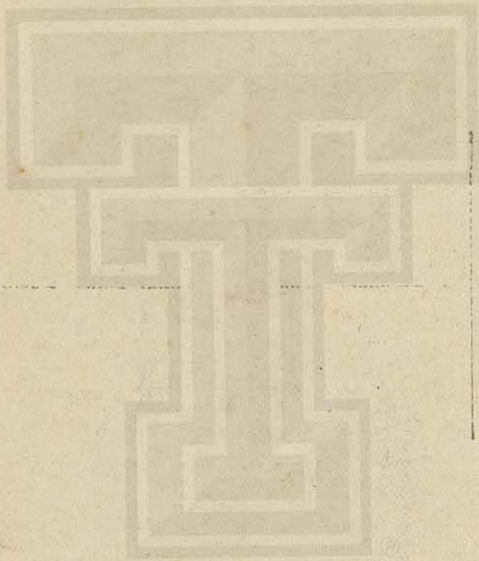




John D. Schilling

CARTE POSTALE



John G. Schelling,
1st Lt M.C.

94
94

Apr. 3rd 1919
Supplies bought at P.C. in Chey.

1 Can Biscuits \$2.70

6 Milk - .78

4 Jam 1.20

2 Cans .38

\$5.06 = 29.35 f

Apr 4-19
Capt. Howard \$17.34 Pd

Capt. Harp 4/4/19 7.34 Pd-

Capt. Crawford - 17.34

St. Schilling 4/4/19 17.34 Pd

2nd Intermediate
John G. Schilling

JUNIOR-SENIOR SPECIAL PATHOLOGY.

Second Intermediate Examination, March 8th, 1909.

- ✓ 1. Give the synonyms of "pseudo-leukemia". Discuss its etiology.
- ✓ 2. Tell about the liver in myelogenous leukemia.
- ✓ 3. Give the gross and minute appearance of a typical spleen in primary splenomegaly.
- ✓ 4. Give the morbid anatomy of primary tubercular lymphadenitis.
- ✓ 5. Give the morbid anatomy of chronic internal hemorrhagic pachymeningitis.
- ✓ 6. What do you mean by "incidental leptomeningitis"?
Give the etiology of acute incidental leptomeningitis.
- ✓ 7. Describe the changes in the leucocytes in acute lymphatic leukemia.
- ✓ 8. Discuss endothelioma of the lymph nodes.
- ✓ 9. Discuss rupture of the spleen.

ANSWER ANY EIGHT. SIGN PLEDGE IN FULL.

1. Describe the corpus Luteum and give its physiological significance?

2. What structures enter into the formation of the foetal portion of the placenta?

3. State the more common changes in the urine in pregnancy?

~~Describe~~

4. What signs of pregnancy may be detected by (a) inspection (b) touch, (c) auscultation, and of what periods?

5. State the diameters of the pelvic cavity, and the level at which they are taken?

6. Give the vertical diameters of the fetal head, and the point lying between them?

7. Give the mechanical acts of labor in vertex presentations and explain the advantage of each.

8. Explain the management
of third stage of labour?

9. State the cause and
treatment of after pain?

10. Give the signs of ~~the~~
threatened abortion
and the indications
of treatment?

12th Intimed D5.
Give your viewson & use of
anesthetics in heart disease,
Ch, Bright's dis, pulmonary
Tbc, longevae diseases
diabetes, and hepatic conditions
Give treatment in detail
of accidents from anesthetics,
Anesthesia.
Give uses with prescriptions
of chloral and HBr with
reference to nervous diseases.
Give uses of Belladonna
uses of strychn. in adynamic
fevers, heart diseases,
paralysis.
Give uses of nitrites and
contraindications.
How is camphor given as
a heart stimulant.
What drugs are used in
cardiac, renal, and

and hepatic dropsy?
Discuss the uses of
opiates in lung, heart
and kidney diseases,
how does coffee, and
tea differ.

Rx. K Br. 3 ss

Na Br. 3 ss

Mg Br. 3 ss

Chloral Hydrate 1

Syrup Auroant. 3 II

M. Sig. Teaspoonful 4 or 5 times

1. What are the stages of a complete exudative inflammation.

Which is ^{typical} most important.

2. Describe union by 2nd intention fully.

3. Describe composition and varieties of pus.

4. What are the effects produced by fibrin exudate.

5. Name chief types of inflammation and name varieties of each.

6. Describe acute exudative inflammation of a serous membrane.

7. What degenerative changes in a tubercular lesion and why.

What conditions necessary for tubercular infection in part of patient and bacilli.

9. What are the peculiarities of a syphilitic skin lesion

10. Describe mixed leprosy
Answer 9, 15 & 7 being optional

NEW ORLEANS POLYCLINIC

GRADUATE SCHOOL OF MEDICINE

TULANE UNIVERSITY OF LOUISIANA

No. 56 April 18 1919

Dr. J. L. Schilling

is entitled to follow the Med a Surg course

for 4 yrs, ending Dec 15

Paid \$ 650.00

DEAN

409-10-11, CITY NATL. BANK BLDG.

NOTICE: Attending physician will fill this Certificate the first visit, provided he thinks patient will be confined to bed seven days. No benefits paid for less than seven days after Certificate reaches the office. No benefits paid for intemperance, female diseases or childbirth.

Received.....190..... Due.....190.....

The American National Insurance Company

Home Office: Moody Building, Galveston, Texas.

Use ink or indelible pencil. No claims paid when ordinary pencil is used.

Name Jane Washington Age 60
(If unknown, give apparent age.)

Number of Street 27 + 28 between H & I

Name of Disease Cerebral Hemorrhage

Is the Disease such as to confine the person to bed?

Will the person be confined to bed seven days?

Did you ever attend above named person for above named disease before? no

If so, when?

Date of first visit in this sickness 30th day of July 1909

Date of last visit up to present time.....day of.....190.....

Were you in actual attendance by visiting above named person? yes

Did the patient call on you?

I hereby certify of my own knowledge that the foregoing answers are truthful and correct.

Signed this, the.....day of.....190.....

M. D.

My address is No.....Street, City.....

District....., Date.....190.....

Received of the AMERICAN NATIONAL INSURANCE COMPANY the sum of.....Dollars and.....Cents, being all benefits up to and including.....day of.....190....., on Policy No.....

Witness

Witness.....Signed.....

URINE REPORT

11-8-1908
Name of Patient Harrison Reymond Ward T. Col.
Color Amber clear
Reaction acid
Specific Gravity 1.024
Sediment flocculent
Albumen negative
Sugar negative
Diazo Reaction
Urea

MICROSCOPICAL EXAMINATION

Epithelial Casts
Granular Casts
Blood Casts
Hyaline Casts
Fatty Casts
Leukocytes some
Red Blood Cells Few
Crystals None
Epithelial Cells Many flat

Request of [redacted] M.D.

Reported by [redacted] M.D.

Junior Surgery.

March 1903.

1. Describe the symptoms and complications of a Whitlow(felon) occurring in the thumb.
2. Classify the various features of the humerus opening up the elbow joint. Discuss carefully the treatment.
3. In a fracture of the tibia and fibula in the lower third of the leg, discuss the deformity and particularly the principles underlying rational treatment.
4. Describe the pathology, symptoms, diagnosis and treatment of fracture of the neck(proper) of the femur.
5. Discuss the principles underlying the rational treatment of open fractures. Illustrate your remarks by describing an open fracture of the femur in the lower third.
6. Describe the deformity and treatment of dislocation at the acromial end of the clavicle.

8
Materia Medica.

What is Monsell's solution?

The main ingredient of Monsell's solution is carbonated Iron. The solution may be used as a styptic.

What is Norwood's Tincture.

It is the T_h of Veratrum Viride.

What is Labarraque's solution.

It is prepared by the action of HCl on NaO₂.

Revised your work and think
you are much better
than you were. See also
the other side of the
book. I have just seen
a fine sample of the
same. I am sure the
book is good and
the work is
well done.

15.00
 30.00
 25.00
 40.00
 20.00

 130.00

424.91
 127.00

 297.91

127
 130
 140

 297

173

297.91
 40.00

 257.91

1.40
 2.00
 1.60
 .90
 .60

257.91
 15.30

 273.21

.75
 5.50
 3.00
 7.00
 2.00
 1.50
 4.00
 3.25
 2.25
 2.00
 1.50
 .75
 .15
 .90

46.20
 20

 46.40

399.19
 46.40

00085

302.79
 15.30

22201
 00028

287.49

00011
 00011

399.19
 46.40

 395.59

VOLUME XIII.

