German
surg. reported 1895 137
in 800 due to trauma

Cases

man ~~[illegible]~~ over
Hundreds in RR
accident. 2½ yrs,
tumor upper abd,
died, p. m. ~~cause~~
Sarcoma of pan-
creas.

Woman fell on ice
hurt lower abd.
2 weeks after tumor,
operation, cancer
of ovary.

Regard minimum
Much serious
trauma cause of
cancer

Sand makes inter-
val 3 wks to 2½ years
~~in sarcoma.~~
even 6 yrs in
fibroma.

Other authorities not
limits 3 wks to 2 yrs

See annals of Surgery
May 1911

Electrocardiogram
June 1911
Interstitial Med Jour
ulcer of Stom
& Duodenum
by Mayo
Annals of Surg.
N-313 Sept 1911

Prof. Hoeing
Nov. 14,

Man - old. hip pain
OK in summer,
pain in wet weather.
always so in these
cases. (don't know why)
Belt around hips with
pressure

Prof Hallé
Nov. 14
Van Noorden

Give oatmeal when high & acidosis or caused by withdrawing carbohyd.

2 days vegetable
Then 3 days oatmeal
(250 gm. oatmeal
250 butter
This cult 5 or 6 times in 24 hrs.
No other food for 3 days.
Then veg 2 days,
Then gradually add

Meat 4 eggs
1 day 100 gm oatmeal + 3 eggs
2 " 150 " 4 "
3 " " " " " " dilute

Not good to give much protein in diabetes

Putrefaction is not very bad for diabetes

In severe cases use fresh putrefaction in intestines, which may produce coma.

Often find in beginning of coma diabeticum

Putrefaction in intestines

Amt of calories
not more than 3000
no drugs. only
diet. also increase
hydrotherapy. ~~[illegible]~~
10-15% due to nervous
system
a "psychic trauma"
may produce sugar
& diabetes, may dis-
appear with no change
of diet.
No essential difference
for in psychic cases
advanced, diet has
great effect.

In nervous form must
have rest, hydrotherapy &
all diversion. In such
cases not too severe
diet is too good.
Avoid great excess
in carbohyd. of course
not more than 150 gm
of CH all day.
Oatmeal used only
for "cure", not in diet.
Patient may select
any CH he likes to
make up. his 150 gm
in mixed diet oat-
meal has better than other

carbohydrates.
Von Noorden uses
bananas very much.
I have seen in cases
banana cure did
very well, others
not so well.

Cancer

Some
always in diabetes
insufficiency of pan-
creas, sometimes
this is dominant
factor, sometimes
secondary, also certain
kind of pan other
worse not possible
diabetes,
usually find no
maybe hyperthyroid
ism.

Vent for Pain
Insufficiency.

acute nephritis
No meat.
Ch nephritis.
not much
only to keep up
appe

Pernicious Anemia

Often use vegetables
only vegetables.
with lavage of stom
& intestines. We
give no drugs. all
kinds of veg. no
meat. no eggs,
or only small
amt. Green veg
lettuce, if patient
can eat. Sour.

Constipation
in most cases
by diet.
must be very severe
300 grms Graham
bread with milk
sugar which
will ferment in
~~stom~~ intestines
this is very mild
laxt. may effect
veg. bowels in
a wonderful manner

Prunes soaked one
night in water hot
in morning.
~~do not~~
use much fruit
may use malt
sugar. ~~may use~~
5 to grms of mg
Take in water
half hour before
breakfast.

Bäckerei Fritz

I Nagberg 13

Schrotbrot

Boiled milk
sour milk
no conditions.

Regulei
(no very much)
gas-agar
farmar bidrien
flere vrey

Superior.

Normal.
Kanehuede but
not yet enough
experience
beginning

Care.

Bilin
no used

mineral waters
given would
prescribe any
laxative for
the use when
horrible to get
effect from diet
fatigued eyes
must also be chary
from time to time
produce calomel

Geolites

Prof. Zalta
Van Vorden Illinois

Rheumatism /
the vertebrae
Bechterew's disease
may be with or
without pain in
arms & radiate
nerves.
X-ray shows cervical
dislocation of vertebrate joints
old man. Neck
immovable. Rigid
after examination
some rotation no
pain, pains in legs

Woman of 35. Hands
affected osteo-arthritis hyp.
joints swell swollen
joints enumeration.
swelling much less.
able to close hands.
Cried not before

Many 50. Knees &
ankles 12 yrs. Been
at many springs
Baden Etc. Intro
better since last
may July enumeration
Med treatments.

can walk naturally now. No
cane. Before much
crippled. could
scarcely walk.
Hypertrophic form.
If chronic rheumatism
(Nodes & rheum. not
same as rheumatoid
arthritis) man
still has some
paraesthesias of
feet. very common
in this disease

pomes generally not so
much involved in
Ch rheum & the rheum
are gout.

Sometimes very good
in gout. Cause the
deposits to disappear
in many cases.
woman 35
Case, very bad hands
but some better
after 4 wks. Some
months sometimes
show good results
stopping treatment pains
returned. Back the

emanations by
douching. would not
give inhalation

2 methods of
giving mandarin
1. Inhalation, most
effective
2. By water solution
taken internally.

Case of Reynolds
years unable to
close, recover

Jan 3 4 Subacute
rheumatism all
joints.
Absolutely stiff, not
able to straighten
curled not ~~able~~
bend legs
Had all baths &
drugs, no benefit.
for 8 months.
9 Remainings, doing
H uncrossed almost
well able to flex
limbs & body fully

Had great pain. Confined to bed. After rest in bed a little better, then no progress for weeks after & Emanations in 11 days. almost well.
(Always good results in subacute rheumatism)

Woman 55

facial neuralgia (trigeminus) very bad.
& day heat by radium Compress, wheel bitter. Had tried all sorts & treatment no better. Expect her to get well. Home cured many like case.

Used Emanations for 6 mon. 200 cases. Good results

Medizinische Klinik.

Paper by Dr. Van Leyden & Zadek on Radium Emanation in Rheumatism

Case. - Enlarged Spleen & liver with pernicious Radium emphysema, 2 weeks, pain much better, but will now use inhalations. Makes hyperleucocytosis. to 14,000 or 20,000 white cells in the mm.

Radium Emanation

500.000

Dose used here much higher doses than had been used before

Internal dose 2500 to 10,000 units

Inhalation line 20-100 units per litre formerly used daily 2 or 3 units.

Sometimes
vaccination
of pain. This
usually goes
away, but
sometimes does
not go away,
especially in
mixed forms.
not good in
atrophic form
of rheumatism

Apparatus for
Nerlingbacher
Radiumwirkung
Günther i.
IX Bezirk

Children's
Kluät
Iod, Glycer
10%
F. B. abreens
Dr J. Rosenfeld
Portland Or.

Einreiz Milk

Tidlta hw 15

Chr tonsilitis
causes. Epac. with
tends of
Rheumatism
Rheum of nerves.
a sort of poliomyelitis
also sciatica
also recurrent
nephritis with albu-
men casts
all disappear when
tonsils are removed.
Man with recated for 4.5 yrs
cured by tonsillotomy.

Now an extreme in America & also here, all tonsils must be removed. a lady in office recommended

deformans rheumatism in effect of tonsils.

· Acute Rheumatism

Patients who do not react to Salicylates will react to Emanations

Also tape cases react sometimes to antipyrine, very large doses 4-8 grms a day.

Salt

But baths, thermo
pen. elec all
very good, but
often fails. Then go
pen. spec good
in gonorrhea
rheumatism,
Radium no
effect in gonor-
rheum rheumatism

Acetylid
often chief symp.
gastro intest catarrh.
Hell has wonderful
effect. Must use
large amounts
give after dinner &
at intervals, 45 min
1:30, 2:30 30 drops
each time
one or two 30 drops
after breakfast, same
after dinner

Text book 2
very great differ
entiation in diet
I think this is wrong
There are a few
exceptions
In Hyperacid, much
fat & butter
In fermentation dyspepsia
decrease carbohydrates
In most other cases the
principle is to ~~in~~
force the patients

general nutrition.

Small frequent
meals

Forced diet 3,000 to
5,000 calories

Yoghurt especially
in cases of obstinate
diarrhoea
give only yoghurt,
2½ to 3 litres giving
2 zwieback & butter
continue for 3 or 4
days. gradually adding

porridges, stewed
fruit etc

Ch. diar. sometimes
due to paratyphoid.
May be other bacteria
must change the
flora.

Eggs in catarrhs
often not tolerated
in ~~[illegible]~~ of
malabsorption.
Mucus in feces.

milk ~~[illegible]~~ very
dilute. Many
will cannot
~~tolerate~~ tolerate milk

In use of Radium emanations begin with small doses, 10-15 units to the cu litre.

Thinks the radium emanation is a very important means of cure.

Recommends in case of rheumatism of the nerves.

Thinks uric acid gouty Heberdeen's nodes, no rheumatism. Has noticed however a connection between Heberdeen's nodes & rheumatism

Radium Institute
Weisenhausstrasse
No.
Off Welzingerstrasse
Saw Dr. Victor F. Hess
Got information as
follows:

1. A Mache unit is
$\frac{1}{1000}$ of an Electro-static
unit (current units)

2. 1 Amp. = 3,000,000,000
Electro static current units

3. 1 milligram radium
gives 2,000 Elec. stat units
when in equilibrium, this is
maximum.

4. Maximum emanation
(after 1 month standing accor-
ding to Radium-werke) is
consequently 2,000, Electro static
units, or 2,000,000 Mache
units

5. One day out-put is 1/6 this amt,
or 330,000 Mache units

6. Cost of 1 milligram of
Radium bromide, 400 Krons
or $80.00

7. Use by dissolving in
distilled water 100 cc. HCl Ice

8. Have bottle nearly full,
Air above water in bottle
contains 3 times as much
emanation as the water,
when amount is large.

9. Passing through solution
and series of bottles, the
amount of radium will
be proportional to size of
bottles & equally divided

10. Emanation will combine with nothing, it may be mixed with anything, no effect from ozone etc.

11. Emanation decomposes 1/2 in 4 days.

12. Best way to take internally is to collect emanation in water, as much as 2000 units has been given in a day

---

3 bottles of Radium
Werk Radium
Sol. Contain
Rad Sufficient for
1000 Mache a day

Government Headquarters for Radium.

1 milligram pure radium costs 525 Kr

12 1/2 mgms 8% containing 1.03 mgms pure radium will cost 540.75 Kr.

Bought 1 mgr pure R for 525 Kroner.

This will produce daily 330,000 Mache units

Prof. Hess
found in 1 bank
392 M.E.
Nov. 21, 1911

Radium Institut
Weisenbaus gasse

Kreipper
Neuferts Nachfolger
V/111/2 Brunnenplatz 8

H. K Bredemann
Dr Fritz Gaustwitz
Leiter des K K Hochbaues
für Radium Therapie
Id Hauptmannthal

Bremann.

Smithengasse 1
arbeits Ministerium

Formula to determine amount present

$Q_t = Q_0 (1 - e^{-\lambda t}$

$\lambda = 0.18$ (days)

$t = e^{-p}$

1 day $\lambda t = 0.18 (1 - 0.835) = 16.5\%$

2 " $\lambda t = 0.36 (1 - .69) = 31\%$

3 " $\lambda t = 0.54 (1 -$ $= 42\%$

4 " $\lambda t = 0.72$ $= 49\%$

1/4 " $\lambda t = 0.045 (1 - 0.955) = 4\frac{1}{2}\%$

Supposing total amount to be 1 mgm (2.000.000 M. Einheit)

1 day 330.000 M. E.

2 " 620.000 M. E.

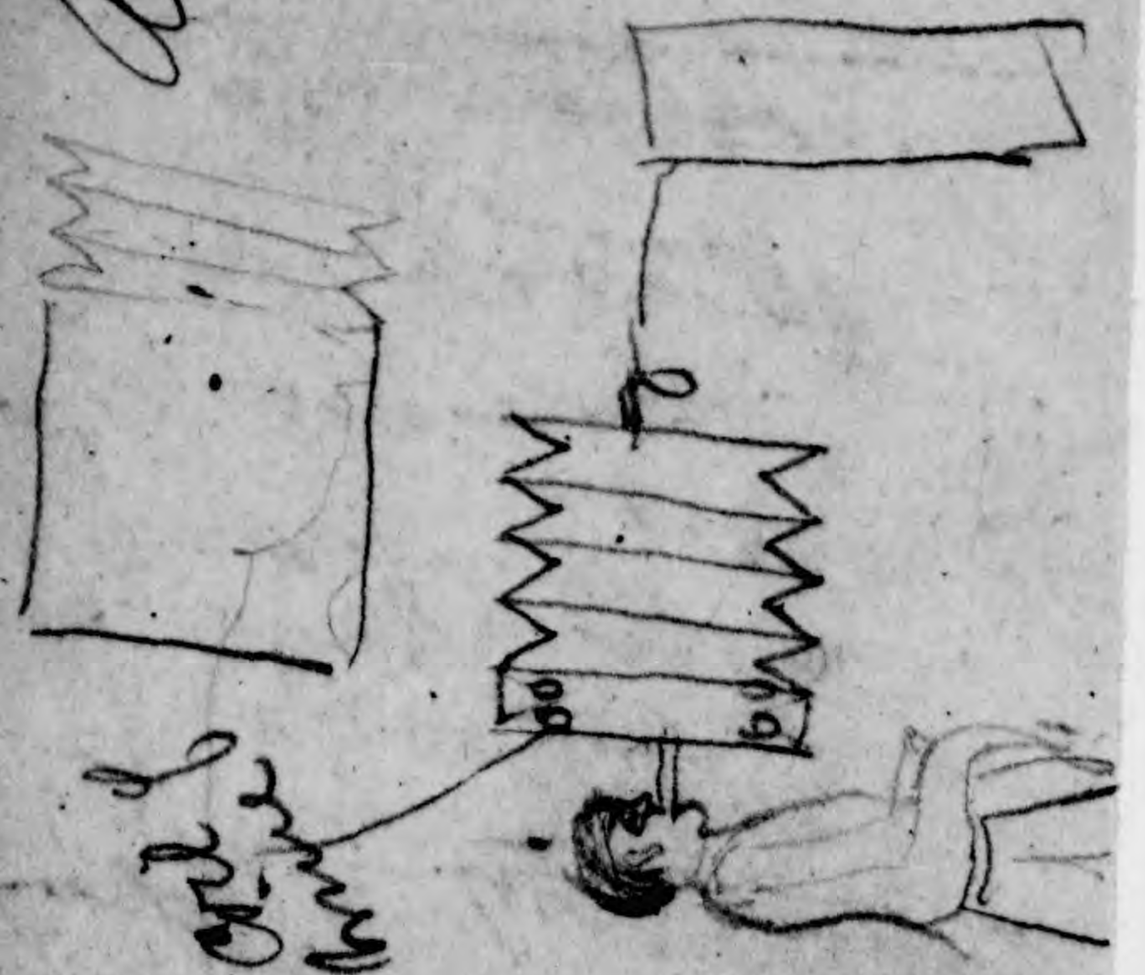
3 " 840.000 M. E.

4 " 980.000 M. E.

1/4 " 90.000 M. E.

Radiogen

all ophuedl



Dr Nicolai
Tuesday, Oct 23.

Heart — pump.
Some disorders of pump
1 - Valves diseased
2. ~~Muscle~~ wiring

diseases 4
1. Arythmia
Earliest known disease
Generally not very serious, but
many serious

~~Cardiograph shows~~
~~the disease~~. In last
ten years we ~~know~~
have learned

anyhemias of no
Decision diff.
Physiologica
4. Respiratory
Organs 0

3. Conduction disturbed

4. Pulses. irreg, paparatus
arrythmias

1. Physiological

Physiological

1. Respiratory
   [illegible]
   [illegible]

2. Extra systolic
   nervous people

   [illegible]
   [illegible]

my daughter
resp: r
extrasystol.
vagusinv.
dam-
disturb. condut.
pulsinreg. resp.

Cryoscopy of Blood.

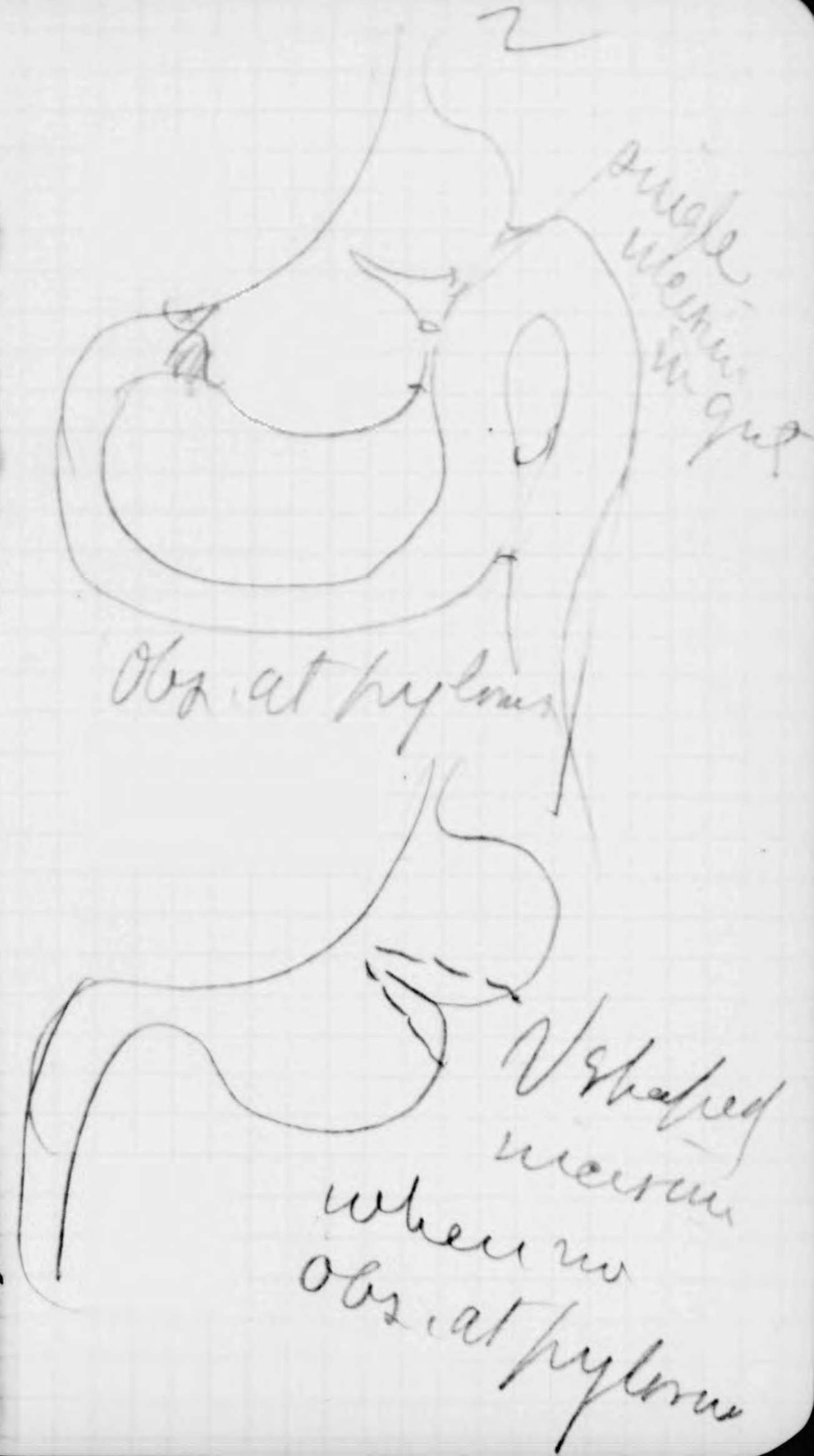
needs 10 cc of blood allow to clot, heat serum same as urine. normal is .069. an increase to .070 or .071 indicates inefficiency of kidneys and danger to operate.

(Leichtenstein)

Wed. Sept 24 1917

Dr. Koehler
of Chicago
Survey Corp.
says he
glare seldom
seldom in men.
Had 11 cases
only 1 man
thinks it due
to light-lacing

2


Single uterus in pig
Obs. at hylum
V shaped uterus
when no obs. at hylum

3

Old Albumen

ppc. - 9 Salol

2 neg No 1 & 9 Salol

3 - 1 gr 2 & 9 Salol

No 1 gr No 3 & 9 Salol

Begin with 1 dose

gr No 4. Use dose

as high as possible

with slimy vaginal

nev Zusp. nev 99

(a)

Nov 1.13, diag
not
Scaffe lesion of
halfway of thus
before last.
1 B. lesion more
16-18 ins after
myeet. Must be
as much as 2° use
Giv (est) in afternoon
5 drops no. 2 for a week
5 " no 3 for 2 weeks

Begin with autogenous vaccine
High temp to usually due to
the mixed infection
use for G.B. glands
in connection with
X-ray
continue treatment
increasing dose
until 5 drops of old

tuberculin gms
no reaction
Give Old tuber
culin once
in 4 days, but
patient arrest
in bed
Glands are
Arbeundum
durchgeschnitten
Cervical gland

then affect the
venae terpentin
and treat with
X-ray

hurplup
butefly
Closefesslin
tbrough vaus
cervix, split the
uterus, dissect
out canal, from
uterus down &
close it in,
the uterus arteries

Di-chloramine
used in dry
powder
mix with oil
Eucalyptus
to form a
paste

must keep
in black
bottle

Shave skin
wash with
benzine
no odine the

use 20%
sulfuric acid
and use an
accelerator
after with
slips of
paper.)

Die Chlorverbindungen des Chlors werden durch Zusatz von used für Zinkbäder Bäder Process in dressing

wounds
dressed daily
till discharge
ceases. Then
every 2-3
days.

Leaving
dressings
rubber adhesive
rolled porch
over on
which potash
ointment
Strips rubber
around bandage
Lace with rubber

only drain
used only
shaved of
zellk worm yet
opens dressing
where no drain
at end of 8 days

Or chlorine T

Sul fut un
with spring
or wood,
they always
to fling over,
close over
Uncleanness
[illegible]

too much
gauze will
cause [illegible]
but gauze
drains to machine
& close wound

8 Phil. Oct. 24/17

Dr. J. G. Clark

Use of radium.

Fibroids.

① Benign fibroids have at Menopause

② Inoperable cancers

Has studied 110 cases of each.

Benign Cases

Selected cases of small tumors, Hemorrhage, age above 45

Regulating radium doses can stop hemorrhage without causing change of life. So necessary in younger women.

Cancer

Operable cases are few in no. compared with operable cases.

Radium only for inoperative cases

Must be preceded

Recommended as palliative rather than curative during a certain period had 60 cases of 3,400 inf.

Bengue Cap 12

Hypothetic 60

Melnes

Polypi

Cervical hem

Nausea & Vom

none 58

present 25

not known 17

not one that

nausea is due

to radium may

be due to gas

Pain

Present 60

none 30

not known 11

Lacerus

Inne 44

Professors 2)

Anemorhea

[illegible]

Medium 1

[illegible]

Panel

Immediate Pers 40

1 person 18

2 or more 23

none 14

no relief 3

not Lucus 2

Symptom Pneu.

17-20 — 1
20-24 — 1
25-3 — 1
30-35 8
35-40 8
40-45 19
45-50
50 — 5

Complication

Pyometra 9 1/2
Uline
of necessary
one mistake in
diagnosis - upstan-
ment
1 cases, no effect

Cancer

Cervix 74

Fundus 4

Vagina 7

Recurrent 10

Urethra 3

Chorio Epi 2

Uretheral

cancer of fundus

very favorable

for cure by

operation

Cancer of Rectum

Hemorrhage
Complete Rel 60
Relief 10
not helped 4
not known 14
Pain
Relieved 23
not 14
not known 2
Fistula recovery

Fecal healing 52
no effect on growth 2
Hastened growth
Made results at no 0
Co-Stay in Hosp. 3 days

If operated few would get out alive

Lied 32
alive 55
3 alive 25-30
still alive

Radium must be regarded as an adjunct in treatment of cancer

Operate
Case of large tumor
Irregular bleeding
in young woman with
1 large tumor

100 mgms is sufficient, all his work done with 100 mgs
In case of doubt use radium

Chas Mayo
Surgery in the war
20 % wounded in head
10 % " " chest
25 % fractures
6 % abdominal

St Luke's
Oct. 25 1917

Opened skin wal
napkin
Jones, crossfoot
with bandage at
ankle through
Pulls up uterus
with bullet forceps
used sheet rubber
for packing

diagnosis
Diseased appendix
Symp. Pain in both
sides
Found only retrov.
shortened lig. by
pulling leg through

broad lig. & attaching
vagina behind the
uterus.
Result uterus falls
back to perpendicular
all the lig. for retro
are rather lengthen-
ing.
We have given up
all ventral fixations
because of failure
the tubes.
Gilliam op. leaves
a hole which may
cause obstruction
If use Gilliam pull
lig. up through in
tervital ring.

Or Walthius said
"I wish some one
would explain
why lower border
of stone in X-ray
picture + only
one found there
at operation.

Hiccoughs of indeterminate duration or
menstrual cycle
normal and bowels
free from laxatives.
After cystotomy
fired most of all with
even when radical
op. recd

Walthius Gynec.

Meatus underneath
sutures on left
we will change
that & put bladder
on left.

Very careful & apply
rubber thoroughly
threading out folds
urgent cause fever.
after op.

operation

Dilates very thoroughly
with urethral dilators
after making incision
cut at lower border of bladder
then makes median
cut extending to the

uretter, simple
of in front part
then bladder
had formed in floating
peritoneum
cut ligaments
did not attach
vertical peritoneum
to uterus.
One or two stitches
in vaginal wound
beginning 1/2 in behind
urethra
Hind stitch
through uterus post-
one level of fundus
at about level of pubes

Cutaway surface of uterus in
closing vag. wound
Cut off rest of vaginal
wall each side
Cut out wedge of
cervix, cut round
segment of cervix
and closed the broad
ligaments with the
fabric where that
closed the cervix
Only 2 ferrinal operations
Emmetts, folding muscle
Hegar's closes entirely
in front
all others modifications

Walkers
May method com-
bines the two

Anesthetics

Narcotic mixture
1/50 Sulphamine prior
before op + 6-12
morphia

Ether, gas, oxygen

Large mixture
air contributes
the worst results
Avoid vomiting
If vomiting
patients in bed
Seldom pick up

bladder

Cystitis and Pyelitis
not due to catheter
never saw a case
due to residual
urine.

after op. always
pass catheter after
urination at least
once a day, after
continue as long
as there is residual
urine. Inject 30
1/10 of 1% solution of
silver nitrate by
catheter. Non septic

Appendix

In adult has a healthy appendix appt has not enough function to remain normal.

① Appendicitis obliterans most common

② type which goes on to systemic sclerosis changes.

"appt has no function"

Closing Portions

Close with rubber sheet as tight as possible

— — — —

Lig. & Suture
Greatly in favor
of lig. & suture
for approximating
fascia well
always bring
tissues together
which others
plus well not

Closing abd wound
1st peritoneum - catgut
no / catgut
2d muscle / or tendon
3 lig. & suture of
waxed silk
4 skin catgut fascia

Admitted.

2d morning (3d day)
2 oz. milk mag
nitrid
afternoon Enema
after that 1/2 oz
milk magnesia.
Great difficulty to
purge. Stools
painful before &
after evacuation

Advised
for Cystocele
Neglect bladder
does not have stools
nt. only urinate if
bladder distended
with urine the urine

Injury was caused
by pulling bag. tissues
together with removal
plates from urethra
backward then includes
uterus in closing
sutures
Trim off vaginal
membrane on each
side
Uses continuous suture

Palpation

Palpate the pelvis & kidney from the front side

Floating Kidney

usually floating kid. almost never

Connective tissue will always hold when fat has been used to suspend

Does not mean kidney suffering has gone out.

Th. Bladder

Always examine bladder for residual urine when bladder symptoms

Hypnosis than reduces of urine over of boro-boro 1/10 2% silver nitrate

Urinary 1/2 of 1% when nearing, Rarely seen any irritation from 1/2 of 1% silver

Dr. Prof. Carlson
Prof. Lillie Zoology
Effects of sex hormones in sex differentiation
Free Martin
free martin
is an imperfect female sterile due to fusion of chorion and allantoic of blood of the two fetuses.

Free martin due to exposure of female to male hormones. The male develops earlier than the female so its sex glands begin making hormones first
Male hormone suppresses the formation of ovarian corterp.

Placenta is impermeable to hormones. This protects the fetus from mothers hormones.

Dr. Lockhart

New factor in the control of the pylorus

Pylorus opens at each peristaltic wave

even not open with feeble contractions

Pylorus may open when stomach is vigorously contracted as a whole.

Any irritation of duodenum causes closing of pylorus.

Irritation of duod may cause nausea & vomiting

Duodenal mucosa menb. very sensitive

Pylorus opens with each bolus wave which may comprise 2-5 peristaltic waves.

Cancer & Heredity
Dr. Maud Ryle

2 objects
(1) Human interest
possible prevention
(2) Clinical
specific advice

Last found
minors needed
permanent lesions
Best condition for
treatment left less
frail
stock is left —
Good stuff often
years standing
Many families selecting
a hundred generations

Study carried on
by two lines of
possibly need
1 Pure strain breds
pure
2. breeding with ~~of~~
grey with albino
giving 3 classes
Gray, albino, hybrid
(heterozygotes).
The Mendelian test.
The heterozygotes may
transmit a tendency
through 100 generations
without grey showing
it

every cancer in the investigations as allowed to die a natural death & than 70 cases produced cancer in 10 years.

Has 8 male & female both cancer all surgery had cancer 10 of 8 cancer

Her investigations shows lime/medicine lyber in cancer benefits

Has 18,000 autopsies 12,000 Dr 13,000 alive

Cancer in general and cancer of spleen or gens per day

Has chores live cancer because rare

Has 75 cases of liver cancer

Can produce liver cancer as easily as any desired color

In Strain 338 Boots parents with cancer heredity 1/2 of all branches show cancer of liver.

The principle applies to secondary as well as primary cancers

Strain 250 - 251
both parents cancer of breast
80% had relatives of breast.

No liver tumor mentioned in ancestry.
Strain 196
Ovarian tumors
75% fell in this

Spontaneous stomach tumor rare in mice
Strain 73 - 281
8 stomach tumors in 3 generations.

Uterine tumors rare in mice
Mouse strain ~~tax~~
uterine tumors frequent

Tumors first appear as sarcoma later become carcinoma

Inheredtarity of Infectious

Study Thinks has Experience shown that Cancer is not infectious

Slain 20

Pulmonary Infectious Both parents Pulmonary infection Generations never appeared again

Slain 243

1 Parent Cancer Pulmonary of pregnancy

58 % had cancer some lung infection

Cancer Inherited infect

45 % cancer 200 cases of intestinal

Cancerous tendency may aggregate and some case cancer disappeared and did not reappear for ten generations

Cancer age of
and comes up-
wards

Dr Moorehead & Diff
Frequency of intestinal
obstruction

troops left for
days dist not
die (open into
peritoneal cavity)

The toxic substance
of cured corf flds
over but induce
antibodies

Antitoxins in closed
loops, greatly in-
creased length of
life.

wounded leg.
A tube at each
end of tube
3 days were
spent in which
one end of leg
was attached to
the splint
five days ago.
Were well & lively.

Prof. Cushing
Reduces pain
in gastric ulcer.
not yet fully
demonstrated
generally thought to
be exposed nerves
in ulcer
Absence of pain
might be due to
ulcer healing. Was
it wrong?
Any raw surface
painful on contact
of ulcer.
Pain controlled
by alkalies

& duodenum

1. Gall bladder without pain in some cases

2. Ulcer & ulcer pain may be present with normal stool to approach

3. In case of ulcer pain & of ulcer that is removed may not relieve pain.

4. Called hunger pain in England Periodic

5. Pain is described

(a) of character & site of pain like one ulcer of pain - tender tenderness

(b) Pain nerves not present in stomach cannot cause pain by irritation

(c) Pain not present with cholecystitis seen by x-ray.

(d) G. pain present with appendicitis, cholecystitis, and cholecystitis same as in ulcer.

Obs. Case,

Young man had acute gastric ulcer, recovered without operation. Occasional recurrences yet attacks. Had learned to swallow balloon studied his acidity & his gastric acidity. He had an attack.

Gastric contractions series of 30 ft waves in each half of waves. Subject had pain only during contraction. Had hour when hyperacid.

The contraction precedes the contraction wave a little. The

If the contraction
is strong enough
a very strong spasm
is caused in the
duodenum which
may be the cause
of the pain.
Bicarb soda will
not relieve pain
is due to ~~the~~
spasm of pylorus
& duodenum.
Contraction of
gall bladder has
been known to
produce epigastric
pain
A collapsed colon
duodenal ulcer, and
when not operative
the pain dont want
to operate myself
Pain is due to
nerves in the
muscularis like
pain of cramp.
In ulcer the
muscularis becomes
hypersensitive

Oct 25,
Gold men & P.M.
Will Mayo
Cancer of Stomach.
30% of all cases are
of stomach.
What is the cause
must be a single
cause.
Cancer of breast
uncommon in race
in which breast
is covered.
Smaller man
takes his food hot
I believe this may

be the cause.
In tropical women
eat rice boiled often
at 3d table & have
rarely cancer of
stomach, common
among men
Smokers cancer
usually men
Tea drinkers
84% of cancers
& ulcers involve
lesser curvature.
Early diagnosis
depends on X-ray,
Carman says
demonstrated that
95% of cases may be
diagnosed

all cases with
any recurrence
symptoms should
be X-rayed.
Extreme anemia
Tumors of pylorus
always if cancer
if cannot remove
all.
Callous ulcer should
be removed not with
gastroenterostomy
Cancer of pylorus
+ lesser curvature
do Polya. Has
done 1500 min.

Mr. Cushing
whole stomach
and a little of the
oesophagus. Edema
in well.
of 300 resections
88% were alive 3 yrs
26% alive at 5 yrs
Should add Allen
Frazier 7% natural
death rate

Phosphorus

Fish in unclean water have cancer of gills.

Rabbits have cancer of stomach because we have too much manure in our stomachs.

Cancer in stomach & colon, because acids in other places.

Cancer is always preceded by rotting. must part clean food in our stomachs if we want to get rid of cancer.

McArthur

Mayo has operated on 10 times as many case as I have & hence has opinion 10 ten times as good as mine. In Germany the man sits at the foot of the

table and pours the
tea, yet there was
no proportion to that
of women coming in
this condition

13 years ago
received cancer
of stomach and
died month of stay
in hospital

Patient elevator
man at St Luke's.

Admission [illegible]
of gall bladder
case y gave
resection

Malas rt to
prevent normal
gall bladder
flood with mge
water & albumen
water of needed

Pieg 1st in 3 cases of
gall stone in cases of
cancer of stomach

Sir Berkeley Moynihan

Effects of recent
Enlarged tissues
of chest wall were
began
Patient negative
Partially filled
chest wounds of
Upper 20 of left
doctor is reached - Ricochet
Rifle bullet wounds
usually small.
wounds of large
vessels are serious
Case in which in-
nominate vein was
divided lived 7 wks.

Causes of death
1 Hemorrhage 12-15 days
2 Sepsis after 3rd day
but occurring later
when large part
of chest has gone away.

Empyema

Apply Karels
method using
many small tubes
each containing a
small wire to
guide & hold the
tube

Send him
book to Rooke
He will send
off 15,000
circulars to
dealers

June 8. Wednesday

Gall stones.

2 cups.
Round, large black ones.
1 more small black
3 smaller, yellow,
faceted stones

Exploding in large
stone to ~~brain~~ blood
tubes, July first row.
of outlier strength are
the coals so as to
hold well.
Almost no chance of recurrence
Had 1000 cases before
one recurred.
Pancreatic stones are
occurrent stones
yellow stones probably
original ones, big black
ones formed by fresh

infection. Has seen all stages from jelly like stuff with black sand to calculi.
Thinks recurrence due to better drainage the end of bladder is lifted to abd. wall

Instruments.

Kocher's clamps, large & small

Vertical ang. retractor

Blunt dissectors
Kocher's & Sluit one.

Longer handled forceps

Big forceps like Kelly for holding wound

Wm Mays

9:27 a.m.

Woman, colics for several years.
Could feel no gall stones, gall bladder looked a little white.

Removed all sundry things, a second incision, found gas in it. Closed wound with Kangaroo suture nearly.

Returned to gall bladder. "Diseased gall bladder. Cell right"

Hesitation, opened let out healthy pile. Closed up.

Explored with finger, felt rough like gridiron ~~with~~ & dried in usual way.

Drain rubber drainage tube with quite a few strands

Modification of my tendon suture

Make every 2d or 3d a locking suture

but just right.

Tubercular peritonitis

Always surgical

Intro-plastic pelvic
Intestinal infection.
1/2 cases from appendix
or ileo-cecal coil.

May be from tube, when
-ever fluid, due to
tube being open &
infection extension.

In men, always put
patient in Trendelenburg
position & look after
tube.

In this case, seen by
surgeon & operation in

---

abdomen with fluid,
& pelvic have had appendicitis

On opening found
tubercles ~~[illegible]~~ on
the membrane in
course of cure.

Cured by 'taping'
because irritation
caused fibre for tube
to adhere to.

Cases got well but
came back with
mass in pelvis, based
Mg

Found many adhesions
appendix all crumpled up
bottom, with some
tuberculosis underneath

(makes small external incision. Every inch means 30 x 4 days more in bed.)

If the tube is free, quite dippy.
If finished by adhesions, becomes a cyst.
If endbecomes adherent to uterus or wall of pelvis, a nasty collection of stuff.

Pyloroplasty.

In an case of probable ulcer with obstruction, big dilatation. No blood, plenty of HCl. Pepsin does not count much figure.
Lab. evidence does not count much.
If lab. agrees with clinical quite glad if not go ahead anyway.

Usual incision, funnel for fluid, a rather bad one.
A big lumpy mass about pylorus, lying as it does, dwarfs liver to overlie in presence of free fluid.

Looking for hernia
Colon. Lies just under
Clamps
Put in forceps an-
nuli below groove 1½ in
below groove.

Pulls stump out &
ties gastric artery
with catgut. double
No 3
cuts Gastric
and ligades gastric
hepatic connections

Assistant puts
finger through ulcer
Put in forceps each
side. Opens opening

Examines gastro-colic
omentum for glands,
separates omentum
into masses & ties off
beginning at right
side of lesser curvature
gradually detaching
from the stomach part
of stomach. Ligades
blood vessels at
pylorus last. Ties
right & left corners
of opening together
to close up & secure
stomach. Picks up
& ties gastric artery

Used skin interrupted
catgut. Gave water
enemas to discharge
[illegible]

"He's got enough"

Cut off with Electro-Cautery knife 1½ inches.

Assistant put on 5 pairs of forceps over stump & stitching back through flaps.

Double row of hemostatic sutures, a row of interrupted sutures.

No anesthetic while internal work is being done, not needed, no pain.

Last row turns in the corner like an appendectomy.

"Turn in at least a half inch of the peritoneum & the interrupted line of sutures."

Superior mesenteric artery
runs underneath the
pancreas

In doing bottom of
pylorus in parallel row
of superficial sutures
doubling back and
crossing at both
ends so as to be on the
side. Roughly one
tenth inch. Then
open carefully
holds bottom in forceps
after tying. Scalpel
fecal matter with
point of needle in
and of forceps used
to mop out stomach

(Don't like to attach
things to peritoneal
wall, always likely to
be pain in accet of
sensitive parietal
peritoneum)

~~Made cut in~~
Joined to stomach
a little under lower
border.
Cut in first
then passed sutures
then cut ~~out~~ more
stomach, trimmed off
unhealthy mucosa,
put in bottom layer
e.g. about a little then
tucks in some edge
into gravel + ties
tight.
Other layer below

while this is being done)

H interrupts, returns to protect the button.

(Great mass of intestines out under rubber dressing this part of Lying in stitch.)

Pulls them back & packs gauze around them & pulls retaining off under pelvis.

Sews up wound by out figure of 8 stitch. Closes up by retaining & opening forceps which attach ligature crushed

the stump just below forceps, then turns in stump and as in Appendect.

"Right down on the pancreas, a little afraid" Put in tissue again. (Simply rolled up a piece of tissue, no gauze in it.

"No I don't care for anything"

H & Mrs. to this party

"I think cancer cases should be done in one hour."

Closes up by silk & single row of silk out retention

Drain brought out at top well healed it in first 48 hours.

Amputation nerving

Hard to cure. Come back

Two Kinds of pain

1. Pain in end of nerve,
2. Pain in end of stump got in the nerve. 2d capsule growing out of marrow at end of bone. Must always resect. Never can get end healing stump when cutting across long bone in thigh root, I've always seen in amputating, make a little flap

Operation,
Turned up flap of
skin from below,
then cut up a flap
with a large chisel
trepanned and displaced
the cap so as to close
the with bone instead of
lead & plates and bound
to all that is needed
Closed with silkworm
~~Rec~~ interrupted

Removed a large menin

3 inches higher up behind
on the sensitive nerve.
Very unsatisfactory
Neil Cruikshank, Kane

tried osmic acid &
everything else.

(This was to be Chantipps
case but he was
detained by automobile)

Man 4 53
Pipefitter.

Tumor in gallbladder region. getting larger and smaller. Has been having attacks like gall stones for 2a 7 years.

Diag. Gallbladder adhesions from stones. Must be subdiaphragmatic abscess. May be malignant disease but seldom see malig. of this sign. Do exploratory lap. of the abdomen.