NUMBER 8

The University Medical

MAY, 1909

CONTENTS



<i>Foetal Overdevelopment, with Report of a Case.....</i>	7
<i>To the Student Body and Readers of the Medical.....</i>	15
<i>Editorial</i>	22
<i>News Items</i>	26
<i>The Doctor and the Patient—Rudyard Kipling.....</i>	27
<i>Junior Class Notes.....</i>	30
<i>Resolutions of Sympathy.....</i>	32
<i>Senior Pharmacy Notes.....</i>	32



University Clothes

Let us outfit you for your Home-going



That's what some people call our student styles. A liberal education on styles and clothes service has won a large portion of the young men's trade for this store. Strange as it may seem, the veritable flood of imitations which has never gone further than fancy lapels and similarity of names, has helped us greatly.

Student styles are smart, stylish and well made.

\$15⁰⁰ to \$35⁰⁰

Thanks to all the boys for their liberal patronage during the past term.

Edwin
Klapp
Oxfords

E. S. Levy & Co.
Uncommon Outfitters

Knox
Straw
Hats

Pictures Moving

THE BEST AND NEWEST ARE
TO BE FOUND AT

The Lyric, 2023 Market

The Vaudette, 2103 Market

No Repeaters

Pay us a visit

OFFICERS:

T. J. GROCE, President

H. A. LANDES, Vice-President

C. J. WOLSTON, Vice-President

B. GROCE, Vice-President

The Galveston National Bank

Capital Stock	\$125,000.00
Surplus and Profits	100,000.00

Corner Strand and Tremont Streets

*3 Per Cent. Interest Allowed on Savings Accounts
We Solicit Your Business*

Our patrons, irrespective of the size of their accounts, will receive careful and considerate attention, and as liberal accommodations will be extended as are warranted by the account and conservative banking.

BAY DRUG STORE

FULL LINE OF

Stationery and Souvenir Postal Cards

Special Prices to Students

11th and Market Sts.

OSCAR SPRINGER

2125 STRAND

Printing, Binding, Stationery

Visiting Cards, both printed and engraved
Writing Paper with initials, in elegant boxes

*Anything in the
Printing Line*

HONEST SHOES

REASONABLE PRICES

PROPER FITTING

Hammersmith's
ONE PRICE - SPOT CASH - SHOE HOUSE

UNCLE EPH

For MONEY. . . . Bargains in DIAMONDS

2417-19 Market St., Near 25th.

Garbade, Eiband & Co.

DRY GOODS, LADIES' WEAR, CROCKERY
CARPETS, HOUSE FURNISHINGS

GALVESTON - - - - TEXAS

First National Bank

OF GALVESTON

The Oldest National Bank in Texas

Southeast Corner Strand and
Twenty-Second Street

Galveston, Texas

CAPITAL FULLY PAID - - - - - \$300,000.00
SHAREHOLDERS' LIABILITY - - - 300,000.00
SURPLUS AND UNDIVIDED PROFITS 110,000.00

OFFICERS:

R. Waverly Smith, President Fred W. Catterall, Cashier
Charles Fowler, Vice-President F. Andler, Assistant Cashier
W. N. Stowe, Vice-President

DIRECTORS:

R. Waverly Smith, W. N. Stowe, Chas. Fowler, H. A. Landes,
J. P. Alvey, J. H. Hill, C. H. Moore.

We Solicit the Accounts of Banks, Corporations, Firms and Individuals, with
the Assurance of Liberal Treatment in every Respect, Consistent
with Conservative Banking.

A. N. NEWSON

LOUIS E. GOTTHEIL

Proprietors

The Model Market

Choice Corn Fed Meats

Free Delivery and Prompt Attention

Phone 388

S. E. Cor. 20th and Market Sts.

NOBBY NEGLIGEE SHIRTS THAT FIT RIGHT AND
WEAR WELL

— \$1.00 —

SAM J. WILLIAMS

Hatter and Outfitter for Men

2215 Market Street

Mill and Timber: Harris and Montgomery Counties

J. W. YOUNG & CO.

(Successors to Brady & Young)

Wood, Ice, Oil and Charcoal

Wholesale and Retail Dealers
Telephones 698 and 2908

Yard and Office 23d and Market
GALVESTON, TEXAS

Say Boys

Get your Cigars, Pipes, Tobacco, Saturday Evening Post
Etc. at the Students Dining Club Cigar Store.

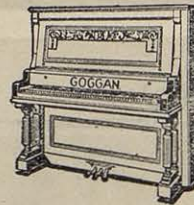
C. ELAM SCULL, Manager

» **MODERN CLEANING AND PRESSING CO.** «
FIRST-CLASS WORK ONLY

OUR PRICES ARE REASONABLE

Special Attention to Students. We Call for and Deliver
Same When Promised.

F. C. DUNTON, Prop. 317 1/2 22nd Street GALVESTON, TEXAS



Pianos, Organs, Violins

Mandolins, Guitars, Victor Talking Machines
and Records. Everything in the Music Line

Good Pianos..... from \$6.00 per month up

We Tune, Repair and Move Pianos

22d and Market Sts. Thos. Goggan & Bros.
Galveston Phone 385

Flatto's

Sell

Regal Shoes

Quarter Sizes

Completely Refitted and
Refurnished

Hot and Cold
Baths

Tremont Hotel Barber Shop

G. Adolph Helmamm

Your Patronage Solicited
at new stand

Massage
Treatment

MORRIS' STUDIO

Studio: 2119 Postoffice St.
Bet. 21st and 22nd Streets

PHONE NO. 745

A Special Rate to Students.

**MORRIS-CARTER PHOTO
SUPPLY CO.**

KODAKS AND SUPPLIES

Developing and Finishing. We carry
Eastman Goods and Other
Manufacturers

2219 Postoffice St. Phone 745

B. F. WILLIS

J. J. SULLIVAN

WILLIS & SULLIVAN

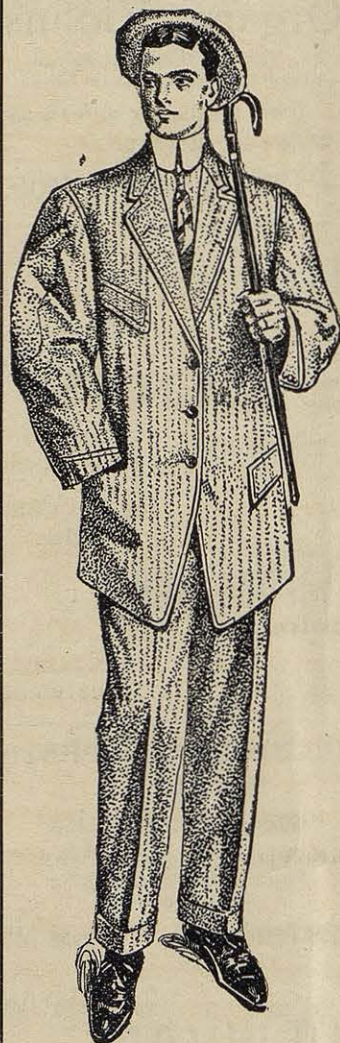
PHONE 162

Willis' Celebrated Ice Cream

we make the best Ice Cream in the City.

Factory: 12th and Postoffice Sts.

Galveston, Texas



Before departing for your summer vacation you'll find that your wardrobe will need replenishing.

Our store is amply prepared to serve you with just the sort of apparel you may need, Clothing, Furnishings, Hats and Shoes.

We wish to thank our many patrons at the College for their generous patronage in the past and to those who will return next season we extend a cordial invitation to continue as our customers.

MARKET, AT
22ND

Robt. J. Cohen.

MARKET, AT
22ND

The University Medical

Vol. XIV.

GALVESTON, TEXAS.

No. 8

FOETAL OVERDEVELOPMENT, WITH REPORT OF A CASE.

BY L. C. BROWN, SENIOR MEDICINE CLASS.

In this article it is not my purpose to go into an elaborate discussion of foetal overdevelopment, but to describe this particular case as I saw it, and to discuss its prognosis and treatment.

Your attention is called to this particular case for a five-fold reason. (a) Its extreme rarity. (b) Danger to both mother and child by allowing pregnancy to go past full term. (c) To show the probable difference in results of an operation early in labor, and the late operation. (d) Difficulty of treatment. (e) Danger incurred by improper examinations and use of instruments where strict antiseptis cannot be employed.

In over 100,000 births reported in hospitals in both Europe and this country, I find record of only 26 cases of foetal overgrowth amounting to as much as 5000 Gms., (11 pounds), and of this number only five weighed as much as twenty pounds, this proportion evidencing the rarity of the case.

Etiology.—Generally speaking foetal overdevelopment may be influenced by, (1) Large size of one or both parents

as in the case of giants. (2) Prolongation of pregnancy, the past mature foetus continuing to increase in size and weight every day after time for delivery. Hirst says that 6 per cent. of women go beyond the three hundredth day before labor begins. (3) Previous repeated pregnancies, the foetus generally increasing in size up to the fifth pregnancy. (4) Advancing age of mother—this often producing an increase in size of the children up to the thirty-ninth year.

"Women generally bear their largest and best developed children whenever the fourth or fifth labor happens to come about the thirty-eighth or thirty-ninth year." (Spiegelburg.)

The large size of this child was probably influenced by the above conditions. The father in this case was gigantic in stature, six feet two inches in height and weighed about 225 lbs.; the mother thirty-eight years of age, five feet ten inches high and weighing 215 lbs. Previous maternal history is not definitely known to be correct, but I understand that this was her fifth pregnancy. The first and second labors were natural and easy, the children being alive and healthy. The fourth labor, two years ago, was a very long tedious one, the foetus finally being delivered by Manual traction without other operative procedure. The attending physician stated that this foetus was very large, but was delivered without mutilation. The puerperium in this instance was said to be short, uneventful, and subsequent state of health was good.

"March 28, at 9:20 P. M., I received a call to go on the hospital ambulance to bring in a patient, said to be in labor. On arriving at the house I found the negress sitting on the edge of the bed supported on both sides by her

friends. On inquiry I learned that she had been in labor since 5 A. M. that day and had made no real progress towards delivery, despite the natural and artificial efforts made, and that she had been in agonizing pain all day. A short examination showed the fundus uteri in left hypochondrium very hard, prominent and in very rigid tonic contraction. Pains were constant and agonizing. Outline of foetus was made out with difficulty, owing to the rigid contraction. Pulse 96, respiration 26, and woman growing weaker.

On the way to the hospital I learned a part of the history of the case. When labor first began at 5 A. M. she had a colored midwife in attendance, who attempted delivery by tying a bed sheet around abdomen above fundus and then entertaining the visitors by allowing them to pull on the ends in a crude effort to expell the foetus by pressure. This mode was unsuccessful and at 3 o'clock P. M. a colored doctor was called, who attempted delivery by forceps, but this also without results.

At 8 o'clock P. M. two other physicians were called, who also tried the forceps operation, without results, and then the hospital ambulance was called to take her to the hospital. At the hospital the patient was found to have a temperature of 99.8, pulse 96, respiration 26. She was immediately anesthetized to ease the pain and to prevent rupture of the tonically contracted uterus.

Dr. Sappington immediately took charge of the case and found the foetus to be dead, the head in right occipito posterior position, head well flexed, and very firmly wedged in pelvis. There was a large caput succedaneum present protruding into vagina. Vulva large, gaping and

very edematous, and with rectum and bladder empty. The fetal heart sounds could not be elicited over abdomen, nor could any movement of the foetus be felt.

She was immediately prepared for operation, and a preliminary trial by forceps was made to ascertain flexibility of the head. Then the basotribe was applied and size of head was reduced, at which time a large amount of fetal blood and brains drained away through opening made in vertex. Traction was then made and head was pulled down to vulva and at the same time rotated so that occiput was to the front when the head emerged from beneath pubes. The basotribe acted as perforator, cranioclast, and forceps so that traction might be made. At the vulva the head parted company with the trunk as the shoulders engaged firmly at the brim. Then the right arm was caught, pulled down, and by combined traction on arm and neck the shoulders slowly emerged from the vulva. The remainder of the second stage was rapidly completed, pressure being firmly maintained on the fundus to prevent hemorrhage, and to promote contraction of uterus. The placenta was found to be firmly adherent and was removed by digital separation from uterine wall. Very little hemorrhage resulted. A hot bichloride douche, 1-2000, was used to clean out uterus and to oppose as much as possible the extreme danger of sepsis due to undergoing treatment at so many hands.

The uterus responded well to the firm pressure on fundus and contracted firmly. One dram fld. ext. ergot was given hypodermatically. At this time examination of cervix, vagina and perineum revealed no lacerations, but showed contusions and other damages from the pressure of the child passing through the parturient canal.

Sterile dressings were applied over vulva and an abdominal binder was tightly applied. Patient was put to bed and rested in comparative ease. She appeared, however, to be somewhat shocked. Pulse was slightly weaker, and 98, temperature 100.6 degrees, respiration 24. The operation was completed and patient was in bed by 12:30 A. M. March 29."

The foetus on delivery was found to be male child, the body and crushed head of which equalled 15 lbs., 2 ozs. This is the weight minus the blood and brains, which drained away during the operation. If you allow the medico—legal one-eighth of body weight for blood the weight comes up to 17 lbs. Then according to Mier, who allows a proportion of 1 to 5.9 for the brain of the new born child, we have a total weight of 19.87 pounds. The total length of child measured 27 inches, and the circumference of body over shoulders measured twenty-one and one-half inches. The finger nails extended to ends of fingers, the hair was longer than a child's hair usually is at term. The bones of foetal head were larger, thicker and better developed and more ossified than in a normal child at term, this going to prove this to be a post-mature foetus.

The subsequent history of the case shows that she took nourishment at noon on the 29th of March, but refused supper. At 9 A. M. on same day temperature 99.4, respiration 22, and pulse 106. After this, patient gradually became worse, sleeping greater part of day, but pulse and respiration increasing until 11:30 P. M. temperature 103, pulse 128 and respiration 34. The urine voided per catheter was dark, amber, turbid, Sp. Gr. 1018, acid reaction, no sugar, albumen present, and copious brownish sediment.

Microscopical examination showed presence of a few hyaline and granular casts, some leukocytes and many red cells. A blood count made on the 30th showed 4,530,000 red cells, 16,100 leukocytes and 90 per cent. Hb. Polynuclears 69.5 per cent. lymphocytes 22.5 per cent., large monos 3 per cent., transitional forms 2.5 per cent, the report showing nothing distinctive in the case, the polynucleosis being only slightly above normal, but with a hyper-leukocytosis.

From the time the above T. P. R. was taken there was a drop until at 12 M. on 30th, temperature was 99.4, pulse 90, respiration 32. She slept but little on this day, complaining of pain in side the greater part of day. She took some nourishment but seemed to be growing weaker, despite the stimulants and irrigations employed to combat the infection. Unfortunately no microscopical examination was made to ascertain the variety of infection, but the clinical symptoms were those of puerpial sepsis. The patient left the hospital on March 31, against the advice and wishes of the attending physician, and was at this time still growing weaker.

Prognosis—From the beginning in these cases the prognosis is dependant on early diagnosis and correct treatment. With a history of previous dystocia due to fetal overgrowth, the date of confinement should be estimated and if labor does not occur at proper time, or if the relative sizes of foetus and pelvic diameters are becoming disproportionate, even before full term is reached, then proper interference will probably save both mother and child. But if the overdevelopment is not detected until labor begins the prognosis varies with the kind and promptness in performing the treatments. If the final result is

left to nature in a case of this kind that the prognosis is very unfavorable is self-evident.

With a head circumference of about twenty-one inches at least, and the normal pelvic circumference of sixteen inches, bones of cranium well ossified and unyielding, delivery is impossible. The mortality where proper treatment is instituted varies with the operation employed, the condition of woman, injury to parturient canal and the aseptic precautions observed.

As one of the physicians who saw the case remarked, Sepsis is elegant out there." But when you consider the frequent examinations, some of which possibly being improperly made, the application, crude manipulations employed, and the great pressure exerted on the soft parts, one need not be surprised to find sepsis resulting even though all precautions be subsequently taken.

Treatment.—The treatment of overdevelopment of foetus in utero if suspected early should be preventive, rather than curative. This patient with a history of a previous dystocia should have been carefully watched; the time of confinement estimated, the relative size of pelvis and fetal head compared, and when the time of full term approached, or the fetal head became as large as would safely pass through the pelvis, then labor should have been induced and foetus delivered while still of normal size.

The proper mode of treatment in the above would be by pelvimetry to ascertain the normal size of pelvis, this probably being best accomplished by the use of Hirst's pelvimeter. To ascertain the size of fetal head or shoulders cephalometry or foetometry may be done by use of regular

pelvimeter, or you may be more easily able to tell the relative size of pelvis and fetal head by the employment of Mueller's method of manual engagement of the head. This operation should be done at intervals of three or four weeks. As long as head engages easily in brim there is no absolute necessity for interruption of pregnancy.

The treatment where the case is first seen when in labor varies with the stage of labor, size of fetus, size of parturient canal, presence of obstructions, tumors, etc., condition of mother, and the condition of foetus, whether dead or alive.

In a similar case with woman in fair condition, head not impacted, no signs of pressure, no chance of sepsis from too frequent examinations, child alive and in good condition, and with the history of a previous dystocia, the choice of operation would lie between symphysiotomy, pubiotomy, and caesarean section, with preference being shown the latter in this case.