Turned out to be a subdiaphragmatic abscess of liver.

Pus poured out & wound wound infection began to explode against & stinking pus

Drained by stab wound from the right side well back, under ribs "I am not in pain, feeling tender. Think I may be. I go through the liver.

Put in short glass tube big as my little finger, and long. Make tube inside opening of two cigarette drains along side of long.

Abscess extended through substance of liver & beneath liver, ~~[illegible]~~ (after punching hole in liver with forceps & finger.

Lateral opening opposite tenth rib.

Chances fairly good

Pus not very offensive been in hospital long.

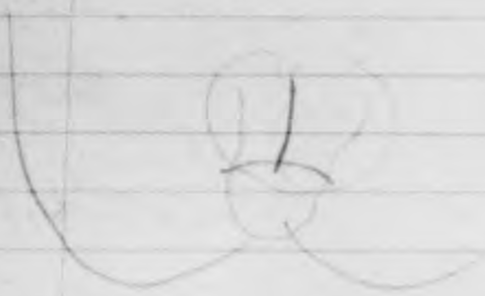
Pathologist reports ~~[illegible]~~ hydatid cyst.

Appendectomy

Repeated attacks of appendicitis, under which worked abscess or it expect to get thinner. Would let pus out.

Found little or no pus. A big gangrenous stump. ~~[illegible]~~ Put in a big cigarette ~~drain~~ and ~~[illegible]~~ a stab drainage.

Instructions for
Providencia
12:1 86



begin with vent incision
Stab migalos
Carries incision around

Punctuates peritoneum before & behind, leaving sides, ~~Ligates~~
Clamps & ligates arteries in corners of wound
Don't put in much of anything
Stop & clamp until you get

Pulls uterus down with cats claw retractors using two one after other

Pulls out and tucks in gauze, hanging on top fulcrum with sheep wide packing

Sieges tubes & round ligs at top after getting fundus in right. puts on ligature leaves ends long for traction

Keeps running hemostatic ligature back as the uterus is pulled down and clipped off

uses catgut
no 2 double
ties together the
two ends of the
quilted suture.
So as to make
stump small &
round.
The forceps on
each side mark
inner border.
Ties stump & loosens
then brings down
the sides of the mucous
wound in mucous
membrane & vag.
gathers in front
by hemostatic
suture & fastens
to stump.
Perineal repair to
finish.
Loosens adh.
posterior margin of
vagina at level of the
hymen then places
deep silk worm gut
sutures similar to
front side not as

Puts in self retaining catheter. Urines bladder does not empty. Has off days till new attachments are formed.

June 9.

Leave affairs in hands of Dr. Mayo

June 7, 1905

Dr. Wm. Mayo.

Internal Sig. Op.

Cuts down under peritoneum three inches and 1/2 so as to take up whole slack in the ligament. Right ovary fixed on uterus. Tube in the median round ligament. Left ovary as usual. Otherwise same as mine.

First done by Simpson of Pittsburg a Dr. Mayo's Dr. [illegible]

Appendicitis

April 4 14

Had frequent slight attacks of appendicitis for one month past. Found only slight adhesions and no other change in appendix.

Appendicitis.

March 29

Had 6 attacks of appendicitis in a week ago, not very severe. Some have been very severe. Found many adhesions, no abscess.

When Peritoneum punched up and the base of appendix dissected back with knife, then put on purse-string stitch ties the mesentery in with stump when sewn, to prevent adhering to bowel some distance away & making trouble.

2 inch incision.

Dr. in the midst of an acute attack

[illegible]

Anterior ligament operation (continued)

I have used it — [illegible] as a good method but requires considerable skill & I have to depend on sense of touch as to whether I have the ligament or not.

Am able to find the lig. in Alexander method by seeing the tissues of the external ring and pulling them hard so as to bring ligament into view generally very easy.

Appendicitis

May d 16. Had many severe attacks. Last a week or two ago

Feared fecal stasis

no other apparent trouble.

(Is not the trouble in many of these cases in colon rather than in the appendix?

Praise this [illegible]

[illegible]

Hypnotism

Girl of 16

dilates carefully & slowly,
does not lear
asses, makes yeas
cuts in each side
a split with razor
Knife after anesthetizing
swabs out mouth
carbolic acid & a
a shred of gauze
pushed in mouth
[illegible]
[illegible]
Saw Phelps in Paris
fill his mouth
with carbolic &

open up to let air in
see it all white
then put in alcohol
& let them see it
recall all right.

Saw nurse from
carbolic on razor
and arms. Used
alcohol at once &
was OK.
Saw a nurse flying
full bone cavity
with alcohol after
carbolic & close
it up. The man
was grumpy.

Cancer of Uterus
Abdominal hysterectomy
or vaginal way
Decision cancer
is so much larger
would pull off
Prefers vaginal
way with tamponing
usually.
not unlikely to
remove ureter.

Packs away a lot
of gauze with

Patient in Trendelenburg position.
Put on Sims's
retractors. Keep
walls separate.
Begin by ligating
left & Rt. Lat. & Anterior
pelvic wall as
possible, fully
2 in. from uterus,
[illegible]

cutting above lig.
and finds ureter
as it crosses to
left of Weins'
Then directs down
in front as paracolon
as we can
Then legates R/
right side & and
way. Tries Weins
alone.

Next finds the
cervix as much as
possible and
cuts out with
electro cautery
cuts downward
close to cervix
gets into vesicovag.
Hemorrhage around
Here is the place
where we have

Uterus was
very small, no
apparent tumor.
~~Cancer~~
This kills the
cancer far quicker
than anything.
The trouble after
beginning the
waters, we will
begin to cure when

we take out the
waters. Volume
will be doing
pretty good
will transplant
into bladder.
~~Proper~~
In first stage,
invaded or agonal
walls & removed with
all raw surfaces
Closed up without
drainage.

I am sure that
Cantey helps these
cases a lot. I think
he used the ligation
method nearly all
come back. I am
particular who
have been alive
8 or 10 years

Send circular
to Dr. - - - at
Rochester Minn.

Another case of appendicitis was observed during Dr Millet's absence at explorations. Saw Dr. — Said others never appendicitis in all cases.

10 cases instruments regregation

Catheter & instrument for urine regration - made in Paris

Ref of Kny-Scheerer Co.

Pylorectomy.

1st ligated off vessels & mobilized omentum from left to right. Then beginning at pylorus, ligated pylric artery & worked along the upper border to cardiac orifice,

made mistake & did not get the vessel first time. Thought he had it, but found another large vessel which was it.

Below pylorus found mass about which

— those. It means receiving transmission coin.
A Game in each
He must have legalized off operation differential fast,
attached Damper.
Cut off butterfly
hatch under to
prevent wiping of
crimes under
~~Kneer~~ over parts
of ~~[illegible]~~ Must
clear separating to
make nice flowing
burned well all
surfaces parts
cools it ~~all~~ till
it looks well
fried about
surfaces parts,

In sewing, from inside through & ties on peritoneal surface, so it can be pulled over & tied.

"In this case history is short. much bleeding plenty of free blood felt pretty sure it was a bleeding ulcer. I've had waited for blood to disappear & for open-pharyngeal bacillus, & all those sorts of things. ~~we~~ would had no change we will give him what chance there is, although at his age, not the best.

On pylorectomy, direct of clope down to pancreas. ligated vessels 'duodenalis pancreatic' Put in clamps. Burned off.

Wilson found that there was disease close to incision. So he laid bowel down, & turned in a good inch of the duodenum. All that is turned in will be taken up by the pancreatic juice

This case is

No 75 Pylorectomies

Questions.

1. What go at top of cardiac border

2. What about transverse colon.

3. What after care

4. What about nutritive enemas.

5. How about yolks of eggs & white, eggnogs, food not digested in stomach, & so about fruit juices which need no digestion

Dr. Millet

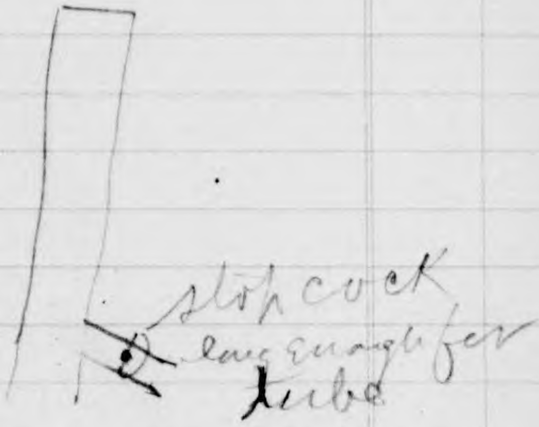
Cystoscopy & catheterizing ureters by male.

Bladder full of water reservoir about 4 feet above table, water running all the time.

Smells instrument ordinary air instrument, but uses it full of water.

I suggest the following improvements:

Have eyepiece larger. Have stop cock aside to let water out when catheterizing



Appendectomy

Adherions, abscess at and of appendix.
Dissected off carefully
Put in two cigarette drains through a stab, will pull the a little on 4th day, remove about the 6th day. D

June 10, 1911
Cyst of ovarian
Not ordinary
hydrocele
Fluid gather days
a little smooth,
Probably choice
true cyst,
Cholesteatic cyst
may be primary
part of Wolffian
bodies.
In women come
from tubules of
Fallopian tube
Here may come from
tubules of the epi-
didymis. Tubules
are analagous

a
Best to take ~~[illegible]~~ sac out completely"
Cholesterine cysts are almost always ovarian
used waddy gauge in directing out sac
The best method in ordinary cases is simply turn testicle out & pull sac up around the cord, but

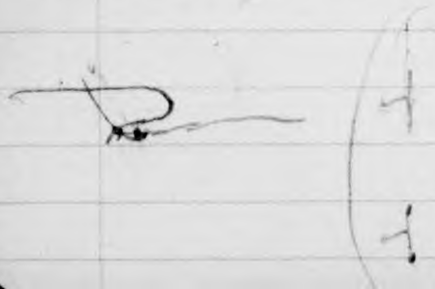
this being cholesterine sac must be extirpated. Stripping sac off testicle and cuts it off around the base of cord where it leaves the testicle

Appendicial Hernia

Was a bad case in which he put in large drains & cough abscess, he seen showed what he called "hockey stick incision, long, curving down toward pubis: took chance of hernia to lessen risk."

Found omentum in sac. Tied off raw part.

Closed up edges of opening with catgut purse-string suture. Then put in two mattress sutures in such a way as to draw a wide thick fold over from outside, thus



A line of suture to join fold to lenden of Ex Obligue.
Used cat gut suture all but on thin linen suture in center hot uses.
vary Linen absorbs sooner than silk

Close with interrupted silk worm gut
Tarnowelle (Judd)
Pulled out testicle
Sac runs down the cord nicely, have to snip a little at upper edge. separate veins & clamps & ties. Cut out about two inches & after crushing & ties ends together
Nice stumps
Vance

Varicose most often
on left side. no good
explanation.
very little large
Cuts to left. veins
to right. many. 2 cases
Hemorrhoids
most often on left
side. No of veins
of small pelvis

near epidymis
if medical,

Ulcer
Pelvic tumor
Fat woman 9.45
in
incision
Adhesions about
appendix. Removed.
Appendix punctured
~~in 15 min~~ at 9.45
walled off intestine
with long strip of
gauze.
Infected cyst all
right. 9 oz pus
under blebs. Had
always means
pus
made large
incision posterior

to see well. Lost
patient back to
horizontal to prevent
pus running upward
incised out carefully
with fingers.
Gathers all the
folds of bleeding
surface together
in a bunch.

Stitch at top with
double suture, return
to lies two ends
around stump of tube
Removed left appen-
age for pus tube
Took pains to draw
all parts up in such
a way as to render
bridge
tense, clean
lower abdomen
stems center of it

The anesthetic

Nurse ... trained
nurse to assist
1.30 to 4.00 P.M.

Uses a large chloro
form inhaler, wire
frame covered with
~~absorbent~~ absorbent lint
small air
building about 4 oz.
drops at a time

almost constantly
Keeps left hand on
jaw fingers on
pulse (carotid) & thumb under
mask to let in air

Diseased appendages
~~Small stones~~
Adhesions to
sigmoid. Left
small tube when
separated. Pulsed
organized up & closed
with fuse-shaped entire
Pulls stomach around
~~behind~~ ~~stomach~~
behind & worms &c
there is some
infection & this

---

the peritoneum is
best prepared to
take care of
infection than
innoculation
~~Diabetics~~
Don't make two
light. Especially
deaf mes. Not
as thick cause
of slight abscess

~~Ochsner~~

Ochsner has taught that for years. He is right about it.

Gall stones

Begin operation gallbladder, when I was at it and diseased appendages.

Put out left ovary tube, right tube, left right ovary. Removed 10 gall bladder which had been left without drainage.

Case Gene
Stone in Common
Duct

Dr. H Wotrago by
Surgical Ex,
Moral courage to
back out,
many patient died
because surgeon
got in beyond his
depth & could
not get out.

Repeated cases
of fever, lost
flesh.
Make pretty large
opening. Pitted
Got hold of stump of
gall bladder. Pulled
down up. Found
stone. Cut down on
it, rolled out
big as filbert, sewed
closed up, left with
a rubber drain

of size of enema
tubing in it. Sewed
this in with and
down toward
common duct.
any obstruction low
down in common
duct. C.P. Pratt
Keep full.

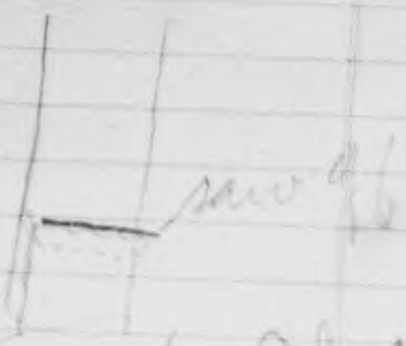
The lig of common
duct in left lobe

used to allow ~~[illegible]~~ fan
McGanell drains
to rubber tube,
Medicines go down
bottom. All
except rubber tube
used no 1 Catgut
Nurses at hospital
about 6 days

Amputation
of leg for
old queer
with sphacelus
recently came
in center
If man was young
could do flap
operation, turning
back skin, then
making flap
from other

leg & ~~bring~~
bringing the two
together & holding
with plaster.
Made circular
incision, turned skin
up 4 inches & cut
periosteum an inch
& tendons turned up
over end of bone.
If younger would
make osteoplastic

flap to cover medullary
(method of Beers)
so it looks



sewn after
frozen with Chilol
done & turn flap
down

Matter taken out well flap
Cut off fibula ½ inch
higher with than tibia

2 9 antiseptic
2 feet of fine
silk in a gear.
Cat gut answers.
Except
Use linen in
sewing in intestinal
surgery.
Pulled nerve out
& cut it off.
Finished with drains
in stump. used
tissue rolled up for
drains. Closed with
deep silk worm
gut

Chronic ulcer.
Old man 50 years
have ulcer worst for
30 years, heart a
cut of flesh.
Gerdan
Gastro Enterostomy
Pulled out stomach,
found ulcer in lower
part of lower extremity
Inflamed, adherent
to liver & diaphragm
used chromicized
catgut on hernia
needle, as silk same
time hangs for
months.
Pats silk outside
outside
Hurrand & Johnston
says nothing can be
based on clinical
evidence of ulcer
of stomach.
Post mortem shows
gastric ulcer in
to no edges

made opening
near the beginning
of jejunum at
penetrile, not
more than 1½ in
Posterior opening
"sewed" does not get smaller
anterior button
opening gets smaller

Closed up with
running catgut suture
did not bring under
edges together. Closed
up skin with the
black silk worm
gut.
No skin sutures

Suggestions

Skullcaps
Chip caps & mouth pieces.

Gloves.
Knot tying
Ligatures
Harrington Sol
actual cautery
(Soldering fee)
Sponges
Shift flap edges
Iodoform

Painting with Iodine
applying Esmarch

bandage. Left leg,
apply firmly not
cutting first. Do
not apply bandage
round left upward

Board for operators,
Seats for operators.
might arrange this
on west side.

Hold a clinic on
Monday if possible

1914

Sat. Mar 21

Took the boat at 10:30 to Soldiers Key and spent two hours riding over there and two coming back with two on the island making one whole day virtually out of doors.

The day was fine as also the water. An Evangelist by the name of Harris, his wife and little girl and a party from East Liverpool Ohio the man had been a patient. He had his wife and baby who was a prize

women, his wives
sisters and mother
in his party. There
were several men.
Saw a "onang wai"
and some porpoise.
The water seemed
was fine, clouds
sky and water com
bined to make an
exquisite picture.
There was very little
to see on the island
which is small.
A number of interesting
specimens of fish
among which was an
octopus were kept
in tanks as curios.
In the evening
went to see the
Paul Rainey mov-
ing picture of
African wild
animals in their
native haunts.
The pictures were
exceedingly inter-
esting. particularly
those of the water
hole showing the
giraffe, zebras,
monkeys and
rhinos in their
native state.

Sun. 22 A rainy day
with a raw wind
We mostly stayed
at home watching
the people outside
Dr K is working
today. on his book.

Mon 23.
Colder, a rather raw wind. Angie and I went shopping this forenoon for provisions and strawberries to make a strawberry short cake for dinner.
This afternoon also we have been walking about town for exercise and amusement.
Later I have been over to Mrs Allens for a while. She came over to call on me but thought it too chilly in the parlor down stairs so asked that I go over there where she had a cosy fire in her fireplace.

Tues 24 A warm day with a strong wind We all went to the beach, but the waves were so high I did not go in but sat in one of the little beach shelters and managed to keep my hat on while the others played in the water and thought they had a lot of fun Dr K said I missed a lot

Wed 25 - Another holiday. Dr was particularly insistent that I go in for a dip so I went to the beach with that intent, although the waves were exceedingly high the wind did not seem so strong on the beach. However we came near having a tragedy. Dr was in bathe to enjoy the waves and was about the furthest ready. He called to the girls that time and tide wait for no man, and he and Brown rushed in. But Dr K was too venturesome and went beyond the bar the tide was going out and the waves so high they carried him out where he could not touch bottom so all he could do was to float and call for help. Brown too had to seek safety for himself altho he called for help for Dr K.

The life guard and some visitor at the place swam out as rapidly as they could but the waves greatly hindered their progress. They reached him just in the nick of time, a moment later would have been too late as Dr was nearly unconscious and just

barely moving his fingers to keep afloat. The two men each on a side took him under an arm and towed him to shallow water where other out bathing assisted in bringing him in shore they laid him on the sand. I was not out of the dressing rooms so did not see the catastrophe until he had been rescued. It was a severe shock and for a time appeared pretty serious, but we finally got him warm up enough so that he was able to be dressed and by being helped to the boat came back on the one oclock boat but he was very ill for a few hours. Jane Inga and Gertrude were busy giving him care all the remainder of the day and that night.

Thurs 26 Began to get some packing up for our return journey Dr went out on errands during the morning. In the evening we all took an auto ride over Collins Bridge (a bridge which spans the entire bay) and to Alton and Miami and Ocean Beaches. We went to

the latter as Dr K desired to leave a little reminder of his gratitude with the Life Guard whose name is Jim Force of his gratitude for his services. The other man was a visitor who aided the Guard and we could not learn his name.

The ride was a most delightful one, the gale was strong the waters high and the approach of twilight on the water and shore with the waves rolling in made a scene to remember. We did not find the Guard but left a reminder with another man who works at the beach and lives in a nearby cottage I think he is the one who offered to have Dr K removed to his own home and look after him at the time of the mishap.

Mon 27 Dr got an auto early and started out to do Eb much business as he wanted to look after before leaving. I went out with him and we went to see Mr Allen. Found him absent but as we were leaving met him and Mr C returning so went back and transacted the business in hand. After returning to the rooms I went out on some shopping rounds and the girls went with Dr. About 12 M he was back and insisted upon our going again. This time he went to the Gov. Experiment Station. We had some fun also learners that have succeeded in making "round" instead of their natural form. We got back about three P.M. Finished our packing so the trunks were off at five. The train not leaving till 1 A.M., we stood at the rooms till 12 o'clock then left with 9 pieces of hand baggage.

Mar 28 – Reached St Augustine at 1 P.M. after a hot and rather tedious journey. We spent two hours there riding in an auto to the various places of interest.

Reached Jacksonville about 4.30 and spent the rest of the day riding about – going first toward Pablo Beach a very beautiful ride, then to the Oldwich farm another delightful drive, but we did not get to see the birds as the place was just closing for the night. It being after dark we did a little shopping and took our train at 8.45

We have a drawing room car and are very comfortable.

Mar 29. About 9 AM Robert came on the train and rode to Chattanooga as we had a very pleasant visit.

The days trip was through the mountains and in many places very picturesque but there were so many tunnels it was not so agreeable

Mar 30.

Snow on the ground upon arrising this morning. We reached Chicago at 7.30 a.m. An Agent of the road got on the train some little time before we reached the station and introduced himself saying he was asked to see if everything had been O.K. for us, Said his road had telegraphed that Dr K was on the train this is doubtless a special way this road has of getting the good will of its patrons.

We breakfasted in the station restaurant, That is the company did I had already eaten my lunch. Mr Ashley met us at the train and Dr dictated all the way home, which we reached at 12.48 tired and glad to be at our permanent abode once more,

June 20,
We left home on the 9.00 P.M. train. Dr K. Dr Cave, Helena, Mr Parker (Dr Cave's assistant) Mr Brown and myself bound for Phila. Arrived at Buffalo at 7 A.M. Took lunch at the Station restaurant and took chair car to Phila. The journey was through N.Y. and Penna. much of it through a farming country, hilly and well cultivated. The hills and meadows were alternate sunshine and snow banks, so many butter cups and daisies mingled with the grass, in many places there are also many pink Mallows (and blue flag so that the fields are yellow, white pink and blue in stripes or all mixed into one fancifil panorama. We enjoyed the scenery in and about the mountains, bluffs and rivers. Everything was so green and fresh appearing. We arrived in Phil at about 8 P.M. June 21 and were soon established at the Bellevue Stratford. We on the 3d floor and Helena & Dr C

on the 8th floor
Our room was
furnished with
mahogany inlaid
with pearl

Jan 22. Rainy in
the morning. Helen
and I got a taxi and
went to Wanamakers
where we spent
most of our after-
noon. Afterward we
went to Independence
Hall. Then back to
the hotel. (Dr C had
gone to Atlantic City)
After our lunch we
went for a walk
Dr K went to meet-
ings of the Gynecologists

At E. P. H. dressed
in evening clothes
we repaired to the
ball room of the hotel
which had been con-
verted into an audito-
rium. The large flat,
gone was decorated
with ferns and flowers
On that sat the officers
of the Association and
Brigants and other
dignitaries. The
guests sat in the
gallery. I had a
front seat and a
fine view of the
1500 surgeons all
in capes and gowns
who marched in
and filled the audito-
rium. It was a

most uninteresting sight. These were the finals of the profession in the U.S. who were to receive the honorary fellowships, and Dr Kinnear was one of them and appeared fine in evening dress and all down. The names were read by Slater after an invocation by Bishop Rheinlander. It took half an hour perhaps more to read the names of the surgeons who were to become the honor. They were read by States. This is the only honorary fellowships that will be conferred by the Am College of Surgeons. This was a tribution to their experience and worth to the profession. Others who later got the fellowship must take examinations for it. So it was a signal honor that Dr K got.

There were addresses and an informal reception afterwards. I did not stay for it. There was rushed about and got my belongings packed up and left for home on the eleven P.M train. Dr Case and Helena remained and went

to Atlantic city.
We had but little time and everybody lent a hand to get us off. The Brooms made a mistake in looking up the time table and we got home at 2 a.m. Found a surgical case in mind and Dr K after taking me home went to the operating room.

The evening after Sabbath the Sam gave Dr K. a reception on acct of his new honors. He wore caps and gown.

Monday June 29 we were off for the Pelham Stone Park at 8 19 P.M. As usual it was a "rush" to the station, and 12 pieces of baggage for a party of six beside 3 that were checked.
There were nine of us in our car from the Sam. to the station and we fairly flew along. Agnes and Helena were at the station, the train was fortunately behind time so we had some to spare.
Had a pleasant ride to Chicago and spent an hour at the Northwestern station which is the most

Elegant R.R. station
Sallmile Seven entered
Great marble waiting
room with green pillars
a magnificent place
We are on the Los
Angeles limited, has
a drawing room and
no changes to Salt
Lake City.
Rather monotonous
Scenery.
Wednesday July 1.
We are crossing
Through Montana's
sand and sagebrush
Arrived at Salt Lake
City about 8 P.M.
and taking an
automobile we
toured the city till
train time 8. P. M

We stopped at the
Mormon Tabernacle
It is not permitted
the general public
to visit it but the
man in charge of
the information
bureau remembered
Dr K.'s having been
there to lecture once
so he took us inside
and Dr told how the
Choir on the left of
the great organ to take
Thursday July 2,
Arrived 6.15 A.M
at Fallonstone. There
is only a dining room
and station with dressing
rooms provided where
changes and repack-
ing of baggage may

be made. We had quite exciting times getting repacked and ready to start as we wished to wear clothing we could little for on the trip which requires no dress parade.

We hired an eight passenger coach, and were off about 9 A.M. We drove 33 miles, stopping for lunch at the Fountain Hotel and ending the days ride at Old Faithful Inn. Through Christmas Dec park was our introduction to Park scenery. The Park is really one vast Evergreen forest with an occasional meadow or clearing. But the roads are very carefully threaded through evergreen woods where wild animals roam and wild flowers bloom in abundance.

After leaving the Fountain Hotel we began to come into the region of geysers paint pots, springs and spouters.

The view around Old Faithful Inn has the appearance of steaming ground. We met with the

guide Joe on a tour around among those nearest the Inn. And several times before bed time we watched Old Faithful play. About six oclock we went behind the Inn to see the bears which come out at night to feed on the garbage. Only one big red fellow came that night.

The Inn is a very artistic log house, with a big stone fireplace and clock

above it. Everything is in keeping with the log cabin idea.

Friday July 3. 1914

We were called at 6.15 A.M. and started for The Thumb.

Our ride was less dusty and cool fresh air was invigorating. We crossed the Continental Divide Saw Kepler's Cascade 80 ft high. and Shoshone Lake with the Teton mountains behind it, on the way. Arrived at the Thumb about noon. Here the beautiful Yellow

Stone Lake with its surrounding mountains came to view, and a beautiful sight it was. We crossed by boat to the Lake hotel letting our baggage go by the coach. The ride was most delightful. Some vaudeville troope sang songs much of the way over.

The Lake hotel is colonial in style and yellow and white both outside and in. In its way it is quite as artistic as was the Inn. From my window I coned the the lake and mountains a most beautiful view. It reminded me of Lake Geneva. There was nothing to see here so we took no walks save to see the bears which come to feed early in the evening. Two black ones came one a mother bear fed her cubs in the tree near before coming for her supper. There were a flock of gulls also feeding.

Sat. July 4
A lovely day.
We were off 8½ A.M
Warmer weather
but one ride was
a pleasant one
ending about Eleven
A.M at the Canyon
hotel which is built
as a mammoth
bungalow on a height
overlooking fine
scenery.
We passed the mud
Geysers and drove
through Hayden
Valley.
We at once hired
a conveyance and
went with our lunch
to what is called
Inspiration Point
where we obtained
a most wonder-
ful vision of the
Grand Canyon.
No words can des-
cribe its beauty
and majesty, its
grandeur and
sublimity. The
rock of varied color-
ings, & the green
river far below
winding like a
ribbon through it.
Each day of our trip
the wonders have
increased. This was
so awesome it was
almost beyond com-
prehension. I could
scarce have dreamed

of anything so magnificent,
We walked back through the woods to View Point where is also a fine view and where we met the carriage returning for us. I rode back with it to get Eulinda, Terry and George who did not take the walk.
Soon after reaching the hotel there was a slight shower
Tonight evening we went by stairs (800 steps) to the bottom of the Great Falls. Every room here has 5 doors. The others have about the same number, so the night one gets considerably bewildered trying to find oneself.
The names of our coach horses & the driver said was popcorn, chewing gum and candy
July 5. Packed and had breakfast in the beautiful dining room of the hotel which is finished in natural wood of a light color in Square pillars after the mission style. Every table is decorated with a dish of wild flowers

as a center piece
and in some sort of
an elastic vase. The
flowers at our table
were paint brush,
flowers that are at
first yellow and
later turn to scarlet.
In all the drive
those were the only
red flowers we saw
after we got a mile
or two from the western
boundary. Spruce,
fir and pine were
the only trees except
a very few aspen
and willows near
the boundary.
We started about
8.30. and rode
20 miles arriving
at Norris about eleven
o'clock. We passed
the Virginia cascades.
A few rods of our drive
were around curved
cliff roads very
picturesque, most
of it was only sun-
green forest roads
and our only diversion
bear, wood chucks
chipmunks deer
and birds of various sorts
along with the varied
wild flowers, brooks
and meadows.
At Norris were
small geysers and
a lunch station where
coach loads of people
were eating and talking

getting ready to go again.
We started at 12.30. The road facing along Gibbon river and through its canyon which is very pretty, and if one had never seen any other more wonderful would command attention. There were a few pools and geysers to see, and the Gibbon meadows, velvety green flecked with yellow cups, and other flowers. The river wound in and out among it and the mountains making a beautiful scene as the river began to lower.
We reached Fallowlone about five o'clock and had to refuel and get aboard my seven, which was accomplished and we were off for home having spent four more delightful, never to be forgotten days among the wonders of Creation.
On board the cars just as the sun was setting we had a last more wonderful glimpse of sunshine on the

mountain peaks while the rest of the mountains was in shade, and a rainbow spanning the Canyon. The sunset too was most beautiful as it went behind the peaks. A thunder shower cooled the air, just at dusk.

July 6.

Reached Salt Lake City about 8 A.M. We all took a trolley ride to Salt Air the Coney Island of Salt Lake City. A salt water bathing seemed the principal program aside from the usual amusements of such places. We had our pictures taken, and found little else to interest us so returned to the city. Those who could have went to the organ recital at the Mormon Tabernacle, afterward we all took an

automobile ride
to the trout hatcheries
Our train left at
4.30
July 7.
This was canyon
day, beginning with
that of the Grand
River Canyon, next
the Arkansas and
Ending with the
Royal Gorge which
we saw in an open
air observation car

July 8.
Awoke this
morning with only
level stretches of
ground to be seen. We
have left the mountains
and are Vaudaline
behind us. Am
going to stay a
week in Lincoln
on the way home.

2838 Forest Ave

[1916] New York physicians

Dr. Thos. Darlington 27
30 Church St. Wash. Hts.
New York N.
Tel. Spring 1411
Apr. 1916

Dr.

Dr. Ralph Jacoby.
411 W. 72d
Tel. Columbus 70

Dr. Fred Albee
10 E 41 st
Tel. Murray Hill. 6950

Dr. John S. Thacher,
20 W. 50th St.
Tel. Circle 340

St Luke's Hosp. Dr. Brewer
Morningside 9100

Dr. E. B. Craig
10 Lo. Broadway
Tel. Circle 6116

Dr. C. H. Ward
127 W. 72d St.
Tel. Columbus 312

Dr. Alex Lambert
43 E. 72d St.
Tel. Lenox 8336

Dr. W. Gilman Thompson
61 W. 49th St.
Circle 1506

Dr. Brewer, Presbyterian
Hosp. 70th & Madison Ave
3 P.M.

Dr. Cragin 10 W. 50th St
1 P.M.

Dr. Abbe
12 o'clock

Dr. Patterson
2 P.M.

Dr. Robt Abbe
13 W. 50th St.
New York
Tel circle 92

Dr. Henry Patterson
130 E. 62d St.
Tel. Plaza 1261

Dr. M. Allen Starr
5 W. 54th St.
Tel. Circle 2197

Operations

Int Sinai Carcinoma
3 P.M. of Skin

Pop Good
Robt Morris
2 P.M.

Mr. Res. 1 Lexington
Tel 1296 Stuyvesant
41 Union Square
Hartford Bldg
Farwell, Bro & Co.

Social Register Assn.
Bowling Green
29 Broadway

Social Register

Women's Club
Miss Rayne a
fell his Jog
Send be raus
Mrs

Emma Jacobs Koehler
103 E. 74th St
Tel 6181 Lenox

Social Register Assn.
Bowling Green
29 Broadway

Social Register

Dennis Lost
Miss Rayne a
fell his Jerry
Send her roses
Miss

Emma Jacobs Weller
103 E. 74 St
Tel 6181 Lenox

Office Bridgeport Conn
Care Mary Eddy

Academy of Med
April 20, 1916

Dr Funk who originally the word vitamines
Vitamines are made by plants only.
Hence plants are essential to animal life
Vitamins are found in all organ
whole bread with baking powder.
food long boiled
vits deficient.

Too little vanil
V. becomes deficient
as diet meat & pork.
V. basic in character
A certain amount
of vits takes care
of certain amt. of
CHO. Nor CHO
requires more vits
Def. V. upsets whole
metabolism as in
rickets.
No animal can
live long without V.

Def. Diseases
Oat Meal & rabbits
causes Pacidosis

Pellagra. Hypo ?
said it is a def
disease.
This seems to be
fully established.
seems to be simply
a chronic poisoning
which is
ordinarily an acute
disease.

Rats do not grow
well with butter
but grow well
with lard
Rats can be made 2
double men

Anemia may be
~~planted~~ in growth
by a management
of diet.
No cause beri-beri
and chicken unpolished
rice coconut oil

Mycin
lying on back
a few min.
my bird seems
well.

another cure
2 hrs.
M

Cinchens
1 polished rice
160 gms

2 Impolvice
+ olive oil 2500 gm

Dr Peters —
infantile scurvy
apparent since artificial
feeding
occurs in children
fed on cows milk
especially when
other infants foods.

Fact that pasteurized
milk (145°) does not
cause scurvy
Repeated Et in an
infants home. Stand
that without orange
juice scurvy.

but fluid scurvy but latent or incipient scurvy.

Raw cow's milk was better but not as good as orange juice

Many infants suffering from scurvy in artificial form

self relation between carbohydrates

May be hemorrhage beneath periosteum gums. Kidneys skin etc. Blood vessels are altered.

Some relation between beri-beri & infantile scurvy

Mebm-beri nervous system & heart especially weight heart often dilated oedema occurs in scurvy & beri-beri.

wheat middlings helped curing in babies.

Wheat germ was better yet cause a cure. Yeast did no good in recovery. (Yeast does wonderfully useful in causing growth)

orange & pickled beet potato juice as good

Potato water

Use potato to put of water use for diluting

Milk

Prepared potato farm without effect.

mutter will promote growth but will not prevent recovery

all babies operated on were well

bed.

Boiling the orange juice makes it less liable to cause scurvy for lack of vitamines. Best food orange juice may be boiled ten minutes without injury. May be given when baby is a month old.

Scurvy causes not only malnutrition but arrest of growth in length. This is true in animals.

Boiling orange juice somewhat lessens its value.

Charts showed that when orange juice was dropped Chicks ceased to grow or even lost. When orange juice added again general effects were ~~more~~ in 1 month. When orange juice for 1 month ~~[illegible]~~ 1 year

Babies may develop rickets

when growing in weight in a normal manner

Enlarged heart often occurs in scurvy in infants as in born-born in adults

Dr Holt

Scurvy very probably on the increase with the disuse of pasteurized milk. It is useful, but there are dangers which must be guarded against.

Pasteurized milk does cause scurvy. It does not have it.

Addition of pasteurized milk does not prevent scurvy.

Infusions of Saw dust is such a case when 1 oz of orange juice was given.

Often seen scurvy with a loss of 20 pounds in 3 t. d.

Usually 1 oz enough under ordinary conditions.

Risky orange juice very necessary with pasteurized milk, but not so good as raw milk.

Cases of scurvy sometimes diagnosed as poliomyelitis.

Neither pure cereals nor the most orange juice must be used.

Dr. W. Coleman

The foods we have to-day are deficient in vitamines. It is possible that some of the symptoms of some ~~of~~ diseases may be due to lack of vitamines.

Pellagra, diarrhoea, delirium are due to defective diet. The plant diet is rich in vitamines.

Dr Hurlin

So far all we know of deficient in pellagra is that an increase of animal proteins needed improvement.

Dr Funk has shown that a substances (crystalline) may be obtained from yeast which will cure beri-beri in very small amount.

Pellagra seconds has been but rarely identified. As yet we cannot say that all the symptoms of pellagra are due to lack of vitamines.

Not certain that Goldberg has produced case of pellagra.

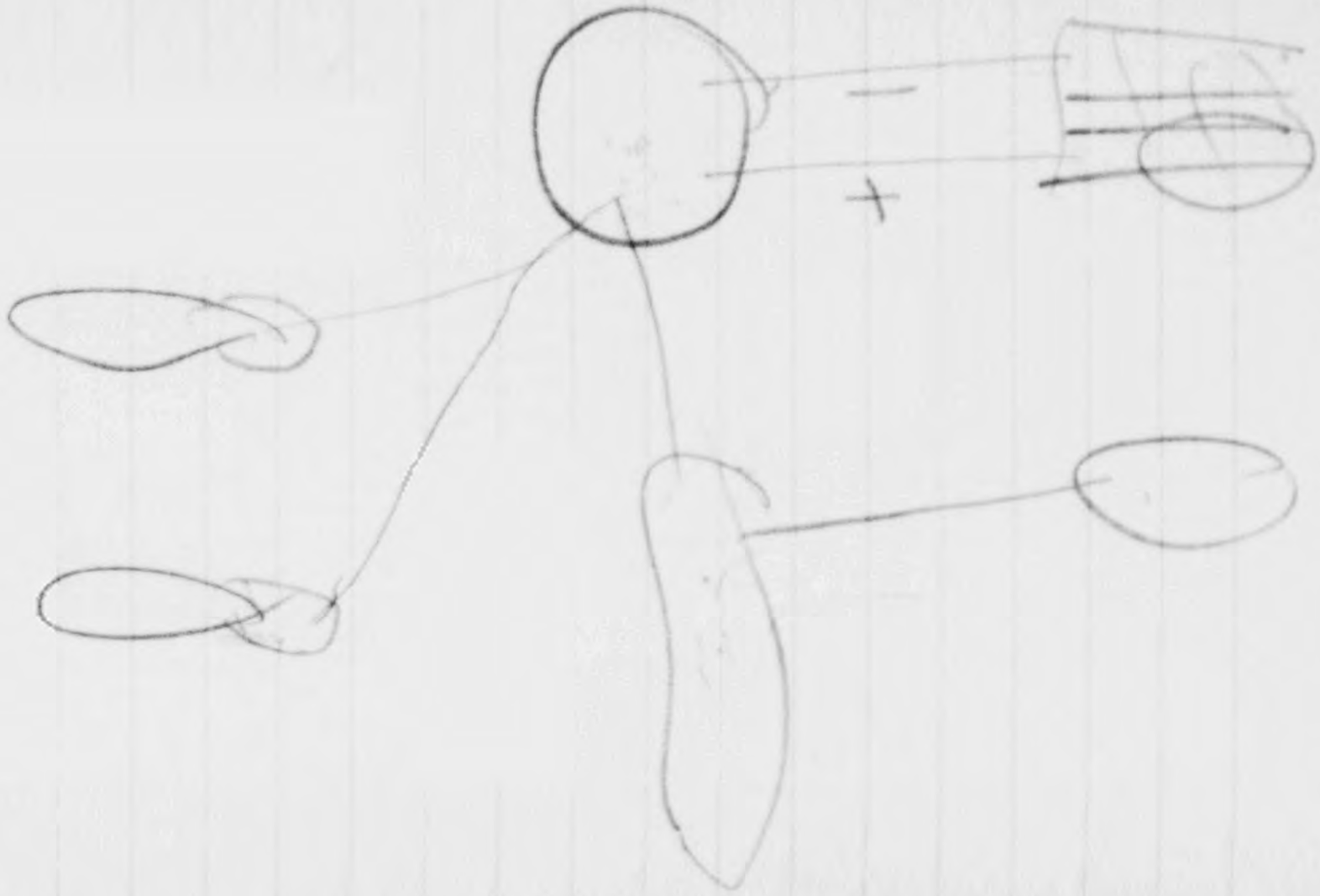
Psychoses of pellagra has been studied by Lawrence Doe the same as seen in alcoholism. Pellagrins show much lactic acid in urine. It seems that the flora of the intestine produces a peculiar poison which causes the mental symptoms

Dr Jacobi
gives early
Kinks clonus
present neuroses.
Contrary to Schmidt.

Dr Hess
applications
In cases of neurosis
use 2 oz of more
of rando & juice
all the

7 & 7 0 11 St
Dr James
5 P.M.

Dr Funk
a deficiency
diet causes
neuroses, convul-
sion, decloses
in rabbits.



Lead Chain
Dmitri Cooper
call us
Fenitucum
Chicago

Send new Ed
Colon Hyg
to
Prof. Upham
Dr Albee
Copy of Graham's
Sex Hygiene
Reply to
Dr Wallace B Davis
Pres Academy

Dr Smith
76 West Main

Dr Brewer

abd. rectum Colocyst
Long gauze
(make silk covers)
Rolls sponge on abdomen instead of wiping
Always sponge & holder attached to sponge.

Pony-ileostomy for very bad eczema, terribly inflamed, lungs so bad thought T.B., edema & dropsy of abd.

no better for several days yet. Then injected buttermilk & improvement began at once.

5-6 watery stools daily
Nodules or olives.
Colon thickened could be palpated. Stool often full of pus. Sometimes blood. Proctoscope showed ulcers of rectum.