If the woman is unwilling to submit to abdominal section symphysiotomy could be performed and delivery accomplished easily with comparative safety. But with a patient in the lower planes of life where skilled care cannot be obtained for all pregnancies, then the abdominal section with removal of the uterus to prevent a recurrence of the dystocia would be preferable. However, if such skilled care can be had, the child may be delivered by doing symphysiotomy or pubiotomy, and the woman afterwards being well watched to prevent a recurrence of foetal overgrowth. The woman in this case subsequently bearing other children. But where the foetus is dead, head firmly

impacted, pressure signs evident, probability of infection, then even abdominal section is contraindicated, and the necessity of action cause you to turn to embryotomy for relief. Here the treatment is really not one of choice, but of necessity. You must deliver the foetus in whole or by piecemeal, and do it immediately to prevent as much as is possible, the necrosis and sloughing that follows the great pressure exerted on the walls. In performing the operation the strictest antisepsis should be observed, and the operation followed up by antiseptic irrigations as often as necessary to combat the ever-ready-to-butt-in-infection.

In this case, in spite of the antiseptic observances in operation and subsequent use of antiseptic treatment, the infection proved itself to be beyond reach and death occurred about seventy-six hours after delivery from puerperal sepsis.

—o—

TO THE STUDENT BODY AND READERS OF THE MEDICAL.

For one more time I am forced to ask your indulgence. I want to reply to Dr. Thompson for all time and all eternity.

The series of articles concerning the giving of anesthetics in the John Sealy Hospital was called forth by an article from this same pen in the December *Medical*. The reason I wrote that article was because there are several students in the Senior and Junior classes who feel the lack of training in the giving of anesthetics. The article was forthcoming at the request of some of the Senior students.

The State of Texas appropriates \$60,000.00 per annum to maintain the Medical Department of the University of Texas. The City of Galveston appropriates \$37,000.00 to run the John Sealy Hospital, from which the students derive benefit. The average graduation class numbers about twenty men; it costs each of these men not less than \$1,000.00 to get a Medical education—\$20,000.00 for the whole class. That means an outlay of \$117,000.00 to graduate about twenty men; these students, after so great an expenditure, lack the proper teaching and training in the giving of anesthetics. There is no excuse for this.

Another reason why the first article was written was the fact that the men whose duty it is to train the students in the giving of anesthetics, hesitate and even refuse to let the students give an anesthetic for them; yet these same men feel no hesitancy in signing their names to the diplomas by which they signify that the holder of the diploma is a competent physician, full fledged and capable doctor and recommended to the world as such by those men whose signatures are attached thereto.

In the February issue of the Medical, in which Dr. Thompson branded my previous article "deliberately false and misleading," he says that the present Superintendent of the Operating room is a specially trained nurse whose skill as an anesthetist is beyond all argument.

I tried to learn the training of the nurse in question, and the following is my experience:—

The Hospital force refused me the information; I told Dr. Thompson of my rebuff and he volunteered no information on the subject. I cannot see the motive for withholding it, since I have given them the opportunity to furnish

me with proper data. I later learned that the nurse in question has been in the John Sealy Hospital since late in the summer of 1907, coming to Galveston from Augusta, Georgia, as a graduate from St. Luke's Hospital in St. Louis. Her training as an anesthetist, from what I can learn, was obtained at the John Sealy Hospital. I have this from one or two of the city physicians to whom she applied for experience in this line of work. This substantiates my position. Therefore I infer that there is bound to have been a time when she was inexperienced and her experience was being gained on the John Sealy patients, while the teaching and the training of the students were being neglected. Yet Dr. Thompson says this nurse, "Has been specially trained in this class of work. Her skill in administering an anesthetic is beyond all argument———" What is the difference between an inexperienced nurse and an inexperienced student?

Further in his article in the February Medical, Dr. Thompson said: "as a matter of fact only one nurse ever administers an anesthetic in the institution. The nurse in question is the head nurse of the operating theatre who has been specially trained———, etc." By his use of the singular number and the present tense, one naturally infers that he means that the present operating room superintendent is the only nurse who has given an anesthetic in the institution. In picking charts at more or less random, I find charts, Gen. Nos. 1729, 2143, and 1644, dated respectively Feb. 4, April 22, and Feb. 20, 1907, are signed, Anesthetist, I. M. B. with the M. D. scratched out. These are the initials of the superintendent of the operating room who preceded the present incumbent. She was another St. Luke's

nurse from St. Louis. If the St. Luke's Hospital gives its nurses a course in anesthetics and the giving of the same, it is about the only institution of its kind in the U. S. A. which does.

Dr. Thompson has shown great duplicity in his interpretation of this matter. When he read my first article, he sent for one of the members of the Senior class and said to him somewhat as follows:—"That article should never have been published. If the students or the Seniors wanted an anesthetists, why did they not ask for it?" In less than three weeks the students asked for and were granted the privilege of being assistant anesthetists. By voluntarily offering to grant the request of the students, Dr. Thompson showed that he placed the proper interpretation upon the article—i. e., a petition of the students for teaching and training as anesthetists, and that he recognized the justice of the same, yet in the February number of the Medical he dodges the issue and branded the sum total of the article as "a deliberately false and misleading statement." Every student who has attended the Medical Department of the U. of T. in the past ten years knows that the students lack experience and training in this line of work. Yet Dr. Thompson felt no hesitancy as professor of surgery of the U. of T. in saying that the above fact was deliberately false and misleading when he branded the whole article as such.

In conversation with Dr. Thompson several days ago, we discussed the situation, and I explained the reason for the brevity of my first reply and the feeling of the students in the matter, etc. He promised me that he would first educate the students as assistants and when they were

proficient as assistants, they could act as anesthetists, but the choice of the student, time, etc., must be left entirely with him. And he further said, "The next time you want anything, please come to me or to Miss——; I do not think you will find us unreasonable. The truth is we do not like publicity." The truth is I like publicity. And if it takes publicity, I am willing to publish from the house-tops this deficiency in our curriculum and to cry it through the streets until we get the desired teaching and training. I told Dr. Thompson and Miss Shackford that I was willing to correct the impression that he had claimed that I had made that the John Sealy nurses were in the habit of administering the anesthetics indiscriminately. I even went so far as to say that I knew of no nurse who had given an anesthetic, meaning that I personally could not furnish them the nurse's name from my own experience. Dr. Thompson has willfully taken this statement out of the context and quoted it to his own advantage. But I would like to impress it upon Dr. Thompson that I hold the proof that others have seen John Sealy Hospital nurses giving anesthetics in the John Sealy Hospital. I am prepared to give the proof of the same to the proper authorities at the proper time. And if they find that the article that Dr. Thompson branded false and misleading is not true, I am willing to be put out of the school as an agitator and a liar. Yet in all fairness and justice to the hospital, I will add that it is not the general custom and that the nurses do not give the anesthetics indiscriminately.

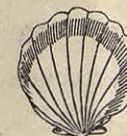
Dr. Thompson claims that I have not kept my promise to him, that he had given me a chance to, but my statements were not to his liking. This is a very misleading statement. I want it distinctly understood that I never at any

time submitted any statement of any sort, kind, or description to Dr. Thompson for his approval, regardless of the impression he seeks to create. He went to the Editor-in-Chief of the Medical and asked to see what I had to say. Here is what he read:—

"Since writing my previous article, I have learned that several persons who read the same article took it to mean that any and all of the John Sealy nurses gave anesthetics. Of course, all the students and all others personally concerned know that Miss Rutherford, superintendent of the operating room, is the nurse who acts in this capacity. The object of this paper is to call attention to the fact that I never said who the nurse was or where she come from." Dr. Thompson sent this article to me, saying that I must publish that "no John Sealy nurse had given an anesthetic, and that Miss Rutherford was the only nurse who acted as such," with a touch as to her capability. And he even said further that unless I published this, he would publish the conversation that he had had Miss S—— to witness. In other words he tried to bring pressure to bear, to threaten, to bluff or to buldoze me into writing and publishing what he dictated. I refused to do it. I asked the Editor-in-Chief for my article and left Dr. Thompson free to publish whatever he wished. Personally, I consider the above statement to emanate from a desire on the part of Dr. Thompson to place me in a false light before the student body and the readers of the Medical.

Now I leave it up to you without any further comment. Who has acted fairly and squarely in this matter? Who is the author of the misleading and false statements? And further, I ask why is the teaching and training of the students in the giving of anesthetics disregarded and neglected?

Yours until the end,
THAD SHAW. (Signed)



The University Medical

GALVESTON, TEXAS

EDITORIAL STAFF

M. SWEARINGEN.....Editor in Chief
C. O. TERRELL.....Business Manager

MEDICINE

C. C. BRADFORD.....'10 R. B. McBRIDE.....'12
A. STREIT.....'11 C. Z. SMITH.....'09

PHARMACY

V. V. McKINNEY.....'09 MISS IDA PFEIFFER.....'10
MISS LENA HARDIN.....School of Nursing
A. J. HINMAN, Ph. G.....Alumni

EDITORIALS.

AU REVOIR.

With this issue another volume of the Medical is completed and our connection with journalism ended as well.

We have striven earnestly to make the Medical worth while, and whatever success we have attained has been contributed to greatly by the valuable assistance of our class editors, members of the faculty, Senior class and others who have furnished us with interesting and instructive papers on subjects well worth consideration.

The business men of the city have patronized our advertising pages liberally. We appreciate this and hope they are satisfied with the results produced.

While all the things we had hoped for in the way of advancement for the Medical have not been accomplished, a few have, so we pass the editorial *toga* to our successor, feeling confident that strenuous efforts will be put forth to make the Medical a journal the pride of the Medical Department and its alumni.

The following are some of the points of progress noted in this department for the session just closing: (1) As the entrance requirements are being raised a greater number of the students entering are able to do the work, and consequently are not being "busted" out to be chronic knockers on the school the rest of their days. (2) Those who do not make good after first third of term are either dismissed, or are left on probation after a heart to heart talk with the dean, so they are not in the way of those who will work and are able to make the course. (3) Attendance upon clinics is being made more attractive, aside from the gaining of actual clinical experience as it is to show up in the grades. (4) The establishment of the obstetrical outdoor service, which is growing beyond our most sanguine expectations, and which promises to make our obstetrical knowledge more practical than heretofore.

Since the last issue of the Medical we have noticed that the appropriation bill for \$150,000 to establish a Tuberculosis Sanatorium in Texas has failed to meet the governor's approval. We think it is indeed a sad reflection

on the State that the chief executive did not see fit to lend his signature to a measure that so vitally concerns the interest of every person in the State.

While, as some contend such an institution would be entirely inadequate to care for the thousands of tuberculosis patients in the State, yet it would have been a great stride toward the solving of a problem that so much concerns the health, happiness and lives of a great number of our people.

After undergoing many reverses and passing through a stormy contest with politicians, the bill providing for the creation of a State Board of Health has become a law.

Our present State Health Officer, Dr. Brumby, who has done much toward establishing a system of vital statistics in the State will succeed himself under the new law.

On April 19, at 8 P. M., Dr. F. Creighton Wellman, of Washington, D. C., delivered a lecture in the lower west lecture room on "Why the Physicians in Temperate Climates Should Study Tropical Diseases."

Then on the following afternoon at 2 P. M., on "Insects and Human Diseases."

To us a borrowed phrase, "Dr. Wellman speaks with authority on Tropical Diseases," having resided in South Africa for some time, and making some interesting observations while there.

Both lectures were interesting and instructive.

On Saturday afternoon, April 10, through the courtesy of the management of the Theatorium Vaudeville the faculty and students were treated to a free performance.

Every feature of the entertainment was well carried out and was much appreciated and enjoyed by the students, most of them being present.

As Business Manager of the Medical, one has opportunity to make many observations of things which would be of benefit to the magazine.

In the first place the student body does not "in toto" feel that the Medical is a magazine of the students, for the students, and by the students. The result is that many show a lack of interest in its welfare and consider it as one of the necessary grafting evils, and in so doing do not give it the financial support that it should have.

It is the duty of every student to subscribe for the magazine and in giving it his support he has the right to expect value received for his money, but as long as only a minority give it their support just so long it will be impossible to place the publication on the standard that it should be.

Do you ever consider when you are patronizing a firm whether or not they are giving your enterprise their support? When you begin to consider this matter seriously and patronize those who advertise with the college paper you will find that you will soon have the representative business men on the advertising list; and in that way the income from the ads. will be increased and the management enabled to put out a larger magazine.

The management wishes to thank those who have given them their support for this year and in behalf of next year's management wishes to urge you to remember that it is your magazine and your duty to assist in making it such that it will be representative of the University of Texas.

Respectfully,
C. O. TERRELL.

—o—

NEWS ITEMS.

Because of an outbreak of smallpox in the Sealy Hospital all clinics were suspended for about three weeks during the past months.

Regardless of the precautions taken to isolate each suspicious case new ones would develop in the wards, finally making it advisable to provide ample accommodations in tents for the patients and to disinfect the wards in which the outbreaks occurred.

President Meyer attended a faculty meeting here on Saturday night, April 10.

Born to Dr. and Mrs. J. T. Collier of Purmela, Texas, on April 18, 1909, an eight pound boy, who immediately assumed the name of Ivan Thayer and announced his intention of attending the meeting of the State Medical Association at Galveston next month.

THE DOCTOR AND THE PATIENT.

BY RUDYARD KIPLING.

The average patient looks on the average doctor very much as a non-combatant looks on the soldiers who are fighting for him. The more soldiers who stand between him and the enemy the better is the non-combatant pleased. It is an army which is always in action, always under fire, against death. Of course, it is a little unfortunate that death, as the senior practitioner, is bound to win in the long run, but we non-combatants, we patients, console ourselves with the thought that it is the business of the doctor to make the best terms he can with death on our behalf; it is the doctor's business to discover how long the attacks of death can be delayed or diverted; and, when he insists on driving the attack home, to see that he conducts himself according to the rules of civilized warfare.

Every sane human being agrees that this long fight for time which we call life is one of the most important things in the world, if not the most important. It follows, then, that the doctors who plan and conduct and who reinforce this fight are among the most important people in the world. Certainly the world treats them on this basis, for it has long ago decided that doctors have no hours which any one is bound to respect—and nothing except extreme bodily illness excuses them, in the world's eyes, from giving their help and skill—at any hour of the day or night—to any one who needs it. Who cares whether a doctor is in his bath or in his bed, or on his holiday, or at the theatre? If any of the children of men have a pain or a hurt he will be summoned quickly, and what vitality he may have accumulated during his hours of leisure will be dragged out of him.

In all times of flood, fire, plague, pestilence, famine, murder and sudden death it is required of the doctor that he report himself for duty, and remain on duty till his strength fails him or his conscience relieves him—which ever shall be the longer period.

This is the position of the doctor; these are some of his obligations. They will not grow less with time. Has any one heard of any proposed legislation to limit his output; any suggestion for an eight-hour day for doctors? Has any one noticed any change in public opinion which allows the doctor to refuse to attend a patient who he knows will never pay him? Is there any outcry against those people who are perfectly able to pay for medical advice and surgical appliances, but who cadge around free hospitals for bottles of tonic and cork legs and glass eyes? It is laid down that the doctor must save others. It is nowhere laid down that he need save himself.

But, with all these obligations, the doctor belongs to the privileged classes. Consider for a moment what his privileges are.

It is given to him to be practically the only person whose explanations the police will accept when he exceeds the legal speed limit.

On presentation of his visiting card the doctor can pass through riotous and turbulent crowds unmolested—even with applause.

He can hoist a yellow flag over a centre of civilization and turn it into a desert; he can hoist a red cross in the desert and turn it into a centre of civilization.

If he judges it necessary to the success of any operation in which he is interested he can halt a twenty-thousand

ton liner with her mails, in mid-ocean, till he can finish that operation.

He can forbid any ship to enter any port in the world; he can tie up the traffic of any port in the world without notice given.

He can order houses, streets, whole quarters of cities, to be pulled down or burned up, and if his patients object to the prescription he can count on the armed co-operation of the nearest troops to see that his orders are obeyed.

To do us poor patients justice, we seldom dispute the doctor's orders unless we are upset by prolonged epidemics of disease. Then if we are uncivilized we may declare that he has poisoned the drinking water for his own material purposes, and we may stone him in the streets. Even civilized people throw stones at him some times. He is open, for example, to the contempt of the gifted amateur, who knows by intuition what it has cost the experienced practitioner years to learn. The doctor is exposed to the criticism of the persons who consider their own undisciplined emotions more important than mankind's most bitter agonies; who would cripple and limit research for fear research might be accompanied by a little pain and suffering. But if the doctor has the time to study the history of his own profession he will find that such persons have always been against him—ever since the Egyptians erected statues to cats and dogs on the banks of the Nile.

Yet the doctor's work goes on, and the medical profession remains, perhaps, the only class which dares to tell our world nowadays that we cannot get more out of a machine than we put into it; that if the fathers eat forbidden fruit their children's teeth are liable to be affected.