At Op. Whole colon thickened. Ileostomy
Colon irrigated with permanganate of K. 1-5000

after buttermilk injection gained 22 lbs. in 2 weeks. Pt. of color thinks it to be malth

Jour. of Race Development
Clark University
Worcester Mass.

Get back vols.

See January No.

Dr. Fentetrop's book
on German. Used work
at print.

May be use of
H. acid without
use of hmp. N.

V. Use

Where Crystals

Boston Medical Library Association
19 Boylston Place

Dr
Died at S.B.
Grad. Negro-Standpoint
College

N. Ala

Brown

Crawford

May be use of
L. Cord walking
use of hand? R.

Dr
Died at 8 3
Grad. Negro Industrial
College

May be me
I. Good walker
me gone. R.

Crawford
Marion

In diabetes with
nephritis
as cases advance
sugar of urine
decreases while
blood sugar increases

Dr Chace.

not sufficient to determine
Non-protein N + Creatinine
urea most accurate
Phalein test very accurate.
Chem. Ex of blood takes
less time & more valuable
than Renal Ex of urine.
Chloride & urric acid
in blood good
means to detect
early case of ne-
phritis

diabetes

Ex to be made in morning
also urine sugar
in hyperthyroidism
the morning blood sugar is normal

Renal diabetes
high urine sugar
low blood sugar

after 50 grams of sugar blood sugar goes up in half hour urine sugar appears in 2 hrs.
Primepara with diabetes claim of sugar is delayed 4-4 hrs.

Discussion of nephritis
Academy of Medicine
April 25. 1916.
V. C. Myers, Ph.D.

Renal insuff. shown by
1. Urea in blood
2. uric acid
3. creatinine

Question:
1. Is gout only a symptom of nephritis?
2. Is nephritis a local gout.

Dr. Myers

Discussion of nephritis
Academy of Medicine
April 25. 1916.
V. C. Myers, Ph.D.

Renal insuff. shown by
ac. of urates in blood
1 2 d urea
2 d urea
3 creatinine

Question:
1. Is gout only a symptom of nephritis?
2. Is nephritis a local gout.

Dr. Allison

3506
A4
Collings, John
Ichthyology

Prof. Harry N. Allen
Professor of Biology
Columbia U.

Edward B. Wilder
Ichthyologist
Ichthyological Cat Museum

Prof. Steerlewant
The Prof. Bear Creek

Prof. Jos. Kelly or
Kelly
Vertebrate Zoology
Potter Amphibious
Reptiles

Dr. Caldwell
1180 Pasture

~~Referrer N. 3527.~~

Dr. Fairchild
Homer Building.
Phone 353

Dr. Alex Graham Bell
1331 Conn. Ave.

Fenugreek Greens.
Get seed from ~~Blatchford~~
Blatchford Calf Meal Co.
Milwaukee, Wis.
Used in Egypt & spread as greens. Looks like alfalfa. The seed is used to flavor brides in Oriental lands.
Chinese Clover
(ask Fairchild for seed)
Talk with Spindle about it at Bell tonight.

Hotel Astor Hence
The Plaza
Dr. H. C. Ferris
dentist
Dr. Gaylord
10 E. 40th St.
New York

Call on in town

Hrdlicka

Paraffin oil

Dr. Kellogg

Transfusion

Soy beans

S. Potato flour

Dr. Barker Balto

Dr. James. N.Y.

Dr. MacKenzie Phila

Bureau of Information

Am Red Cross

Miss Gilmore

44. E 23d St

N.Y.

Demobilization

Hatch

Katel Albert

11 44 St Univ Place

Head nurse

Miss Ethel Sweet

Col Davis

Dr. Carver
"his Kegger has
Write about
lamb's quarter
Perfectly delicious
ask for seeds.
Sen Fairchild
Grows wild all
over the country
"a pig weed"

Reginald A.
Muir, Salvn
Soc. Secretary
Mg. Sen Office
Army Nurse Co.
$75 & Expenses.

Miss Weitzel
has sent in resig-
nation.

Maj. Hoskins
at Winter Coton
Literary
Mg Sen Off.

Send Hazel
2716 Ontario Rd
C/o Dr. Wilson
G.H.
Itinerary
Leight
Colm Hyg.
Protose
Chocolates
Lecta
Paralax

R. C. Kettles Co
Hallis Le. P.
Hereosoefie
Skin Cure

Send Hrdlicka
Protose
Lecta

Weitzel
Chocolates
Lecta
Write to Orlen & to
Poferner to Swingle
not articles for G. H.
for $60 for 1000 words.

Poke greens
hunt up in woods
adm for seeds.
Collect roots
for winter greens
Try to feed.

---

on Carr at
Walter Reed.
at Dr. Bells

Frank Carpenter
Mr Collins.
ag + RK
Mr. Parmalee
Cleveland
Mr. Chas Henry
Miller Chief
Clerk & Dr

Mr. Carney
Cottonseeder

Mr. Morse
1306 B. St. S.W.
Soy bean expert.
Sell him tomorrow

A. Meeky Co.
Phila
Meandercart
Folding & flower
Handcart

Coleart Blue
bulb
McFadden (N.Y.)
38 Murray St
N.Y.
Heat Infuser

Quinet Forest Reserve
Stuyvesant Sq.
2d Ave & 15th St.
Gilman Thompson

Mr. Carney
Back from Algeria
about work of Dr.
Jabir.
Has domesticated
many plants - North
Africa - Cork Oak forest.
A good automobile
from Tunis to Morocco
M. A. home of olive, grape,
peach, pear, wild natives
of Africa.

the Vines all over
Connecticut, plants are
result of hybridization,
Cotton introduction
boys ago, seed of
egypt cotton introduced

Mr. Young &
Education
in China
Books 1000 yrs.

Dr Harry Parr
walter Rud. Kon

Man brain
thing, expert
act now
Can't add 2 + 3
Dr Betty Boat
Chinese make boat
blunt and for
mart, say it in
the right way.

Mr Swingle
Agr. Bldg. West Wing
1st floor R 117

Soy sauce
made in San Francisco.
May Jun

Mudicks baths
in all the
~~Hoa~~ ~~Swingle~~ said
Mienchang
Soy paste
Salt Vole paste
of Stero.

Regular Jamin
thing in Chinese
is 1 lb a day

In China good meal for 1 cent

Chinese never eat soy bean as a bean. Only use it as "soy" They laugh at us for eating it as a bean" Mrs Swingle

---

Suggestion to Hogan

annuity Mrs Coad. wards well

Send iron & lime articles & labels to Dr Fairchild.

---

94. 10th line to extract last 7 from ~~new~~ alfalfa
↓ soy bean

Leaf with glycerine
180 times as sweet as
sugar.

Dr. Upton,
Diabetic
has a diabetic garden
in which he grows all
sorts of greens.

Dry bean
milk

Mask flavor.
with coumarin
or vanilla.

Making Hopu
Add to cold
water & mortar
soak one hour
Add 5 times
amt boiling water
boil 10 min.
Strain.
Boil, & while boiling
add mag. chloride

Citric acid seemed to be just as good.
Sol. 1/2 gram to 100 cc water
use 20 cc of sol. to 100 cc of milk to curdle

French Sorrell
New Zealand Spinach
(make analysis)
Mustard - Dispatch for several early
Collard Green
several
Poke greens.
Get seed from
Dr. Ortlin
Wittloof
special variety of Chicory which forms large heads.
Plant like parsnips.
(next page)
Grow in rich soil, fertilize & water
grow fast.

Seedsman

Burpee - Phila
D. M. Ferry - Detroit
Haungerser - New York

Store roots in boxes in after 1st heavy frost, and
Cover in vegetable mold
cover all with a box.
If wanted as asparagus
Leave open for greens
Also called
French endive.

Sea Kale - variety
Swede turnip a cabbage

Or

Ordinary endive
one of best early
spring salads.
very hardy stand
most freezing.
Ready 3 mos. after
sowing.
2 forms 1. Escarolle - best
broad leaves rosette
like when grown
the inner leaves

crisp nutty salad

2 ordinary finnged
not so good.

Get dandelion seed.
of Vaughan Chicago
also other things

Get Winypo greens.
Pai-Tsai (Chinese Cabbage)
Leif lettes, heading
varieties
Vaughan Long round head
Wong Bok largest stalks
one of best header
Get seed.

Take heads of Chinese
Cabbage pack
with straw in a
pit, hell up to
Dr. W. A. Orton.
Dept of Agt
Washington D.C.

Morse will send
me 25 or 30 lbs of
new soy bean
seed to be used
like green lima
beans.

Soy bean milk has comp. similar to cow's milk. Children like it, very in wash use it

Can make of soy milk fine ice cream and sour milk. Can't tell the difference from sour milk

Get further information from Nurse.
See if we can get the chop of the Flint cannery.

Will have plenty of seed next year Dwarf Soy.

Try soy milk for soups and for breads
Try soy cream for gravies and shortening
Investigate soy sauce for veg meats.

Improve paraffin by adding resin or balsam or something else to prevent oil running & changing the flavor.

Look up paraffine oil in New York.

Get estimate from Shaw of cost of Physical Culture pamphlet

Send Never Knowledge of nutrition to Mrs. Henderson

Box of foods to Grove & also literary & authentication

Chocolates to Seaton & Whitfyl

Seaton a social secretary. $75.00 a month & board & room

Send literature etc to Mr. Morse of Cayuzeft & also Mr. Orem.

Write Orem for article about queens & raising queens.

Box to McCollum also Spaeth & French articles about Earl to Dr. McCollum.

McCollum May 1 1919

1. Best greens.
. Thin leaves with no storage cells as in cabbage.
Hicks' turnip tops best. Kentucky, horses and men superior. Turnip greens much used in south. Limestone again

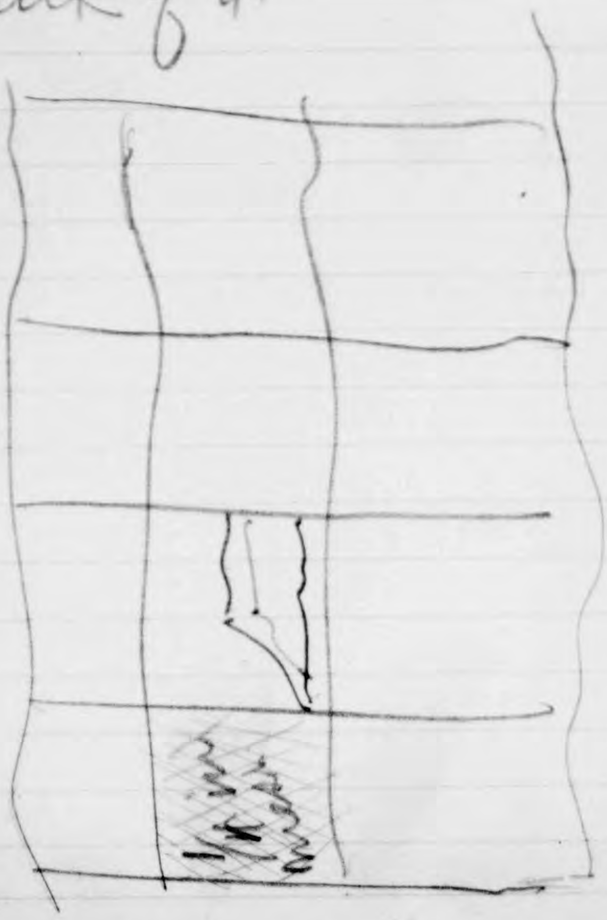
2. Why egg inferior to milk.
Only because of deficiency of lime, Chicken lays much of lime from shell

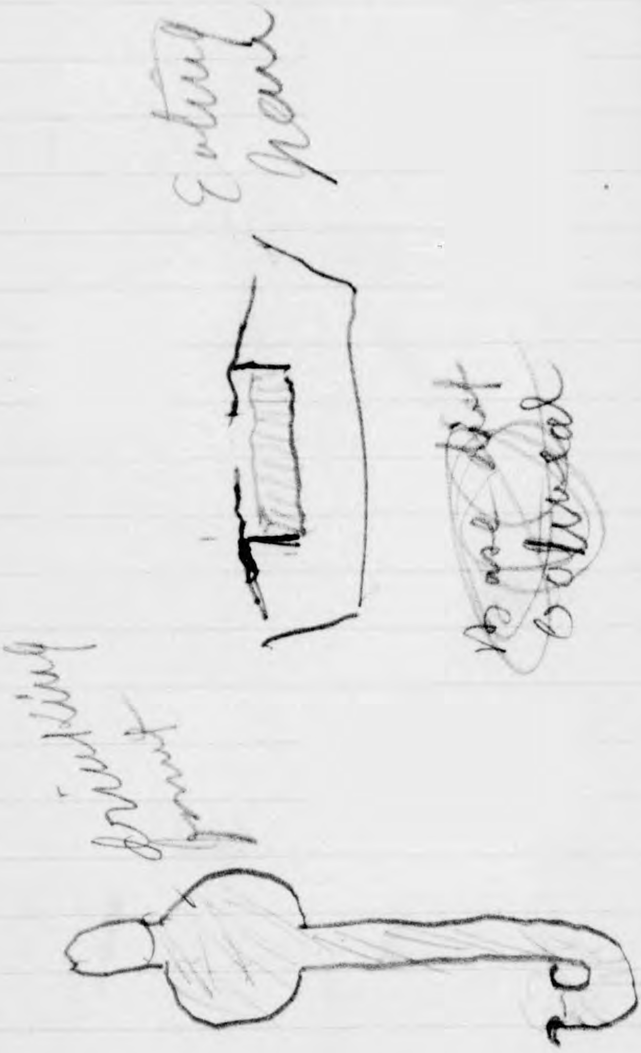
Hopkins's friend abt scurvy. Mendel is right anti-scorbutic vitamine most labile of all.
Ought to mix chalk with salt 3:6-5:1. Uses only lime & iron in mineral form in balancing rations

3. Hindhede.
Not good accuracy of Hindhede's observations

Sorry that Mendel & Osborne are sensitive & jealous. "Osborne came down here & told Boyd a lot of stuff against me, that I did not give them proper credit, that I ~~the~~ affronted their data, etc" Not a bit of it true.

asked Mr Collins to suggest some re-
lations clinicals for us. said he would think of it.





Send to
Dr. McGee
or
Col. Ashford
for Library
of Walter Reed
Hosp.
Massage
Hydrotherapy
Light.

Dr. McCollum
has changed his
mind since book
was written abt
two things.
Scurvy vitamine
Animals differ in
essential food needs.
Cannot cause scurvy
in rats.

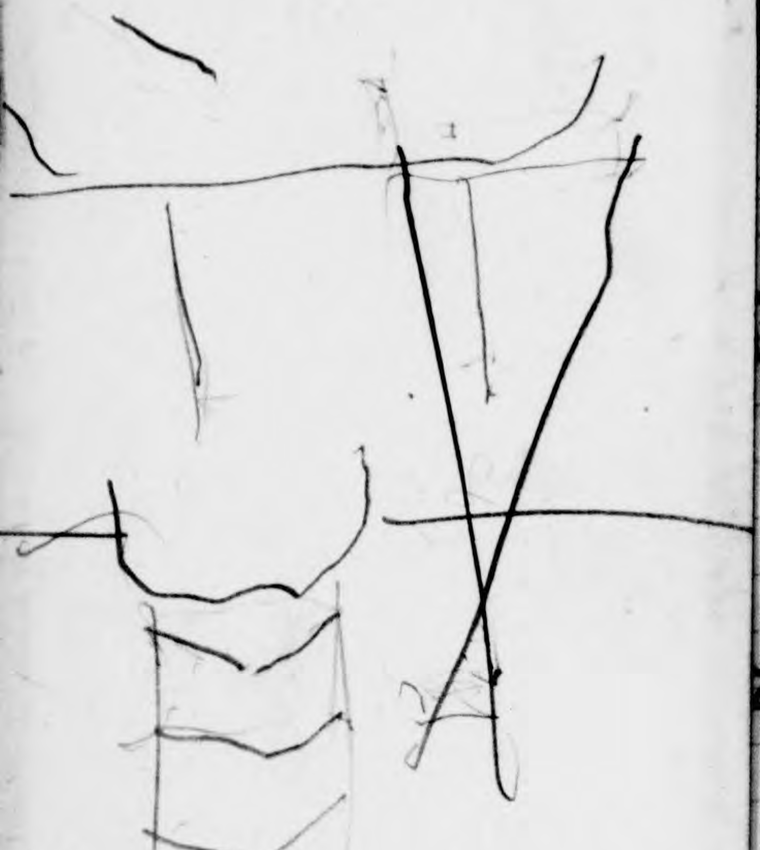
Complained that
Osborne & Mendel are
sore toward him.
"Osborne came down two
weeks ago and told Howell
a lot of stuff that is not
at all true! They claim
I have used their data"

Miles Dawson

GH to office
girl, Maine

3564
A4
Vol. 5
17
106
-0
40

Maj. Granger
Col. Glenn
Walter Reed
Wash.
Lt. Col. Ashford
Walter Reed
Capt. Mackenzie
Comdt at Jeff.



Wm. Stokes
1906

3556
A4
Kilgour
17

106
-6
40

Maj. Ranger
Col. Glennie
Walter Head
Resp.
Lt. Col. Ashford
Walter Head.
Capt Mackenzie
Cantot at Cdf.

Wm. Stylus
1906 85, 1.

Iroline

G. H.

Colon Hay

Literary

Cheese

Clive

Lenfa

Brown bill

W. W. W.

Purple figs

Aunt Clive

Methodist people

Methodist Board

Iroline Kellogg

674 W. 161st

apt 5 D.

C/o Mrs. Davis

Leonard Thermostat Mixing
Leonard-Rooke Co
Prov. R.I.
Whirlpool
leg baths.
Douching and
baths

Louis Jones
Examiner.
Weaffer modification

Miss Mary McMullan
P.T. Dept
Walter Reed Hosp.
Automatic Ex.

Fischer Co Chicago.
Lithographs.
Cheap Effective

Morse Wave
General
Allen Chapman
Co
462 Boylston St.
Boston
Mississippi

At Mrs. Henderson's
May 21, 1919 8 P.M.
Dinner party
Present, Chauncey Depew
Congressman Dunn
Ex Pres. of Geo. Wash. Univ.
Senators from Col. and
several other states
Mrs. Cunningham + other ladies
Mrs. Leewitt Palmedge
widow
My table partner
Ordinary sat next
Mrs. Henderson
Mrs. Leewitt 2 next
there I.

over

Chauncey said
I am in my 56th year.
Chevreul said, I owe
my advanced age &
activity to 3 things.
1. I never have had occa-
sion to worry. My
father was a Yankee
Jersey man & had a
safe job. At 15 I was
made chemist of the factory
foreman.
2. I ate simply.
3. I never smoked
never tasted liquor.
Drink only water
no tea or coffee.

After dinner men
went to smoking
room, ladies, re-
mained with Mrs.
Henderson.
I went with men
before told stories.

Knew Lincoln, knew
Slauton.
Lincoln said he
got his stories from
the crowd in the
taverns on the cir-
cuit in Ill.
Said he never invented
a story, and added,
I think I can tell
a story pretty well
Said he never forgot
a story.

Many of his stories were unpublishable. He told Chauncey a story of how he got rid of an office seeker.
Longnecker was defeated for reelection. Roosevelt said "take care of him."
Gov. Tsen large delegation from Panama & Longnecker called on him. He said in telling the story as he sat in the old rocker clasped across his knee (in front) rocking back & forth. "I thought I was gone

as the Panama incession came marching in. Each made a speech in behalf of Longnecker. One Spaniard said, "Take care of him & he will do anything." They all said, "He will do anything." Then said, "Finally if he will have the N in his name changed to M I will appoint him governor of Utah." It killed Longnecker when the story got out. The delegation filed out very solemnly.

Helpers told how
Johnson became
an assistant.
Was later left after
married, wife who
taught him to read

visit with Mr.
Swingle of Agr. Dept.

Soy milk used for
babies in China.
Buffalo (water) milk
used in large cities
of south China.
Milk very rich, must
be diluted

Soy never eaten as
a bean. Enough at
American factory
to eat it. Eat about
1 to 2 ounce.
In making Soy pu,
thinks something
unwholesome or pig
germs is removed.
Must obtain
Winnyh Jane Milk

It got rid of mineral
used to cough.

(Soy milk supplied the
Hebrew hospital in
New York by Dr.
Kim to feed babies.)

About ½ people of
China eat no rice.
Cannot afford it.

Man can live on
1 cent a day.

Five 5 cts a day
Man have good variety

Statistics in Ger
showed less
decay of teeth
in hardwater
district

Dr Murray
Cleveland
Cotton Board
40 % of insane
who recover are
cured by removing
dir teeth
40 % teeth & tonsils
20 % gastro intestinal

Swollen & purple
gums means
diseased teeth (roots)

Gastric coat
imagine
(scale a month)

2 qt blood for
examination
of streptococcus

Colon bacillus in stool always abnormal.

Colon vaccine made with culture from upper part of int. canal, not lower part

infection of stom. in peptic glands.

Germs travel from cecum to stomach

Fundamental in every case.

Mania depression

Dementia precox

Paranoid

Pulse reduced from 72 to 10.

Send down
~~Nelson +~~
Roderick & Cotton
& Roettger

Write:
Cooper
Geo Fisher →
Orton agt Wpt
Nesse
Fairchild
MacKenzie { Kinney auto valve cases
McCollum
Farmer abt
fund. Insure ret
of all the papers
they rec'd.
Keene

Swingle
Plunkett
English agent
Alpha
Finnkt Waynalls
Wm Neisel
Meyers MacMillan
Itinerary
Dr Ozear Rogers
Umpire
Invite guest
Wm Mackenzie

see Crawfords
Clerk at N. Y. Store
Send 2 an literature
also.

Sweet about school
+ food work

Golf about
Paraffine
Rinser + Cuttard.

Seid dort gfoods
vbeanza Bloaugh-
lin. Dawerfon Hea
Ttlu, Hamellen.

Circulair
Collegenen
fan Forth &
E. Pelb.

mushrooms
artichokes
Dandelions, beet tops
Lime Cons.
N balance.
strict diet, green vegs.?

Kaliski
1070 Mad.
81-82 St

Tel 2587
Lenox

Dr. Rauer
154 E. 46th St.

Dr. Bernstein
Rome
was at N.Y.
Conf. is enthusiastic
Intolerance

Dr. Corwin,
Ch. Surgeon,
Col. Fuel & Iron
Pueblo. Col. Co.

Cicadeles
Mellen Menus.
Artichokes.

Rochester
Pneumococcus

60% 2 types of pneumococcus

10% a mucous type which cannot give immunity.

Balance cases due to a variety of germs always in mouth

Method find the germ, then vaccine not very fatal

No 1 35% fatal
Clot Pneumonia

3d day.

Temp. 104.4
Type no.
80 cc serum
better
next day 80 cc.
4th day temp. normal
Organism determined in 7 hours.

lease man
6 days
Blood post.
no!
all right lung
part of left!
Pulse 130
Temp 104+
off 80 cc
Blood cleared
Temp fell.

Had 3 20 Temp.
normal on 4th day
after 8 day.
Temp. normal
3 days.

Case man
~~6~~ 105.8 6th day

after 6 days.
Temp down
same face?
fluid. seeds
will absorb.

where organisms in fluid must absorb

lens Mans
entered day very sick
after chill
Blood c. 9,000
no consolidation
rales bronchitis
apathetic very dull
next day dull, bowels
Pneumococcus in
sputum
not typical

Immediately in bath
bacer.
after 3 days
diplococcus in
blood.

---

read Dr Cole
info about Eosin
Spikes.

---

will take Mrs

Dr Cohen

Electrocardiogram

Diabetes

2d visit

Miss Westhart

Dr. Allen consist.

Dashecan spinats
and artichokes.

Also give Gluten
when ready.

Begin with green
vegs afterfast
then strict diet
then add

Isabelle
2 visit

Grenville Quiser
1269 Broadway
Tel 3039 Madison

Send Chocolates
& Health Delights

Write
Fissler Dr Stephen
Smith, Mrs Henderson

Ricardo about
vacuum treatment
of gyorrhoea

public health
service

School inspection
House to house
in spection
Pub health
nurses,
ed campaign
milk supply
water supply

Malaria

med. Ex of food handlers?

war toll of civil pop. many times great as army.

Gen Gorgas

Ven. dis. greatest cause of inefficiency of soldiers

a military commander would choose relief from venereal dis. rather than from wounds

afterwards of
Hugh, back
in 16 days
or 2 wks!
ven. disease
much longer.

ven. disease
can be controlled
more easily

than yellow
fever.
compared
w. with yellow
fever.

I am inclined
to think the infec-
tion is relative
to ven. disease
must be educated
up to the point.

If men had
same standard
as women, the
disease would be
controlled. Success
must rest upon
changing the
beliefs of men
about sexual
morality.

Custom controls
to a wonderful
degree.
Women do not
smoke,
Men smoke, be-
cause they have
been taught it is
manly to smoke.
Women have not
been so taught
at least not
until recently

h. y. plan.
Bill ~~passed~~
reg. emen, ofs
for Mar. licenses
assert no
Venereal in
5 yrs or is
cured.
Bill for Buddy.
adv. of sem.

for sex diseases,
daily newspaper
of N.Y. has published
series of articles
on gon. & syph.
Diagnostic clinics
in each borough,
including Warren
Hosp. for segregation
for habituals incorrigible
& unbelievers

to isolate themselves

No dispensary for treatment of ven. dis. allowed without permit from Board of Health

Rol

Robertson of Chicago will send copy of ordinance on ven. dis.

Sr. + Dr.
Inlenur
Sr. 49.80
Dr .87

Vaccine
Sr. 11.00
Dr .35

Sur. Maj. Ed. Rist
Greek army

Vac. for typhoid does not diminish death rate, but only decreases sick rate.
"Ann of the Pasteur Inst Vac. for typh. sensitizes to paratyphoid. This disease increases as typh. decreases

the disease
in some cases
most fatal were
typhoid vaccinated

antityphoid
vac. has a
notable effect
on typhoid, but
decreasing it,

but increases
paratyphoid
to exactly same
degree.

Recently French army have been vac. for typh. and also the two paratyphoid germs. Vac. with typhoid alone lessens death rate but not sick rate

Dr. Walker
Room 616
Mills Bldg
Mgr.
Absent Management mgr
Case
Failure

Plan of organization
authority
~~Dep~~ departments
Cas. Cost &
authority given heads

Organization

University Hospital

Johns Hopkins Corporation.

Supt with 2 assistants

Head painter
" carpenter
" mechanic
" nurse
Purchasing agent
~~Housekeeper~~

Costs

Food per day

Nurses	.40
Ward	.26-.55
Private patients	1.12

Total cost of care

Ward	$2.20
Private	4.56

(Laundry, care of nurse, medical fees extra)

Charges per day

Wards - free

Private $5.00 - $12.00

Hospital cases

$25.00 for Ex + first week and $20.00 a week after under care of hospital doctor. Pay extra in ward

no. patients
about 450.
Budget $100,000.00
Nurses.
$50.00 paid by
probationers for
1st 3 mos.
After that, shoes,
uniform, & books.
Nurse once accepted
cannot be dismissed
without vote of
trustees.

Patients are charged
$32.00 a week
for 12 hrs. service.
Extra.
X-ray (about 2/3 are)
wines, liquors,
etc.
Food confined to
rather meagre
bill of fare. Extra
fruit, etc. not supplied
" we don't get them)

800 applicants
to nurses course
which cannot
receive.

Aim to be strong +
enduring

Building up the
Body Required

Social Hygiene in France & England

School of Health

How to have a clear tongue, sweet breath & clear head

Holding old age at Bay

Science of Eating

Secret of Strength and Endurance

How to be strong & enduring

Building up the Body Reserves

Social Hygiene in France & England

School of Health

How to have a clean tongue, sweet breath & clear head

Holding old age at Bay

Science of Eating

Secret of Strength and Endurance

How to be strong & enduring

Building up the Body Beautiful

Moslin bud
& mucous
anti-sum
Mayo Clinic
Neck Applica-
tor for
Radium

by Office
last 7 hour,
Mrs. Davis
look,
Emulsa
seems decrease
Radium number

Hy Park
property in
a speedy
fund for
paying off
debt.

Rather Riley
work into
Supt Office

Gun accident

2671

Family Tree
321 W 17th St

Look up
case of
Hansen
from abroad,
travel trouble

3506
AF
Kellogg, J.H.

2671

Yearbook
Case 9
Hansen
from abroad,
travel trouble

3506
AA
Kellogg J. M

Dr Skinner

Columbia Hosp.

Av. Cost per day

Private	$2.36
Attend.	2.00
Food	.40

every soldier who gets ven. dis. at Camp Custer must be reported ~~by~~ to the health dept.
See Manual 302.
See Col Powell about this.

Elite Pub Co.
810 F St
Wash. D. C.

The Elite Paint.
$65.00

Prof. Foster
of Rush College.

Entrance Engt
Sixty 3 mos.
Chief of foreign
office in England
& of French army.
Nobody knows
exact condition
in France.
No exact investi-
gation made.

Clinics established
near Am. Camps.
for all diseases
including ven. dis.
Saying little
about ven. dis. for
fear of offending
people of France.
1000 diseased
persons came from
Germany every
day. Arrived at
a French town

only
5 med. institutions
and 1000 new
vicious neurons
~~cases~~, coming daily
only 2 doctors in
the town.

Red cells produced
Each second
700.000.000

White cells per second
in pneumonia
11400.000.

12 miles of sweat ducts.

Move

Slow infection by
sneezing, coughing.
Man in clean room
coughs or sneezes
air fills with
germs
another comes &
~~has~~ man, breathes
air, he sneezes
at home & room
whole family
sneezing.

Handkerchief same
way.

1000 Employees
at $1000 a year
1% of sal ($1000) = $10,000.

500 - 2 wks @ 1/4 sal = $5,000
250 - " 1 1/2 " = 5,000
250 " " 1 " = 10,000

Classes
1. where sick 1/2 pay.
2. where sick 1/2 pay
+ 2 wks vacation
on pay
3. when sick, full pay.
2 wks vacation
half pay.

Allegheny
Pa.

Mansfield Mary
Office 64 5th Ave.
Phone Chelsea 5710.

Frank Hodgkins.
354 W 116th
Phone Mad. Sq. 3700

Greenville Rubber,
126 Bdwy.
Mad Sq. 3039

Greenstone 120 Bdway,
Rights 10.000.
Bradley, Everything

R. G. Lipe
3 W 60th Bdw.

Franklin, 4900

Herman Zierka
Pleasd
Dr. H. C Jerris
Dentist
Bayard
104 E. 140th St N.Y.

Bureau of Red Cross.
Miss Florence Johnson
44 E. 23d N.Y.

Demobilization Station
Scott Albert
11th St. University Place

Col Davis
Head Nurse, Miss Grant.
Clinic Orthopedic Reconstruct.
Dr Gilman Thompson
2d Ave & 15th St.

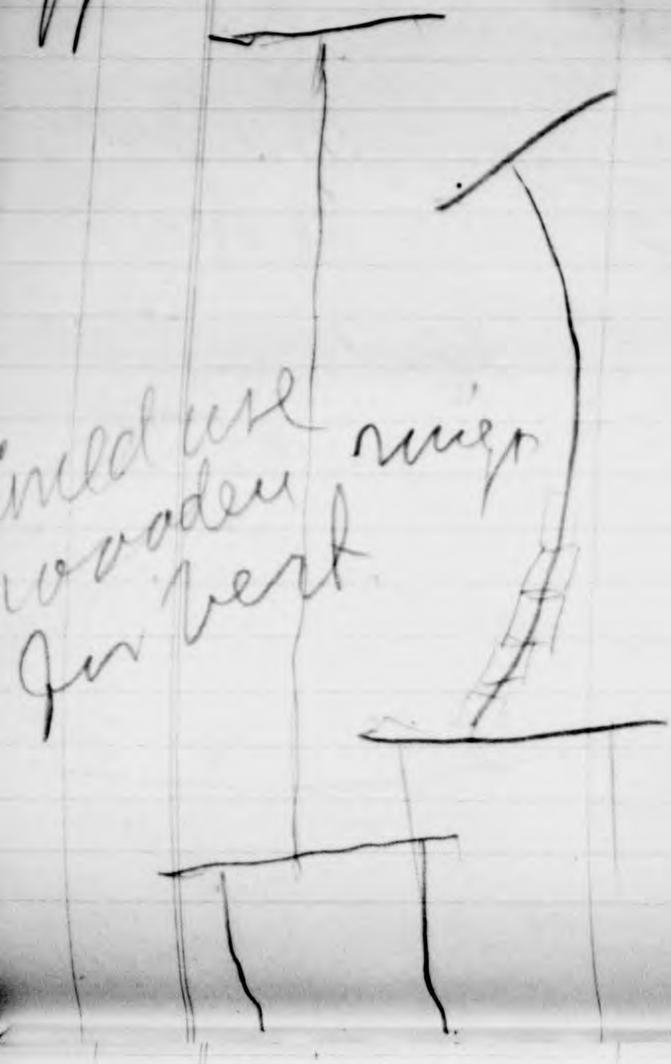
Physiologies
1st Book
320 pp.
2d Book 448

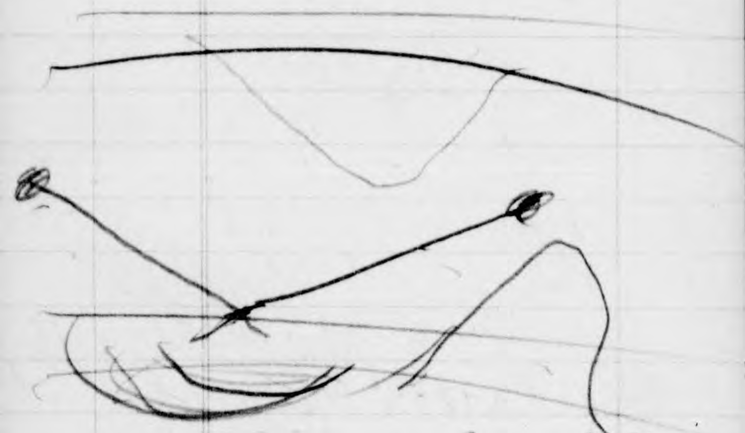
Illustration

Story of Winkle
Lid rest.

Height & weight rem
Story of Benedicite
book

illustrate model apparatus





story of fur flux

Write Mexborough
about meeting of
Cem. Dis.
Send Deed
Valve & Cases
Necessary ask pressure
Autos yields, calcs
Write Macmillan about
Send Murray to
Finch & Wagnalls

Thanks yours Adams

Book by Hawk

Mine Rescue
Safety
Mine, Mill and
Smelter Workers
Union, Butte
Montana & Anaconda
Montana
Butte Miners Union
Butte, Montana

Play.
Disinfecting
by gasoline
fumes.

Oxygen
safety.

First aid
Emergencies in
both both books
Blended in
second book. m

Community is
grasp idea in
both books.
make books more
concrete by applying
to lives of children
Things for children
to do.
Projects for children
to do.
survey with them
notice
Green stuffs
organized corps
school surveys

what signs
for Whooping cough
depth blue ?
Scarlet red ?
measles white ?
Smallpox

Pictures of handsome
children - fine figures

No. Illustration
100 pt
125 2d books

2600
200
400
Problems

Begin with
Health Habits for
1st Book
add Emergencies
& Com. Hygiene
~~& sanitation~~

Body in Health.

Must be ready
by Dec. 1.
Callahan will
write me further
suggestions.
Name will be
Kellogg & O'Hea
ASKO O'Hea to share
expense of cuts &c

Wrote an Kerne
of Tobacco Co.
Thank him for
kind words to
Farmer

Suggest to ask
Tobacco men
to put a repre-
sentative on the
com. & ask to
contribute

Write Mr Keene
of Tobacco Co.
Thank him for
kind words to
Freeman

Suggest to ask
Tobacco men
to put a repre-
sentative on the
com. & ask to
contribute

R. Lait McKenzie
Automatism

A. E. Barclay
of Manchester
Eng.
Dr McKenzie
saw him. says
case is remarkable
roentgenology

See Barclay
read paper.
Chk Pathologists
$4.00.

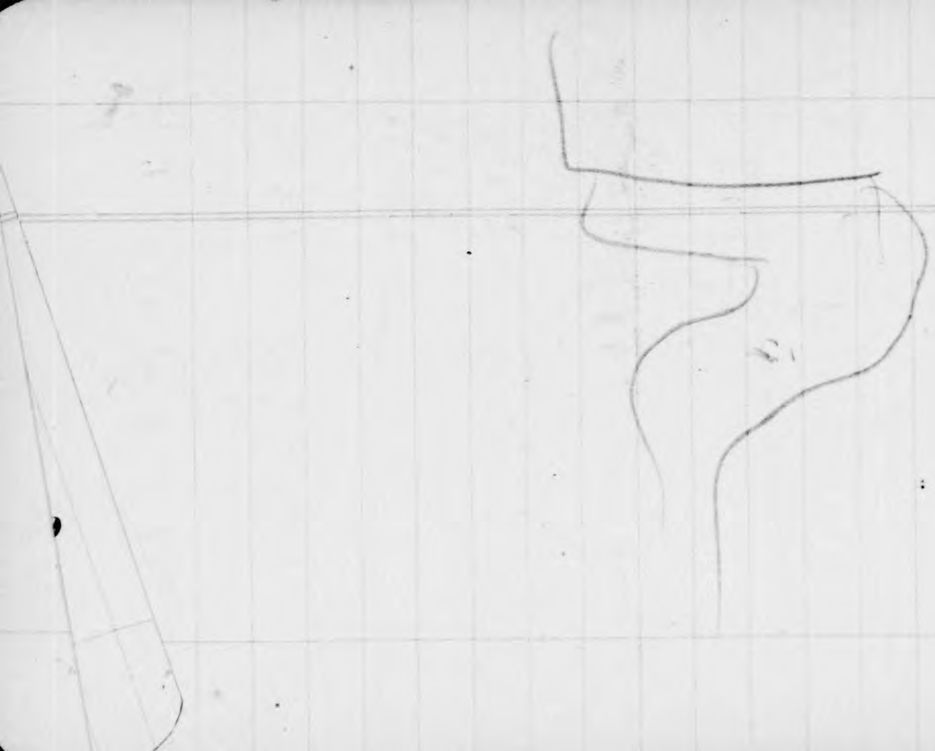
See man could ob-
jectively tell
if heart have ceased
beating from infarct

See Burroughs
and Ford.
Ask Patterson for
$5,000.

See men will appreciate better
if they know a good
big fund behind

R. J. McCormick
Cincinnati, Ohio

B. E. Thresher
Plainfield
Ind.
Philadelphia
Saw him. Say
Came to Massachusetts
Washington



Tobacco Potters
Geo. Fisher

Pres. Lambert
also
Pres A.M.A.

Last year
60,000,000,000
cigarettes
including those
sent over tax free

Cigar maker
wanted fine
lunch on 21 cigars
a week amounting
to 25,000,000
last year.

Com.
Phys.
Chu.
ath.
Ed

Plant turnip
& turnip seeds
Cabbage greens
Collards
Mustard & varieties
Endive & varities
Sheep's quarter
Dandelion
Poke root

May 18 - June 1 - 1919

Dr Rogers

Yankers 374

Mrs. Anna W. Allen
Shelby Mich.
Nurse about 45 yrs
in Good health.
available after
July 1, possibly
before, a very
good prospect. Af-
fectionately very strong
& able "not and
sick day." Thinks
of taking a course
Dim lectures, Univers
Dev Dr. Publ Health.

Miss Allen mentioned a Miss Ellis.

Helen O'Brien
Mo. Dr D. G. Snodgrass
Meadville
4-6 wks
will consider,

Margaret Connolly R.N.
South Warren,
8 wks. Pa.

Past Graduate

Nell M. Byers.
Idaho Falls
2 wks. Idaho.
well recommended

Gertrude Beard.
232 Monmouth St
Rest 4 wks.
July.
Electro-therapeutics
Has had a course
ready for position

Miss Glenn
wants to take
course at Columbia
Husband left
univ. work? needs
help. Her Father would
write Chancellor.

Called on Rehfuss
sent approving
counterpart averag.
sent agreement about Chemory
etc.
will take a man next
fall. Closer up soon

Write Capt McKenzie
Dave Anderson abt
Crampton. He will
not be back in red
place. much opposition

Tobacco
7 lbs. per capita
in U.S.
4 in Eng
2 1/2 in France

Miss Eslein
wants to take
course at Columbia
Husband left
univ. work? needs
help. has typewriter

Roetger.
using acidophilus
finds it will survive
in colon. Especially
if helps in taking
milk, new effi.
Have Dr. ——— go down
to see him.

Propose circular to men
who did training

1,200,000,000
dols spent on
tobacco direct
7 lbs. per capita
in U.S.
4 in Eng
2½ in France

Fires from tobacco.
3,000 fires in N.Y., smoking
22 % of all
15-20% fires caused by smoking

Send Geo. Fisher reprints of N.Y. Underwriters paper.

Program

Early visits to San

Visit all depart's

Schools

Normal

Economics

Nurses

Dietitians

Bathrooms

New treatment rooms

Laundry.

All doctors

Shops

Farm

Store room

Out-door games

Food Co.

Good Health

Nurses Aid

Bus. Offices

Religious

Lectures

The voice behind

Physic. life

Breathing

Heart

Fatigue

Sleep.

Awaking

Hunger

Thirst

Pain

Mental

Thoughts

Aspirations

Ambitions

Premonitions

Dreams.

Somnambulism

Warnings

Our Mission / Our Ideal

Have we had a mission

Historical - Charter
old - new
Race Betterment
Foundation.