His training and his practice show him daily and directly that things are what they are, and that their consequences will be what they will be. Better still, he can prove what he asserts. If a patient disregards his advice the doctor has not to wait a generation to convince him. He knows that in a few days or weeks he will be called in again, and he will find his heedless friend with a pain on his inside, or spots on his outside, or madness in his brain, precisely as the doctor assured him would be the case if he continued in his errors.

All this is the tremendous privilege of the doctor! At a time when a few things can be called by their right names, when it is opposed to the spirit of the day even to hint that any act can entail unpleasant consequences, he is the one man who is paid to tell the truth, and whatever departure he makes from the truth is in concession to man's bodily weakness, not a man's intellectual weakness.

The doctor's calling is at once the profession that carries the largest powers and the highest death rate of any profession in the world. We, as patients, therefore, can only wish for its members as much work as it can do, and strength enough to accomplish that work—without having to go to a doctor!—*A Reprint.*

—o—

JUNIOR CLASS NOTES.

Recently Mr. T. C. Gilbert was suddenly taken ill and upon calling Drs. Moore and Randall a diagnosis of appendicitis was made and immediate operation advised. He was taken to St. Mary's Infirmary where Dr. Moore did an appendectomy, finding that only a few more hours would

have resulted in rupture. Mr. Gilbert suffered very little and made a rapid recovery. He was visited during convalescence by his father, Dr. Gilbert of Irving, Texas.

Some one stated that it was a negro soldier who slew his fellowman between Strand and Mechanic recently, whereupon Mr. Montgomery became all inquisitive to know if he wore his *union suit* at the time the deed was done.

While many of the class have tried to find some specimen which would be of interest, and do to store in the Museum, Mr. Thad Shaw has never shown himself over-anxious of such distinction as might naturally devolve on one from such a find. He has done his work creditably and such has no doubt been appreciated by his instructors. However, he could not but feel elated over a specimen which he recently discovered. It was indeed a surprise to him and all who were working at the same table with him. It was a case where there was a direct connection between the stomach and duodenum. When Mr. Shaw first saw this he could hardly be convinced that it was true but such was the case, and it seems as if when food was ingested that instead of passing on through the intestinal tract as it normally does, it must have been forced to pass, first from the stomach into the duodenum, and from here it was driven on in some strange and mysterious way into the jejunum. Once in the jejunum there is no reason to suppose its further passage was other than normal.

Recently at an election for the purpose of electing a manager for the cigar store of the Young Men's Dining Club, Mr. C. F. Smith was elected.

Mr. Scull has been on the sick list for the past few days, but is now well enough to attend lectures.

It has recently been demonstrated that in the absence of abundance of lemons pepper sauce is about as good for ice tea. The liberty to so use the more convenient article is not covered by patent nor copyright. For specific directions see Mr. Warren.

RESOLUTIONS OF SYMPATHY.

Whereas, Almighty God, in his infinite wisdom, has seen fit to sadden the heart of our fellow classman, Mr. W. J. Jenkins, by the removal of his mother from this life;

Be it resolved, that we, the Sophomore class, extend to him our sincere sympathy and condolence in the present sad hour; and,

Be it further resolved, that a copy of these resolutions be presented to Mr. Jenkins, and other copies be furnished for publication in his home paper and in The Medical.

AUG. STREIT,
W. F. SPILLER, Jr.,
G. C. KINDLY,
Committee.

SENIOR PHARMACY NOTES.

We are now on the "home stretch" in our race for a much coveted and dreamed of diploma. We feel fairly certain that we will all make a "grand slide" and be called "safe in home" by the "reverend umpire." However, we all realize that Pharmacy, Clinical Chemistry, Therapeutics, and last but not least, Organic, stare us in the face and present to our six senses (more or less) a giant question mark.

Know all men by these presents, we who are "by the board" sincerely and affectionately offer our good wishes, reconciliation, etc., to the applicants for examination before the said State Board, which is to be held in Houston on May 18, 1909.. We feel confident that all will "show their raisin'."

Miss D.—Professor, don't some kind of blackberries grow just under the ground?

Professor B.—No, ma'am, your are thinking of Irish potatoes.

Professor C.—Mr. W., how do spiders move?

Mr. W.—By their legs.

Professor C.—What is the difference between yours and a spider's legs?

(Who knows?)

Miss R. wants to know if she may graduate without a "cap and gown."



DRINK

Kaiser Wilhelm Springs

Purest and Healthiest Table Water

"The King of Them All"

Guaranteed to be bottled at the Springs in
Imnau, Hohenzollern, Germany

WITH ITS OWN NATURAL GAS

Sold Everywhere

O. KONOLD, Sole Importer and Distributor for U. S. Moody Building.

G. B. MARSAN & CO.

HEADQUARTERS FOR

Fresh Oysters, Fish, Shrimp

POULTRY

GAME AND VEGETABLES

PHONE 109

1919 Market Street

Galveston, Texas

PATSEY'S HACK STAND

NIGHT PHONE DAY
1750

FIRST - CLASS SERVICE

LOUIS TSCHUMY SWISS WATCHMAKER and JEWELER

Watches, Clocks and Jewelry Carefully
Repaired and Warranted.

2219 Market St., Levy Bldg.

Galveston, Texas

FOOT FORM SHOE STORE

LOUIS HIMELFARB, Proprietor

AGENT FOR

Just Wright and Florsheim Shoes

Complete Line of Footwear Always Kept in stock

2114 MARKET STREET

Between 21st and 22d Sts.

Chas. E. Witherspoon

DRUGGIST

Corner 21st and Market Streets, Galveston

PHONE 254

Special Courtesies to Students

"Meet Me at Witherspoon's"

Established 1890

Phone 2611

P. NIELSON

Leading Tailor and Importer of Fine Woolens

Take a look at our **\$25.00 Suits**. We keep an expert cleaner on our premises. You can have your suit cleaned and pressed for \$1.50.

We will call for and deliver your goods.

2124 MARKET STREET

Tussup Grocery Co.

ESPECIALLY RECOMMEND

Club House Fruits and Vegetables,

Chase & Sanburn Teas and Coffee

Morrell's Hams and Bacon

22d and Postoffice

Phones 12 and 422

Star Drug Store

Carries everything pertaining to a first-class
Pharmacy. Students are especially invited to call

Corner Tremont and Postoffice Streets

Cafe Royal

LADIES' RESTAURANT

Sea Foods and Delicacies of all Seasons

OUR SPECIALTY

OPEN UNTIL 12 O'CLOCK P. M.

Corner 23d Street and Avenue C.

We solicit the patronage of the Students. We will
wash, clean, press and mend your clothing

Rex Laundry

2417 Mechanic St.

Phone 2000

LOOK RIGHT

DRESS RIGHT

Which we assure you can be done by having us
do your Laundry work and Clean and
Press that Suit

O. K. LAUNDRY

FOR COAL

Telephone **100** or **800**

E. O. FLOOD & CO.

2113 MECHANIC STREET

FERDINAND OHLENDORF

Headquarters for

Students' Note Books, Fountain Pens, Stationery, Books
Magazines and Newspapers

Subscriptions taken for any Paper or Magazine on shortest notice

PHONE 608

2015 MARKET STREET

Bartlett's Studio

2217½ Market St., Galveston, Texas

DEVELOPING KODAK FILMS

4x5 AND SMALLER

12 Exposures, 25 Cents

6 Exposures, 15 Cents

PRINTS—4x5 and Smaller, 5c Each

A. C. DEAN

PROPRIETOR

Tonsorial Parlor

Shaving, Hair Cutting, Shampooing, Hot and Cold Baths.

313 CENTER STREET (Pendergast Bldg.)

GALVESTON, TEXAS

HATS of all kinds cleaned, dyed and re-blocked.
When you have your work done with us
once you will become a customer always.

Try Us and Be One.

LEVIN HAT CO., Artistic Hatters

603 23rd Street

SAKOWITZ BROS.

SOLE AGENT

STEIN-BLOCH AND KIRSCHBAUM SMART CLOTHES

\$15 to \$35

Elite Restaurant

N. L. BALLICH, Proprietor

Everything Up-to-Date Prompt and Polite Service

OPEN DAY AND NIGHT

Phone 66

2208 Market Street

W. D. PUELLE'S

For Tonsorial Art Work
AND HOT AND COLD BATHS

506 Tremont St. Galveston, Texas

PHONE 308

For Everything First Class in

GROCERIES

S. E. Cor. Tremont
and Winnie Sts.

L. A. MAAS & BRO.

T. R. Lovelace

YOUR TAILOR

Expert Cleaner and Presser

1823 Market Street

Phone 2826

Hair Cutting Neat

Shampooing Glean

Shaving First-Glass

Tonsorial Parlor

317 22d STREET

Bet. Market and Mechanic, Opposite Goggan's Music Store

First-Class Barbers in Attendance

Your Patronage Solicited

HAL L. ENNIS, Manager

BILLIARDS AND POOL

CIGARS AND TOBACCO

Next to Turf

2212 Market St.

"Your Money's Worth or Your Money Back"

**Cigars, Tobaccos
and Cigarettes**

W. R. WILLARD 21st and Market Sts.

AT WITHERSPOON, THE DRUGGIST

A. H. GASTON'S BARBER SHOP

218 Tremont Street

Opposite Royal Hotel

Between Mechanic and Strand

Polite attention and best service given to the public

Latest Periodicals always on hand

HOT AND COLD BATHS

M. O. NOBBE & CO.

(INCORPORATED)

OPTICIANS

Tremont and Market Sts.

Galveston, Texas

THE PLACE TO DO YOUR TRADING IS AT

MIGEL'S

Established in 1880

Corner Market and 24th Sts.

Galveston, Texas

T. GIUSTI

GROCREIES

Oyssters, Cigar and Tobaccos

PHONE 1073

Fox's Steam Bakery

GEO. FOX & SON, Proprietors

BREAD, PIES, CAKES, ETC.

PHONE 146

1906-1908 Market Street

EAST END PHARMACY

513 Thirteenth Street

Students' Note Books, per dozen.....70c

Stationery, Cigars, Tobacco, Cold Drinks

Special Rates to Students

E. C. DOMINGO, Ph. G.

■ RICH CUT GLASS ■

AND

SOLID SILVERWARE

People of refinement everywhere regard these two wares as the height of good taste and elegance.

No household that makes any pretense at fashionable table service can afford to do so without a showing of these beautiful wares.

Add to your supply of cut glass and silverware at every opportunity. Money invested in them is well spent and will give pride and prestige as long as they last—forever.

We show a splendid line at all seasons.

M. W. SHAW & SONS.

OPTICIANS AND JEWELERS

Corner Market and Tremont

Galveston, Texas

It's a Known Fact that

J. J. SCHOTT

Galveston, Texas

Has the LARGEST and most complete DRUG STORE in Texas. Especial attention to Students.

WE NEVER CLOSE

HANDTURNED COLLARS

FIT AND WEAR WELL

WE DO IT

Model Laundry & Dye Works

THE ONLY LAUNDRY IN GALVESTON WHICH WORKS
EXCLUSIVELY FOR WHITE PERSONS

...STUDENTS' HEADQUARTERS...

For The Best and Newest Thing for School, Professional
or Full Dress Wear.

GALVESTON AGENTS FOR

COLLEGE BRAND CLOTHES THE HOUSE OF
KUPPENHEIMER, THE ED. V. PRICE
MADE TO MEASURE CLOTHING.

All the New Spring Shapes in Stetson and Our Special
Hats. Give us a call.

Dave Schram Clothing Co.

GEAR & PECK, MANAGERS

Have your Prescriptions for SPECTACLES and EYE GLASSES Filled by

Galveston Optical Co.
UP TO DATE OPTICIANS

TRUST BLDG. G. H. Aronsfeld Mgr.
Patronize a Fellow Student

Students Take Notice

The Celebrated Line of

Hart, Schaffer & Marx Clothes

For Spring 1909 Now Showing.

—Everything New.—

Crossett Oxfords

Tans, Russets, Vici and Patent Leathers

STAR CLOTHING HOUSE

2405 and 2407 Market Street.

Pharmacy
John S. Schilling.

3/12/08.

II

Give constituents, official name, use, dose
and mode of administering. (A) Spirits
of Mincereus. (B) Barleant's Mixture.
(C) Solution of Iron. (d). Give official
name, constituents doses and use of
a. the two Symps of Hypophosphites

Pharmacy
J. S. S.

L

3/12/08,

III.

Give official name, constituents
uses and use of (a) the two ^{hypophosphites} syrups of
(B) Syrup of Iron (C) Syrup of Ipecac
(d) Syrup of Gum Arabic,

Howey
am. 11:50 1783hr
Berg Strich. gi'koat
8 P.M.

For Berg.

Give Anerema
with S.S.M.S. 1/2 fl.
Glycerine 1/2 ss.
in the morning.

When he came in he
was in comatose
condition with
mental retraction
and evidences
of a right sided
hemiplegia.

For ~~admission~~ preliminary
give atropine Noohy

dem.
and rub the chest
with turpentine.
+ Leonard Tronche
at night.

Louis Washington

36th Portoffice

See Abernethie
about eruption.

Test meal Wd III

9 AM

Test M. Wd II

9.20 AM

Calomel

Squills

Digitalis at night
at night for 3 days.

Enema for dissen-
sion.
Evacuans Enema
+ Mille aniseta 3T
and turpentine 3T

15	15
15	60
75	4
15	240
225	
7	
232	

Peter

Henry Thompson

Tride
+ vermal. 3T

B. for Bingham

Syr. Squills.

Ammon chlor.

Troloxin Cough.

Syrup. Oxine

Aquae gr. 5.

and II.

Bel 10 90 to side

~~Stomachic. Sassafras~~

~~and 10 90 to side~~

Thompson Caffeine

Cit. gr 3 94 lvs.

Morris Symplicis Symp.

J III gr 4 lvs.

Ello Morris

Pulse 125.

Resp 50

Temp. 6 AM. 106 1/4

Caffeine gr III
Camphor gr X. II

No 10 pint.

No. 3.

Martha Mitchell

Agonacin gr 1/6

Sol. Chlori gr II

R.B.C 3,648,000

W. 27.700

Pulse 25.5 2

Symplicis 17.

Large Morris 38.

H.B. 50.

on a new side

Dr. Dudgeon Private
patient room 4

Grybill.

Lincoln Tissue
if don't sleep.

34-108-107

5-0-5

Notify Dr. Dudgeon
of atrophy.

Loop line.

Mustard oil

3 95 3 97

Urotropin 7 1/2

Salsol 3 1/2

Benzoin oil 3 58

Cap. No. 2 X 1/2

Tit.

Tr. Nux Detox

Fenic Chloride
M 10

each a.c. 10 min.

Creosote Fin

alcohol

Tr. Cordonum.

Coat at 1/2 3.

North American
Accident Insurance
Co.
3rd Floor Trust
Building,
J. E. Mead.
Moxnessup Quay
Phone. 130
3184 Phone.
Leukie
T. Gamber Co.
Bismuth.

12:15
Mrs. J. W. Howie
Mrs. A. L.
Woodruff
Hoyt
Bright
Time Hartnett
Prinipase
Membl. 6:30
Loben 2 hr.
Mex

Stephen Steel
15-10-2nd St.

33

M

W

Typhoid

Max Koranovich

38 & 15.

21.

M

W

Typhoid

Secondary

Demented

tertian Malaria

3100

Mrs Constable

~~private~~ ~~Flora~~

Frank Wery

23 C & B

26 - M - W

Typhoid

Gustav Carlson

2702 Market St.

24 - M - W

Typhoid fever.

Annie Bohren

40-124-103.

46-128-108.6

ac. Carbolis 3⁵⁵
ac. Boric 1¹¹
alcoholis 1¹
aqua - 6⁵⁵

Bernice

Electrum

1019-16th St.

3 - F - W.

Mrs. Bohern.

14.000

4685 L. 9

pays 84.5. L. M. 2.5

42¹/₂ transitional.

John W. Elliott
James Gooding
1210-29th St.

Labos

36 - M - C

typhoid.

James Gooding.

1210-29th St.

36 yrs. - M - Col.

typhoid fever.

GI 1210-29th St.

W. Aug 26.

M. Aug 14

Ac. Carbolic MT

Alumina gr X

Ac. Boric gr XX

Aqueous 3 II

Presumpt. Subst.

gr. XX.

Masturbe Ortolan

Comp. 3 I

~~Fl. 12 and MX~~

herpentine

Mucil. acacia
II 3.

24	24
20	3
<hr/>	<hr/>
480	15
2	24
	<hr/>
	60
	30
	<hr/>
	360

Mrs Annie Balch

20 - F - W.

3922 Ave H.

House wife.

Typhoid fever.

1473 Phone

F. E. Mangum

John Williams.

1305-28

34 yrs.

M-C

Tuberculosis.

Tr. Ferri Chlor⁴

KClO₃ gr 20

Glycerine $\frac{3}{4}$ TSS

Aqua $\frac{3}{4}$ III

George Elson.

31 1/2-23rd

M-W-48

typhoid fever.

Roman Marshall

M-W-18-

town the island

typhoid fever

Termin Acid gr

Dodopom gr III

Morphine.

Stella Crawford

M 1/2 & 15 - St.