Have we still a mission

People come
Lord send.
World talk of Basic
Crack System

What is B. C System
Eclectic Physiotherapy
Diet
Biologic
Normal

Scientific control
No condiments
Milk
Salts
Balancing.

Exercise

Out-door life
Controlled life
Water - hydrotherapy
Electricity
Mechanotherapy
Massage.

Schools for training
experts.

A doctrine, an
idea, to take root
in public mind
must be clear cut,
must be sane & sound
& endure.
Discuss all points
in system.
Get differences to
participate in dis-
cussion. Colver, Egg.
Mott, Martin,
etc.
Have Prit. ... and
all come in.

× Great Ideals.
Moses - Peter, Paul
Paul - saw a great
light (waves) seen
a great light - what it
has done for us. How
our light become dark-
ness, mistrust, our
lamps burned
dim.
What Sanitary reform
did for Hebrews.
Hymn Kept all there
The nations that see
you shall say, etc.
They will say it.
Jew longest lived
longest headed man
in world.

Notes & Ideas
Mental & Moral
Sept. 5/96

Martin Luther
Wesley
Jefferson
John Brown
Father Matthew
Prohibition Leader
Susan B. Anthony
Wendell Phillips
its Ideal
Roots one way
week
sect
English clergyman
founded church
in Virginia

Sylvester Graham
Alcott
Thoreau & other
idealists
Fri. Wright, Huber
Pavlov Atwater
Helen Chittenden
Foster - Prison reform
Frenchman
Winternitz
Elie Galvani - Volta
Mead. Apostoli
Gerchenne
Eyer Leing, Dio Lewis
Sargent, Leaner
out-of-door life
Indian

Our own history
Early days.
Extremes - Shakers
"Bloomers" - Bloomer
sisters,
Skirt
Injuries - Extremes
no meat
no milk
no butter
no cheese
starvation
Cold baths
meating ice
coldwater cures

New light

A new day - a great
day has dawned.
Committee p. 50.

We are lucky to be
alive. Almost of us
are like the children
of Israel who went
into the promised
land - most of their
originals had died in
the wilderness. A
few of us remain like
Caleb & Joshua who
were young. And the
promised land is before
us. World is awaking.
No time for pessimism
Mutiny & pessimists all
right, all the more
need of our work.

Drive

For Biologic Living

Health decalogue for everybody.

Lecturer

1. Live out doors.
2. Eat biolog.
3. Exercise
4. Rest recreate
5. Sleep
6. clothing
7. Avoid excesses
8. Avoid poisons
9. Avoid infection & do not infect others
10. Avoid worry

Able speakers.
A whole week daily lectures
Monthly rallies
Monthly meetings
Made very attractive
Music, new speaker, prizes, report of benefit fund.

Contest in Health improvement
Strength
Endurance
Blood
Prizes for improvement
Prizes for health record
Prizes for efficiency
Prize for suggestions.

Begin Dive
with a few
Board Heads and
all doctors

1911 1 2

Dry goods

Dec 5 15

1 Pants Case, Linen of 20
Cuts. & F.B. & Bib.

1 Messenger Bag

2 Infant's Red Sweater
Black linen thread

3

3. Special house dress
knot for linen thread

2 pairs gloves ordered
of Higgins.

4. Stump burned off & seared after cutting

5. Before cutting the pelvic strand large forceps applied around stump.

6. Before cutting, a large single ligature applied to the mesentery in such a way as to join mesentery & middle intestine to wall of pelvic cavity at point at which incisions are made, which is marked by forceps.

7. The forceps remain attached to proximal end of bowel, the bowel being cut short and then seared.

8. The forceps are rolled over so as to bring the upper most point 3/4 in. from the end.

9. The two edges of the small bowel are then attached to the inner edge of the longitudinal band of colon.

10 Suture line of stitches close together run across the bowel, at lower edge the mesentery is included in the last stitch so as to take strain of the suture line.

11 The colon is opened by a slit about 1/4 inches long.

12 Pair of forceps placed at each end of the incision taking in all the layers of the intestinal wall. A pair is also placed in middle of the outer half of the bowel

13 Posterior line sewed with black linen thread lock stitch across and ordinary stitch back.

14 Upper side. lock stitch across, then second line of peritoneum & muscle only.

15 Complete outer suture line

16 Put colon tube in bowel and up small intestine a foot or more

17 Complete suture & inventory.

18 Make kink at end of descending colon by attaching bowel (inner margin) to brim of pelvis.

19 Assistant puts up thick colon tube, and paralyzes the anal muscle. In inserting tube two fingers are inserted and pressed against anal wall of rectum then the tube is passed close up to them. (I suggested putting tube in before operation. Mr. Le. Denied no objection)

20 Some melted vaseline is poured in on intestines (oiled napkins is placed over intestines while out of cavity.

21 Close wound.

22 Attach colon tube to anus or labia to prevent pulling out. Closes wound with catgut and silk gut.

After care

Give handfuls as soon as nausea will permit. No other laxative is needed

Introduce a pint or two of normal saline under skin. This prevents nausea & thirst.

Give liquid food for a few days.

Colon tube remains in place 6 days.

Colon fistula tube by means of rubber adhesive. Will place tube before operation & wash bowel out with yogurt whey.

Woman at 35-40. X-ray showed obstruction (left delay) lower ileum

Found kink and adhesions of appendix. Broke up the adhesions and closed mucous membrane over raw surfaces

Found kink at brim of pelvis. Left it. Thinks it useful to prevent return into upper colon

would have done 'short-circuit' if the evidence of auto-intoxication had been worse. Regards dimpler in breast as best evidence of infection. Especially thickening running up to left axilla. Not present in this cases.

Met Dr. Henderson from Mayo who is preparing for orthopedic work. Had been 2 mos with Dr. Robert Jones of Liverpool who is the best man in orthopedics in the world. Never much "tendon" work.

Met Dr. Flagg who came down to Magnuson, assist operator on Thursday & Friday. Friday afternoon at 2 o'clock at Leeds infirmary is the only day. Run to write Dr. Dave.

Said he saw Sadler there. Sadler had nothing to do with the work, simply a spectator.

Dr. Henderson said Mayo short circuited a man and he gained 40 lbs in a short time.

Dr. Lane protects the edges of his wound by napkins with forceps.

Wallace

Dr Platt's
Report of Examn
of Stools of
Infants

Dec 19.

Gave him specimen of Baby's stool for Examn. Very bad smell. White. Hard like a goat's. Showed evidence of undigested casein & fat. Microscope showed many Welch's B. Few spores. ~~Not~~ Dr Platt said, a very bad stool.

Cow's milk bad for infants. Not good for many adults. Cannot digest cow's casein.

Mallose is best food for acid forming bacteria.

Dr Platt stated that neither he nor his wife eat meat. "It is not the natural food of man."

In trying to find a remedy which will change flora of man without change of diet.

Jeanne at Great Ormond St Children's Hospital.

Saw 3 cases of hare lip. In one the mucous membrane trimmed of the side (left) of the fissure in the lip was turned in and spread over the raw surface of the flap from left jaw. Jeanne said she often does this and sometimes later makes a left palate yet. by making a second transplanting. The bridge is not divided. Left for teeth to cut through. Jeanne says his method does not make a cicatrix in roof of mouth and that that teeth do not grow from the roof. Should a case which seemed to confirm his statement says mucous membrane gives nothing, part usually all naked in a week.

Jeanne spoke of the great value of prostatic secretion especially for public women, often urged women to have intercourse on their next. Could tell he says whether a woman is having it or not by feeling the market.

Scotch Broth
on bill of fare
reflect curly greens
Kale broth
used after hard frost.
must be frozen
Get rid of scotch
Kale plant winter.

Sheep dogs never
have meat. This
is not

Chalmers Hosp.
Dr Stiles Dec 20 1911
woman 35. Fistula in
groin, hus. no
local matter. Had
op. for appendicear
abscess 12 yrs. ago
by Dr. Jos. Beal. Ok,
all 2 yrs ago, from
then abscess & fistula
S. thought may be the
append. was not
removed. Did not
find in op.
Operation. Cut out skin
scar. Then enlarged
fistula & put finger
in as far as possible.
Pushed it about and said
"an interesting anatomical

point. I cannot push my finger higher than the crest of the ileum. The iliac fascia is attached to the crest of the ileum. Hence I am under it."
A woman later he was pushing his finger all about the abdomen when he pulled his finger out he smelled something. The odor was urinous, but soon fecal matter appeared in the wound. He split the wound upward, and found that he had been inside the colon. A small

Dr. S. Matthiasson
Akureyri
Iceland.
(Akureyri)

Send Sam & other literature. He knows Hindehede, and has read of Lilienthalism etc. a very bright man

(over)

fistula had been created into a hole big enough to put four fingers in. In fact the coecum was torn upward from the bottom, at least 4 inches. The wound was wipe clean & bleed, a little lysol solution was used. Then the bowel was pulled out. The whole coecum and most of the ascending colon. The ileum came out for about 6 inches. He hunted about, put his fingers in and explored among the intestines, pulled omentum out and put it back. Then exclaimed, Why here's the ileum. Then pulled out about a foot more. He swoke the coecum over a bit, applying clamp. several hours then took it off, & finally decided to remove it, which he did with 6 in of ileum & eight inches of large bowel.

~~Immediately then~~

~~the~~ ner

The following is a list of some of the things Dr. Stites did which are not in accord with up to date surgery:

1. No pains to keep wound clean while dissecting the tissues.

2. Did not locate the inner end of fistula before exploring with finger.

3. Used no gloves.

4. After finding finger in rectum, only washed fingers & rinsed in weak lysol solution, about 1 to 1000, a spoonful or two of a thin solution in a big wash bowl full of water.

5. Used only tap water in washing hands. Assistants & nurses worked without gloves.

6. Tied catgut only two single knots.

7. In cutting of intestine simply wiped ends with ~~swab~~ ~~then~~ pad of gauze, then left them lie about and let them come in contact with hands, ligatures & wound.

8. Inspected unnecessarily the whole right side of peritoneal cavity.

9. In opening abscess & cleaning out, soiled

the edges of wound very much. did not wash, only wiped off with. hands ~~after~~ morning out of weak lysol.

10. Boiled needle, thread and finger by frequent contact with iodine of color.

11. did not close peritoneum, formed into a large fine mass on one side.

12. did not coapt edges of tendon well. Joined tendon of external obl. half length of wound to tendon. & half to muscle. Often expend over with superficial

parts which was joined to the edge of tendon halfway & to fat surface the rest

13 ~~Stored~~ Used catgut (commercial, Barnett & St Louis) in deep parts. but in silk worm gut in skin, including skin only.

14 did not waleth edges of skin too well.

15. Put a rubber tube down to intestinal wound to be kept for 48 days (doubtless necessary with such dirty work (mm)

16. Served last 5 in. of ileum to colon thus:

In other words. made a larger kink.

17. Carelessness in closing up end of colon. 1st line of suture showed many stages of mucosa projecting. Pushed back but did not put in a stitch. Only one row outside. all imperfect

22. He explained carefully. 23. Bowel was very edematous. within weeks for above reasons

24. Let bowel hang around outside without proper care.

25. Cut intestine loose from its mesentery.

18 Bowel had not been well prepared. Cæcum & ascending colon full. Not

19. Made no attempts to empty colon before opening

20 Did a major operation when a far safer operation would have been sufficient.

21. Did not dissect out the

He remarked. "well it was well that we tore that cæcum because that made us take it out." The cæcum was perfectly healthy.

(over)

Some good points observed in work of Dr Stites.

1. Uses short (½ in long) small rubber tubes to prevent cat gut from cutting. These are threaded on the cat gut before suturing.
2. In a case of distended bladder (up to umbilicus) opened & drained. Said he would remove prostate later. Suspected to be malignant. Said "you can save many lives in these old men cases when urea threatens by draining first. They improve a whole lot after draining.
3. Used very large rubber tube for draining bladder ½ inch. Will not irrigate contin usually in this case but thinks it a good thing.

Dr S was called by house surgeon to see a case of fracture femur with Kane's bone plate. Two weeks ago. Wound had healed. but within a few days had become red, swollen

Dr. J. was found plates in his office when he said some

and seems worrying. Evidently inspected. Dr. S. said "It will come all right but I don't it.

Leane's bone plates.

I asked Leane the other day what about use of plates in compound fractures, with infected wounds. He said: "Use long plates so as to get the screws a long ways away from the fracture. This prevents the spreading which occurs around the screws from interfering with healing.

Dr. Stiles said the he finds many Leane's Kinks. He simply breaks up adhesions. Does not short circuit as Lane does.

An Icelandic doctor who was present at the operations to day said Dr. Stiles did not do as well as usual. He did not at all approve of what he saw. His technic does not compare with Leane's.

Learn's Technic.

Takes very fine stitches always very careful not to lacerate the bowel. Never not use McCormick stitch, simply through & through.

Dr Slitter used McCormick but very carelessly. Thought it was charlatanism

Slitter uses a sort of linen thread made especially for ~~tonic~~ surgical purposes. It is very smooth & strong. Very cheap. Get a supply from some instrument maker.

Sanitary Wood Wool Co.
Travis Inn
Holborn
London W.C.

Flat-free catgut.
18-4 per 100 ft.
+ 5% advance

Macfarlane & Co.
Wholesale Chemists
~~Glasgow~~
Edinburgh.
cat gut.
2½d per 12 feet.

Mackeson Telegraphing Print maker
Reeds.

Entered list of print he has to send the memorandum at once.

Leeds Dec 22
1.30 P.M.

Morphia
was most cordially
rec'd. Pushed the table
up near the railing so
I could see better, even
at the sacrifice of light.

1st Case. Nurse, appendicitis.
Had had 3 attacks of
appendicitis (2 too many)
he said).
Incision (Martin) at inner
edge of rectus. Drain
back rectus. Made long
incision (skin) over not
behind in button hole
incision. Must have
room to examine
gall bladder & pelvic
organs.

found no kind (did not examine carefully) said he seldom does find kinks. Kinks have existence in their. Has found kinks, and makes short circuit when marked automatically battery skin etc.

Ligated mesentery, crushed appendix with strong crushing clamp. Ligated, cut off inverted without cauterizing. Said he had had made 90 inoculations from stump, always sterile. Post case however, not to touch the stump & covered it in with.

Then or four layers of ~~sutures~~ fine silking sutures placed alternately at right angles.

In closing, placed 3 or 4 silkworm gut sutures about 1½ apart and an inch each side of wound, protecting the skin by slipping in the suture a small rubber tube an inch & half to two in. long. Closed skin with clips put in with a hand machine.

<u>3d Case.</u> Gall bladder disease. Opt. years ago. Better & now. Has worse. had 4 very severe attacks, last very bad

Thought he would find stone in common duct. This is usually the case. Jaundice in only a few cases when stone in common duct. attack of pain of duct closes & cause jaundice & pain.
~~Some~~ In cystic duct comes on suddenly & stops suddenly. In common duct develops more gradually.
Made long incision, 1 inc right of mid line from ribs to 1 in below umbilicus. Said the surgeon did no live

who could do a proper gallbladder op. Thing was small incision nothing than by rear (1½ in) directed at scar chan down to parts of uncle.
Found many adhesions (a mess). Head of pancreas large as fist, many attacks of acute pancreatitis. No stone in duct. Fat necrosis shown by gritty feeling. Fixed gallbladder and did cholecystenterostomy. same plane as gastroenterostomy. Used semi-circular clamp for intestine. 2 rows of sutures. Pagenstecher's linen (No 1) for first row. catgut inside.

Remove the same pean for
~~the~~ gastros. (said he had lost
a thread of silk in his place)
Broke up adherions well
and closed up with
a drain of rubber twisted
as big as finger, at
upper angle of wound,
going down to deeper part
Drained into intestine
~~3d Case Hopeless~~
so as to make drainage
permanent. Female
in many of these
cases due to rupture
in cystic duct from
attrition of stone.
If duodenum is
bound up adherions

to cannot reach it,
join gallbladder to
stomach, or if cannot,
then to separate fistula
of colon. but last is
not desirable on accot
of danger of ascending
infection.

4th Case. Appendicitis,
1 right attack. Sometimes
in appendix, no
other evidence of disease.
Remarked, the case is
always mechanical
in appendicitis.

Remarks between operations, etc.

Cancer of Pancreas. Always operable in cancer of pancreas and doubtful part. Case of cancer of stomach & etc. & gall & liver is popular. Patient always is boss a lot better. One case a woman able to walk 10 miles a year after for relief jaundice by draining gall bladder into stomach. Difficult to use the small intestine.

Duodenal Ulcer. Eight times as frequent as gastric.

In 1903 Both mayors told me at depot in Rochester that they rarely saw duodenal ulcer. Surgeons do not believe that he came and watched my cases. In 200 cases in which I made a diagnosis of duodenal ulcer operate confirmed in all but 4 cases. In 400 cases of duodenal ulcer found cancer in 3 cases, but did not begin in ulcer, they extended to it.

Juicine when when I can. Not always garlic.

Case of total pancreatectomy.
Patient lived 8 years & more. Then died not due of cancer, no recurrence. Made all the viscera has published report in Lancet.
Will have important article in Lancet 1st number of the year.

Symp. of recurrence of gall bladder trouble after operation on gall bladder.
1. Jaundice
2. Recurring attacks of pain.
Most common cause is stone in common duct.

Gall stones. Always cause trouble. Two things not correlated,
1. Many cases of nervous dyspepsia
2. Gall stones without focal pain or other symptoms.
Gall stones must always be removed.

No recurrence, as
innocent gall stones.
In one case removing
cancer of transverse
colon which involved
the stomach. Other
found gall stones,
also removed. Patient
recovered, still doing
well — a year after
op.
Cancer of colon
seldom recurs.

No objective symptoms.
In last year had
a case giving all
symp. of gallbladder
disease, found nothing
Patient go well after
operation.

Vomiting is present in
only small proportion
of cases of pyloric
obstruction

Prepare skin thus:
Wash with green
soap. Then 1/500
bin-iodide of mercury
sol, then flaming with
sol. Then aqueous
sol 1/500 bitiodide of

mercury on cloth to
wear over night
after shaving.
~~Pain the~~
At time of Pr. sub
well with solution
of Bincoride 1/500 in
Alcohol, then pure
alcohol.
Dampen cloths
about wound with
~~bin~~ bincoride sol.
~~after~~ on
Extra cloths. after
incision, fold extra
cloth over edge &
fasten with special
forceps.

Dress wound with
Flain gauze. Remove
clips on 2d day. Leave
deep wound pt for
10-14 days.

Hasegawa's Incision
of Ulcer
Woman of 35. Two
years ago. Eating
Chicken.
Ulcer on back side
of stomach, adhered
to pancreas. Opened
stomach in front.
~~to~~ Loosened up
stomach by working
finger under
behind through

& left in mesentery
of colon, same as
for pyor. gastro.
Excised ileum, closed
by Murphy & through
& through volvulus and inner
surface of mucosa. Then
put patch of peritoneum
over the defect
by dragging down
through mesentery
opening.

<u>Indication for Gastro</u>
<u>Mayo</u>:
It first said
the indications are
many. Quite wrong
I suggested that the
Mayos did not
operate on cases of
so-called nervous
dyspepsia with
dilatation.
Ever not close
pylorus with
gastro.

Mother bowels with
Castor oil after night
before operation.

Usually food next
day after gastro,
"Tea & toast."

2d Edition of book appeared
Recd it next month
Just finished mss last night.

Invited me to
come again, promising
to write me when
to come after he got
back from holiday
vacation.

It rained hard it
would be Friday
morning first to-day.

Tetotchuman's dog.

He maena sal guid
wind.

Selfridge
Orford.

~~Spencer~~
~~Coade & Cox~~
~~27 Old Jury~~

1

62
9

Milton
88 Lungs Ins
Roads

7.29) 1,44.00 (.20
145.0

96
14

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11) 40 (3.63
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7.26) 8.44

Steam Boilers,
Woodwards,
143 Queen Victoria St.
London E.C.

MacDowell Stoves & Ranges
41 Upper Thames St
E.C.

Cum blake pore
28 1/2 x 16 x 21

16		
8		454
168		21
28		454
456	912	
1728)	9576	(5 1/2
	8644	
	932	

Practitioner 1910
for Sept ~~or Oct.~~
Article by Hubert Higgins
on Articles on Colloids.
Intestinal toxemia.

White Pine
John Graham
Hodder & Stoughton

Send Dr. Bryce
Some Chocolates

St Mary's, Dec 3
Dr Chumnery

Cancer of rectum, low
down involving sphincter
incision from sacrum to
anus.
Removed coccyx.
Dissected up rectum
without detaching anus.
Opened peritoneum.
Crushed & tied bowel.
Inverted with purse
string suture

St. Mark's Hosp.

Dec 4 1912

Fissure - small External ulcer

Nearly with roofs.

Ointment

Bismuth	120 gr.
Cocaine (hcl)	8 gr.
Vaseline	℥ j

Large deep fissure will cut out & leave open to heal.

Has tried immediate closure given up.

External Hem.:

cut off & let heal off

Cancer of rectum

Patient said had fo-ment stools. diarrhea asked "the doctor? no it seems to be constipation with diarrhoea form."

External Hemor.

Contracted sphincter.

Had pain 5 min twice a day.

Will cause abs of sphc & relax sphincter

Ulcerative Colitis

½ pt 4% Argyrol sol. retain 10 min then wash out.

Had had appendicectomy a year ago, no better, because not

Prolapse of Rectum
relapse after
a year.
Immediately pain
ing in to make
incision behind the
anus & pack with
gauze and wait
fill up with cica
tricial tissue.
described in Murphy's book.
(My experience with
Adrenaline)

Dr. H. Tissier
En Rue St Lazare
Paris.

Dr Horace Plunkett
86 W. 12th St. N.Y.

Rectal Specialist
Dr. P. Freeman F.R.C.S.
St Marks Hosp.
Res 10 Cavendish Place
Teleph. 508 Paddington

Herschell on Stomach,
Lewis's Library
Oxford St.

Bilson

Mother
Sir Ronald Ross
Trop. School of
Med.

Nature Sec. 14,
MacMillan & Co.
Address
also Sir Wm Osler

Waltman & Curtis
190 Broadhurst Gardens
West Hampstead

London Institute
of Preventive Med.
Chelsea Bridge Road
Tel. Victoria 754

Wright. E. Alworth Sir.
6 Le Park Crescent
Tel Mayfair 2018

Dr Freeman
Tel Mayfair. 1434
Double Dr. Wright's work
St. Mary's Hosp.
2.15 P.M. after this
week

Reginald Thompson
Paddington 2567
32 Wimpole St.

OPPORTUNITY
TIME THERE WAS BUT IT IS GONE.
TIME THERE MAY BE WHO CAN TELL?
TIME THERE IS TO ACT UPON.
ACT THEN NOW AND ALL IS WELL
DELAY IN FILLING IN THIS COUPON HAS
INVALIDATED MANY CLAIMS.

THERE IS SO MUCH BAD IN THE BEST OF US,
AND SO MUCH GOOD IN THE WORST OF US,
THAT IT ILL BEHOVES ANY OF US
TO FIND FAULT WITH THE REST OF US.
R L Stevenson

Name _____

Address _____

In the event of this Diary being lost, kindly return to above address.

DIARY & NOTE BOOK MDCCCCXII

THE WELSH DISASTER.

ACCIDENTS WILL HAPPEN.

IN January, 1911, two serious Railway Accidents occurred — one to the Scotch Express at Hawes Junction and another near Pontypridd — arising out of these accidents two fatal claims each of £1000 were paid, and in the same month no less than 13 additional claims were admitted under the Insurance Policy Coupon contained herein.

Register your Coupon NOW.

MORE THAN £16,000
PAID IN RECENT CLAIMS.

Charles Letts's

SELF-OPENING

POCKET DIARY

1912,

CONTAINING COUPON FOR

£1000 ACCIDENT INSURANCE.

Gold Medal and Diploma of Honour, Brussels Exhib'n., 1907.

Diploma of Honour and Gold Medal, Franco-British Exh., 1908.

For the *Number* under which this Edition is published, and the *Price* please refer to the Order Form. This Diary is made up in a variety of bindings, for particulars of which see *back* of Order Form.

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JOHN LETTS,

The First Diary Publisher.

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Year by year each of the two hundred Editions of **Charles Letts's Diaries** is critically examined with a view, if possible, of improving it in some detail or another. Any suggestions to this end are at all times welcomed by the Publishers and always receive their most careful consideration.

Suggestions are desired.

Improvements are annually effected, but never have so many improvements been effected in any one year as in this, the Coronation year of His Majesty King George V., in very truth it is the Publishers' constant endeavour to make it worth while for everybody to possess a **Charles Letts's** Pocket Book or Diary.

Arising out of the policy, the Publishers have entered into an arrangement with the General Accident Fire & Life Assurance Corporation Ltd.—the Company by whom the Accident Insurance Policy risks are guaranteed—so that every person who registers his or her name under the *Accident Coupon*, is entitled to cover what may be termed **Householder's risks,** namely Fire, Burglary and Liability in respect to Domestic Servants, on terms *far more advantageous than are usually possible.*

Take for instance the Burglary Insurance, for 1/- per cent. (with a minimum of 5/-) the holder of this diary is entitled to insure his Household Goods against Burglary and Larceny, incidentally it may be mentioned the Publishers have taken care that the conditions of this insurance are unusually generous; three months non-occupancy is allowed and a holiday extension if so desired, and theft by servants is also covered. Liability in connection

Valuable concessions secured.

with servants and also Fire risks are covered on equally generous conditions, full particulars will be sent to all who register in connection with the Accident Insurance Coupon.

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Mr. Letts gives personal supervision.

The general compilation of **Charles Letts's Diaries** is under the immediate supervision of Mr. Charles Letts, and to each and every detail of manufacture the greatest care is given; the paper is really good, the writing papers are made by one of the best mills in Great Britain, each sheet bearing our water mark as a guarantee of good quality; in **Charles Letts's** large and well equipped Factory the most modern machinery is installed, in addition, the Factory possesses every labour saving device experience has proved to conduce to economy in production; thus not only the highest possible quality of work is ensured, but also the greatest possible economy in production, enabling the Publishers of **Charles Letts's Diaries** to offer value unexcelled by any other Diary Manufacturing Firm.

"'Tis not in mortals to command success,
We'll do more—deserve it."

Charles Letts & Co.,

3, Royal Exchange, E.C.

JANUARY—1912.

1	M	CIRCUMCISION. Stock Exchange closed	
2	Tu		
3	W		
4	Th	○ Full Moon 1.30 p.m.	
5	F	Dividends due	
6	S	EPIPHANY [S. Distaff	
7	✠	1ST AFTER EPIPHANY	1
8	M	S. Lucian. Plough Monday	
9	Tu	Christmas Fire Ins. ceases	
10	W	☾ L. Q. 7.43 a.m.	
11	Th	Hilary Law Sittings begin	
12	F	*Temp. Day 43·1°, Night 33·7°	
13	S	S. Hilary	
14	✠	2ND AFTER EPIPHANY	2
15	M		
16	Tu	*Rainfall, 1·87 in.	
17	W		
18	Th	S. Prisca	
19	F	● New Moon 11.10 a.m.	
20	S	S. Fabian [S. Agnes	
21	✠	3RD AFTER EPIPHANY	3
22	M	S. Vincent. Accession of King Edward VII. 1901	
23	Tu	Clock before Sun, 11m. 46s.	
24	W		
25	Th	CONVERSION OF S. PAUL	
26	F	Fall of Khartoum, 1885	
27	S	☽ First Quarter 8.51 a.m.	
28	✠	4TH AFTER EPIPHANY	4
29	M		
30	Tu	*Barometer, 29·803 in.	
31	W		

FEBRUARY—1912.

1	Th		
2	F	PURIF. B.V.M. Candlemas ○ Full Moon 11.58 p.m.	
3	S	S. Blasius	
4	✠	SEPTUAGESIMA	5
5	M	S. Agatha	
6	Tu		
7	W		
8	Th	Half Quarter Day	
9	F	Temp. Day 45·2°, Night 34·9°	
10	S	☾ Last Quarter 6.51 a.m.	
11	✠	SEXAGESIMA	6
12	M		
13	Tu		
14	W	S. Valentine	
15	Th	Kimberley relieved, 1900	
16	F		
17	S	Rainfall, 1·49 in.	
18	✠	QUINQUAGESIMA	7
19	M	● New Moon 5.44 p.m.	
20	Tu	Shrove Tuesday	
21	W	Ash Wednesday	
22	Th	Clock before Sun, 13m. 50s.	
23	F		
24	S	S. MATTHIAS	
25	✠	1ST IN LENT. Ember Wk.	8
26	M	☽ First Quarter 7.27 p.m.	
27	Tu	Barometer, 29·799 in.	
28	W	Ember Day. Ladysmith relieved, 1900	
29	Th		

MARCH—1912.

		[Fly Fishing begins	
1	F	S. David. Ember Day	
2	S	Ember Day. S. Chad	
3	✠	2ND IN LENT	9
4	M	○ Full Moon 10.42 a.m.	
5	Tu	Temp. Day 45·8°, Night 35·1°	
6	W		
7	Th	S. Perpetua	
8	F		
9	S		
10	✠	3RD IN LENT	10
11	M	☾ Last Quarter 7.56 p.m.	
12	Tu	S. Gregory	
13	W	Duke of Connaught m. 1879	
14	Th		
15	F	Rainfall, 1·53 in.	
16	S		
17	✠	4TH IN LENT. S. Patrick	11
18	M	S. Edward ● New Moon 10.9 p.m.	
19	Tu	Clock before Sun, 9m. 56s.	
20	W	Vernal Equinox	
21	Th	S. Benedict	
22	F		
23	S		
24	✠	PASSION SUNDAY	12
25	M	Annun. B.V.M. Lady Day ☽ First Quarter 3.2 a.m.	
26	Tu		
27	W		
28	Th		
29	F	Barometer, 29·747 in.	
30	S		
31	✠	PALM SUNDAY	13

APRIL—1912.

1	M	○ Full Moon 10.5 p.m.	
2	Tu	Temp. Day 57·1°, Night 38·9°	
3	W	S. Richard [Hilary Law Sittings end	
4	Th	S. Ambrose. Maundy Th.	
5	F	GOOD FRI. Dividends due	
6	S	Easter Eve	
7	✠	EASTER DAY [Old Lady Day	14
8	M	Easter Mon. Bank Holiday	
9	Tu	Easter Tuesday [Lady Day Fire Ins. ceases	
10	W	☾ Last Quarter 3.24 p.m.	
11	Th	Rainfall, 1·60 in.	
12	F		
13	S		
14	✠	LOW SUNDAY	15
15	M		
16	Tu	Easter Law Sittings begin ● New Moon 11.40 a.m.	
17	W		
18	Th	Clock after Sun, 3m. 37s.	
19	F	Primrose Day, 1881	
20	S	[S. Agnes	
21	✠	2ND AFTER EASTER	16
22	M		
23	Tu	S. George's Day ☽ First Quarter 8.47 a.m.	
24	W		
25	Th	S. MARK	
26	F		
27	S	Barometer, 29·748 in.	
28	✠	3RD AFTER EASTER	17
29	M		
30	Tu		

*Average of 70 years (1841-1910).

MAY—1912.

		[○ Full Moon 10.19 a.m.
1	W	SS. PHILIP & JAMES
2	Th	Royal Academy opens
3	F	*Invention of the Cross*
4	S	Temp. Day 64·0°, Night 43·8°
5	✠	4TH AFTER EASTER 18
6	M	*S. John Evangelist*
7	Tu	[Accession, King George 1910
8	W	
9	Th	Half Quarter Day
10	F	[☾ L. Q. 9.58 a.m.
11	S	Rainfall, 1·89 in.
12	✠	ROGATION SUNDAY 19
13	M	Rogation Day
14	Tu	Rogation Day
15	W	Rogation D. Scotch Qr. D.
16	Th	ASCENSION DAY
		[● New Moon 10.14 p.m.
17	F	Clock after Sun, 3m. 40s.
18	S	Mafeking relieved, 1900
19	✠	SUNDAY AFT. ASCENSION 20
20	M	[*S. Dunstan*
21	Tu	
22	W	Barometer, 29·702 in.
23	Th	[☽ First Quarter 2.11 p.m.
24	F	Empire D. Easter Law Sit. e.
25	S	[Queen Mary born, 1867
26	✠	WHITSUNDAY. Emb. Wk. *St*
		[*S. Augustine*
27	M	Whit Mon. Bank Holiday
28	Tu	Whit Tuesday [*Ven. Bede*
29	W	Ember Day
30	Th	○ Full Moon 11.30 p.m.
31	F	Ember Day

JUNE—1912.

1	S	Ember Day *S. Nicomede*
2	✠	TRINITY SUNDAY 22
3	M	King born, 1865
4	Tu	Trinity Law Sittings begin
5	W	*S. Boniface*
6	Th	*Corpus Christi*
7	F	Rainfall, 2·08 in.
8	S	☾ Last Quarter 2.36 a.m.
9	✠	1ST AFTER TRINITY 23
10	M	
11	Tu	*S. Barnabas*
12	W	
13	Th	Clock after Sun, 0m. 14s.
14	F	
15	S	● New Moon 0.24 a.m.
16	✠	2ND AFTER TRINITY 24
17	M	*S. Alban*
18	Tu	Waterloo, 1815
19	W	Barometer, 29·815 in.
20	Th	*Tr. of King Edward*
21	F	Longest Day
		[☽ First Quarter 8.39 p.m.
22	S	[Prince of Wales born, 1894
23	✠	3RD AFTER TRINITY 25
24	M	S. JOHN BAPTIST
25	Tu	[Midsummer Day
26	W	Temp. Day 70·5°, Night 49·9°
27	Th	
28	F	Coronation Q. Victoria, 1838
29	S	S. PETER
		[○ Full Moon 1.34 p.m.
30	✠	4TH AFTER TRINITY 26

JULY—1912.

1	M	
2	Tu	*Visitation of B. V. M.*
3	W	
4	Th	*Tr. of S. Martin*
5	F	Dividends due
6	S	Rainfall, 2·40 in.
7	✠	5TH AFTER TRINITY 27
8	M	[☾ Last Quarter 4.47 p.m.
9	Tu	Midsum. Fire Ins. ceases
10	W	
11	Th	*S. Benedict*
12	F	
13	S	Clock before Sun, 5m. 29s.
14	✠	6TH AFTER TRINITY 28
		[● New Moon 1.13 p.m.
15	M	*S. Swithin*
16	Tu	City & Boro' voters must pay
17	W	poor rate bef. 20th, or lose vote
18	Th	Barometer, 29·800 in.
19	F	
20	S	*S. Margaret*
21	✠	7TH AFTER TRINITY 29
		[☽ First Quarter 5.18 a.m.
22	M	*S. Mary Magdalene*
23	Tu	
24	W	Gibraltar taken, 1704
25	Th	S. JAMES.
26	F	*S. Anne.*
27	S	Temp. Day 74·0°, Night 53·2°
28	✠	8TH AFTER TRINITY 30
29	M	○ Full Moon 4·28 a.m.
30	Tu	[Trinity Law Sittings end
31	W	Ann. & Nov. to July Game
		Certs. & Gn. Licences expire

AUGUST—1912.

1	Th	Lammas Day
2	F	
3	S	Rainfall 2·33 in.
4	✠	9TH AFTER TRINITY 31
5	M	Bank Holiday
6	Tu	*Transfiguration*
		[☾ Last Quarter 4.18 a.m.
7	W	*Name of Jesus.*
8	Th	Clock before Sun, 5m. 30s.
9	F	Coronation K. Edward VII.
10	S	*S. Lawrence* [1902
11	✠	10TH AFTER TRINITY 32
		[Half Quarter Day
12	M	Grouse Shooting begins
13	Tu	[● New Moon 7.58 p.m.
14	W	Ramadân begins
15	Th	*Assumption B.V.M.*
16	F	
17	S	Barometer, 29·784 in.
18	✠	11TH AFTER TRINITY 33
19	M	☽ First Quarter 4.57 p.m.
20	Tu	Black Game Shooting begins
21	W	
22	Th	Temp. Day 72·7°, Night 53·0°
23	F	
24	S	S. BARTHL. Massacre, 1572
25	✠	12TH AFTER TRINITY 34
26	M	
27	Tu	○ Full Moon 7.59 p.m.
28	W	*S. Augustin*
29	Th	*Beheading of S. John Bapt.*
30	F	
31	S	Relief of Candahar, 1880

SEPTEMBER—1912.

		[*S. Giles*
1	✠	13TH AFTER TRINITY 35
		[Partridge Shooting begins
2	M	Capitulation of Sedan, 1870
3	Tu	
4	W	☾ Last Quarter 1.23 p.m.
5	Th	Clock after Sun, 11m. 12s.
6	F	
7	S	*S. Evurtius*
8	✠	14TH AFTER TRINITY 36
9	M	[*Nativity of B.V.M.*
10	Tu	Barometer, 29·920 in.
11	W	● New Moon 3.45 a.m.
12	Th	Jewish Year 5673 begins
13	F	Tel-el-Kebir, 1882
14	S	*Holy Cross*
15	✠	15TH AFTER TRINITY 37
16	M	[Ember Week
17	Tu	*S. Lambert*
18	W	Emb. D. ☽ First Q. 7.55 a.m.
19	Th	Temp. Day 67·2°, Night 49·0°
20	F	Ember Day. Alma, 1854
21	S	Ember Day. S. MATTHEW
22	✠	16TH AFTER TRINITY 38
23	M	Autumnal Equinox
24	Tu	
25	W	
26	Th	*S. Cyprian*
27	F	[○ Full Moon 11.34 a.m.
28	S	Rainfall, 2·10 in.
29	✠	17TH AFTER TRINITY 39
		[S. MICHAEL. Mich'mas Day
30	M	*S. Jerome*

OCTOBER—1912.

		[*S. Remigius*
1	Tu	Pheasant Shooting begins
2	W	Charles Letts's Diaries for 1913
		[published
3	Th	☾ Last Quarter 3.48 p.m.
4	F	Clock after Sun, 11m. 13s.
5	S	Dividends due
6	✠	18TH AFTER TRINITY 40
7	M	[*S. Faith*
8	Tu	Barometer, 29·721 in.
9	W	*S. Denys*
10	Th	● New Moon 1.41 p.m.
11	F	[Mich. Law Sittings begin
12	S	Old Michaelmas Day
13	✠	19TH AFTER TRINITY 41
14	M	Mich. Fire Ins. ceases
15	Tu	
16	W	
17	Th	*S. Etheldreda*
18	F	S. LUKE ☽ F. Q. 2.0 a.m.
19	S	Temp. Day 57·7°, Night 43·4°
20	✠	20TH AFTER TRINITY 42
21	M	Trafalgar, 1805
22	Tu	
23	W	
24	Th	Rainfall, 2·79 in.
25	F	*S. Crispin*
		[Transvaal annexed, 1900
26	S	○ Full Moon 2.32 a.m.
27	✠	21ST AFTER TRINITY 43
28	M	SS. SIMON & JUDE
29	Tu	
30	W	Clock after Sun, 16m. 16s.
31	Th	Aug. to Oct. Game Certifi-
		[cates expire

NOVEMBER—1912.

1	F	ALL SAINTS. Clock fr. 1st of
2	S	*All Souls* [☾ L. Q. 3.38 a.m.
3	✠	22ND AFTER TRINITY 44
4	M	
5	Tu	Inkerman, 1854
6	W	*S. Leonard Conf.*
7	Th	
8	F	Barometer, 29·757 in.
9	S	● New Moon 2.5 a.m.
10	✠	23RD AFTER TRINITY 45
11	M	Martinmas. Half Quar. Day
12	Tu	[*S. Martin*
13	W	*S. Brithwa*
14	Th	Temp. Day 49·0°, Night 37·8°
15	F	*S. Machutus*
16	S	☽ First Quarter 10.43 p.m.
17	✠	24TH AFT. TRINITY 46
		[*S. Hugh.* Suez Cnl. opd. 1869
18	M	
19	Tu	Rainfall, 2·23 in.
20	W	*S. Edmund*
21	Th	*Presentation B.V.M.*
22	F	*S. Cecilia*
23	S	*S. Clement*
24	✠	25TH AFT. TRINITY (last) 47
		[○ Full Moon 4.12 p.m.
25	M	*S. Katherine*
26	Tu	
27	W	
28	Th	Clock after Sun, 12m. 2s.
29	F	
30	S	S. ANDREW

DECEMBER—1912.

		[☾ Last Quarter 11.5 a.m.
1	✠	ADVENT SUNDAY 48
2	M	[Queen Alexandra born, 1844
3	Tu	
4	W	Barometer, 29·775 in.
5	Th	
6	F	*S. Nicolas*
7	S	[● New Moon 5.7 p.m.
8	✠	2ND IN ADVENT 49
9	M	[*Conception B.V.M.*
10	Tu	Grouse Shooting ends
11	W	Moham. Year 1331 begins
12	Th	Temp. Day 44·3°, Night 33·0°
13	F	*S. Lucy*
14	S	
15	✠	3RD IN ADV. Emb. Wk. 50
16	M	*S. O. Sapientia*
17	Tu	[☽ First Quarter 8.7 p.m.
18	W	Ember Day
19	Th	Rainfall, 1·88 in.
20	F	Ember Day
		[Mich. Law Sitt. end
21	S	S. THOMAS Ember Day
22	✠	4TH IN ADVENT 51
		[Shortest day
23	M	Clock before Sun, 0m. 51s.
24	Tu	○ Full Moon 8.30 a.m.
25	W	CHRISTMAS DAY
26	Th	S. STEPHEN. Bank Holiday
27	F	S. JOHN
28	S	HOLY INNOCENTS
29	✠	1ST AFTER CHRISTMAS 52
30	M	☾ Last Quarter 8.12 p.m.
31	Tu	*S. Sylvester*

DAILY WANTS' DICTIONARY.

(Copyright.)

Acre, 4 roods (4840 sq. yds.).
Affidavit Stamp, 2s. 6d.
Agreement Stamp, 6d.
Alma, Sept. 20, 1854.
Archbps. Cant. R. T. Davidson, 1903; York, Cosmo Gordon Lang, 1909.
Armor. Bearings, 21s., on Carriages, 42s.
Australian Mail, Friday even.
Australian Commonwealth, 1901.
Austria, post, 2½d. 1 oz.; tel., 2½d. word; parcel post, 3 lb. 18d.
Bank Hols., 1912, 8/4, 27/5, 5/8, 26/12.
Battery (Artillery) = 107 men.
Battalion, = 8 companies, about 750 men.
Belgium, post 2½d. 1 oz.; tel., 2d. word; parcel post, 3 lbs. 12d.
*Bermuda Mail (W. or S. aft. *F.* 5), 11-13.
Bill Stamps, £5, 1d.; £10, 2d.; £25, 3d.; £50, 6d.; £75, 9d.; £100, 1s.
Bill of Lading Stamp, 6d.
Blind, Postal Book rate, 2 ozs., ½d.; 2 lbs., 1d.; 5 lbs., 1½d.; 6 lbs., 2½d.
*Braziln. Mail (W. 2, *F.* 2, S. 2) 17.
Bricks, 1 load = 500.
Bushel, 4 pecks or 8 gallons.
Cab Fare (Lon.), 2 mls. 1s., then 6d. ml.; outside radius, 1s. per ml. Do. time 4 wh., 2s.; 2 wh., 2s. 6d. per hour; extra 15 min., 6d. & 8d. Taxi Cab.—1 mile or 10 minutes, 8d.; then ¼ mile or 2½ minutes, 2d.
*Canadian Mail (W., *F.*, S. aft.) 9
Canadian Post, Newspapers, 2 oz., ½d.; 1 lb. 1d.
*Cape Mail (S. aft.) 17.
Carriage Tax, 4 wheel 1 hor., 21s.; 2 hor., 42s.; 2 whl. or Hackney, 15s.
Carriers' (Lon.) Rates, 5 & 10 mls. —7 lbs., 4d., 6d.; 14 lbs., 6d., 8d.; 28 lbs., 8d., 9d.
Centimetre = about ⅖ of an inch.
*Ceylon Mail (*W.* 2, F., *S.* 2) 16.
Chaldron = 12 sacks.
*China Mail (*W.* 2, F., *S.* 2) 29.
Christmas Day, 1912, W.; 1913, Th.
Coals, sack, 2 cwt.; small sack, 1 cwt.
Coke, sack, 1 cwt. (about 3 bushels); chaldron = 12 sacks of 1 cwt.
Coml. Papers, Foreign Post, 10 ozs., 2½d.; 12 ozs., 3d.; 14 ozs., 3½d.; 16 ozs., 4d.; 18 ozs., 4½d.
Commons, H. of; elec. Jan., 1911: Eng. 465, Wales 30, Scot. 72, Ire. 103 = 670. Rad. 272, Lab. 42, N. 84 = 398; Unionists, 272, Maj. 126.
Copyright Registration, 5s.
Crimean War, 1854-6.
Cubit = 18 inches.
Day, Sid., 23h., 56m. 4s. Civil, midnight to midn.; Astron., noon to noon.
Degree = 60 geographical miles or 69⅛ English miles (60 min.).
Denmark, post, 2½d. 1 oz.; tel., 3d. word; parcel post, 3 lb. 1s.
Derby Winner, 1907, Orby; '08, Signorinetta; '09, Minoru; '10, Lemberg; '11, Sunstar.
Dog Tax, 7s. 6d. each.
Dog days, begin July 3, end Aug. 11.
Dollar, Amer., 4s. 1½d. (100 cents), 4$ 87 = £1.
Domin. Letters, 1912, GF.
Drachma = 100 Lepta, 9½d.
Easter Day, 1912, Apl. 7; '13, Mar. 23.
Easter Sittings, bg. Tu. aft. East. week; end Fri. bef Whit. Week.
Eclipses 1912, Moon, Apr. 1, partial; Sun, Apl. 17, Annular (vis. at Gr'nwich as a partial eclipse); Moon, Sept. 26, partial (invis. Gr'nwich); Sun, Oct. 10, Total (invis. Gr'nwich).
*Egyptian Mail (*W.*, *Th.*, F. S.) 5½.
Ember Days, 1912, Feb. 28; Mar. 1, 2; May 29, 31; June 1; Sept. 18, 20, 21; Dec. 18, 20, 21.
Empire Day, May 24.
Epact, 1912, 11; 1913, 22.
Express Delivery (post), 3d. per mile, and postage.
Express Rail. del'y., letters not ex. 4 oz., 2d. to Rail. Co., plus postage.
Fathom, 6 feet.
Fire Ins. (priv. dwellings). Ord. risk, 1s. 6d. to 2s; Hazardous, 2s. 6d. to 3s. 6d.
Florin = 100 Kreuzers, 1s. 8d.
Flour, Barrel, 196 lbs.; sack, 280 lbs.; peck 14 lbs.
Foreign Book Post, 2 ozs., ½d.; 4 ozs., 1d.; 6 ozs., 1½d.; 8 ozs., 2d.; 10 ozs., 2½d.
Foreign Letter Post, 1 oz. 2½d.; and 1½d. each oz. above; to British possessions generally, U.S.A. and Egypt, 1d. per oz.

Franc, 9½d. (100 cts.); 25 fr. = 20s.
France, post 2½d. 1 oz.; tel., 2d. word; parcel post, 3 lbs. 16d.
Franco-German War, 1870.
French Nat. Fête, July 14.
Furlong = 220 yards (10 chains).
Gallon, 4 qts. (4·54 litres).
Game Lic., 14 days, 20s.; ann., £3; short period, £2.
Germany, post 2½d. 1 oz.; tel., 2d. word; parcel post, 3 lbs. 1s.
Golden Number, 1912, 13; 1913, 14.
Gramme, 15·43 grains.
*Grecian Mail (*Sun.*, *M.*, *Tu.*, *Th.*, F., *S.*) 4.
Greece, post 2½d. 1 oz.; tel., 5½d. to 6d. word; parcel post, 3 lbs. 27d.
Gulden (100 cents) = 1s. 8d.
Gun, Licence to carry, 10s.
Halfpenny Post, 2 ozs., ½d.
Half-quarter Days: Feb. 8, May 9, Aug. 11, Nov. 11.
Hay, truss, 56 lbs. old, 60 lbs. new; load = 36 trusses (new).
Hil. Sittings begin Jan. 11, end Wed. before Easter.
Hogshead, 54 gall. beer; 60 gall. brandy; sugar, 13 to 16 cwt.
Holland, post 2½d. 1 oz.; tel., 2d. word; parcel post, 3 lbs. 1s.
Hops, pocket, 1¼—2 cwt.; bale, about 3¼ cwt.
House Duty, £40, 3d.; £60, 6d.; over £60, 9d. Shops, &c., 2d., 4d., and 6d.
Income Tax, 14d.; ov. £5,000 an extra 6d. on all over £3,000. Earned £2,000, 9d.; over, 1s. Under £160 exempt. Relief given under £700.
*Indian Mail, Fri. ev., 14.
Indian Mutiny, 1857.
Ireland conq. 1177; rebell., 1798; Union, 1801.
Italy, post 2½d. 1 oz., tel., 2½d. word; parcel post, 3 lbs. 18d.
*Jamaica Mail (*Fr.*, W., Sat. aft. 2) 13.
*Japan Mail (*W.* 2, F., *F.* 3, *S.* 2) 24-28.
Jap-Russ. War, beg. Feb. '04, end. Aug. '05.
Jewish Era, 5673, 12/9/12.
Julian Period, 1912, 6625.
Kilometre, 1094 yards, 8 = 5 miles (approximately).
Kilogramme, 2¼ lbs., 10 = 22 lbs.
Kimberley relvd., 15-2-1900.
King born, June 3, 1865; ac. July 6, '93; acceded, May 6, '10.
King Edward VII., b. '41; acc. '01; died, '10.
Knot, Adm. = 2026⅔ yards.
Krone, 100 Heller, 10d.
Kronor, 100 Ore, 1s. 1½d.
Ladysmith relieved, 2-3-'00.
League = 3 miles.
Leap Years, 1912, '16, '20.
Letter Postage, 4 oz. 1d., and ½d. for every 2 ozs. above; limit 24 × 12 in. × 12 in.
Lira, 100 Centesimi, 9½d.
Litre = 1¾ pint; 4½ = 1 gall.
Lost Property Office, Great Scotland Yard.
Mafeking rel., May 17, '00.
Male Servants License, 15s.
Mark = 100 pfennings, 11½d.; 20 Marks = 19s. 6d.
Marriage License, 35s. to 52s. 6d. Special, about £30.
*Mauritius Mail (F. 4, 8th and 23rd) 27-33.
Metre, 39⅜ inches.
*Mexican Mail (W., S. aft.) 12.
Mich. Sittings beg. Oct. 12, end Dec. 21.
Mile = 8 Furlongs or 1,760 yards (1⅝ Kilometres).
Milreis = 1000 Reis = 4s. 6d., in Portugal.
Moham. Year, 1331, 11/12/12.
Money Orders, not ex. £1, 2d.; £3, 3d.; £10, 4d.; £20, 6d.; £30, 8d.; £40, 10d.
Do., Foreign, £1, 3d.; £2, 6d.; £4, 9d.; £6, 1s.; £8, 1s. 3d.; £10, 1s. 6d.
Motor Car Licences, Not ex. 6½ h.p. 42s.; 12 h.p., 63s.; 16 h.p. 84s.; 26 h.p., 126s.; 33 h.p., 168s.; 40 h.p., 210s.; 50 h.p., 420s.; exceeding 50 h.p., 840s.; Registration, 20s.; Drivers, 5s.
Motor Cycle Lic., 20s.; Reg. 5s.
Nail = 2¼ inches.
Newspaper Post, ½d. per 2 oz. (if Registered, ½d. each); limit, wt. 5 lb., size 24 in. × 12 in. × 12 in.
*New Zealand Mail via Italy (F) via San Francisco (W. or S. 4) 35.
Norway, post 2½d. 1 oz.; tel., 2½d. word; parcel post, 3 lbs. 1s.

Daily Wants' Dictionary *(continued).*

Oaks Winner, 1907, Glass Doll; '08, Signorinetta; '09 Perola; '10, Rosedrop; '11, Cherimoya.
Parcel Post, 1 lb., 3d.; 2 lbs., 4d.; 3 lbs., 5d.; 4 lbs. or 5 lbs., 6d.; 6 lbs. or 7 lbs., 7d., increasing 1d. per lb. up to 11 lbs. By rail (pass. train), 30, 50, 100 miles, 6 lbs., 6d. 6d., 8d.; 12 lbs., 6d., 8d., 1s.; 18 lbs., 6d., 10d., 1s. 3d.
Patents, Stamp, Prov. protec., 20s.; Complete protec., 20s.; Complete specif., 60s. Sealing fee, 20s.
Patent fees, 5th year, £5, and 20s. extra per ann. to end of term (14 years)
Pattern Post, Foreign, 4 oz., 1d. and then ½d. every 2 ozs. up to 12 ozs.
Peck, 2 galls. (flour 14 lbs.).
Peninsular War, 1808.
*Peruvian Mail (*W*, 2) 30.
Peseta, 100 Centesimas, 9½d.
Piastre (Turk) = 2d. 110 = £1.
(Egyptian) = 2½d. 97½ = £1.
Pint = 20 fluid oz. (rather more than ½ litre).
Pope, Pius X, elected 1903.
Portugal, post 2½d. 1 oz.; tel., 3d. word; parcel post, 3 lbs. 18d.
Postal Orders, up to 2s. 6d. inclusive, ½d.; above 2s. 6d. to 15s. inclusive, 1d.; above 15s. to 21s. inclusive, 1½d.
Postal Registration, 2d. up to £5 3d. up to £20, and add. 1d. for each additional £20 up to £400.
Potatoes, sack, = 168 lbs.
Primrose Day, Apr. 19 (1881).
Quarter Days, Lady Day, Mar. 25; Midsr., June 24; Michaelmas, Sep. 29; Christmas, Dec. 25. Scotch do., Candlemas, Feb. 2; Whitsun, May 15; Lammas, Aug. 1; Martinmas, Nov. 11.
Quartern Loaf 4 lbs.
Queen Alex. b. Dec. 1, '44.
Queen Mary b. May 26, 1867, m. July 6, '93.
Queen Victoria born, '19; Crowned, '38; Married, '40; Died, Jan. 22, '01.
Quire, 24 sheets.
Ramadan, 1912, Aug. 14.
Ream, 20 quires, 472 to 516 sheets.
Registration, Companies, 5s. for every £100.
Roman Indiction, 1912, 10.
Rouble, 100 Copecks, 2s. 1½d.
Rupee, 16 annas, 1s. 4d.; 15 = £1.
Russia, post 2½d. 1 oz.; tel., 4½d. word; parcel post, 3 lbs. 2s.
Russ.-Jap. War, beg. Feb. '04, end. Aug. '05.
Sack of Coals, 2 cwt., Flour, 280 lbs. Potatoes, 168 lbs.
Scruple, 20 grains.
Sedan, Sep. 1, 1870.
Solar Cycle, 1912, 17.
Spain, post 2½d. 1 oz.; tel., 3d. to 5d. word; parcel post, 3 lbs. 18d.
Span = 9 inches.
Stone = 14 lbs., Butcher's, 8 lbs.
Straw, load = 36 trusses of 36 lbs. each.
Sweden, post 2½d. 1 oz.; tel., 3d. word; parcel post, 3 lbs. 18d.
Switzerland, post 2½d. 1 oz.; tel., 2½d. word; parcel post, 3 lbs. 18d.
Tea, Chest of, 60 to 84 lbs.
Telegrams, 6d. for 12 words, then ½d. a word. Portge., 3d. per mile.
Tennis Court, 78 ft. × 36 ft. (single, 27 ft.).
Thermometer Freezing point 32° Fahrenheit = 0° Reaumur or Centigrade; 60° Fahr. = 12·4° Reau., 15·3° Cent. Water boils 212° Fahr.; 100° Cent.; 80° Reau.
Tola, Indian Weight = 180 grains.
Trafalgar, Oct. 21, 1805.
Transvaal War beg. Oct. '99, end. May '02.
Trin. Sittings beg. Tu. aft. Whit. wk. end July 31.
United States, post 1d. per oz.; tel., 12d. to 33d. word; parcel post, 3 lbs. 18d., 30d. and 42d.
*U. S. Mail (W., S. aft.) 8.
University Boat Race, '09, Oxford, 3½ l.; '10, Oxford, 3½ l.; '11, Oxford, 2¾ l.
Waterloo, June 18, 1815.
*West Indian Mail (*W*, 2) 16.
Year, Mean Solar, 365d. 5h. 48m. 48s.
Yen = 100 Sen, 2s. 0½d.
Zulu War, 1879.

* Days for despatch of Foreign Mails are shown by initials—in italics for morning despatch, in Roman for evening. When a figure 2, etc., follows, every second, etc., day is indicated. The figures at end of line show days in transit (approximate).

Personal Memoranda.

Watch No. .....

Season Ticket No. .....

Telephone No. .....

Bank Pass Book No. .....

Telegraphic Address.....

Size in Gloves.....

Size in Boots.....

Size in Collars.....

Size in Hats .....

Weight.....st.....lbs. Date.....

Height.....ft. .....ins. Date.....

Name and Address.....

.....

Train Service.

To Town.	From Town.

FIRST OF EACH MONTH.

	1911	1913		1911	1913		1911	1913
Jan.	S	W	May	M	Th	Sept.	F	M
Feb.	W	S	June	Th	S	Oct.	S	W
Mar.	W	S	July	S	Tu	Nov.	W	S
April	S	Tu	Aug.	Tu	F	Dec.	F	M

EXPLANATION OF SIGNS USED IN THIS DIARY.

S.R. = Sunrise.
S.S. = Sunset.

The times of Sunrise and Sunset and of the Moon's Phases are for the Meridian of Greenwich, and are given at least once a week throughout the Diary. Cyclists' and Motorists' lamps must be lighted one hour after sunset and until one hour before sunrise.

Phases of the Moon:—● = New Moon; ☽ = First Quarter ○ = Full Moon; ☾ = Last Quarter.

1 MONDAY [1—365]

Circumcision. Stock Exchange closed.

Worked in room all day on new book (Constipation) Dictated 10 a.m. – 6 p.m. then wrote till 4 a.m.

2 TUESDAY [2—364]

Dictated on new book.
Wrote till 7 A.M., 8 hours
sleep. Then at work
again.
Visited St Mark's Hospital,
met Dr. Mummery,
invited me to see
operation for cancer next
day at 3 P.M.

3 WEDNESDAY [3—363]

Dictated on book.
St. Mark's at 3 P.M.
Operation - cancer of
rectum by Dr. Mummery
not removed done as P.
Hill Mayo's. Told me
he had dep. Keen
when he was here.
He had acute obstruction
Thought it was cancer.
Sent him to Mayo who
found diverticulitis and
filled him out. Want's to
see Wilson's paper on
Diverticulitis. Promised
to send him. Write
Harris. Patient blue as
whetstone with CO_2 &
nearly died. Prof. Cameron
of 20 yrs. Butter paper by
nurses giving anesthetics but
not taught it in training

4 THURSDAY [4—362]

O Full Moon 1.30 p.m.

Dictated in forenoon. At St. Market at 2. P.M. Got patient department. Saw many cases with Mummery. Got some good points. Mummery walks cottonwoods he holds wooden right leg. Women nurses undressed the men, put them on table in knee chest position, and with cotton sponge cleaned anus before the doctor examined. On passing catheter women a chest. Dr. Mummery said the doctors at Samaritan Hosp. are more all women. Women not good doctors. Men not good nurses. Men nurses are all being discharged from army. Women taking their places.

5 FRIDAY [5—361]

Dividends due.

Worked all 9 A.M. Got sick at stomach, due to moldy tomatoes at Good Reform Restaurant, 4 Fourth St.; Mr. Hall.

Vomited 2 A.M. Got worse after. Vomited three times. Took another hot bath. Got hot bag. Got asleep at 5 A.M. Up at 9.15. Worked all day. Saw Lane perate at Cook's. Broke up all heroic and removed blind ends in women perated over yr ago. Then ascend and trans. colon were removed and lateral anastomosis made to descending colon. Colonic malignancy obstruction. Cancer stricture at 6 f. Stomach out in cold, mostly uncovered for an hour or more. Intestinal necrosis, a lot of manipulation.

6 SATURDAY [6—360]
Epiphany. Sun rises 8.7. Sun sets 4.4.

nearly finished work last night
the first chapter in crying
his next and mine agreed, $31.65
in all including the water.
I agreed to settle for $30.00. - I he
proposed $50. - I much for $1/2
and $100. - a month after the
fraud. No leave notice with
solicitor. I must meet him again
Monday at 4 P.M. and finish the
business. Finish book. May
write first chapter on surgery
of future and return. Expect
Br. Ottison in morning. Letters
from Mark, Cagie, Harris, etc.
Answered and took 8 letters
to post train at Euston Station

7 Sunday [7—359]
1st after Epiphany.

Dictated notes till 5 P.M.
Dr. Bryce came in as we
had a meet till 6 P.M. Read
me letter from Higgins.
Said he was delighted Whittenden
smokes and drinks strong
coffee. Whittenden takes
nothing for breakfast but coffee.
Promised to avoid alcohol, cocoa
chocolate for his complaint. Dr.
Bryce says Hunter is strong
as a string, an honest scotch-
man but sharp, selfish, and
secretive. Dr. B. says he was
in the company as scientific
adviser to the company. Bryce
takes Paraffin. Said he had lost
limb, gone limp at times and
general bad feeling for months.
Caused by suffering feet, poisoning
putrefaction. Should take laxative with
Dr. Paraffine. Ottison not come

8 MONDAY [8—358]
Plough Monday

Met Ramsey writer of Birmingham at 11:30 a.m. Looked food agency for Eng. till 6 P.M. Will meet again at 11:30 to-morrow. Mr. Crane of McKenna Co. Solicitors of 31 Basinghall St. London E.C. was present. Also met Mr. Stellony some firm at his office, Recommended by Hotel Cecil See (working in Bourge)

Met Camp with Mr Crane in my room. Settled with Camp for note for £730. to be surrendered when £630. are paid by him. ~~£10~~ £10 a month during 1912. then £20 a month, with interest at 5 %. to be collected by Solicitors. Will ask them to look him up and keep eye on him. and put note and statement in their hands. Saw Olsen & Ottesen in evening wrote line to Mr. Case & sent letter to Mr. Stelletter

9 TUESDAY [9—357]
Christmas Fire Insurance ceases

Met Ramsey, had long conference with him and his lawyer & secretary. Met to sign papers at office of McKenna. 31 Basinghall St. London Wall. Not finished documents. Not signed. Suspect Winter will withdraw. Left for Mr. Cahill to try to carry through if he can. Offered as follows: Corn fl. $2.60, fr. pd to Liverpool. Wheat $2.56 Rice $3.00, Biscuit, Corn & wheat $3.00 Rice 3.10. Other foods 5% of whole order 20-10-5, fob paid to New York. Saw Mr. Dean of Leigh House, Brooke St. Holborn with Olsen & Ottesen. In evening purchased Bergons Obesity Apparatus and Thermopenetration apparat. Got it to hotel at 1:30 a.m. Paid £20 on acct. Bergons off to be sent.

Arranged with Cahill to send bank balance to Ship.

Met article on Cancer by Haig in National Review for January. Scotch dog "He has na sae guid sond"

10 WEDNESDAY [10—356]

If not already done, send in Accident registration form.

Worked all night packing and left London from Waterloo Station at 6.10, so as to reach Southampton in time to meet Sargent at 10 A.M. found him at W.S.A. Booking Office. Promised to send him $600.00 to be loaned, probably, by H+H. He said this would pay all his floating debts, all but mortg.

Sailed at 12 o'clock. Got stuck in mud & delayed for hrs. Reached Cherbourg at 7 P.M.

Got a turkish bath in the afternoon. Very great me. Air fresh and light tonic. Good outfit, also Russian bath and E. light, horizontal, made by Sanitas. A fine lazy swimming pool.

In Turkish bath has the patient sit up to do the arms. A good plan to adopt.

Bed at 10 P.M.

Sent Dr. case £5 in registered letter for use for [illegible] and gave Sargent $5 for his 5 girls and

Weather very mild but no sunshine

11 THURSDAY [11—355]

Hilary Law Sittings begin. ☾ Last Quarter, 7.43 a.m.

Slept till 11 o'clock and horribly as steward said we would arrive at Queenstown in 10 min. Wrote letters to Dr. Carr & Hebson, sent cable to Harris & Dunne.

Bought a lot of things from the Irish Women who came on at Queenstown. H B Thorn cashed 1 shilling. Trinket boxes, paper cutters, breast pins, lace, shells, beads. The women are great thieves always charge too much.

Mr. Sania a cattle man from Wyoming told me he had noticed that his heifers with calf did not develop their udders when constipated. When given green alfalfa hay the constipation disappeared and they have been well. The cow was caused by willow browse in hard winter weather. They become "thin, weak, hollow eyed"

12 FRIDAY (12—354)

Slept 14 hours. Sea rough but no qualms. Have a table all to myself. A young French couple found they belonged in 2d class. A man went to a table with friends and his wife stayed in bed with seasickness.

Found a nice gymnasium on board. Tander bicycles. Horizontal movements, trotting, horse, rubbing back, kneading abdomen. We need all but the last.

Took another Turkish bath. No water in swim bath. Attendant said so rough would all spill out. Had massage by my room at 9 P.M. to give me math. Left $8000 with the purser. Weather very rough. Not likely to arrive before Wed. morning.

13 SATURDAY (13—353)
S. R. 8.4, S. S. 4.14.

Slept 10 P.M. till 9 A.M. making up lost time. Been working on short sleep for 3 weeks. Getting rested. No qualms. Took a Turkish bath in evening. At dinner, got a big lump then ship stopped. Found a big wave had come aboard and carried off the firemen's hatchway and bowed a winch. Ship stopped 4 hrs. to fix it. This put us back so much we will not arrive till Wednesday afternoon.

Still very rough, but some days. Walked 11½ miles on deck most of the time reading in my room. Have a nice electric light grate fire.

A good music at bedtime. No paper printed on board.

14 Sunday [14—352]
2nd after Epiphany.

Another stormy day. The old, bad one of the worst they ever have. A big wave damaged the front of the ship so we had to stop. Bread running on ½ speed all day. Sleet & rain, wind a hurricane. Many people sick. Service only. Not W. breakfast. I haven't had a psalm. Reading Germans all day. Hope we shall not get in before Thursday I fear. A message from N.Y. tells of a great blizzard there.

Mended my overcoat this morning. Read about 50 pp of German. Ship rolls so very hard bags about. A man was thrown with his chair clear across a stateroom three times during times. Hope to be able to send a message

15 MONDAY [15—351]

Another stormy night & day. The mercury dropped 28 in. the lowest the Capt. ever saw. Terrible wind. Mountainous waves. The ship shook & quivered but kept steadily on. Had to slow down though. Only make 330 miles. A big wave broke away the matter again in the forecastle.

The manager, Mr. Lomax says the ship has behaved beautifully. No time so unsteady as to interfere much with going about. A smaller ship would have been very uncomfortable. Not a gentleman yet. Had a musical bath & mass

16 TUESDAY [16–350]

Make a good run of 541 miles. The storm is over. Still some big waves.

Have worked hard every day reading German. Air is good so I stay in my stateroom. Met Mr. Stevenson on board. He is still in bad health. Is coming back to the San. Also met a Mr. Dana of the west whose wife is sick. Also met a rich German doctor who is a vegetarian and will come to the San. A Mr. Hatch who is interested in an estate in Scotland is on board & wants to see me. but I have not met him. & am not sure to do so.

17 WEDNESDAY [17–349]

Arrived at Seattle at 6 P.M. Met took 2 hrs to get up to pier on acct of ice. Very cold, heavily frozen. Left first. Saw Wadsworth & Ashley on pier waiting. Had to have baggage sent to Custom House for inspection. Radinsky & all. Got to hotel at 10:10 P.M. No dinner. Found Mr. & Mrs. Stone waiting to see me. At Navarre Hill Hotel. Had Mr. Mr. that with him. Sent 50 post cards home & wired Mrs. K.

"Jostled to death to be home once more in the land of the free. Birth of the 7x9 Kingdoms land the stingy ways of Europe. Dictated Nill! 12 Dec to Cerpe ey. A barrel full of new ideas.. Dictated

Saw Henderson at Dock

18 THURSDAY [18—348]

Spent a busy in N.Y. with Wentworth Wright Zander apparatus & Pike Schieer Co. Could not get apparatus through Customs. Had to leave with broker.

Sara & Swift arrived & son-in-law at hotel. Daughter Mrs. Mara sick & not getting better. Wants her to come to San.

19 FRIDAY [19—347]

● *New Moon, 11.10 a.m.*

Left for home at 8 P.M. last night, directed to Ashley on cars. Train much delayed reached N.Y. at 7 P.M. Doctors & Phys. Court Students at depot. Kirkland with auto (mine)

Sir Horace Plunkett met me at train.

20 SATURDAY [20—346]
S. R. 7.58, S. S. 4.24.

At home forenoon. Had a last talk with Paul He decided to go to his grandfather's in Detroit. ~~Board~~ Mrs Reception in parlor of Sam in evening.

21 Sunday [21—345]
3rd after Epiphany.

Busy day seeing patients.

Paul came in at midnight last night, and started to empty out the laundry floor. I called to him the first time light out, He disappeared & at 8 a.m. found him & white in bed with clothes on. Gave Paul $10.00 and he went to Detroit.

Board meeting.

22 MONDAY [22—344]
Accession, K. Edward VII., 1901.

Got to work in my new office. Beneficiaries box in evening.
Paul came in at midnight with white paid ~~letter~~

23 TUESDAY [23—343]

Office work as usual.
Letter from Paul saying he had been robbed of his money; wanted $105 or $120. Referred him to Salvation Army headquarters. Had auto for white man. Telephoned Sal. Army Headqtrs. by secretary. They paid the cent him to his grand father.

24 WEDNESDAY [24—342]

Operations, Dr. Slaptura
Smith & others present
Got through at 10 P.M.
Saw 1st patient before
beginning,

Set up Radium appara-
tus 3 P.M.

25 THURSDAY [25—341]
Conversion of S. Paul.

Got new office sign
Judge Nickel, Anston
Jones came from N.Y.

Lantern lecture
on Radium etc

26 FRIDAY [26–340]

Dr Harper arrived from Burmah with Dr Antisdel. Travelled 1400 miles on foot. Carried patient on cot on men's shoulders.

Began use of Para-lax.

27 SATURDAY [27–339]

☽ *First Quarter, 8.51 a.m.* S. R. 7.49, S. S. 4.36.

visit with Dr. Harper. He started back. will sail for England 2 wks. very interesting man. Our little usual. was raised on potatoes & oatmeal.

28 Sunday [28—338]
4th after Epiphany.

Office work as usual

29 MONDAY [29—337]

Dance this day, in evening. Very long busy day!

30 TUESDAY [30–336]

Meeting of H & E League in evening. Dr Smith & Sir Gordon Plunkett talked.

31 WEDNESDAY [31–335]

The insurance herein contained is not valid until your name has been registered.

Office work
Left Thermo-penetration apparatus at work.
Saw Croft & Nielsen about annual report.
Profit off food Co. about $5,000.00.

1 THURSDAY [32—334]

Operations 12:30 to 9:30 P.M.

Baby 4 months old Case in with obstruction. Colon ½ filled with ileum. Removed ascending colon. Babe died toward morning.

2 FRIDAY [33—333]

Purification B.V.M. Candlemas.
○ Full Moon, 11.58 p.m.

Busy day in office.
Telegram from Mr. Case that he is better. Will arrive on Wolverine to-morrow.

Took hot and Radium bath in evening.

3 SATURDAY [34—332]
s. r. 7.39, s. s. 4.49.

Dr Case and family arrived at 1.35 a.m. The doctor was very weak & sick. Had eaten no food for 15 days. Suspected typhoid & ordered Widal.

Board meeting in evening decided to modify B.C.& circulate with G.B. on new plan discussed. Question of Examination of missionaries.

4 Sunday [35—331]
Septuagesima.

Operation in P.M. hos. on old jaundice. Opened gall bladder & removed 16 oz black bile with stones.

Another case of gastric pain, found diseased appendix.

Saw Flynn in evening with Wlek. & Dr Stewart. Till 3.30 a.m.

Then ran Dr Case in wood and got home to bed at 5 a.m. Monday morning.

5 MONDAY [36–329]

Office work, lecture in evening. In bed at 2 A.M.

6 TUESDAY [37–329]

Very busy day. Just made address to the medical faculty in the evening.

Dr. Clark better at 11:30 P.M. Temp. 100. H. sleeping

7 WEDNESDAY [38–328]

operations. Gastro,
appendectomy (2 cases)
& sundry other cases.
Got through at 7:20 P.M.
Began at 12:30. Dr.
Hepburn Smith present.
Case of young man contin-
ued due to spasm
of ileo-cecal valve from
irritation of diseased ap-
pendix. Apple seed in app.

8 THURSDAY [39–327]
Half Quarter Day.

Lecture in evening.

● FRIDAY [40—326]

Lecture to P. C. Students for 2 hrs 10-12.

In Evening met friend of Sir Horace from Cal.

Dr Case temp 101.7. not so well.

10 SATURDAY [41—325]

☾ Last Quarter, 0.51 a.m. S. R. 7.28, S. S. 5.2.

Met in forenoon Sir Horace Plunkett & his friend from California

Basket ball contest in Gym. our team won

11 Sunday [42—324]
Sexagesima

Operation on me case
office work

12 MONDAY [43—323]

Lecture in evening
to Jail house. Busy day.
Dr Smith of N.Y. left to-day.

13 TUESDAY [44–322]

met doctors in Eve.
discussed radium.
+ Cons.
Dr. Sm

14 WEDNESDAY [45–321]

Operation – only one case
Mc Clure arrived tonight

15 THURSDAY [46–320]

Lecture in the evening
Stereoptikon
My audience

16 FRIDAY [47–319]

Office work as usual

17 SATURDAY [48—318]
S. R. 7.14, S. S. 5.15.

Mrs. Brackett, Vera, Ronald & Mrs. Owen were at dinner with us.

18 Sunday [49—317]
Quinquagesima. ● *New Moon, 5.44 a.m.*

Office work as usual

Mr Jack & Elevator blew up at 10 P.M. Displaced platf of main stairway and blew out north partition under stairs. Team on hand in 5 minutes. Got men and fixed up stairs in 15 mins got patients quiet. Got plans going to have Elevators going by 7 A.M. except Engine Elevator.

Fire 10 years ago to-night

19 MONDAY [50–316]

Lecture in evening
P. Bay.

20 TUESDAY [51–315]
Shrove Tuesday

Symposium in parlor
introduced by
Mr. Horace Plunkett.

21 WEDNESDAY [52—314]

Ash Wednesday.

Office work. Too cold for operations in operating room

22 THURSDAY [53—313]

Began operations at 11.30, several very good cases. Got through at 5 P.M. Office work till 8 P.M. Lecture. Home at 11 P.M.

23 FRIDAY [54–312]

Office work
Within elevator running
Paul returned
to-day, Genius autom
to reform. Came and
apologized to us.
last Evening.

24 SATURDAY [55–311]

S. Matthias. S. R. 7.1, S. S. 5.27.

Rented in bed with
a Pain.
Arranged for Paul
to go South to school
Days he is ready to do
anything I can to help him
to do.
Operated on a man
from Hungary for af-
fection of the liver.

25 Sunday [56—310]

1st in Lent. Ember Week. ☽ First Quarter, 7.26 p.m.

Had Conference with Wentworth & Wilfred about G.H.& Appalachian business. Promised to see Saunders & Little Contract with Post for Adv.

Visit from J. L. Kellogg in Evening. He said they made 1,200,000 Cases in 1911 50% more than year before. Said had lots of trouble trying to create what seem biscuit. Showed me samples of all their new foods and Designs. Said W.K. talks of selling out. Says W.K. does not do much work. Told me about trouble with Battle Creek Co.

26 MONDAY [57—309]

Office work. Lecture in Evening. Bombardment with flowers in boxes in between. Speech from Plunkett. Resolutions presented by Cornwell. Surprise party at house. Dist. Nurses.

Speech by Dr. Stewart. Presented me a beautiful gold watch.

27 TUESDAY [58–308]

Busy day. Sir Horace Plunkett spoke in the parlor. I presided. Subject "The present State of Ireland."

28 WEDNESDAY [59–307]
Ember Day.

Operations

29 THURSDAY [60—306]

Lo Ecture

1 FRIDAY [61—305]

S. David. Ember Day.

2 SATURDAY [62—304]
Ember Day. S. R. 6.46, S. S. 5.40.

Called in Harriette
Helena & Dr Case

3 Sunday [63—303]
2nd in Lent. ○ *Full Moon, 10.42 a.m.*

4 MONDAY [64—302]

Lecture

5 TUESDAY [65—301]

6 WEDNESDAY [66–300]

B/m

7 THURSDAY [67–299]

Lecture

8 FRIDAY [68—298]

9 SATURDAY [69—297]

S. R. 6.30, S. S. 5.52.

Rested in bed
till 2 P.M.

10 Sunday [70–296]

3rd in Lent. ☾ Last Quarter, 7.50 p.m.

Received four letter
from Mary & Helena

11 MONDAY [71–295]

Practice ? Day
Offered Paul chance
to go to Madison with
his sister

12 TUESDAY [72—294]

Office work

13 WEDNESDAY [73—293]

7 Sunday [98—268]
Easter Day.

Father left in
evening.

8 MONDAY [99—267]
Easter Monday. Bank Holiday.

Wedding at house
Mr Dawkins &
Judge Cleveland

9 TUESDAY [100—266]

Easter Tuesday. Lady Day Fire Insurance ceases
☾ Last Quarter, 3.24 p.m.

Operations D-day.
Prostate etc.

10 WEDNESDAY [101—265]

11 THURSDAY [102–264]

12 FRIDAY [103–263]

Meeting State Bd Hlth
Office work evening.

13 SATURDAY [104–262]
S. R. 5.11, S. S. 6.51.

14 Sunday [105–261]
Low Sunday.

Office

15 MONDAY [106–260]

Lecture
Office work as
Usual.

16 TUESDAY [107–259]

Easter Law Sittings begin.

21 Sunday [112—254]
nd after Easter.

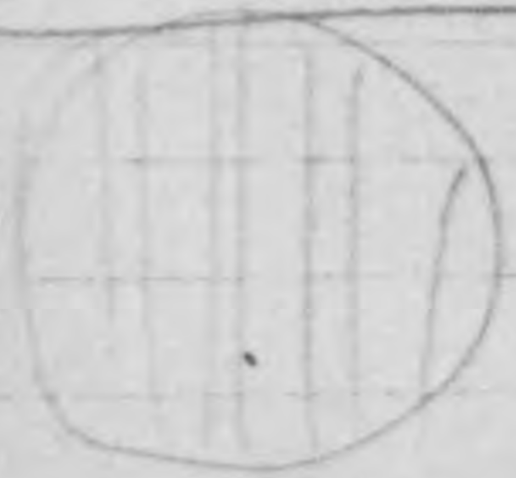
1912

Coleman Steam
Gauge Co.
Perfect Kymograph
Given by Dr Smith.

Altimeters

Alix-Egestron
Bend Sweden
Variable Speed
Kymograph

Ives - Cobb
bin. acuity 06 feet
write to
Nela Research
Laboratory National
Electric Lamp
Assn
Cleveland.



Apparatus for
Measuring Hirsch-
hold by Faradic
perception
See book
Meas of Induction
Rubeks.
By E. G. Martin
John Wiley & Son
N. Y.
1912

Dr Packard
476 Commonwealth
ave

Miss Dr Southerland

Chocolates
malt Sugar
malt barley
Savora
Leaxa

Syrd Drugs
f Carnefore
Dansbitter
Alcohol Ex

Hurty

Victor Hugo said.
future race will
say.
What! we had plague
What we had war
In future may also say
What! we had lunatics
What we had criminals
What we had idiots

50% insane - hereditary
20% alcohol
20% syphilis
10% other causes

Descartes
Pronounced de carte

We have tried to
keep men out of
hell.
Now let us try to
keep hell out of
men.

I would add, and
let us thus keep
hell out of
society.

Fate of Proteins introduced into the body.

1. Enterally - alimentary
2. Parenterally.

all converted by enzymes into Amino acids, which are all harmless.

Only ~~way~~ Native protein is taken up by inhalation By this means

are become sensitized
This is cause of
Hayfever, rose fever,
horse fever and
asthma

Much auto Infection
described from intestines
When we overeat
we take so much
we become sensi-
tized

Cause of indigestion
Eggs Against
Eggs, apples, fish
Strawberries, etc
We are now using
vaccines of various
sorts. This shaking
new causes for
sensitizing

Native albumen
~~into~~ is elim by
Kidneys. Egg white
90% Great difference

in obs. as to
~~urine~~
means of elimination
Hornemeister gave
90% elim by kidney
Vaughan ~~[illegible]~~
no alb in urine
after egg white of
3 eggs.
depends on rate
of injection

Does albumen
elim by kidney
do it normally?
One authority believes
it does & thinks
Bouglet is due
to absorp. of native
albumen from
intestine.
Vaughan believes
that long elim
of alb by kidneys

causes B. disease.
Bone cause of B.
disease is absorp-
tion of undigested
alb. from intestine
foreign proteins:
injected in blood
soon disappear, in
so doing, it carries
with it much of

normal proteins of
blood. 1/2 to 1/5 of
this is controlled
foreign protein is
injected. So both
foreign P. + P of
blood is elim
through kidney.
This shows that
when foreign
P are elim through

Kidneys, the result is impoverishment of blood. All who have tried this get same result.

Another outlet of Elim, is passing into alimentary canal where it is digested and absorbed.

He has experimented by injecting Eggs, milk & eggs and taken by lacking bile, & intestinal fluids, finds albumen after a short time.

Mercury nitrate
nitr. other causes
sore gums, ulcers
of colon, diph-
theritic m. ? Y
intestines. Same
is true of all
mineral poisons
(Referred to Rosen-
ais work)

Gastric or duodenal ulcer
associated with
suppuration some-
where: perhaps
diseased appendix
(colitis?).
"From such sur-
faces absorption
of Bact always takes
place.
"I doubt very
much if G. or D. ulcer

Ever accurs unless
Poison of some sort
is being elim, some-
where.

Rosenau has
shown that special
germs have
special predilection
or affinity for elim
numerous chemical
lates same as cells
Bluo. liver. Mercury - kidneys

3. Poison may be disposed
of by being deported
parenterally.

We are born without
iodine, we accumulate
iodine in thyroid gland.

Different poisons
accumulate in dif-
ferent tissues.

Exanthematous poisons
accumulate in skin.
Pneumonia - lungs.
Typh. in intestine

What is
Culture issues the
Poison is digested
and always liberates
a spirit which
causes destruction
even inundation
death.

Feb. 7, 1916.
Dr Nevano
address.

6 year combined course already adopted by 50 of the 54 Med. Colleges

Advises 1 med college in state or large med. center.

9 H Colleges will probably be reduced to 70. No of Med Colle 10 years ago was 166

In 1904 28000 med students enrolled.
5700 graduates

no students 1915 17,000
Graduates " 3,500

50 or 60 colleges could easily do all the educational work.

No of students decreasing each year due to raised standards

Of 95 Med. Colleges 20 do not have unqualified recognition because not equipped with competent teachers and facilities.

Ohio law provides for separate Boards for each separate med. cult. and mentioned and provides for any new ones.

Law of med Students is only 1/3 cost of maintaining med school.

6 med. colleges no m. course but students pay 8 of these med expenses considerably less than mean.

Pfeiffer Co.
Wells Pfeiffer Brewer
732 Milwaukee
Kelly 3323

3506
AA
Kellogg

Write CC Vaughan
see State
also Gov Perkins
about enforcing
law about negro
traffic & births
must prosecute
some doctors.
Must assure
Rogers director
of census.

Seth Cheetham
Landolf Ernst Lib.
Strasbourg Alsace

Pedagogical
Seminary
Sept 1896
Hyperaesthesia by
Mordecai

Mental Development
Chas. E. Merriman
Westfield Mass
Boston

Dec 24 1902

Com. on Mental Hyg
N.Y. State Charities Aid
Association

Numerous
Exhibits
Charts

Send Chair to
Hubbard + literature
also Chocolates

So Cal. Health
Hygiene
Dr. H.W. Moore
Santa Barbara

Watertown
Sanitary Fountain
Minneapolis
Minn
Lansing

Shoemaker Dances
H. & K. Dances

N.Y. Dept of
Health
E. & Porter
Communism

Cut Health
Exhibit for
the Conference

Send Dr Sugglet
Calex & Paulay

Write Fisher & send
copy of Foyler
pitch.

Jacob Sopel
140 W 22
N. York

Committee

1914
?

2 7 yrs

Hygn veg
never made
meat
Blackbread Rye
Potatoes Sauer
Ham Smoked
Haver Beer
tasted
Present diet.
Beans, peas.
autute many years
become vegetarian

Normal Duration of Life
in
Various Classes of organism

Protozoa few hrs to few days
Plant " " (Fungi) to
several thousand yrs
(Sequoia, Baobab)
Invertebrates few hr to over 100 yrs
(Tricadna gigas)
Insects (total of all stages) - few wks
to 17 yrs (the American
Cicada septemdecim)
Fish To over 2 centuries (Pike)

Batrachians To 34 yrs Toads
Snails, Lizards a few decades
to over a century (Crocodile)
Turtles - To over 200 yrs. Galapagos
Birds - a few years to over a
century (Falcons, eagles)
Mammals - a few yrs to over century
(Whales)

Man 70 - 100 years

Centenarians in various Countries -

Whites

Country	Date of Census	Total	male	Female
Belgium	1900	8	3	5
Denmark	1901	2		2
German Empire	1900	40	8	32
Switzerland	1900	2		2
Finland	1900	5		
Netherlands	1899	8	4	4
England & Wales	1901	146	47	99
Norway	1900	4	3	1
Italy	1901	202	69	133
Spain	1900	152	28	124
Scotland	1901	41	7	34
U. S.	1910	764	326	438
Austria	1900	481	193	288
Hungary	1900	604	263	341
Poland	1897	358	92	266
Portugal	1900	316	89	227
Ireland	1901	497	194	303
Russia	1897	15,467	6,827	8,83[illegible]
Greece	1907	404	127	277
Servia	1900	389	230	159

Others

Negroes U.S.A.	1910	2,675	1,017	1,430
Indians "	"	114	50	64
Japanese	1908	3,840	1,667	2,173

Per 100,000 Individuals

all	male	Female
0.1	0.1	0.1
0.1		0.2
0.1		0.1
0.1		0.1
0.2		0.4
0.2	0.2	0.2
0.4	0.3	0.4
0.5	0.6	0.2
0.6	0.4	0.8

Per 100,000 Individuals

all	male	female
0.8		
0.9		
0.9		

Nebraska

Contested
Will
Mrs. Kate Barrett
Wash. D.C.
Affirmed & admitted
to
Probate by Seibert
Judge Foreign Courts
Lewis Abbott Affirm
Sel. and Overall

Funeral Expenses
Entertainment

Get Women Clubs
4 to 8 & 4 M. Ca
Cities to send
delegates
Prohibition
Get Harlings to select
Have Inspection of

$1,200,000,000 for tobacco
300 loaves

30,000,000,000

Manhattan Kan.
~~Gethis~~
M. M. McKeever
Anti-tobacco
Campaign

Wm M. McKeever

Copy 44 Paper

C. N. Millard
Principal School No 52,
837 Richmond Ave.
Buffalo, N.Y.

Loading Jacks
N. Ma Kissing
Tech Press
Cedar Rapids

Prof. Edgar L. Hewett
Director School
of Am. Archeology
Director of Am. Arch.
for Institute.
Washington

George W. Mills
State Hospital
Central Islip
N. Y.

ark for Photo
of Dr Smith during
a Knee joint amputation

will join R. R. Men

Race Betterment

Total Circulation January, 1908

307,697

Distributed as follows:

Pacific Coast . . .	27,709
Western States . .	224,329
Eastern States . . .	34,414
Canada and Foreign . .	1,745
Newsdealers and Agents	19,500
	307,697

The twelve Middle Western States which contain one-third of the entire population of the country, have two-thirds of *The Housekeeper's* circulation.

The Housekeeper reaches the best buying people of the most prosperous territory.

Rate, $1.50 per Line.

THURSDAY 2

FRIDAY 3

SATURDAY 4

Pulse rate
not increased
but usual fall
from 80 to 62
Memory not effected
Mental state
thoughtful than
reflective
No hallucinations

SUNDAY 5

no sign of
[illegible] or rat
depression in very
Alcohol lessened
hallucinations
[illegible]
[illegible]
[illegible]

MONDAY 6

Cotford meeting
Remember afternoon
Mon aug
more fuchsias
[illegible]

TUESDAY 7

Rifle Mr. Stamp
Reg 27/6 + 93 2nd
[illegible]
Hand drinkers 1/9
Refined 37/6
Eng. Ind. meeting
Afternoon & eve
alley £18 0/0

WEDNESDAY 8

Attendance 20
Observation 20
When we have
Attempting [illegible]
[illegible]
[illegible]
Negro [illegible]
Participation

THURSDAY 9

Learning Salem
All Rich in earlier
Days [illegible]
of alcohol [illegible]
Learning [illegible]
Physically [illegible]
Full of Beauty
[illegible] for
the poor [illegible]
[illegible] result

FRIDAY 10

SATURDAY 11

SUNDAY 12

MONDAY 13

Effects special upon central nervous system

Dr. B. Sachs and Alcohol more than applicable

Effects of alcohol much does Family more worse large doses.

Effects of alcohol after long effects during the relaxed state of the blood.

TUESDAY 14

Mr Swanzen
Health officer of
New York

Mr Infected by
Phenomena
Alcohol reduces
absence are offered

WEDNESDAY 15

b pretty come
Effects against
Alcohol
accidents largely
due to alcohol

Bad Smoking
may lead
to alcoholic
Disease to growing
in children which
most palatable
Dinner 8.00.

Best received yr
Valuables Lett
Shipping tickets
Wheat weather

Dr Dr Dr
St James
7 E 70th

Uric acid in all animals, insects, lower scales of butterflies largely uric acid

Enzymes which may be concerned in converting purin into uric acid

Gouty of U. Ac.

Exogenous

Endogenous

High protein diet (Hopkins & Cole)

Cause great increase of U. Ac. due to destruction of cells & especially of lymphoid glands.

All animals
but reptiles &
higher apes
has enzyme
which converts
uric acid, not
yet more known
that uric acid
is end
product of metab-

Dalmatian breed
of dog shows
uric acid as
end product
Ordinary dog
destroys 98-100%
of uric acid
a 10 lb dog
on ur. ac. diet
Elim as usual
uric acid as a num

Caffeine increases
Uric acid very
distinctly. If
question whether
caffeine is so
introducing a
substance as
we have been
led to suppose
in the past"

Uric Acid in Blood
Folin method
uses only 10-20 cc
15 mm in 100 cc of
blood
May be free in
blood & in combi-
nation.
Normal 2½ mm
to 100 grams
of blood
& in gout 4-10 mm
in 100 grams
blood

FRIDAY 24

Urgent no
urea U.A. in
blood then in
nephritis.
In nephritis
U.A. may rise
to 20-30 mm
in urea blood
urgent is a sufficient
retention of U.A.
by reduced excretion due
to chronic nephritis

SATURDAY 25

The ground for
belief that in
gout blood
is supersaturated
with U.A.
causing precipitation

In nephritis
U.A. accumulates
first
leaving urea

as blood from
falls. U. acid
& urea diminish
in advanced
cases. Creatin
also increases
in nephritis
but if urine acid
fol. the blood many
times that in
gout

A new factor
new method of
new amount
of kinds of urine
acid.

Wally Meyer
Embalmed
Chiropractorium
bags & drain rubber
tube covered with
gauze & gutta percha
always drain after
globule operations
because cystic duct
may leak.
Always drain
for pancreatitis but
do not remove gall
bladder, use small
tube in gall bladder
at time of op.
Sugar crystals in chol-
cystitis & jaundiced
minute deep olive green
mucus through transverse

Wally
Meyer
Chiropractor
Embalmed
Jaundiced
Gall

Valley Mayer
Completed
Cholecystectomy
Large drain [illegible]
tube covered with
gauze + gutta perch
Drainage drain also
should be cholecystectomy
because cystic duct
may leak.
Always drain the
pancreatitis but
should not remove gall
bladder, use small
one in gall bladder
case only.
Sent home in cho
cholecystectomy
Wake dep. Allegra
[illegible]

Continued
Missed
Stitches

THURSDAY 30

Rockefeller Bank
Saturday 3:30

Tuesday, 2:30
Officers
Sunday 10 A.M.
Dr. Davenport
Thursday Eve. Acct Med.
2 P.M. Fisher

MEMORANDUM

Rogers Peet Co
Broadway + 34 St
New York

Make + sell
the Parka
Parka from Open
in School in
Chicago.

Dear

MEMORANDUM

1908

JANUARY.

S	M	T	W	T	F	S
..	..	..	1	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	..
..	..	..	..	..	..	..

FEBRUARY.

..	..	..	..	..	..	1
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
..	..	..	..	..	..	..

MARCH.

1	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	..	..	..	..
..	..	..	..	..	..	..

APRIL.

..	..	..	1	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	..	..
..	..	..	..	..	..	..

MAY.

..	..	..	..	..	1	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	..	..	..	..	..	..

JUNE.

..	1	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	..	..	..	..
..	..	..	..	..	..	..

JULY.

S	M	T	W	T	F	S
..	..	..	1	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	..
..	..	..	..	..	..	..

AUGUST.

..	..	..	..	..	..	1
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	..	..	..	..	..

SEPTEMBER.

..	..	1	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	..	..	..
..	..	..	..	..	..	..

OCTOBER.

..	..	..	..	1	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
..	..	..	..	..	..	..

NOVEMBER.

1	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	..	..	..	..	..
..	..	..	..	..	..	..

DECEMBER.

..	..	1	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	..	..
..	..	..	..	..	..	..

1909

JANUARY.

S	M	T	W	T	F	S
..	..	..	..	..	1	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	..	..	..	..	..	..

FEBRUARY.

..	1	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	..	..	..	..	..	..
..	..	..	..	..	..	..

MARCH.

..	1	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	..	..	..
..	..	..	..	..	..	..

APRIL.

..	..	..	..	1	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	.
..	..	..	..	..	..	..

MAY.

..	..	..	..	..	..	1
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	..	..	..	..	..

JUNE.

..	..	1	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	..	..	..
..	..	..	..	..	..	..

MADE BY
THE J. C. HALL COMPANY, PROVIDENCE, R. I.

Apr 21. Varned
Agnes and Dr C
Spent the day
with us at the hotel

Apr 1. Home Sick

Apr 18.
Apr 19 to Phila Mt Vernon
Apr 20 transcontinental
Apr 21

Mississippi Valley

Apr 23 Central Park
Apr 24 Niagara Falls

Stopped at Metropolitan Hotel
Phila
Independence Washington
R. E. Murray Hall

Apr 25 Central Park
while Dr went to New Haven

Apr 26 to Boston on
the Merchants Express.
Stopped at Parker House

Apr 28. Cambridge
Harvard, Longfellow's home
Washington Elm

May 4

Lexington [illegible]

the road [illegible]

May 5

[illegible]

May 6. [illegible]

Wm H. Pearce
N.
2105, Charles St
Baltimore
Md.
Colored Parlor

Dr C. W. West
Johns Hop Hos
Alex Sp &
colored Parlor

34
60
2100

W. H. Pearce M.D.
N. 2105 Charles St
Baltimore
Md.
Colored Parade

Dr. C. W. West
Johns Hopkins
Alex Sp &
colored Parade

Cooking
Cabbage
Food cooked at
110°C loses much
of power to prevent
scurvy. At 120°
loses nearly all
its preventive
power.
Int. Cong on Hyg.
Rept report - see
paper of Murray Phil.

Van Voorden

Things we should increase strength in food. This is an education of the bowel. A diet too concentrated spoils the bowel and increases the tendency to disease.

Money cost alone should not be considered as the chief thing.

Y. Everdiet

Heat loss is
35 cal per Kilo.
The food must
be 2 or 3 times
this amt. to save
K loss and loss of
weight. do not
know what becomes

of the nosplus.
The loss from
exercise in bed
& other sources
not more than
30%
CH + fats are
fully absorbed
not necessary
to give more

Ration 10-15 grms
daily, fat.

Langworthy

10-15 grms of fat
daily

$$\begin{array}{r} 350 \\ \times\ 6 \\ \hline 2100 \\ \times\ 2 \\ \hline 4200 \end{array}$$

Slippers

Single Service
Package Corp.
Chicago, Ill.

Babies slaughter

New Jersey
School & Church
Furniture Co.
10 boards in
a case
Ret same:

	Million
Immorality	3,000
Liquor	2.000
Tobacco	1,200
Jewelry & plate	800
autos	500
Church (home)	250
Candy	200
soft drinks	120
Tea & coffee	100
millinery	90
Patent meds	80
Chewing gum	13
Foreign liquor	12

Surg Gen
report-1909
Gen admissions
rate for
venereal diseases
199.17 per 1000.

200,000
cases of venereal disease
treated in
New York in
1900.
50% of all
patients of
Johns Hopkins
admitted gonorrhea

International
Congress on
Hygiene.

Meat juices in
cabinets say they
have no ill effects
Results different from
living in close air
16-14 years.

I ~~questioned~~ think there
must be something
else

Chemical methods
showed nothing

Experiments

Tried Phys. test.
Collect moisture
by passing breath
through tubes in
snow.
Sterilized fluids
inject sterilized pig
no effect.
after 2-3 weeks.
inject blood serum
Pig dies in convulsions
infection min. anaphylaxis

Have tried in
nearly 100 guinea
pigs, same results.
5-6 dif. persons.
These facts mean
that Ex. breath con-
tains specific pro-
tein, a complex
protein.
Surprized that
breath could contain

so large a molecule
as the protein.
Fluids filtered very
carefully.
Maybe colloid is
carried over with
moisture of breath
everything is volatile
Guinea pigs & dogs
Pigs reacted to
dogs serum.
Same with horses
Showing the the
breath contains some-
thing from the

blood which may sensilize an animal.

This does not mean that breath matter is a poison.

Henderson's paper combats the above theory.

Bohr & Huldane hold that the epithelium of the lungs secretes oxygen underinfl. of skin.

---

warm moist air in contact with skin inhibits this secretion, while cold air excites it.

Air is supplied to blood in running by secretion.

Vaughn.

Rosenau's paper does not prove the cause & effects of bad air. He has proved the cause of ~~sweet~~ bad effects of ingesting horse serum in cases

of horses. Asthmatics
cannot ride after
horses without getting
attack of asthma!
Evidently anaphylaxis

Faintness in close air
due to excess of blood
in skin, leaving not
enough in brain.

68° bad air tolerated
72° intolerable.
Rosenau reply

Flügge's cabinet
Exp. not conclusive

Teaching dangerous,
Keep same air
and keep cool and
moving.

Out doors in
cool day, skin is
warm and moist.
Same as in cabinet
Remote effects
may appear.

Mountain-sickness
due to deoxygenation.

Axel Holst
Christiana
Diet in relation to disease

Def. line ca

Osteoarthritis
Spasmophilia
Cows milk causes anemia because of too little iron

If diet does not contain a certain amt of CaO_2 or of fats is deficient & result is acidosis.

Beriberi

Eijkman showed that chickens are paralyzed on polished rice but when fed a little rice-bran.

Vorderman found beri-beri among prisoners of Java rice-bran prevented.

Grijns showed that a yeast bean prevents beri-beri also cures it in man

Tamila do not have beri-beri when fed on their own rice "cured" "parboiled" contains much bran. This "cured" rice has been introduced in India & Philippines to prevent & cure beri-beri.

Adding rice bran to rice does the same thing.

Substance may be extracted by water or alcohol and prevent beri-beri when given (Eijkman) with food or subcutaneously.

Scurvy.

Stunted, rigid in 4 wks on bread or grain only. Sometimes lose teeth. 80% show hemorrhages in skin or around knee joints. Ex-

pecially at ends of ribs where they join cartilages, most characteristic of scurvy especially in children

Scurvy in infants & adults due to long use of farinaceous food

Due to lack of certain substances can extract them

Jam cabbage by boiling with water ½% citric acid.

Each class of foods has its special properties due to special substances

Rice, wheat oats, rye without bran cause beri-beri

Peas prevent as well as malay beans.

This is not true of soy bean

Chickens die when fed on canned meat cooked at 120° C

Raspberries prevent scurvy & bear boiling on hour at 120° C

Dried fruits & veg. do not prevent scurvy.

Scurvy is cured by yeast, yeast bread butter cream baking powder bread

(Baking powder kills Vita-mines)

bunnies pigs die of scurvy when fed on barley and oats. If grains are allowed to sprout. they do not die.

Dr Jos. Collins
Neurological
Institute
New York

Dr. Yamei Kin
New York
Hosp. in Tien Sin

Market's
Cures
Eosinophilia
May be due
to
Trichinosis
Tape worm
Hypertrophic pulmonary
Mucous colitis
Amebiasis
Puffed eyelids
Fever
Eosinophilia

Remedy preventive
Purge everybody
after a picnic with
[illegible]

History of trichinosis

2 days after eating worms copulate & males die
Embryos deposited in lymph spaces of villi. Hence thoracic duct then blood. Embryos so small go through the lungs, left heart, the body in general
Most common in

Small active muscles
eg. tongue, larynx, diaphragm, inter costals, deltoid.
Most common near insertions.
Body may contain 100,000,000 trichina
3,000 trichina may cause eosinophilia

Girl of 7
menstruates 6
Tumor of ovary
Barker
Precocious puberty
due to 3 things
1. ~~Tumor of testes~~
2. Tumor of ovary
3 " " "
2 cases removal
of tumor 1 boy 1 girl

both returned to
infantile
Hypo genitalism
more common than
hypergenitalism
due to absences of
pituitary body
or to removal of
ductless glands
may relapse to
infantilism may
occur after puberty

Look up
our case as
to return
of infantilism

Send Quelfa's
book to
Dr Lawillys.
Jr. Barker
1035 N Calvert St
Baltimore
Md.
Paraffin tablets
Lanza biscuit
Sterilized bran
2 cookbooks.

Washington
May 10,
Sect. of Congress.
Cin. & Physicians
Dr. Lausseur & Brown
reported finding
living J. B. in
Savannah river
2.4 miles below
newer accueth. Were
above, killed
Pinnebaga.
also found J. W.
at 3.45 same day
same on Sunday day

Poly cythemia
treated by radium
Red count reduced
from 7,000,000 to
5,000,000. The
spleen received
from 15 - 22 cm
to 10 X 15 cm.
all multiple
lymph. glands
Patient is apparently
well. Cannot
do without radium

for a month
without feeling
worse.
Amt. of radium
used was
for 4 hrs.
repeated
(look up or write
Wilson)

Splenectomy &
transfusion in
Pernicious anemia
by Giffin
Good results from
splenectomy fol-
lowed by transfusion
repeated every 3 mos

Sing. Sect. May 10

wound by sugar
inflicted or injury
may be cured by
1 drop of

Tetanus

. Prognosis depends on period of incubation

Only patients who recover are those who have had a long incubation.

Dr Crile:

Electric light
Leaks Sol.

Can completely
sterilize septic
wounds

French surgeons
use no dressing
on many wounds

Crile puts a
little iodine

over wound and
dangles under
it an Electric
light. Wash
with Dakin's
Sol.

Sent y nurses
g arms
If can't flex
nurse elbow - spread
If can flex pre-
finger, median
is OK. If can
adduct little
finger, ulnar OK

Radium. Cancer
Raunsloff

Other.
62 cases
40 trep. 32 dead
11 operable
7 cured 2 dead

Iwas destroyed
by cancer as
much as possible
the applied
radium
after about
two apparently
cured. the
ut was afterwards
removed.

We found no
cancer in the
uteri removed.
22 of the 62
are now cured.
of 40 now
alive & have
recurrence &
will probably
die.

Cameron tells me that Werner (Schmidt) uses 100 mg (Schmidt confirms this. He gives 4000 mg tots within 5-6 days whole dose

usually, 2500 first dose, 1500 a day or two later,

Eben Putnam
Wellesley Farms
Mass

Send proceedings of
1914 Conference to

Send Savor, Zuna,
etc to Dr. David Fairchild

Look up Ptomaines
in stools.

---

2 new ptomaines
in stools.
Zeitschrift
1913

Skin sensitiveness
not a full test
too effects on
other parts.
Write Dr Macer
Baltimore
about tests.

Mann
Got great results by removing all animal proteins.

Sanderson
Carbohydrates (cane sugar, has induced relapse
Fats better borne

Small PHO, moderate
2-3 oz. bread
balance fat + protein
Total ration must be low
Tendency to alkalinity of urine as shown by Hopkins method

Chamber of
Commerce
San Francisco
fresh Bamboo
shoots
packed in clay
Get in Canf
on Penn Ave
Hillside St

Chinatown
Wash. D.C.

4 SAT.

Saidy
R. E. Taylor
Decatur 12
N.E. 1/5. 110. 1/4 Sec 12
Has been seen
by Drummond
Line
Check dates

5 SUN.

6 MON.

Laundry
Porcelains
Slippers &
milk

TUES. 7

Lodine

WED. 8

THUR. 9

1921 May

Boston, May 24/21

10 FRI.

W. B. James
7 E. 70th
Rhein
Leave

Boston May 24/21

11 SAT.

Mr. G. A. Rich
Pres. Boston
Stock Exchange
53 State St.

12 SUN.

J. P. Beal
2d Nat Bank
President

MON. 13

Names of
Stock Exchange
Club.

TUES. 14

521 - 120

WED. 15

16 THUR.

Milk Paper
Boston June 7, 1921

Great value of milk
Comb. with meat
milk
Cant: with
Cant: water in
U.S.
Cant water
Effect on animals
Rats
Chickens
Pasteurized
oxidation
atomizer - O
explosion

SUN. 19

Orange juice
pounds
Clean fresh
as well as
water

MON. 20

water
~~100~~ B. per oz
3000 in bad
water.
Allowed fat meat
6000000 per oz

TUES. 21

17 FRI.

18 SAT.

28 TUES. Barnes
Poland farmer
hemorrhage Mark 1/10
Had royal suite
for $6.00

29 WED. Vienna hotel
reduced
Gen. Embassy
Sal $3000 =
Omaha = 4 times the salary
of the President.

30 THUR. Berlin a city of 4 times as
large as any in Germany
Berlin is bankrupt

FRI. 31 Sheets
1,600,000
of per. which is 1.5 cts
a sheet

FEBRUARY SAT. 1 Rita Carlin $6.
6,000,000
Gross 6,000,000.
Sheets only
= 1,000,000

SUN. 2

3 MON.

Farmer sold
got back 8-
neg from
Eug. Sent coal
on hand

4 TUES.

THUR. 6

Coal wheel
Gen. Hers than
Gen at Eps
Mean Meets
at home 205

FRI. 7

5 WED.

SAT. 8

9 SUN. Porter Gonham
P. E. Young
7 Coventry St
Roxbury

10 MON.
address
good type
in Boston

11 TUES.
Write to Elizabeth
Hartshorne
Madeline

Write Florence
about flowers

TUES. 18

WED. 19

THUR. 20

Memo for week

21 Fri.

Nearly 300,000 babies died annually in the U.S. from bad feeding, which produced illness and possible death.

22 Sat.

23 Sun.

Everyone knows best feeding babies than best feeding chickens, canary birds or possible dogs.

Mon. 24 June 7/21

Paper to be read in Boston

Name all the remedies good breeding. Show Rickets, show cuts scurvy, effects on growth or bones, interesting

Tues. 25

no.

Automatics

Wed. 26

usually methods pasteurization not effective

Milks only a pure germs d.B. typhoid diph.

27 THUR.

Scarlet, etc.
Convalescent
nurse theirs all
the rest [illegible]
[illegible]

28 FRI.

Show up screen
shows dirt in
milk.
Sliders showing
comp. food

1 SAT. MARCH

in veget & meat,

Calories	Cal
126	19 + milk
[illegible]	Cost [illegible]
	Certified

SUN. 2

Good Examination

Weight	P	Meal
+	E	+
+	E/+	0

gt 2 [illegible] 1 [illegible] 2
Vitam.

MON. 3

+ [illegible] —
+ [illegible] —
+ Rickett

7 food [illegible]
milk all
meat only 2

TUES. 4

Need germs
meat germs.
[illegible] [illegible]
Measured babies
Rab.

5 WED.

Nurse sick
of clean cows
clean milk
Barren is dairy
Lacs "

6 THUR.

B.C. Sace "
Clicks
Probably germs
Good pitchers

7 FRI.

Vaccine germs
harmless

SAT. 8

obj to Pasteurized
Clean milk
must have it
to feel as
Clean

SUN. 9

100 germs
Cow milk
101,000 germs
health week

MON. 10

have germs
Ought to have
had germs
Cert milk
germ harmless

11 TUES.

Milk Cheaper
than meat
at 35 cts a
quart.

12 WED.

Chickens with
Beefsteak
chicken eels
Oysters

13 THUR.

Chicken
Lobster
Fish
Asparagus
Hundreds of

FRI. 14

Milk product
crude refine
Savage tribes
Birds nest soup
& chinese
chewing gum for
beer & 50 Ann & Frosas
(~~[illegible]~~)
Fresh leaf in
Jones Creek
Hindoo feeds dung
in milk

SAT. 15

SUN. 16

Estimate amount
of dirt in milk
20,000,000 cos.
10 lbs (9 gl a day)
10 gal. dung a
gal.
6,000 bros a year

17 MON.

3 trains 150 cars
each 20 tons
to car
1 ship 6000 tons
sunk to
fertilize
2000 acres
20 farms 100
acres each
The evil weeds

18 TUES.

Fabies the
also dont

THUR. 20

not enough
attention given
to colds germs
in week

FRI. 21

Colon germs
in water very
bad. Colon
germs in milk
bad. Secret

SAT. 22

from authorities
on water sup-
ply about
colon germs

23 SUN.

18 cars lists made of coln general in

24 MON.

week.

25 TUES.

WED. 26

THUR. 27

FRI. 28

29 SAT.

make tablets of Savita dried milk tomato

30 SUN.

or marmite + tomato (dried) juice

31 MON.

ask Mabel & Mendel how to get that A recommendated home.

P.B.

TUES. 1

all only need have good weather

Can't go nuts berry

WED. 2

Write recipe hydrotell & Leaflets &

THUR. 3

leaflet nutritial. & research labs & visit to Baltimore also Farnum

4 FRI.

Fed fresh fish to salt (dried)

Fig 30 pr ounce

5 SAT.

to stall on full ration

Sherman found more funds raised on meat

6 SUN.

Colleen (Fresh) found larger letters on Marmite

MON. 7

Fed Sherman to Sherman

Fed 4, 0 dogs

Dried canned tomato to start for curry

Went off guard 6 pm

WED. 9

Boston June 7, 1921

22 Tues.

Thomas Strain
Fullerton
Calif.

Prof Stringer

23 Wed.

West Chester
Pa
near Philadelphia
Normal School

24 Thur.

Mrs Joseph Beiderwerz
202 W 86th St

Fri. 25

Dr. A. F. Hurrer
1110 Euclid Ave
Lewis Boston Jafer
Lorite Barren
for list y

Sat. 26

Hannes

B. G. Wilder Dr
Cone Ave near
Freshel

Sun. 27

Jessie Bancroft
Sterling 4150
Teachers
120 - 121

28 MON.

29 TUES.

30 WED.

THUR. 1

Sample
minute Brew
in bran steat
goes to Macy's

FRI. 2

Minutes $75.00.
a week

Concentration of
minute Brews

SAT. 3

4 SUN.

Sermon
Hubert Theo

Sandles of
Minute Oldes
1 cup.

5 MON.

Printed envelope
Hunt up theater
entertainer

Consider sending
Sayon to N.Y.!

6 TUES.

for 2 wks.

Get detailed report
on S.H. Salesman

Consider Brinkerhoff's
25 - 65

WED. 7

W. C. Flake
Ask Bailey what
attorney Flake
New formula
home & abroad

THUR. 8

Wi Con Flake
Hull?
Cook
Graduate
Flake

FRI. 9

Hell - Mary Flake
Wisconsin

Retail cost
Wholesale - Jordan
Martin

10 SAT.

Childs at
Butterick
also minute
men.

11 SUN.

Hel Russell

12 MON.

not pulbenty
service.

about the
men

TUES. 13

Prof. Carl S. Schrader
Sargent-Federal
Co.
Cambridge

WED. 14

Offer much
Often to her

THUR. 15

Mr Thieck
Can therson the
Paper to
Rat

16 FRI.

Childs
Buttermilk Powder
HC 3.13th St
$4.00 a pound

17 SAT.

18 SUN.

MON. 19

Dairy.
test milk
for butterfat

TUES. 20

write Sayre
for report.
ask him to
call at B. to.

WED. 21

ask Cowes
at which the
preserve and
produced

6 SAT.

7 SUN.

Florida

8 MON. Wednesday 10
Fine ride P.M. Beach
Sound big mass resin,
engaged
Starting Needel St,
$20.00 a week when
car comes.

St. Augy. Magnolia
91 Cuna St

TUES. 9

At home. Sunbath. Hot
A.M. Temp. 98 in sun.
70° in shade
No gnating. No bugs. Sunbath
9 A.M. No cough. Have
decided not to go to Cuba
at present as Miss Gibbs
of Gibbs bros. abroad.

WED. 10

1918

THUR. 11

Cash Account—Nov

		Received	Paid
			Fire Ins.
	4.0 0		
	30		

ash Account—December

		Received	Paid

1911

Joachimsthal

Nov. 23/11

Called on Dr. Dautwitz at the Stadt Bad Anstalt. at 11 A.M.

Found Dr. D. occupied and made appointment for 2 P.M. Took a bath in Radium water.

200 W.E. per liter, 96° F

~~Roman~~ Water has a rusty appearance due to iron.

Remained in bath 1 hour.

No cold water added to cool off. Patient lies on ~~easy chair~~ couch wrapped in blankets. Cost of bath 3.50 Kronen. (70 cts.) No attendant

Noted extraordinary activity of kidneys. at

least a quart of water colored urine! Had taken before the bath not more than 1/2 the amount of water. Effect ceased after bath. Dr. Dautwitz did not mention this as an effect of the bath. Maybe purely personal or accidental.

After leaving noticed a man abt 40 in a rolling chair with rosy cheeked Austrian nurse, who came 10 days ago unable to walk, paralyzed from a spinal injection. He is now better. can walk.

2 Pills. at Badanstalt.

Obtained following information from Dr. Dautwitz and ~~Director~~ Herr Ulrich, director of the Radium works.

1. Baths are better than emanation because there is the effect of bath the emanation and the radiation from the emanation, which produces radium and is radioactive. The Radium D. produced by Emanation has lately been shown to be of much therapeutic importance by Gudzent. (See Joachimsthal p. 41)

The ~~bath water~~ Nice contains naturally 600 M.E. per litre. Only 200 M.E. are ordinarily used. The time of bath 15-30 min. The ordinary course is 4 weeks. Course may be longer if necessary.

Strieger dosed them 200 M.E. per litre may cause headache, sleeplessness, vertigo, palpitation of heart. In arranging the bath the tub was filled 2/3 full of plain water at mean temp. that the addition of 1/3 Radium spring water would give the right temp.

This leaves the Radium water at the bottom on account of its bouyancy until the patient gets in and so preserves the emanation from escaping. The emanation will not pass out quickly unless the water is agitated. It will remain 1/2 hour at least.

Dr. Dautwitz told me that with his activating apparatus (Neupert) baths can be easily prepared. The dose need not be more than 100 M.E. (Dautwitz) to be effective.

(Suppose a bath to contain 150 litres this would require 1500 M.E. for a bath. The bath room must be closed with a curtain (rubber) as well as door and have condensing pipe to remove moisture of breath and ozone apparatus to remove emanations from skin)

The emanation as used here from the natural water contains 10-20 M.E. This is enough (Dautwitz)

We recommend the emanations so highly. Van Harden and his are actuated by commercial motives. He is interested in an emanatorium. The physicians of Berlin are now complaining of him and his act. The inhalation is cheaper than the bath, but not so good. In the bath the patient gets the emanation ~~besides~~ in through the lungs and the skin both.

Effects.

We have noted no immediate effects.

Effects are cumulative, and appear after a few days.

Appropriate Cases.

Chronic rheumatism, the older the better.

Acute not so good

very good in subacute.
Wheeler told of Vanhoordens report of high doses in acute rheumatism. He shrugged his shoulders & smiled.

Rheum.
Arthritis deformans benefited.
Other diseases, neuralgias.
Neurasthenia with depression.
Excellent in all exudates.
Not hysteria,
Poliomyelitis - excellent.
"ausgezeichnet"
A girl of 14 daughter of Austrian officer, paralyzed (poliomyelitis) for 8 years. Could not walk. Weak in left leg + arm. After 12 treatments walked 100 steps, in 6 weeks walked up stairs + went home. Verified by hotel director where she stopped, who carried her in his arms when she came.

X-ray cancer. Radium is about excellent in these cases, but use strong dose. Small dose does no good.

80% of rheumatics are cured. All have tried everything else before coming here.

Radium-work get their radium from the Austrian Government. They cannot buy the residue which they formerly used.

Radium Radiation.

Three kinds of rays. Same as ~~X~~ Rentgen tube.

X-ray tube produces, 3 kinds
1 Canal rays.
2 Cathode rays
3 Roentgen rays.

Radium produces
α. - β - γ rays.

α =	Canal rays	90%
β =	Cathode rays	7%
γ =	Roentgen "	1%

In X-ray only one set of rays can be used. ~~In the~~ In use of Radium all can be used

β & γ rays are most effective.
α rays act most on the surface.
β. is not homogeneous. several kinds
~~Radium has 3~~
γ has three kinds, weak. medium & strong.
For deep effects. β & γ are needed. α is useful for superficial ~~effects~~ effects.
α may be used by means of ~~very~~ small amounts of R.
β & γ need larger amounts 5-50 milligrams, using filters of lead or aluminum (thin plates about 1/4 in. saw him use 2 of these)

Rettenträger the R is on the surface. Because it is covered with thin sheet rubber rubber dam. The lead plates are put inside as needed.

Showed me spot on arm caused by 10 mgm of R in 1 minute.

Photo of woman's hand with blister. Had tatoo applied 10 mgm. R for experiment for 6 hrs. The tatoo was removed. Next day blister same size as "träger". Next day twice as big. In six weeks was dried up, a layer about 1/8 in thick, burning & itching. No other ill effect.

Never known, to date, of cancer from radium as from X-ray.

Radium is good for both Carcinoma & Sarcoma.

Certain forms yield better than other!

Never use radium except in inoperable cases of cancer or cases in which patient refuses operation.

Cures many cases supposed to be hopeless.

Special mention in cases of lymphio-Sarcoma.

An old man with cancer of rectum was in for treatment while I was there. He placed träger in rectum by means of speculum, left for 2½ hrs

Application every day till desired effect obtained.

Director Ulrich said that 1 Kilo pitchblend contains .001 milligram, or $\frac{1}{1.000.000}$ part of Radium.

Work on Radium

Radium Therapie
by
Wickham and Degrais
may be bought of
Deuticke,
Wien I
Hilfersdorfstrasse
in French & German
both,

Nov. 24.

Bad Gastein

Asked Dautwitz

1. What advantage over X-ray

2. Harmable are effects

3. How soon effects seen

4. Exophthalmic Goitre

5. Syphilis - Gumma

6. Gudzent + Ra - D.

No. 21

Dr. Dawlewitz.

1. Duration
2-3 yrs.

2. How soon appear
in cancer effect seen
in 3 days to 2 wks.

3. Has Exophthalmic Goitre
no

4. Syphilis - Gumma
very good

5. Any contraindications
Nephritis & albuminuria
Hemorrhage

6. Arterio-sclerosis
Some

7. Spinal Sclerosis

no

8. Tabes - Gastric Crisis

?

9. Hodgskin's Disease

no

10. Diabetes

no

11. Splenic leukemia

no

12. Fibroid uterus

no

13. - Uterine Cancer
yes

14. Dr. Gudgeut - R. "D".
not verified

15. Having body negative
Bad & Trikwater
Good - Bathbath, but no sensation

16. What is Bailey going to do.

17. Can buy Compress Natural
Yes

18. Pitchblend - what worth.

$15.00

50-cm 1/2 Mgm.

1-3 cm häger 10 Mg.

1-2 cm " 5 Mg.

Dr. Dautivity showed me a piece of rubber that had covered a häger over night. It was eaten full of holes and nearly destroyed

at mine
uranium
over 1-9,000,000
of radium
I brought 1/2 kilo
residue contains
12 times as
much.
brought 50 grams
the mill
feather bag
paid

always cannot fetch
more than 14 cent
air. + not paste
board.

Uranothallit (the green material

Joachimsthal ore contains more radium than any other. about 1 Mg in 9.000 Kilos of ore. The ore runs about 50% Uranium ore Contains also, ~~silver~~ cobalt, actinium, and other ~~rare~~ ~~stances~~ metals, besides Radium. When silver is present, no radium is found

The government mine, is over 400 years old. An old silver mine which the silver was worked out, the silver ~~above the~~ near the surface. the radium lying deeper.

The residue from the uranium color ~~work~~ is richer in Radium than the ore

~~factory~~

~~for~~ working in Paris (Harber-Werk) Was 1.2 ~~kilo~~ Mgms per Kilo, I bought 50 grams, which contains ~~.06~~

Uranium ore (50%) contains 1/9 Mgm in 1 Kilo. I bought 1/2 Kilo of 50% ore which contains .18 Mgm per Kilo. Hence the half Kilo I bought contains .09 Mgm of Radium, or as claimed by the Mine director .1 Mgm.

The residue, of which I bought 50 grams, contains .075 Mgms of pure radium. Requires long application (weeks) was used by physicians in Germany before Radium was obtainable.

Got two specimens of rock. One shiner black ~~stains~~ of

radium. the other green copper uranium compound, very rare. Can use in making photos, leaving in place 3 or 4 days on sensitive paper.

(Also make photos of Keyserite with radium.

Waste ordinary electrometer & show how it is discharged by radium.

Mine director told me that radium over injury. Man who does the weighing at Vienna got left hand all swollen up with blisters and pain and inflammation, laid up for weeks. Now fingers only skin & bones, and very sensitive.

Not working mine much. Only enough to pay expenses. Holding it for sale.

Dr. Bailey bought a few pounds of 4% uranium ore, to use for compresses.

Try making this in a compress then ~~dry~~ moisten over night and apply with cataplasm for some hours.

The 50 grms residue will make in 24 hrs 20,000 M.E. or ~~1000 per hour~~. in 1 hour 4,500 M.E (Maximum 150,000) If carried in by electricity, this might produce a very profound impression. Try with very weak continuous current.

Dr. Dantwitz in answer to my question about advantage of making body negative by influence machine agreed that this was likely to prove valuable and was supported by established facts. Dr. Gradgent did not discover this. It is well known that bodies negatively charged will attract and condense the emanation.

He showed me an electric bath arrangement (Monopolar he termed it) which was simply a porcelain bath with movable electrodes and a simple switch board arranged so that any portion of the body could be made − or + the opposite electrodes being blister

Has not tried the influence machine with emanations. Suggested clothing would interfere. Told him my plan was to remove clothing the influence machine must be outside the room, the current conducted to patient and concentrated on his body by exposure of naked skin. Apply alboline at close of ~~bath~~ seance

Herr

Showed me large samples of Uranium ore and various phosphorescent bodies. A horse head that shines in the dark, but is almost invisible in light.

Showed scintillation of diamond in presence of radium. ~~Said~~ of

Said that radium solution is precipitated 1500 times to make it approximately pure.

80%
Nitrate of Bismuth containing .1 mgm of Radium will produce in 1 day 33,000 M.E. and in 1 hour 1,400 M.E.

By means of electrolysis may carry this into any desired point.

Try use of chamois skin for the purpose. Immerse in the bag in water. Pass current through bag to water outside and test water for M.E.

Visit to Zirm
Old castle overlooking
Town Joachimsthalle.
Road. old houses. chapel.
Church. rattlehouse. houses have
small windows, few comforts, some
stables 1st story. odd stone windows.
Town hall, school children 1st grade
8-10 a.m. 2-4 P.M.

Seams. 1st horse, 1st being
biggest share of the work.

Tobacco factory. glove factory.
Bleak hills. no crops but scant
grass. Beautiful view from
castle, old towers has seen wars,
once 18,000 people in the town.
now town inhabited 1st story by
geese. bedroom & store. lace
made by country girls, 3 kinder
bedrooms, top living room & store
shop. "der mann ist unterschlumpfen"

schoolchildren, gave them
Kreuzers, "dinke schöen".
Plain fare of children.
Women with burdens on backs,
men great loads of coal.
Long street lively scene
the women, tobacco smoking.
Big slide on mountain side
2 hrs climb up, down in
10 min. 2000 feet.

New Kurhaus 200 rooms.
Price will be $5.00 a day. all
included. Built by Prince
by leave of government who
give use of water free.
Cure costs 3,000,000 Kronen

Van Hoorden has a San. in Vienna with emanation rooms.

Gastein's a peace in the Tyrol where the water has 200 m.E. 1/3 that of St. Joachimsthal.

Government baths have has 2 men & 1 woman in summer, only 1 woman in winter. She helps men in baths.

Pole here with Austrian nurse. She gives him his baths? No man about to do anything. Administration evidently very economical.

Pay of servants.
Office girl. 70 Kr a month
Waiter in dining room 30 Kr. a month,
Chambermaid 25 Kr a month.

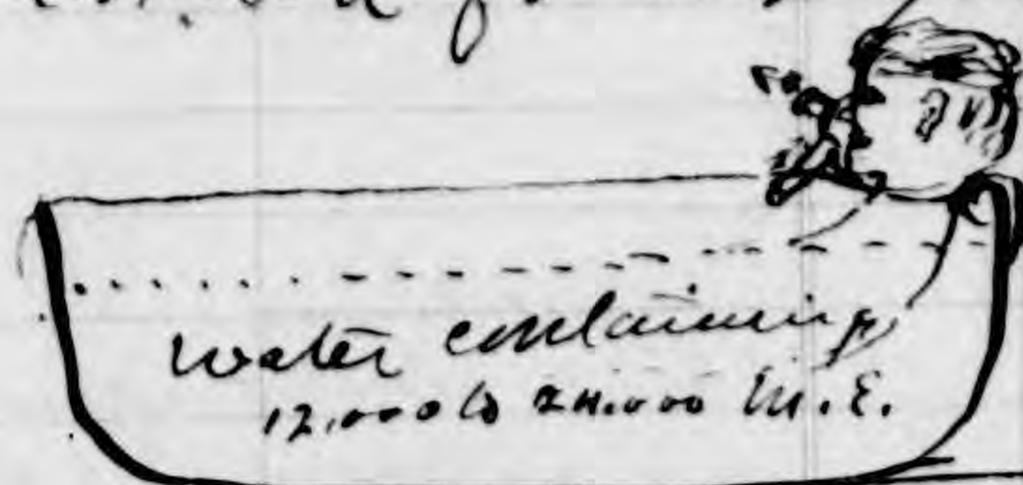
Radium Bath.

Water 30 gallons
Charge with 100-200 M.E.
Cover with rubber cloth, or board and rubber.

Have patient breathe air from over water in the bath so as to get the emanation through inhalation.

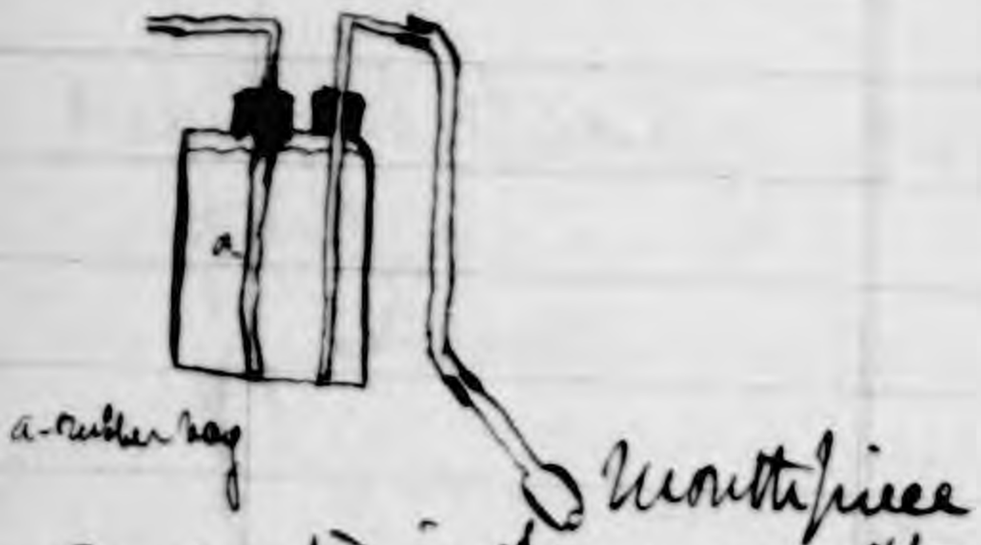
Airspace over water abt 60 litres. Air breathed by patient 600 litres. In an hour probably all ~~water~~ emanation will escape, & patient will breathe in all 20 to 40 M.E. per litre, if ~~water~~ contains 100 to 200 M.E. per litre or 12,000 to 24,000 in the bath. The following is

A sketch of bath proposed



Charge the inside of the body with — Elec. from a static machine by passing a conductor through a rubber tube into rectum in men and vagina in women. Make water + Elec. Perhaps render head — by Electric cap. Rubber tube must be very thick to make inhalation perfect.

Emanation Bottle.



As water is drawn out, the air rushes in the bag and so no emanation is lost.

Have patients take the emanation while sitting on the static platform and charged with negative electricity.

Apparatus ~~Bottle~~ for transferring from one bottle to another.

By working bulb the air is passed through the water until No 2 contains the relative amount of gas according to its size.

Dr. Hess Nov. 28.

Radium Institute
Boeigenhausgasse. Wien.

Radium decomposes. thus.

$$Ra = RaEm + He$$
$$226 \quad 222 \quad 4$$
$$RaEm = RaA + He$$
$$222 \quad 218 \quad 4$$
$$RaA = RaB + He$$
$$218 \quad 214 \quad 4$$
$$RaB = RaC + He$$
$$214 \quad 210 \quad 4$$

Bath at Vienna.
Kurhaus

Moorbad - "price" 9 Kronen
Finding me to be a physician
would accept no pay.
Tub full of water 30 R (99½F)
Man rolled in big wooden
tub full of black mud.
very thick, rather lumpy.
Said mud contained Radium
sulphur & iron, also sprudel
water.
Start in bath 30 min, taken out
by nursing off one hand, then
gradually emerging as
pulled out by attendant.
Put in water bath to finish.
Not much attention to cooling. Little
drying, none unless requested.
2 baths given a day in winter, 6 or 8
in summer.
Sprudel bath 25°, 29° R.

Massage at Carlsbad

Masseur Georg Zuber, Roseggerstrasse, "Konradshof," II St. 33.

Much working with thumb and finger tips, clapping, vibration, swinging, very firm pressure in friction, and at end a peculiar beating of the skin of the arm by using fingers as a flail striking side of arm and holding fingers loose, executed very rapidly using first right hand while holding arm with left. Then holding arm with right and "thrumming" with the other. Masseur trained at Kallenteutgeben by Lorenzmity

Class 2-3 times, 17-20 passages, 1 day hour "Massage"

Mellon
to
J. Ralston
J. Barkell
Burden
Mr & Mrs. Fyf
Ripley
Henrt. Evans
St. W. B. Holden
Mrs Hamel
Mrs. Whitney
Moses Paulsen

Dr. B. Stevens
Alameda
Calif.

Orr Harold.

Dr. Sewall
Healdsburg
Cal

Mrs. Lynch
c/o Enterprise
Fitch St
Healdsburg

Merritt's Grand
daughter
Mrs. E. K. Frage
Corcoran
Calif.

Mrs. Nolan
mother in-law

Write about
blankets for U.G.

Send Muriel
Body in Health

Harold Kellogg
Hygiene of Infancy ?
Health ? Mont
Santa Rosa
217 18th St

Send H. J. Box to
Merritt

$50 a month to
Merritt

Merritt's Grand
daughter
Mrs. E. K. Fragg
Corcutt
Calif.

Mrs. Nolan
mother in-law
Write about
blankets for U.G.

Send Muriel
Body in Health

Harold Kellogg
Hygiene of Infancy
Health 9. 1904
Santa Rosa
217 18th St

Send H. 9. Box
Merritt

$50 a month to
Merritt

Ideals

The real things.
others perish.
all great leaders are
heliotrope
10 Cor. – Summarians
May be long buried
but do not decay
They are eternal. They
come from the source
of all truth

guides
ideals are guiding stars
Emerson

Cross roads

Passport

What is truth
Beholding change

Protector – against enemies
Man fights for truth fights
nobly – bravely, honestly
against self – Inhibition
Anotions – escape

Refines
Beholding – Changes
Pursues you
Personal Experience

19 – hard jobs
10 – self Reliance
12 – Service
14 – Nature is verse
16 – Bible in school
20 – Normal School
31 – Med Doc Battle
Smith
Phelps Sanitorium

Dr. Kellogg
well water
well sunshine & time

1899 Palestine
1902 Fire -
Voice behind
Chicago - Water
Porto Rico
Miami

always listen
a swirl of emotions
a tidal wave of ambition

What is Truth?

Service - He can't hear
her my brother

Fell Dr Martin
at Mr George's
14 yrs ago

3506
AA
Kellogg, John
Harvey

Nash, Nolan
Bible?
Collgrave
asphaltum pit
agar agar
Blood Arrows.
White memorial
Phone
Wire Sight Went.
C. Mallock Pasadena
Will Hartensen
P.S.K. 614 N. Louise St.
Glendale 669-R

White memorial
140 G

Story of arrow which killed another for Dan'l Boone

first episode

Blood Pressure Observations made at Mechounech Babyles ~~two~~ Oasis, first one in the mountain region.

Bou Kakara Mohammed
age 22 farmer
Pulse 72
Pressure 145

Mettaoud Ben Haq
age 60 Camel driver
Pulse 72
Pressure 135

Laarbe Ben Califha
age 30
Pulse Réfé

Mohammed Ben Ibid
age 20 Shepherd
Pulse 90
Pressure 135-125

Mohammed Ben Khlil
age 22
Pulse 72 Chronic

Selima Ben Soulé
age 52 Chili
Pulse 80 Plenty
Pressure 125 no coffee no tobac

Amar Ben Hamdi
age 45 no coffee
Pulse 90 no tobac
Pressure 150 plenty chili

Ben Amar
age 13 no C or T
Pulse 96 plenty chili
Pressure 110

Ali Ben M'Barak

Age 28 Not well No Coff
Pulse 100 No Tobac
Pressure 120 No Chile

Belgasum Ben M'Bond

Age 60 No coffee
Pulse 80 No Tobac
Pressure 125 Not much Chili

Diet bread + dates

Often not more than 5 or 6 times a month & very little. Plenty of milk when time for it. March to October. Potatoes, milk & couscous or bread & tea.

does not care much for dates.

Ab

Abdurrahman Cheri
age 55 Ben Ali
Pulse 80
Pressure 195 + Child
Mohammed Ben Bedgassena
age 17
Pulse 90
Pressure 105
No coffee
No Tobacco
No Alcohol
Bread, potatoes, beans
kuskussu, meat
sardines. Does not
care for dates
Plenty apricots

Kabyle Boy
age 13 No father
two garments only
never shoes, stockings
Likes best
bread with honey + butter
oranges, dates very
Potatoes - not much
Turnips - not at all
Spinach - never
Camels milk very much
but goats or sheep's
better.
No meals. Eats sometimes
at noon or when other kind it.
often not till night.
Never only 2 times.
Works 11-15 a.m. to 4
36-40 sheep + goats
cannot do 50 or 100

Has taken Mineral Water

How old when began to work
at 8 years.
Never rode a horse
afraid to ride camel.
Can ride donkey O.K.

Sleeps outside mosque
very cold, when too
cold can't sleep. for
5 years since father
died. left him with step
mother who left him.
Never more than 2 days.
Often no food for a day.
Sit down in a corner of
mosque. don't feel very
bad.

Gave him some very
hard dry bread

Proof 13
St Paul
P. M.
Polio-myelitis
Dr. Richardson
Inj. Serum of
urine, nose, &
intestines
Otis Fab. has
shown that 5-1800
flies will not
transmit disease
Rosecrans used 300
flies. Believes usual
screens urgent
important flies
must be kept important

Has investigated bedbugs & lice! with no result.
Had 500 cases in Ohio last year.
Out as well as in fly season.
Has no absolute evidence stable fly is an infectant cause of poliomyelitis

Rhode Island
Had very few cases. Not much

Utah 15-20 cases although many cases in Utah.

Richmond Hunt mentioned infection of animal life
Shut up in case with sick monkey, doubtless from dust

Nebraska Hunt had something with rats.
Noted medullary case - 13 months

after infection.

Richardson said this delayed infection accounts for the longer stages.

Sanitary Regulation of Industrial Camps.

Law should
1. require notice of establishment of such camps,
2. Enable S. Bd. H. to make rules and
3. Provide for the legal publication of rules.

Medical School Supervision

Dr. Hurty read a valuable paper on Medical inspection of schools.
Penn. lays 1/5 children were infected
Chairman suggested that title should be changed to Physical supervision so as to avoid less alarm
"Romance of Medical Frauds"

Venereal Disease

State 7 - - -
has just passed a law making it a felony to rent property for prostitution.
misdemeanor to solicit or rent a room or hotel for such purpose.

work
on Kelley's old
state Oregon
but ~~pay~~ no pay
roll & executive
office & secretary
~~[illegible]~~ & treasurer
serve, distrib.
lit. literature
gave hundreds of
lectures.
Last legislature
appropriated $10,000
for use of this
society. Organ-
izing in small
towns with local
committees. 15,000
Small town in
Wash. under
call from gov.
printed 4 or 5
pamphlets &
distributed to every
household, & now exceptionally
clean healthy
city. The state
society is responsible

Vt. law last leg. Report of venereal cases, culminated in institutions

name
age
sex
date & place of infection.

Private practice cases reported by number of blank

distributed, mus coming in.

Mass. has matter under consideration

California has no law, but a private society operating by way of education

Ill. thinks no use to report by no. same person may be reported repeatedly.

Rhode Island
unpublished
circulars
much opposition
from the Catholic
Church. almost
broke up board
by opposition

Dr. Somers of
Des Moines Iowa
see State B. Health
invite to come
to Mich. as guest
Send literature

Mayo Clinic
June 14.

Kidney - J.B.

Muscular incision
Began 12 rib down
down thru back
to 1 under lower
borders.

Inject 15 cc. pus
available into J.B.
ureter & kidney.

Tie both ends
of ureter to prevent
infection

Fill cavity with
normal salt sol.

When accidental
infection occurs

Finney

Adhesions about the
upper ileum

Avoiding incision
below the umbilicus
Sections of rectus
mark 11 & 12" ribs
when stomach
was long.

Gastro.

Packed stomach up with forceps.

Line of union 2½ ing
First suture line
13 stitches.

1 case applied the second suture after cutting through muscle but not the mucous coat closed mucous

coat after cutting with plain catgut

another case cut into lumen at once and close with one line inner suture.

Appendectomy

Did not cauterize nor apply carbolic.

Closed wound
with interrupted
catgut sutures.
about 3/4 inch apart
depth of vesicical
wall enclosed.

"Fat Necrosis
(look up)
old abscess of pancreas
discharged into stomach(?)
Many adhesions.
Thought fat
phlegmonous fat
necrosis. Put in
the dog drains of
folded gutta percha
tissue.

Biliary fistula

" always due to
1 of two things:
"(a) abscess or
(b) gall stone or foreign
" body.
Abscess heals up
then breaks out
again.
"When fistula foreign
body, probably gall-
stone. Found neither
Old subphrenic abscess
packed with gauze

Closes with horsehair

Pruritis Ani.
Injects normal saline
50cc

Unrelated FO
Injects 100cc near the
nerve. 9

Mayo uses black
linen not cel-
luloid.
Can be boiled
only once.

Closes pylorus
with twine just
tight enough
to close not
enough to cut.
German surgeon
claims to have
seen this method
successful for
ninety years after.
Ordinary packing
twine.

Will Wraps

In case of high ulcer, folds in the ulcer and does Finney.

Think Finney will be done more in future.

X-ray is of great value (most important in cases of ulcer high up) shows deformity + defects of function

---

Thinks well of Dr. Case. Likes his conservative attitude.

Told story of Lugen

Made decompressing operation in H Hunter, brain & blood spattering.

Next case had had operation, been comatose for 2 days. Opened up & found big clots, turned them out & secured control

"It would have made me sick almost did as it was

"I never do anything I would not like to have done to me under the circumstances."

Does not draw an old T.B. guy more fills up.

In cases of high ulcer, the pylorus must be tied and do a gastro carefully. Adhesions may form a ring and close the gastro opening. Did this in 2 cases for may cut off and did a tummy.

Born Wednesday
afternoon
woman 25 attack
when 7 yrs old was
well nigh paralyzed
down left leg probably
affected, advised to effect
frons.
Sound it. Pain in left
side a mere tender line,
one area affected probably
element in history.
Relief also could
breath & circ of passenger
train gather. Tire upon
big alone affected
big mean affected

Applies fresh stump
ligature thus:

After tying ends
pulls stump down
by removing over all
raw surfaces of the
amputated stump.

In closing peritoneum
knotted ties so as
to turn raw edges out.

Ligates about appendix
with linen thread
Closes rest of wound
with catgut, about
no. 3. Doubles it
in closing tendons
In closing skin
a row of coarse
deep sutures then
row of superficial
fine ones.

made incision
a little lower

2d case: Appendix
Pain left side
found appendix
sick in pelvis

3d case
R. kidney gall bladder
- Pylorus through
incision. Rules pylorus
made incision a
little larger than
usual. R

Avoid long incisions
outside epigastric
line. They cut
nerves & lead to
atrophy & incurable
hernia

Handling appendix
thin. with bulb at
end. Obliterating form
of disease, painful,
no adhesions.
10 min.

Charles Richardson
operates through Preston
1½ in incision for
appendix. Pulls
appendix out like
a fish line.

Chas Mayo

Hernia (Inguinal)

Splits tendons on line with inner border of ex ring.

Does not open

Pulls up sac near internal ring.

Splits sac & turns out with finger.

Twists sac & transfix + tie.

Sew edge of tendon to Poupart's / edge of muscle under neath.

This leaves an inch of interpart. of tendon & ex oblique

This is called "inversion"

~~The closure~~

Puts in deep

Returns through

Internal fascia, overlapping tendon this against 3 weeks to heal well.

Uses interrupted sutures.

Loops not dissect out end.

Human cremaster is attached to testes only 1/3 distance in women 2/3. Not in

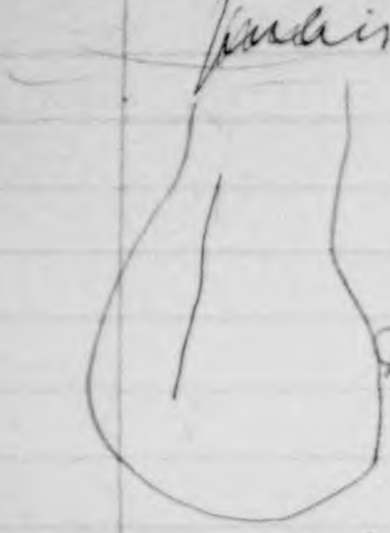
Operation cremaster is detached up to testes as in women.

This manner of dissecting the cords terrible painful adhesions from pus.

If much adhesing of parts anon, cut it off & let it go.

Ewen

Hydrocele in man,



measures 4 in long

Opened sac. Found clear fluid. This clearly means hydrocele of cord. Hydrocele might cure. But best way is to dissect it out.

Case Mayo

Appendicitis
Very sick. Had previous attacks.

Found end of appendix in a small pelvic sac. Wrapped all again in gauze & packed gauze in wound. Put in "slab" drain.

Chas Mayo
Hydrocele
Given me same case as before

Opens, found yellow fluid, true hydrocele of

Turns testicle out, found also hydrocele of cord

Opens the outer and feels on the sac.

Lenzen - Ryder
Massini

For the true hydrocele

Pull testicle out and attach ring of raw edge to top of cord. Varied alcohol injection with ~~coagulating~~ avoid epididymis & cord in does varicocele anyway

Half the size of varicocele is in head

Causes floating & infection

Uses clean sterilized instrument.

Used zinc & calyx for first two of sutures in hernia.

Does varicocele in same way, only applies tie around & puts them inside & ligates half the veins. (mc)

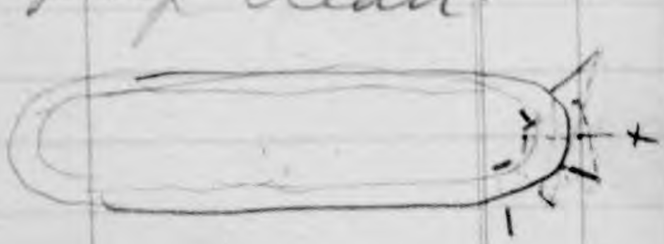
May be hydrocele
following varicocele
occurs in about
1 in 8000
Surgeon by trade,
having one vein

von Mayo.
Man had gastro-
enterostomy by
"Anterior bottom"
done by Mayo,
well for 11 yrs
now vomiting blood,
not much food.
May have jejunal
ulcer. Something
gone wrong.
Began 10/23
Incision 5 in. just
inside old scar.

Found opening in btw stom + intest.
Found ulcer just below pylorus in duodenum + another an inch + 1/2 lower almost

Closed stomach
Sent between
tied with circular
ligature makes last
attachment.

Trimmed off
edges of mucous
membrane
Did not include
mucous membrane
in inner row of sutures
Used chromicized
Catgut for inner
row
Linen for outer
rows.
Leaves end of first
suture ready to
finish last row.
Wraps up in gauze
& put clean.



Chas Mayo.

Breast

Cleaned out axilla, cut away all of both pectoral muscles down to ribs

Picked out the fat with forceps, rather nasty & bloody.

Better my method better.

[illegible] I think I might have been better to slice it thin along the center & bring up edges over the ridge.]

Sewed nostrils together to make a bridge. Will use paraffine when the child is older

Turned perineum over from above down so as to form a bigger made more elevation.

Chas Mayo.

Breast

Cleaned out axilla, cut away all of both pectoral muscles down to ribs

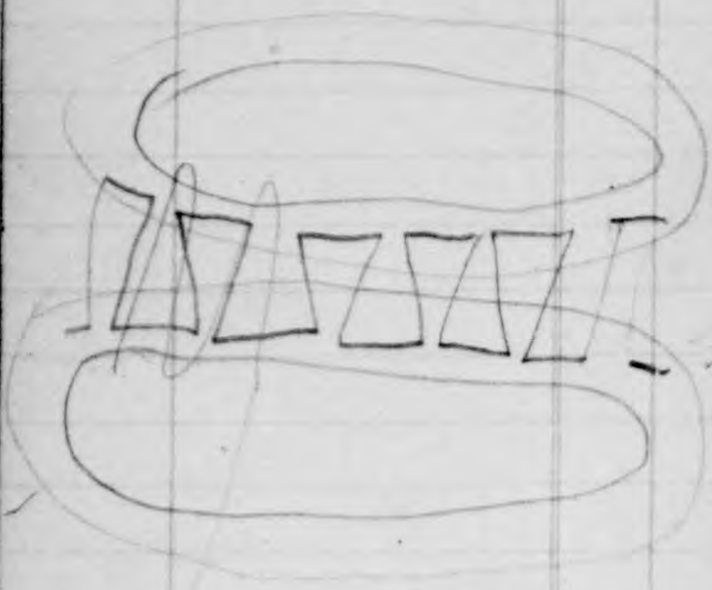
Picked [illegible]

[illegible] said not do it!

dissected up a flap & closed up. (Might have been better to skin it down along the center & bring up edges over the ridge.)

Sewed nostrils together to make a bridge. Will use paraffin when the child is older

Turned periosteum over tympanum so as to form bed made more [illegible]



hemmstitch stitch
unravelled edge
goes through muscle
membrane muscle

peritoneum + all
this goes on under
side
on upper side uses
running mattress
stitch, turning under
edge of peritoneum

Bern Mayo

Hemorrhoids

3 groups.
2 taken at first

Avoids cutting
. vessels by hot
iron. Burns off
by black heat so
as to cook
& should have
no bleeding.

Protects tissue
with asbestos
slabs base through

Skin to prevent
swelling by
oedema
. Uses no packing

Club foot
equino-varus
made wedge shape
flat looking
loose tied toe
when over 12-14
cuts out wedge
bone on back
foot in equinus
of chloroform
cuts of everything

in foot & cuts
fill with
blood clot
ulcer esmarch
& control bleeding
ties no vessels
puts on plaster
cast. Changes
in 3 weeks
puts on crutches

for 12 minutes
If alive before
will elapse.

June 4
Upside & Round of wood
with Mr Mayo.
Boy with gunshot wound
several big holes, feces
in abdomen 2 hrs.
after injury.

Talked about Kelly,
sent for afterpuncture
"Kelly's pads" by a
Prague surgeon.

Think Young's statis-
tics incorrect, as
he has found 10 % of
his prostates malig-
nant.

Told me of his early struggles. Had hard time with A.P.A. & a Doral hospital Riverside.

Met his mother. Sensible looking woman. Proud of her son. Said she believed her husband was best surgeon in that part before her sons had made such a success. He would do things others dared not touch.

Took dinner on Sunday. Rodman & Phil'd. Med. Chi & son present. Talked about early times.

Took supper Sunday evening. Went in library & played on Harmonium.

Thinks Koch greatest surgeon in Europe.

Wednesday June 4
Wm Mayo:
5 lb ovarian
tumor.

Chas Mayo.
Hernia.
Avoid never use
alcohol near
parports. This
saves pain.
Put gauze
underneath

Kidney. This
suppliers blood.

Wm Mayo
Cholecystitis
without stone.
appendectomy.
stones in appendix
no inflammation
Gall bladder was
granular, brownish
specks, excessy
stringy mucus at
last. sediment of
brown specks. Bladder
large, not thickened
mucous membrane
thickened. Might
remove bladder.
but drained

Put in rubber tube
wrapped with
tissue. Gaitens
edge of gall bladder
about tube by
puckering stay
attaches to peri-
toneum & fills
tube with gauze
found appendix full
of stones. May give
rise to the stomach
spasms or any other
reflexes. More likely
caused trouble than
gallbladder

Will May 9
Dr Aymont
Gallstones
Sharp, sudden attacks
of pain
at first attack
had rigidity, tenderness,
soreness right side,
distended gallbladder
"Cannot feel yet, but
am sure I will
find stones
Pocar showed
dark mucus, about
6 ounces
after draining, "Chase
the stone out", get rid
it right quick

Pathologist a handful
of stones size of
peas
Gall bladder very
inflamed. Pathology fe
[illegible] of Gall
[illegible] falls of [illegible]
Gall ducts [illegible]
Enlarging [illegible]
[illegible]

[illegible]
[illegible]
[illegible] gall duct
[illegible] and
cleaned out [illegible]

Rochester Minn
Mayo
Gastric Ulcer.
decided to remove
gallbladder. Will
leave the slit
duct a little open
so bile can
drain out
dissected out
with knife, ~~[illegible]~~
~~out~~ beginning at
bottom, dissected
off liver, turning
left arm ~~[illegible]~~
left border of fai-
[illegible] on each
side of gall bladder
Had trouble

in ligating atery
Left side left and
used in closing up
~~[illegible]~~ raw surface
or under surface of
liver, thus pulling
all up together!
Used gall bladder
as handle "makes a
good tuck handle"
Left gall bladder
partly attached until
done with deep
work to pull liver
up north.
Put in two narrow
strips of plain gauze

& two cigarette
drains, two a piece
of gutta percha
tissue to protect
gauze from contact
with intestines,
thus avoiding
adhesions. Tied
all the drains
together.
If patient does
not do well
will pull
drains out & open
up duct flow of
bile. Does not
hesitate "to pull
good & plenty"

thought of draining
at Newington
bread & formed.

This is just the sort
of case in which you
don't like to remove
gallbladder on account
of so much inflammation
but he has no temp.
just now, & the
contents of gallbladder
must be filthy
we can sterilize no
wonder it is.
To leave the stone

would have involved
another operation,
which I am adverse
but the added risk
is not more than
that of the two opera-
tions combined.
The gallbladder looked
bad to remove. Time
to make trouble.

Packed in some
iodoform gauze
around drains,
Leave drains
undisturbed for
at least a week.

Harrington Sol

Chas Mayo.

Suppurating Glands
Scrubs out with
equal parts
M. iodine & acid
carbolic. also
suppurating sinuses
heats a knife &
then operates.

Chas Mayo
Operations for
tuberculous glands.
Incision, 1/2 in.
behind jugular
down upon to clavicle
then turns forward.
dissects out entire
membrane.

Dictated to here

Wash & gown

bld

Stomach trouble
last six months
lost 30 lbs.
Can find no tumor
but there is probably
carcinoma.
Will therefore
do hysterectomy
Sure fee $100.

Incision in median
line, to get more
room in case
of hysterectomy
being an old man

less [illegible]
blade, then divided
pectoral muscles
in line of fibres leaving
upper third to cut
vessels. Cuts off
pectoral from
normal side. Ligaments
then cuts out
pectoral.
Dissects freely
with gauze wad.
Cuts out the
breast by elliptical
incision. Leaves
very little fat
on under side of skin

Dictated to me
Wm. [illegible] June 9.
bld

Stomach trouble
last six months
lost 30 lbs.
Can feel no tumor
but thinks it probably
carcinoma.
will explore, may
do hyperectomy
June 9th 1911.

Incision in median
line, to get more
room in case
of hyperectomy.
Drains an old bruise

Turned back skin
flap, then divided
pectoral muscles
in line of fibres leaving
upper third to cover
vessels. Cuts off
pectoral from
sternal attachment
Incisions out
pectoral.
Dissects freely
with gauze wad.
Cuts out the
breast by elliptical
incision. Leaves
very little fat
on under side of skin

Discussion of
Case of Exploration

1/4 - 1/3 of stomach of
Stomach in Pan-
ch.
Has removed stomach in 7 ulcers
which he thinks
were cancer until
he examined them
all got well.
Has cases of ulcers
turning to cancer
beginning in edge.
Has cured such
ulcers, one 6 years

becoming cancer.
Must take these
cases early

Dr Mayo

Nephrectomy
almost
No urine
one night
Kidney
Plenty clear urine
one left.

Incision in mid
making up to meet
spine at 12 rib.
point of resection
erector spinae
Pushed aside
Right Nephrectomy
large, modular
be a little careful

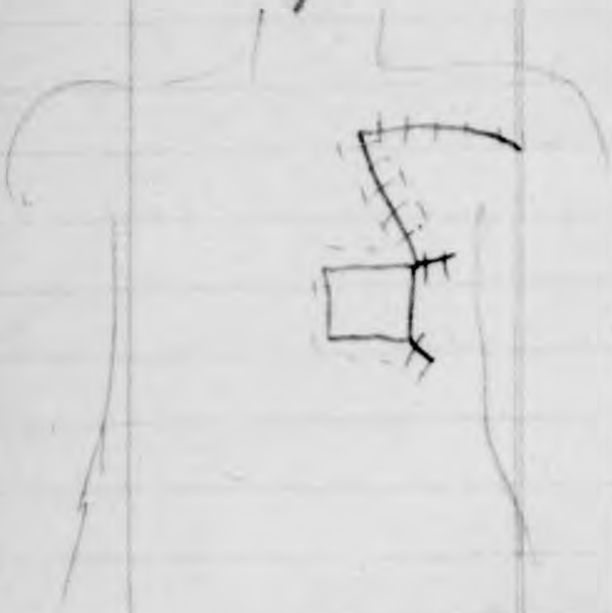
in pulling up
right Kidney
to avoid vena cava.
found stone in kidney
7, 13, begins in
upper pole of kidney
as in hand.
Butterfield cut
Kidney badly
discard, as not
so conservative
Kidney as a rule
ago likely to have
secondary fix to
remove anyway
Later.
Secondary of 20K
is pretty defined
not so adherence

On January Cancer
from page

Axillae removed
fat ~~under~~ of inatter
Pulled skin up over
clavicle and ex
amined supraclavicu
lar glands. Found
them O.K.
~~Nothing~~
Cut off skin
over left arm
below cancer
In closing pulled
up the skin

angle of median
flap, into the
axilla near the inner end of
clavicle.
Swelled arm
necessarily follows
the removal of
glands. It is really a
sort of elephantiasis
or rather lymphedema.
Swelled arm does
not mean return of
disease. At first
thought it did. An
operator got the
best results by curing
the patient. Mass
is good. Mass

all the schools have been driven by the osteopaths to give attention to massage.



made small bloodless incision, only half through the skin, to relieve tension.

Time 50 min

Mayo remarked he had seen Halsted take 4½ hrs for same op. He does it often in 2½ min.

Had to go without his dinner "Came muddy lore of dinner clothes [illegible] right up."

Tray for Specimens

Tray just deep enough to receive slide frames each holds 20 10 in row.

New fine adjustment of Zeiss

Fine large stand costs $125.00

New style just out this year. aromatic condenser.

Farrington. Dol.

Michlinde	32
Kiel	2400
Agnac distil	1200
Alcohol	2460

Kills germs, in 30 sec. & does not coagulate albumen

June 4

Visit to Westfield with Wm. Mayo

For prolapse, shortening lesser curv. of stom to suspensory ligament of liver with linen sutures.

Story of baby, intussusception gangrene of cecum & ileum

Received 4 P.M.
Operated 6 P.M.
Sent home as case 8 P.M.
Left well.

Removed half of colon & one foot of ileum, made anastomosis by Murphy button

?

Ask what about
ulcers in fundus
of stomach?
~~Dno~~ many gallstones,

June 7.
Wm Mayo assisted
Appendectomy
used stab drain
for great pain
to include superficial
fascia ~~with~~ in
returning bender
this prevents the
fascia from
separating & the
making a hood
rear.

Appendectomy

pt attack cow's ago
not yet seen.
Cut inside in 30 secs.
Uses Kocher's dry dissector
in getting through the
muscles.
a long wide strap
retractor
~~Turned up~~
Found pus. Opening into
cecum. Closed up hole
in bowel turned. Pus
~~discs~~ broke up adhesions
with fingers & Kocher
dissector

Put in three cigarette
drains, brought up
straight through the
lower angle of wound
"will not risk a
side cut."
no fecal odor
because no reflux.
Nature makes a
valve when the
water an opening
Inberculai sinus
opening itself, no
mixed infection
no temp. & one
open with a knife
time to be infected
Nature does things
better than we can.

Some Appendix Cases
as serious as any
thing we have to do.
Had patient under
care in town waiting
for him to get better,
but he would not
get better. Some
time would rather
have waited until
condition had became
chronic.
Closed up wound
with silk worm, because
whole wound is infected
& total deep sutures.

Prefers to operate
in external
legal responsibility
in such a case
as this.

Tubercular glands of neck right side

Cuts just front of ham ~~[illegible]~~ line & runs along border of trapezius. Dissects out the gland bearing membrane. Avoids nerves works largely with blunt dissector)

Works right down to subclavian. Work out gland at junction of jugular & subclavian.
Begins low down. Avoids phrenic nerve. Superficial coli & half inch higher spinal accessory — post. branch.
Cuts of some small nerves.
Dissects very carefully, catching veins before cutting. Thus avoiding dissection dry.
Be careful not to

get part of spinal accessory which passes through trapezius muscle. May develop lateral curvature.
Dissected nerve out with very great care, lifted up & worked under it. Kept ends attached.
If the lymphatic glands run down into armpit it is usually in the outside group.

Anterior glands, below were crossed facial & superior thyroid veins.

Skull cap & Chin Cap.

Square piece muslin. Fold middle back one corner over forehead, tie other two ends behind & standing back over middle.

Make chin cap by twisting ends of piece of gauze & tying behind over top of skull cap.

Chin cap under

Old Dr. Mayo.
80 years.
Smooth face, bald, not much wrinkled looks about 70 yrs.

Remarks by Mayo.

"Glad I met you, I have been hearing of you for many years. I'm glad I have this chance to see that you are no larger than I am."

(Same height, but broader shoulders)

"We have quite a workhand. Never had a medical case. Paid its way first year.
Girls have helped use. Never any discontent between us at all.
"My sons are doing well. Brought up right. The Bible saying is best true wisdom in older hands.
"Bringing up a child is

I took care to keep my boys in good company.
When they got out of school I sent them to Dreamwe themselves among other men.
I said "mix with bigger men. All gets thinking head if he dont."
Bringing up a boy or girl right takes the it when he will always go right. Never will go wrong.

I've always had my own idea & have stuck to it. Always right too. If you find you have made a mistake, crawl out of it backwards fast as you can and don't let anybody know. Makes a bad impression.
Have an idea & you will stick to it. I have no fear never did have.

One must have courage to do things.
I'd like see Mattie Cook and learn what you think of eat simply. If one eats & drinks a lot he will die of bad kidney. Heart not. My breakfast is your grapefruit & cornmeal mush. Eat my meal

worship in the
form of worship.
One of my daughters
married a Methodist,
a good for nothing
drunkard to boot.
She was pregnant, she
died bad, I did not be
dead when my mind
home. She was, she
left 5 children, 3 boys
2 girls. They are
unfortunate not
married. My boys
work as mechanics
when they
were conscious.
We keep it now
in mind important
Bible parable in
Canada. It's a
pleasant thing
to think of.
I have worked with
these Catholics
with no trouble
many years. I will
think good well
of the whole Catholic
community. I don't
know anything about
the mysteries.
Know nothing of them
myself and I will

not let anybody take possession of my brain & think for me I do my own thinking. The Spaniards have decayed because their best brains went into the Church & stopped thinking. I always told my sons do your own thinking I have a little Spanish blood. There was good blood in Spain Cervantes was the greatest of all writers. Never will he be a greater.

But you must go into the Clinic. I hope to see you at Rochester sometime.

Mayo Senior has done no surgery for 10 years.

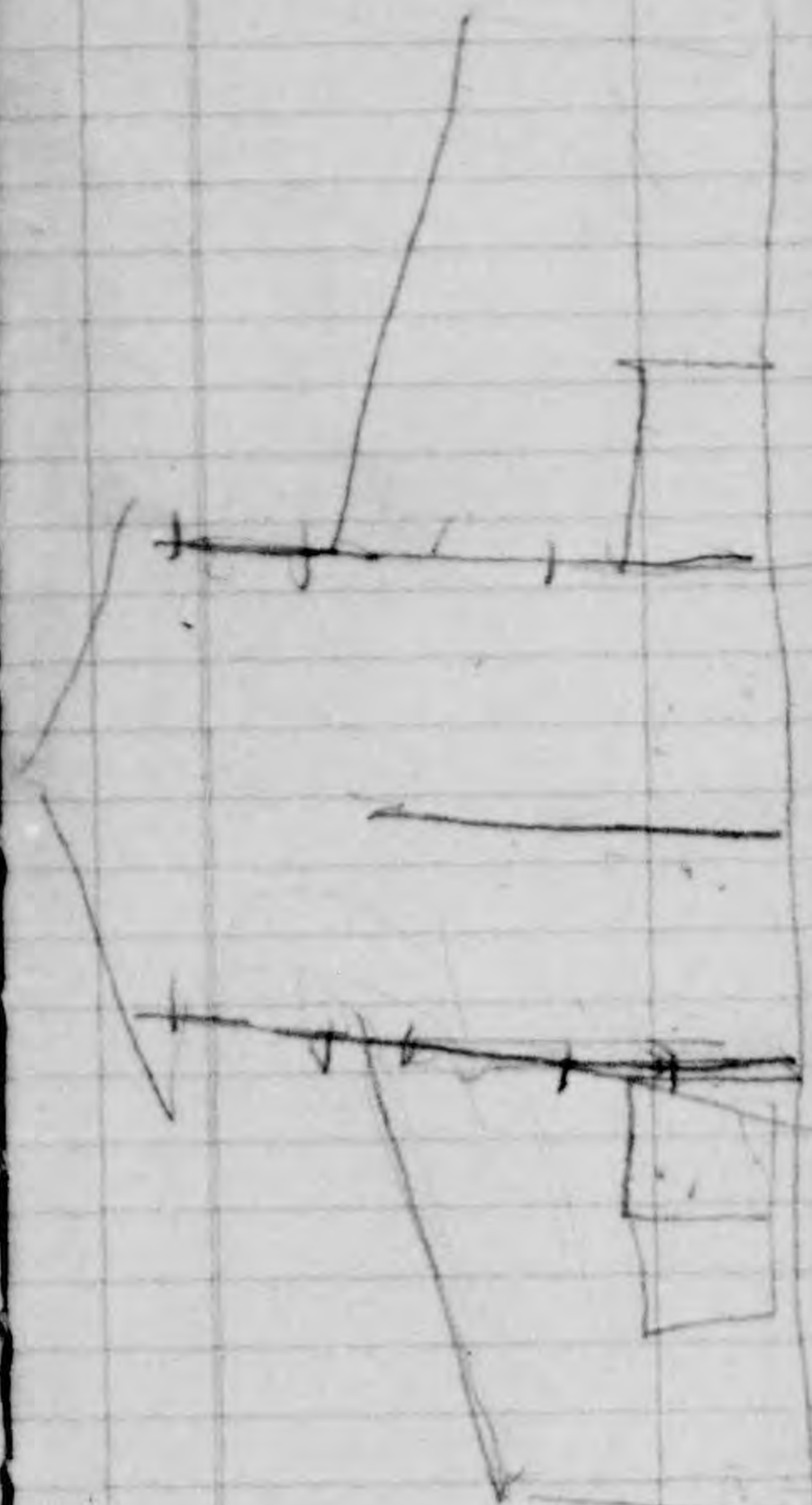
Danish Pu
Helsing Co.
John Carpenter,
Peacedale
R. I.
James B. Rawnsley
Hayward Bld
Rochester
N. Y.

Nelson
Cryptography.

Wills
Williams Surgical
Instruments
Corner Howard
& Saratoga
Baltimore

Dr Young.
Centrifugal
Unit
or Weldon
Potter & Hopkins

Blood Pressure
in Wound
Operation



Charlemagne
offender
Richard
Leinster
Nevilla found
Phils up stump
leaves hole
blunt discov.

1st year

Histology	30	60	90
Embryology	30	60	90
Osteology			

Eng Ward
Nelson

Vinegar inhalation
Lemonade, narcotics
opiates
1/2 oz. presents
bladder, 1/2 longer
Left leg cases
sit up 1/2 + walk
3d day.
Have all patients
drink 3 pints of
water daily at
wk before operation
& 3 1/2 pints within
2 hrs. before op.
weak lemonade
wash out stomach after
operation

Etiquette meetings
begin also
meet [illegible]
[illegible] soda
fritters with
mackinaloste

Write to
Mrs. Naper about
Mrs. Byrd
also Hollet
Send to Temp.
Russell
McCauley

June 3, 8
USN Hays.
Removal of
Gallbladder,

Empty cyst
liver
Protect peri-
toneum with
Fleet slips &
Jackson
Removes gall
bladder
fundulum

3

Patient dont
do well,
Open up &
bad bile duct

Bilirubin
leave in
8-16 days
100 cholecystit
2.27 %
variable
300 cholecystect
7.56

(2)

Cigarette daily
Jaundice abdomen
leave drains
attached 5
amount of opera
diet
cut feed veins
of possible
causes of
Hernia
Patient keep
Patients up
weak and pain
Stomach bare
same as urine
for of bladder

6

Chas Mayo

Op for gallstones
Sure gall bladder
Healthy
Appendix like
intestine, = colo-
cystitis, medyor
not be stones.

Ligating large
vessels - sure to
bleed from the
line of ligature

Removed appendix
looked normal but
had concretions.

ligates a vessel
the appendicular
artery

5

In 1000 cases,
only 16 recovered
one died.

Removes gall
bladder and
drains when needed

No routine

Wm Mayo

Gall bladder

Hunt, large amount
cystic
cholecystitis
adhesions.

Lengthened gall-bladder

may digestion
also
must
attend
cruds
no
carbonic

pulse second row
of pulses over
plump after
warning in

appendix is always
3½ inch from
ileum.

Rafting on
Leathem rapids
breaking up
rafts.
Lots of steel,
Capitain.
Rapide
Man up hand,
nothing
anyway,
do nice good,

Allcock's fire
Against inside
to edge of Pump
in well of boiler
drawn up against
cigarette drain
& wraps in
tissue.
Will be no additions
because rubber
tissue lies between
gauze & fitting
Iodoform makes
adhesions
ordinary cut in
a week
Patient up in 12 days
leves hospital in 14 d

Chicago Eng
malig carcinoma
Removed appendix
Anyson
Chief up hands
after putting in
sleeves - by
means of long
band gauze
around wrists
over head &
under (also
shell over
legs)

Chas Mayo,
Single injury makes
sarcoma
Continuous irritation
carcinoma, the
primary cell
causes of sarcoma
which recur
are those which
suppurate.
Leave wound
open
Mayo's reports
in 6 cases, is
cancer's with
dressing, worse
infection, better
result

Enterostomy will
not do so much
as is thought
Megan 16:16
5 in incision
gall bladder healthy
Colon healthy.
Pylorus contracted
to size of lead
pencil

Case of Pneumococ
meningitis will
work where there is
make. 500 yards
enterostomies.
new opening
does not stom
unless pylorus
is closed.
stomach not a
bag.
obstruction
may be spasm
but fluids
of cicatrix

16

Put on clamps
~~OA~~ 11:16
Opened through
incisions, thru
through mesoveden
close to stomach
pulled through
bloodless part of
stomach, ligated
pieces in artery
all seen
inverted

Fig 1

Fig 2

Fever

Eight days an
end to end but
gesting exceptions
Defer next

Diet –

Nothing water every hour, 1 2 hrs.

2 oz every hour

Qgs 12 noon

2d day thin water gruel. So continue for a week.

Then soft toast & eggs

Closes incision & muscular coats then peritoneal lymphatics & edges in by submucosal wedge. Two sutures fuzzle on each side

H.O.

Wound closed at 11:30

Finished by lembert suture over the main seam

Closing at 11:40

20
Non Vaccination

Call nurse st.
middle case.

Perineal wound
with napkins.
Let urine & ~~[illegible]~~ be
passed into
catheter & bladder
with finger
dress

from map
Procedure.
Hypnotizing
Cats & hold
legs down
as possible
Show them
cognitive attacks
bladder, pricks
everything
together with
yattering
nerve

Put in a cigarette
drain.
Puts a purse string
ligature around the
opening, half an
inch below opening
turn edges in
& apply two rows
nine of sutures

2 more small Chairs

If you are tired
Nurses Sanitas Chair.

3 more small Chairs

4 Pair are hired
Nurses Sanitas Chairs

Book photo-
ntini

Mr Rolin
5505 Bartmer Ave

Pike or Administration
Building
Page Ave Car going
North + East
get off at Bell Ave.
+ go South to Bartmer
2d h. on N. side

20000

200 6.

24

2

~~$50~~

~~$500.~~

260

50 1300

2600

2000.

~~$2200~~

100

200

300

1000.

2160

500

1660

1080

3

3240.

500

2740.

2740 6.

1080

506

$5801

9.

9/9 10

5/5

3/5

Cereal
Apple juice
Corn flakes
Chocolates
Raisin
Soups

Tuberculosis

Ca

Su for

fu ortal

stasis.

1. Polycythemia Vera
2. Empty portal veins.

Breathing, Sp.
Pleurisy, or empty
Compression of lob. veins
Ex. Salin
Bleeding Compression to legs
Starving.
Water drinking

disadvantages of
Indigest (really starving)
Ethaverx of liver & kidney

Dr. Babcock uses
saline cathartics
very small doses of
morphia especially
in cases insufficiency
1/4 gr with 1/100 of atropia.
used for 6 weeks &
witness with no
difficulty.
Gives saline cathartic
every morning.

Cardiac

Substitutes for purging in portal stasis.

1. Relieve venous congestion
2. Empty pestal veins.

Breathing, Ex.
Resistance movements
Compression of abdomen
Sandalum
Heating compresses to legs
Starving.
Water drinking

Disadvantages of
Indigest (really purging)
Exhaustion of liver & kidneys

Dr Babcock uses
saline cathartics
very small doses of
morphia especially
in cases insufficient
1/4 gr with 1/100 of atropia.
Used for 6 weeks &
withdrawn with no
difficulty.
Given saline cathartic
every morning.

Tuberculosis

Taking temp.
9 a.m.
12 m
3 P.M.
6 P.M.
9 M.M.
Take temp. before and after Exercise
~~Also~~ Temp also rises at mens. period

Patients with incipient tuberculosis have temp range 99½ to 100½
Sometimes normal when at rest until at mens. when temp. rises above normal.

Blood
increase of white.
reduction of Hemoglobin & reds.
In recipitures ~~a~~ tendency to dim. leuco cytes.

Tuberculosis

Nice distinc btw T.B.
& Pus infect
in the

Hydrocele
Leaguillo
Malaria
T.B.
Sem infections in wind.
Nonin div leucocytosis

Leonstenson. 90-100

Rt. of lung

Primary seat is behind
~~near of~~ Suprascapular
region, a little below
the apex.
Slight dullness, even
dight, must be regarded
as suspicious.
Percuss. then percuss
again, inflating ell.
brings out contrast
(premitus)
Don't rely on palpation
as much as sense.
Auscultation is most
reliably.
Earliest sign is
harshness or roughness.
Must be very careful
study & comparison
go over chest in many times
for dif. days, esp. below
& under clavicle, stay
fixed

Tuberculosis

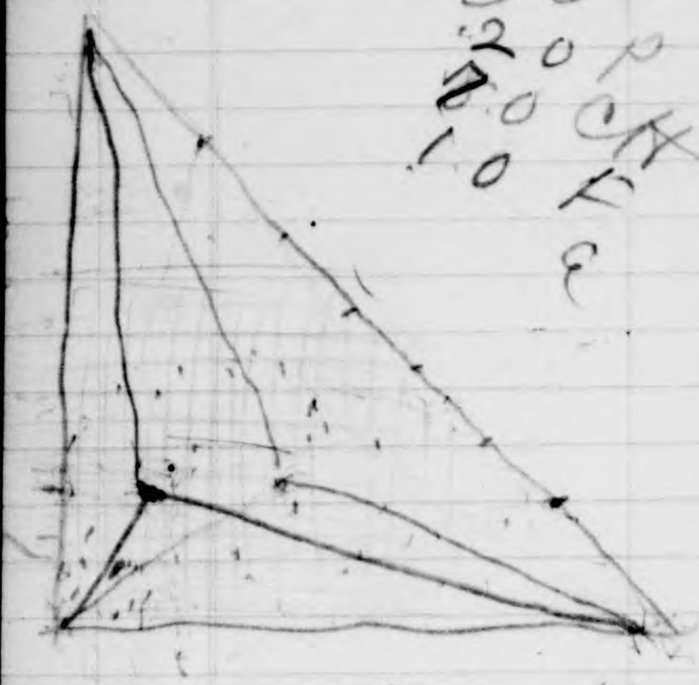
Sec. Areas

Ris. goes down behind faster than in front.
In front. Second area:
1 space. Then 2 then 1
a area above Clavicle.
Close to sternum. A little dull & harshness of heart sound.

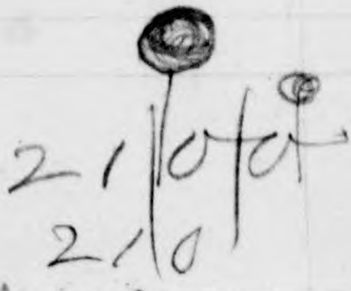
Prolonged. Expiratory murmur not so significant, unless it is local.

100

80
20
70
10



Rain 100.



Fire entrance cut off
Mell line at
Oil & Chem
1109 Chemical Na
Res. 5005
Marshman Ave
Tele. Forest 957-R
Leigh Boat House
2022 Chestnut St.

Bell 2232 a

Good Health
Cures,
Pers.
Charts
Mottos

Lady Branch
Samlarium
about circulars
~~+ demonstration~~
1/2 feet more
in food bath.
demonstration

G.H. Booth

Heart Disease
Indigestion

Get up cheap
vibration on Chairs
smaller motors

Maynard's Pharmacy
Forest 1140
call Molin.

Reymannia
Jacks
Exterior et
top.

Stomach
canaliferus
attributed
2 microscope
slides
E. lamprotus
Jones pocket
knife.

Smithsonian Institution

Health Com —
1½ cts full

Health Clubs in
high schools
Exhibits
Essays
Correspondence
with Pres of Club

use 1000
in this
way for
light

since pre-
vailing day

430 N. Illinois

H.D. Haring
600 Century
Building

will give us
35% discount on
lamps. Will
send bill in
full & we deduct
35%.

Ella Bagot Kehne
21 E 10th St
Anderson
Ind

See of State Madison Co
1st Pageant
Health
Send Race Better
ment literature

Mrs J.P. Kenower
332 Matilda St.
Huntington Ind
Pres Local Council
of women
R.B. literature
proceedings

In Meridian
to 38
follow white
candle poles
Michigan Avon
Logansport
Michigan road

Dr D. L. Flanary
Leyersburg Jerk
Left:
Hoods. hat
Coat
R.B.
Med papers.

Health Day in Indianapolis

1 mayor & Chief police
2 mounted police.
3 horsemen in Rabbi
4 Band
5 men blue & gray caps
6. militia
7 Can double cross
8 - 19 medical school morpeloro
20 W.C.T.U. Mud temperance

Health Day at Indianapolis

Health Day in Indianapolis

1 mayor & chief police
2 mounted police.
3 horsemen in Rabbi
4 Band
5 men, blue & gray caps
6. Militia
7 Can double cross
8 - 19 medical school inspectors
20 W.C.T.U. Red temperance

21 Good health good business

22 Fly skeleton today

23 Rat carrying flea.

24 Dung Flies

25

Mosquitos

26

Cultivate & temperate man

27

Preventable diseases in a camp

28

Recreation department

Playground

29

Nurses Corps

30

Gymnasts in swimming suits

31

Boys in white swimming suits

32
Submarine
20th
Centuries
Service

33 Summary Sec

34 Old horse
in horse
ambulances

35
5 7 8 7 birth rate
death 100 per 1000

36
Sanitary Places
+ factories

37
Rich time +
city of int
38 of
women suffrage

41 - 48

Health & wealth.
Cab full of
Children

44
Nurses etc.

45
women's peace
daily

39.

Fly high
Shoat fly,
Pa 6 / /

Pay results
feat

41 - 43

Health n wealth
Cas full of
Children

44

Nurses bars.

45

women's peace
haily

56

Kindergartens

Old Mr. Toothache

Keep 'em clean

Don't let 'em ache

Trade floats

Plumbers

Paints varnish

Heating

Carpet cleaning

Roofing Co.

Crackers.

Street sweeper

Cold storage

Ice cream

old way

new way

Old Mr Mathach

Pig teeth on a clothes line

Lactative biscuit
Lorna

Dr. J. Montgomery
Fresno,
House
Quartermaster, U.S. Cal.
Lace Hellerman of
Lactative

Trip 15 Sept. 25-Oct. 1/22

Atlantic City
Washington D.C.
Norfolk, Va
New York City

Norfolk Va Sept 25 Oct. 1/22

Am. Peanut Corp.
Norfolk, Va
Mr Phillips Bain
Has an oil mill
Bain Oil mill
at Suffolk Va

Peanuts, Spanish 7 1/4
Va. 7 1/2 old, New mts
Spanish 6 cts
Duty is 4 cts
Crop short quality
good. On acct. duty
Price will be higher.
Price has been 8 1/2

Figs

F. W. Immonger
Fig orchard (3,000)
Neck, Ocean View
+ Forest Lawn
Cemetery.

Address.
Mason Creek.
Phone Norfolk
27342
or 37342
Norfolk Truckers Ex
77 Church St.

Memo for
B. C. F. Co.

Why not refer
orders in N. Y.
territory to
N. Y. Office.

D. S. Miller,
Cor N. 4th St &
Park Ave.
Plainfield
Send list about N. J.

The San. & Wrote him
was mentioned by
Mr. Raetz.

B. V. Jones.
Petersburg
Va

Peanut cake
100 lbs. 11½ & 5 cts
will send in
week 10 days
nearly free from
skins
will contain
7% oil

Meanwhile
Corn Mfg
start into-volume
in New Haven

Brau Biscuit.
1 doz Cartons
Consider Changing
brau biscuit
Leighton, nucoter
dozen in case.

B. V. Jones.
Petersburg
Va

Peanut cake
100 lbs. 11½ & 5 cts
will send in
week 10 days
nearly free from
skins
will contain
7% oil

Menno Food
Company
Start into wheat
in New York

Bran Biscuit
1 doz Cartons

Consider change
bran biscuit
Leigh, sweeter
dozen in case

Inquire about window demonstrations?

B. E. F. Mills

W. A. Cooke
146 Bergenline Ave
Weehawken N.J.

Agency. Write him about our foods.

Send literature abt. Health Chocolates

Grafhophum
Columbiæ
Ordered 20 oct.

Send Hogan
an inhaler

Calcium Analysis

Jour. Off. Agr. Chemists
Aug. 15 1920 p 124
By Breazeale

method to determine calcium in presence of phosphates and of magnesium

also Journal Biolog Chem. 1922

3506
AA
Kellogg, John Harvey

Cincinnati
Oct. 17-20/27

memo.

Dr. Pettibone - Jurgo

Write Evans - invitation

Call Heitman when go Chicago. +

Write U.S. Pub. H. Bureau about dope.

Have about Roberts!

Phys. Fitness in Middle Life.
by Hornibrook
Fred Stokes Co.

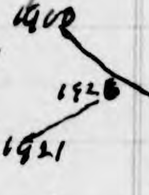
Sassman letter in bulletin to nurses + dietitians

Dr. Sawyer of the Eastman Co.
(over)

Dr. Kieffer - Mich State Bd

Has Prohibition
Promoted Pub. Health?

Dublin:
Best gage of health is
death rate
2 sources ~~U.S~~
1. U.S statistics
2. Metropolitan life
2 Periods
① 1900-1917
② 1921-1926



Metropolitan show: slight decline
1921-1926 —

If decline were due to prohibition, the decline which was going on before Prohib should

have been increased after prohibition. This did not occur. Instead a blowing up.

mortality of males increased after (P), females stationary.

(2 reasons why this is not true conclusion.

① - after much improvement naturally slowing up because of limit being approached

② The influence of the epidemics of 1917-1920 continued on into the preceding years, increasing death rate.

Saving of 13,000 annually between 1921-1926.

women & children

1000 men's lives saved same time, chiefly over 45 years of age

due to better food, better conditions in home

Prohibition has not been effective in stopping liquor drinking in men

The bad quality is so bad as to counteract for slight ~~balance to~~ improvement in death rate

Mortality from alcohol is 6 times as much as 6 years ago

Recorder of Worp. Phila
1920 lowest.
1926 first time as bad
as le year ago.

(Not fair comparison)

Much more imp. in deaths
from heart & kid dis.
No improvement

Facts,
Imp. in mort of women
& child due to activity
of public health activities
Cases to general property.

No improvement in mort

Prof. Haven Emerson
wishes avoid states
deal with opinions
evidence of doctors,
nurses, dentists, wel-
fare workers.

~~Summary~~ Best Statement
of effects of alcohol
by English Committee

1. main effects of alcohol
are nervous system
a narcotic.

No one claims that alcohol improves health

Cannot tell how much alcohol is used.
Only guess is the indications of acute + chronic alcoholism

Zones

A Preprohibition states
B. Cooperation states after prohibition
C. Non-cooperative states

Prohibition has been of great benefit

(1) Economic improvement, more evidenced, especially among labor.
~~$3.000.000.00~~

Increase of savings bank deposits just equal to ~~the~~ liquor bill before prohibition.

(2) Greatly lessened delinquency. Conviction of repeater alcoholics falling 50%
apprehension alcoholism falling 3/4
Arrests for assault + battery falling 3/4

3. Greatly fewer alcohol ~~from~~ ~~death~~ 1/2

5. Sale of narcotics fallen off

Increase of school attendance.

Increase of milk 30 %

Only 27 houses from Washington remain out of 134

A student in Naval architecture was asked to define a dry dock. He answered a physician who won't write a prescription for alcohol

Reed & Cincinnati

Alcohol is a constituent of the human brain. Hence there is a universal demand for it.

65,000 deaths due to bad whiskey 15,000 more than the world war

Surg. General's Office
states that deaths
from alcohol now
as before Prohib. are
due to ethyl alcohol
chiefly.!

Dr. Jos. Goldberger
U.S. Pub. H. Service
Wash D.C.
Write about yeast
See about pellagra factor
See Dr. Mitchell and
dogs. - black tongue

Solitude in Heaven

One of the greatest events that ever happened was when Gen. Lee died & went to heaven and retieved the awful solitude of Gen. Leach.

Ladies & Gentlemen

you all remember the story of the two Irishmen well I'm going to drop that right here and get right down to business.

For
Dr McCormick
Mrs Mary Breckenridge
Appalachian Highlands
Pioneer Life Survey
in
Dr Smith

Wed.
Send Dr. Sawyer
~~of Cartright~~
1343 State St
Rochester
N.Y.
Send Lab Sawyer

Send Dr Sawyer
Lecture of Ex Christians
for white diarrhea
Sal-Lavida,
New Iron table

Eastman Co
Dr. Sawyer
Jean Fuzzy
Food Tablet

Lur.

Dr McCormick

Mrs Mary Breckenridge

Com. on Cereals.

H. E. Barnard Chm

J. C. Blank

W. Ward

Dr. Humphreys

Redfield Average
tip - $6.00. 1st that
ever came up to
the average.

12 00

15 00

20

30 00

C. A. Brooks,
Hesperia.
little girl lunch.
Hand up letter
← red white hair
? were not answered.

Hotel Austria

262 0 38

Rdes 44 & 45

Roll 77 Pleeson
Heward
877 R
Heiward

Plaintiff's Attorney

Amt.	Nov 1. Beginning	Amt in Cal.
8 oz	Tomato Bouillon	40
1 1/2	Eggs	375
3 oz	Sweet Potatoes	450
1 3/5 oz	Breakfast Toast	612
6 oz	Baked Apple sauce	225
3 oz	Plum-pudding	115
1/2 oz	Butter	100
4 oz	Veg. Gelatin	36
	Breakfast 10 oz milk	2353
	3 apples	1074
		450
		3877
Nov 2.	Wednesday	
1 3	Tomato Soup.	45
2	Eggs	500
2 "	Bread	540
1 "	Toast	405
1 oz	Raisins	225
3 "	Butter	337
2 oz	Baked Apple	500
2 "	Apple sauce	108
2 "	Apple butter	128
4 oz	Breakfast cereals	100
	milk	3888
		1125
		4993

Cost		
	Breakfast	
	Nov 3 Thursday	
3 3	bread	810
3/5 "	toast	243
1 "	Malt Honey.	270
4 "	apples	150
3 "	flour.	120
1/2 "	sugar	225
1 1/2	butter	1500
6 "	potatoes	675
2	eggs	600
		5570
		1100
		6670
	No. 4	
4 oz	apples	150
3 "	bread	810
14 "	Beacon Rash.	710
1/2 "	butter	500
6 "	apple juice	270
8 "	Potatoes	337
2	Eggs	500
	Milk & cost	1075
		4152

Nov. 5

Breakfast

2 apples
3½ oz Chocolates

Dinner

6 oz Potato
2 Eggs
2 apples
8 oz apple juice
1½ oz toast
1 oz butter
8 oz broth

Nov. 6.

Breakfast

8 oz apple juice

Dinner

8 oz apple juice
8 " broth
2 " toast
1 " bread
1 " Pecans
1 " butter
2 eggs
2 apples

Nov 7. Breakfast

1 glass of Cider 120

Nov 7. Dinner

6 oz.	Potato	174
2.	Eggs.	140
4.	Apple Sauce.	
2 .5	Breakfast Toast	
.5	Butter	
8	Applejuice.	
4.	Corn.	
1	Cornpudding.	

Nov 8.

(B 2 apples 4 oz of cider)

2	Eggs.	
4 oz	Potatoes	
3	Tomatoes (stewed)	
.5	Butter.	
1	Breakfast Toast	
8	Applejuice	
1	Bread.	
3	Fruit Relish	

No 9

2	apples (B)	60	
	dinner		140
2 oz	bread		105
4 oz	toast		
1	Egg (1 fat 1 albumen)		68
3 oz	walnuts		358
2	apples		60
1 oz	Chocolates		170
			801

Nov. 10

Breakfast

5 oz	potato	145
2½ oz	bread	175
1 oz	butter	256
6 oz	tomato soup	42
3 oz	custard	21
1 oz	chocolate	255
4 oz	grape juice	60
1/4 oz	egg	17
2 oz	orange juice	22
		994

Dinner

6 oz potato
2 oz bread
1 oz honey
2 oz peach
4 oz grape juice
1 oz butter
1 oz rice

Nov. 11.

6 oz Potato
3 oz bread
2 Eggs
2 oz custard
1 oz butter

Supper

16 oz apples
8 oz grape juice

Nov. 12

Breakfast

8 oz apple juice

Dinner

6 oz potato
1 oz sweet
3 oz bread
1 oz butter
6 oz soup
8 oz apple juice

Nov. 13

breakfast

8 oz hot
6 oz apples
2 oz grape juice
8 " baked pears

dinner

3 oz Bread
8 oz soup
1 oz butter
2 oz grape juice
16 oz baked pears
6 oz potato
1 1/2 oz chocolates
6 oz cocoa

G. W. James,
c/o Craftsman
Syracuse
N.Y.

Anti-Tuberculosis literature
Slides of chairs
See Everybody's Magazine
article
Great White Plague.

Nov. 14

Breakfast

4 oz apple juice
1/2 oz grape juice

Dinner.

3 oz Potato
3 1/2 oz meat
2 eggs
8 oz tomato soup
1 oz butter
8 oz apple juice
1 oz toast
1 oz chocolate

Nov. 15

Breakfast

7 oz grape juice
5 oz apples
8 oz Bean broth

Dinner

6 oz broth
3 eggs
2 oz bread
2 oz toast
3 oz grape juice
8 oz apple juice
4 oz butter
1 oz nuts

Nov. 16

~~Breakfast~~
~~Dinner~~

2 eggs
8 oz potato
1 banana
1 apple
8 oz " juice
2 butter
3 oz meat
2 oz toast
6 oz broth
2 oz stewed carrots
3 Chocolates

Breakfast
8 oz apple juice

Nov. 17

2 Eggs
2 oz Toast
6 " Potato
8 " apple juice
" 1 Apple
2 oz Beans (baked)
2 Chocolates
1/2 oz Butter

Breakfast
8 oz apple juice

Nov. 18

6 oz Potato.
8 oz applejuice
2 Eggs
1 z Bread
2 z toast
8 z Soup
H Chocolates
2 z Peaches
2 z Prunes

Breakfast

8 oz applejuice
6 oz soup

Nov. 19.

Breakfast

8 oz applejuice

Dinner

1 z Nuts
1 Banana
1 z Grapes
~~Bread~~
2 z Toast
6 z Mutt
6 z Soup
3 z Potato
2 Eggs
1 z Spinach
1 z Butter

Nov 20

Breakfast

4 z Malt Honey
8 z apple juice
2 z grape juice
2 z apples
6 z Mean broth

Dinner

5 z Potato
2 z Beets
2 z Toast
1 3/5 z Butter
8 z Prunes
8 z apple juice
2 eggs
~~2 oz Cake~~
1 ~~c~~ Bread
3 z Malted nuts

Nov. 20

B

4 z apples
2 z Grapes
8 z a. juice
4 z Milk

D.

6 z apple 108
4 z Milk 380
2 eggs 140
6 z Potato 168
2 3/5 Toast
2 z grapes
1 z butter

Nov. 21

B.

8 z	apple	128
2 z	grape juice	60
4 z	~~muffin~~ honey	380
4 z	apple juice	72
6 z	broth	30
		670

D.

4 z	Potato	112
23/3	Toast	318
1	Bread	75
1 z	Butter	225
2	Eggs	140
4	Gravy	80
6	Soup	120
		870
		670
		1540

No. 22

2 z	Grapes	60
16 z	Apples	288
8 z	Juice	144
		492

D.

8 z	Gravy	88
1 z	pecans	230
4 z	Potato	112
1 z	Granuto	109
1/2 z	Butter	112
1 z	Toast	246
6 z	apple	108
2	Eggs	140
		1145
		492
		1637

Nov. 23

B

4 Z	apple	72
8 Z	apple juice	144
4 Z	grapes	120
8 Z	Broth	40
	Dinner	376
6 Z	Potato	168
1 Z	roast	123
2 Z	bread.	150
1 Z	butter	225
4 Z	apple	72
8 oz	apple juice	144
1/2	Milk	115
1 Z	Chocolate	175
		1172
		376
		1548

Nov. 24.

B

1 Z	bread	75
1/2	butter	112
8 Z	a. juice	144
4 Z	grapes	120
		451
	Dinner	
2 Z	apple	18
2 1/2	bread.	188
8 Z	soup.	144
3 Z	grapes	90
10 Z	a. juice	180
2	eggs	140
1 1/2 Z	butter	337
		1097
		451
		1548

Nov. 24

B

1/2 oz Bread	37
8 oz Apples	144
8 oz apples	144
8 oz broth	40
1/4 oz butter	56
	421

Dinner

3 oz bread	225
4 oz apples	72
8 oz Jelly	144
1 oz butter	225
2 oz malted milk	250
	946
1 oz pecans	225
	1171

Nov. 26

B

8 oz broth	40
2 oz cocoa tea	40
1 poached egg	90
8 oz juice	144

Dinner

4 oz Potato	112
3 oz bread	150
3 oz broth	15
2 oz cranberry sauce	46
1 oz butter	225
1 oz corn (stewed)	30
4 oz apple	72
3 oz grapes	90
	1084

Nov. 27

B.

4 oz	Juice	72
1/4 oz	bread	18

Dinner

8 z	Juice	72
2	eggs	140
3 z	Plum sauce	69
3 z	Pear sauce	66
3 z	Toast	369
1/2 z	Butter	112
8 z	Soup	144
		1062

Nov. 28

B

8 z	Mush
8 z	Juice
2	yolks
4 z	Apple

Dinner

2	yolks
8 z	Mush
8 z	Juice
4 z	Apple
2 z	Grapes
1 z	nuts
2 z	Toast
1 z	Butter

Nov. 29

	B	
2 Z	malted nuts	
4 Z	Skim milk	
1 Z	malt Honey	
4 Z	apple,	
8 Z	" juice	

Dinner.

1/2 Z	Butter	1 12
2 Z	Toast	2 46
4 Z	Spinach	20
1 Z	Roast	
6 Z	Potato	
3 Z	Potato Egg	
2	Egg Yolks	
4 Z	Gravy	
8 Z	Juice	
1 Z	Malted nuts	
6 Z	Skim milk	
6 1/2 Z	Nuttolene	

Nov. 30

8 Z	apple juice
1 Z	Nuttolene
1 Z	malted nuts

Dinner.

6 Z	Potato
1 Z	Roast
2	Eggs
1 Z	butter
8 Z	apple juice

J. C. Armstrong
Hotel Wyncoop
Connellsville
Pa.

would you like to meet
our doctor at
Somerset Thursday.

Dr. Kirk

7 Murmurs at Base of Heart

7 in all

1 Intraventricular
2 Dynamic
3 Cardio-respiratory
4. Systolic
5 Diastolic
6 Systolic - Intra-aortic
7 Diastolic Intra-aortic

Mum. 9 PF CH T 34 328 618 1 07

* Murmurs at Base of Heart

7 in all

1 Intraventricular
2 Dynamic
3 Cardio-respiratory
4. Systolic
5 Diastolic
6 Systolic - Intra aortic
7 Diastolic Intra arterial

Mon. 1 34 328 613 1070
PFCH T

Pericardial murmurs

Test Increased by pressure of stethoscope, louder where produced, not transmitted

Type by watching patient forward, Rubbing the aches may occur with either sound. Sounds near by.

Endocardial murmurs distinct, deep, transmitted

Mitral due to

1. Cavity larger or orifice smaller
Change in orifice
2. Hypertrophy of wall
4 Dilatation of cavity.

Max sounds.
loudest at base

aortic stenosis
very rare
sound is usually
intra arterial

rel. Diag.
stenosis
left left ventr
2d sound weaker

intra-arterial

absence of above
lesions.
1st sound normal
2 aortic element is
2d sound very
loud & ringing
bruit is aneurism or
~~aortic sclerosis~~
~~atheroma.~~

aortic regurgitation
or insufficiency

Corresponding organic
changes.

widely transmitted
to axilla, elbow
popliteal space.
intra arterial ringing 2d sound
Haemic
~~systolic~~ murmur
heard at pulmonic
no changes in cavities

Dynamic Murmur
due to anemia
of heart muscle

Grand Union Hotel
4932 38th St.

10 weeks

Surgery	60
Surg Anat	60
Med Ther	40
Derm.	50
Anatomy 5 by	150
Clinical work	

430.00
6
~~50~~ 480.
2480
7

+10
50
160
3
1360

Camembert
~~Roche~~
Cream Cheese,
Farmer's Convention.
Dir
Pres Ag. College

leyden (one)
muffler-static
Hyperstatic
fir coil
insulated coil
Pickard's high frequency
minerals
electroscope (Valentine model)
alla glass port
milliam
amperometer
(hot wire)
for high frequency

The Clock of Nature
The Deeper Teaching of Plant Life
Hugh MacMillan
Thos Whittaker
2 & 3 Bible House.

2 Toast	123
2 Bread	75
2 Potato	28
2 Butter	225
2 Malted nuts	140
2 applesauce	18
2 apples	18
2 Pecans	230
2 Eggs (each 114)	~~70~~
2 Yolks	185
2 Rice	33
2 Maraise	109
2 Riceflakes w/cake	105
2 Corn flakes	105
Broth	4
bean, pea, corn soup	18
Green corn	30
Green peas	33
Mashed potato	31
Sweet potato	58
Squash	13
Tomato	6½
Baked beans	37.5
String beans	6.4
Asparagus	14.
Malt Honey	95
Beets	11.5
Olives	60.
Lima beans	22.5
Grapes	30
Lemon juice	11
Orange	11
Cherries	23
Walnuts	206
cream	57
milk	20
Honey	15
Buttermilk	10

Rice rolls	115
Rice cake	115
Graham biscuit	113
Wafers	120
White bread	71
Beef suet	18
Broth	4
Sugar	
Chloroform	

311 W.82

Cereal
Albumen
Urine

Syrup
Powdered
Sugar

Kellogg Chas
Battle Creek
Mich

See Wood on Pr. Pr. visit Medical Societies in State

Send circulars when appointed

Lists of attendants

Improvements

Elevator - w.p.

Heating - hot water

Roof - w. [illegible]

Verandas - village, a Pavilion

Grounds during summer

Edison
Lab. Ft Myers May 1H

Walking notes in
front room of
lab.
(asked me what
was doing in the
Old time Thus.
writing book.
asked what subjects
Fold him foods.

said people
very ignorant
about foods. added
"70 or 80% of all
diseases due to the
damned foods people
eat. People do not
study foods. they
go on eating foods
which do them harm

Edison

Ed said "you have lost a pot more you were here. Um were tall then. Has you are thinn Haven't you a brother Who was thinner than some years ago?

No. I am the thin I am taller. When I sit down my legs are short.

Edison living on milk 2 qts a day bread & potatoes.

A few slices oranges so I won't get scurvy.

Many people eat themselves to death. It is the damn food that does it.

In Edison's laboratory

Try 1st 1 dram
then 1 lb. then 10 lbs
then 150 lbs. so
as to be sure to
make no mistake.
Things are coming
on very well.

Mrs. Edison's niece asked me to wait as Mrs E. was out. Was sure she wanted to see me. Waited a ½ hr then came on. May stop when I go back.

Mr. Edison said. paraffine oil is a good lubricator. Drugs are all bad. Told him about paraffines. He said, yes there is a whole series of oils that melt at diff. temps.

Coals

Woods

C
E F G H I J K L M N O P Q R S T U V W

Health

Building

D E F G H I J K L M N O P Q R S T U V W Y Z

Cases

Hurricane Ins.

Flood.

Sec of Board of Examiners
Dr. W. M. Norvell
Tampa.

Get address of Sec. of State Board. Try to see him.

Dr. W. said. If two or three good doctors came down here & practiced a few weeks in this town nothing would be said about it.

"Covering" is illegal

What about interns?

Said "Dr. Pritchard & Hall are just like two brothers.

Sec

Saw Dr. R. C. Woodard
27 N.W. 12 Ave

He would like to be a member of Consulting Board
Recommended as other men
and pathologist (good)
Think Dr. Letterer
Eye & Ear Dr. Demaray
Orthopedics Dr. Weiland
Nerv. disorders Adolf Jewy
Psychiatry Dr. Hodge.
Pediatrics Kennon

Dr. Jones,
Quad surgeon

Dr. Donaghey,
Quad driver

ordered

Send to

H. C. Genung

Tobacco sm
Nat Cut Mem
Hr Living
Cir of N.St
Cir of San
Cir of College

H. C. Genung
Auburn N.Y.

Memo

I J K L M N O P Q R S T U V W Y Z

Memo

Cost of tents
Heaters
Fuel

Heating

Miami	add 30°
Palm beach	33
Tampa	40
Daytona	45
Jacksonville	50

Best hotels Miami Beach
steam heat in halls
only
Babcocks use gasoline
heaters for bathrooms

Miller & McKay
1st Nat. Bk. Bld.
Miami

May 1H.

Left option with him & looked over plans. He suggested two kinds of stock A & B.
A with no conditions
B with condition of calling in on or before 10 years.

Charges

State 20 cents for each share
$150 fee for simple organization

Taxes

Hotel - Town $270
County 450

Leases - Average abt $15 each

Control

80% stock can call meeting and controls

Suggestions

Release lots on condition of mutual agreement about building

C to Pay taxes on lots to be returned to C if lots are sold

Lots to be released on condition that if the property is not at end of 10 years made a public charity, taxes shall be paid,

Curtis stock in Co.

Helps

Get colored photo of hotel

Get supply of photos

Plats

Get Curtis promotion stuff.

Σ

See McC
Guarantee against floods.
appropriation
~~Sugar~~ Co. dyke

Day exception

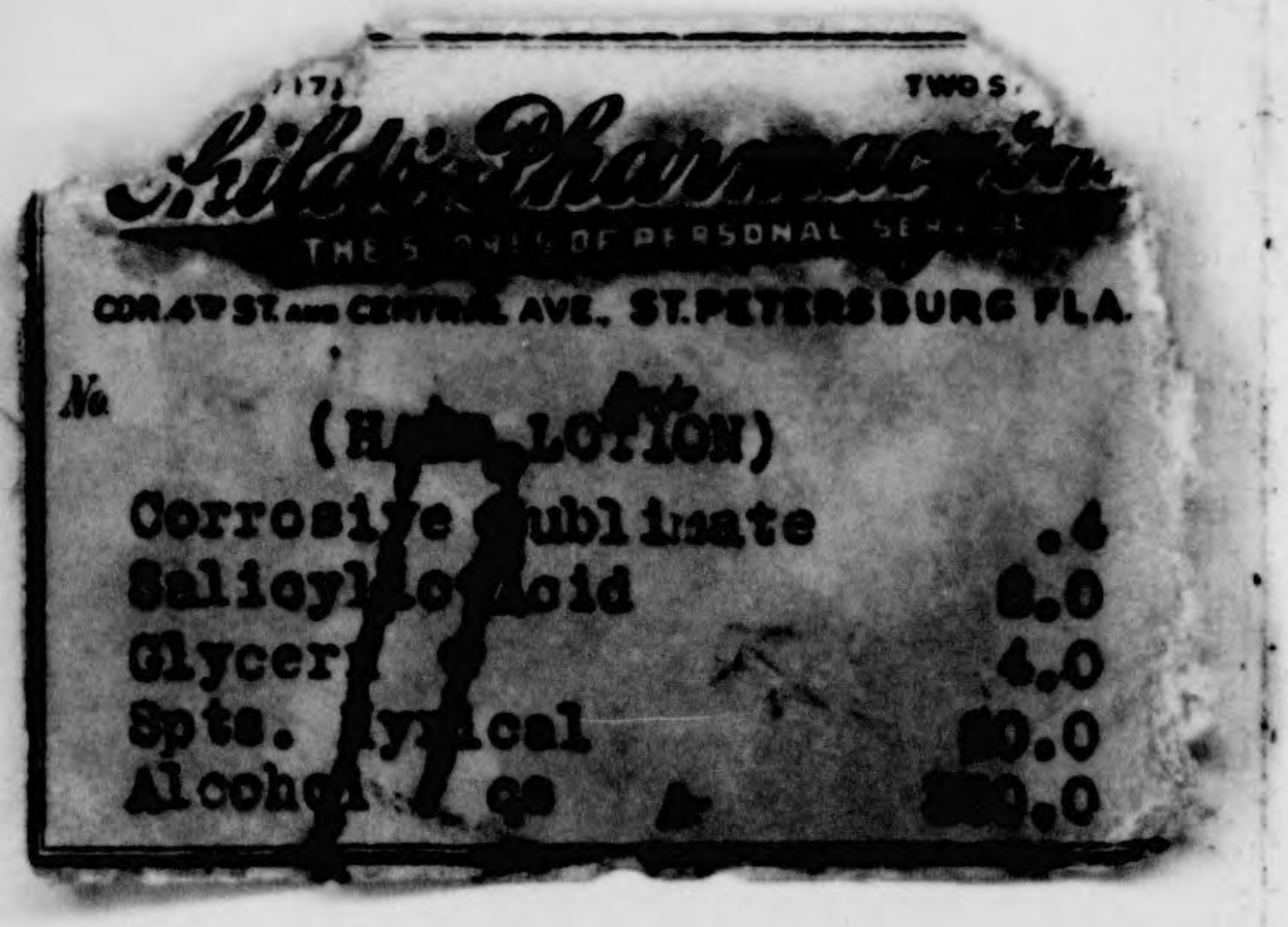
Miami Islands
120 S.W. 50" tree

Mr Gemmy.

Mr C. C. Stover
Ardmore Pa.
architect.

3506
AA
Kellogg, John Harvey

Richard Kiehnel A. I. A.

Kiehnel & Elliott
Architects

930 Seybold Building
Miami, Florida