Tillman Foster

Houston, Tex.

Mrs. Vaughan.
Nervous give
Aromat. Spts. Ammon

$\frac{3}{4}$
Potass. Bromide gr
XXV

6 P.M. T. P. R
102.4-110-30

T. P. R
102-104-32
7:30

John Willcott
24-108-98
22-104-92

Vaughan.
9 P.M. - 24-108-102

Pot 24 + S.
anla.

Potass. Citrat. $\frac{3}{4}$ IV

Ol. Santal. $\frac{3}{4}$ V

Syr. Acaciae $\frac{3}{4}$ i

Aqua Ment. pip. grs

M. Thale $\frac{3}{4}$ III

sig! One teaspoonful
inf water 2 times KC.

K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

Polcom. Coprisa
Co. Spn. Grounder
Ypts. Nitron Ether 255
Liquor Potass 755
Ol. Sancheris 711
Muciloge Acacia 7504
711.

Christiana
M - C
32 & 33 Church.
37 yrs.
Joseph Tarcy
1475 A.
17 - M - N.

L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

27th K.

12:40. St

1:25. M

~~10-5-09~~

10-5-09
St. 7:15

or. 1:51

Office.

~~5/10~~

10-6-09

2:40. St

3:00. M

Police St.
Patrick Rowers

10:25

11:09

John Dunn.

Screwman

Pier St

to St. Marys.

11:12 P.M.

on

S. West Cor 20 N.

Will-Morson

24th M.

due airt 100

~~5:11~~

10-6-09.
24+30

4+4

7:16 P.M. at

7:50 a.m.

Sam Bee.

10-7-09

6:55 M.

7:25 on

Hope

10-8-07

3:30 ~~ST~~

4:47 ~~Ar~~

~~4:48~~

Mrs. A. J. Beard,

10-8-07

11:50 ~~Ar~~

~~Ar~~ 12:15 ~~Ar~~

Mike Isaac.

10-9-07

1:43 ~~ST~~

2:15 ~~Ar~~

10-9-07

1:45 ~~ST~~
~~Ar~~

10-10-07

3:40 ~~Ar~~

Holman

10-18-09
12:50 AM
1:05 AM

10-16-09
9:45 AM
10:00
312 20th
Walter Morris

10-16-09
6:13 AM
6:45 AM

10-16-09
10-16-09
10:23 AM
10:35 AM

10-16-09

Learning Will of God.

The following suggestions for finding out the will of God are given by Henry Drummond:

1. Pray.
2. Think.
3. Talk to wise people, but do not regard their decisions as final.
4. Beware of the bias of your own will, but do not be too much afraid of it.
5. Meantime, do the next thing; for doing God's will in small things best prepares for knowing larger things.
6. When decision and action are necessary, go ahead.
7. Never reconsider the decision when it is finally acted upon.
8. You will probably not find out until long afterward that you were led at all.

Phone.

1395.

43.

11/8/09-

Between

10 - 11th

@ - D.

Coleman

10-16-09

10:28 A.M.

10:55 A.M.

Col. 100

1314 Mi 1/2

10-19-09

1:05 A.M. P.E.

1- A.M.

Schools Drug Store

100 Collected.

10-19-09

9:32 A.M.

10:11 A.M.

26 C-13

Geo. Halbert

10-19-09

2:35 P.M.

27-C-13

POSTER

10-21-07
8 AM ST
8:15 AM Air
23rd + B

~~Branford~~
~~Bolivar~~

Bolivar.

10-21-07
3:40 PM

Here 10
Olive Warren
Screwman No 2

10-22-07
12:20 ST
2:45 Air
J. S.
Harry Brockman

10-23-07
3:30 AM
4:15 Air
358
Aaron Henderson

P
S
T
I
V
2

10-24-04

11:25
ST
ar

3416 N 1/2

10-24-04

11:25 ST

11:37 ar

Josephine Frank
Shia

10-25-04

4:25 PM
ar

2608 P 1/2

Miss Pearl Creek

10:50 ST

ar

P
S
T
I
V
2

10-28-09

8:20 P.M.

4:15 A.M.

39-42

C. J. Wolder

Bilderbach-
ange.

Herman Höfbeck

10-28-09

8:22 A.M.

9:15 A.M.

2610 Voss

Geo. Christman

10-29-09

9:52 A.M.

10:10 A.M.

27-28
Jesse Keep.

10-230-09.

9:25 ST

10:05 ar

John's Drug Store

Jose Arroyo

Velia

10-30-09.

394A.

Paul

Dep. M. R. R.
Pie Malavish.

10-30-09.

11:50 ST

12:42 ar.

Boulevard Hotel

200 Col. of.

10-30-09

1:30 ST

2:10 ar

St. Mary's

to 1814 N.

100 Col.

10-31-09
4:05 at
4:35 at
Mallory dock
~~at foot~~

Wm Webb
foreman of gang

10-31-09

9:05 at

9:35 at

27 & Church

Walter Osborne

11-2-09

5:07 at

5:30 at

7:15-2 at

Pearl Swan

11-2-09

10:27 L

11:10 ar

21st K

Mrs. Currie

11-3-09

7:10 STAM

7:22 ar

Rd. r.
James Washington
No collection

11-3-09

8:25 STAM

ar " "

44

H. Smith
Switch Union No. 135

11-3-09

10:10 STAM

10:26 ar " "

Per. 25

G. Anderson

11-3-09

6:42 P.M.

ar

Pier. to 5

Frank Simon

11-3-09

7:29 P.M.

8:06 ar

2909 M

James Worthington

11-4-09.

6:14 ar

6:35 ar

624 Tremont

Mrs Lena Flores

Chg 100 and fee.

11-5-09

7:20 ar

1312 L
Mrs Etta Shaw.

11-5-09.
8:25 St. Alb.
9:00 Arr. " "
16-17 0 1/2
Caroline, Buchanan

~~11-5-09~~

St. Alb.
Arr.
W.R. Morris
312 - 20th
no chge.

11-6-09.
8:56 St. Alb.
9:35 Arr. " "
Alfred Wimmerhofer
R.R. Station.

~~3911~~ ~~see L~~

11-7-09.
2:13 St. Alb.
2:50 Arr. " "
3911 L
Mrs. Speers.

Ruby Simon

02:01

2000
D. H. M.

11-9-09

10:42 AM 25

3524 2

Calvin Evans.

11-10-09

10:50

25

2002 Cl
Mr Lockett

11-12-09

1:45 AM

2:05 ar

R.R. Depot

Goodwin 5b

11-13-09

5:20 PM

ar

39 Ch

via post

11-14-09

6:42 AM

7:00 ar

R.R.

Owens.

11-14-09

27:30

6:40 PM

ar

11-15-09
1:30 ST.P.M.

Ar
Pier 18 100
J. Rhodes

11-15-09
ST.P.M.

J. Rhodes 100

1512-25

2 J. W.

2:45 " " 100

11-15-09
3:26 ST.P.M.

Ar
1921 D. 1/2
W. Foss

11-16-09
10:57 ST.A.M.

11:25 Ar " "

Miss Ogilvie

1714 H 200

11-17-09
6:45 AT
7:05 ar
7:14 a
no patient to
 Hosp Pat. dead.

11-17-09
12:15 AT
ar
2715 C
1.00

11-17-09
3:57 AT
ar
Pier 25
~~Winn-Dixie~~
Winn-Dixie
2608 C

~~10-04~~

10-12-04

Oscar Richards +

Harold Lockett +

Chas. Johnson +

F. J. Devine

Alfred Schaffer +

Peter Jackson.

Mrs. L. F. Hunt

Mr. Liza Jordan

Geo. Robertson +

J. Moore +

Chas. Johnson +

Chas. Edman
Sept 11 to 23

10-12-04

Kate Biggle +

Alex Thompson
Mallory & Co.

Don't know -

Mallory & Co.

~~10-04~~

10-12-04

Oscar Richards

Rapoleon Lockett

~~22 Dec 11~~

Smith - 34

Wickham

34

Prof. Wickham

Chas. Edwards
Sept 11 & 23

Booth 10/11
H.M. 31
Wickham
at 6 AM
Prof. 10/11
at 10 AM
some for drawing
Brown in 11/11
2 Oct.

2 Ac. dif. peritonitis; ac.
gang appendicitis; Ch. Colitis
(ulceration); Ch. parench.
neph with contraction etc.
Fatty & Cinnamon Liver.
Fatty degen. heart.

1902 P 1/2
G. W. Morgan.
Will Mosson

Albert. Gehlberg.
4942 Denver
Remedy.

12:03

12:08

12:08

12:14

Neke Laundry.

06:01

11:08

10:01

10:35 and
a beach

27

After Costar oil
act well give
Paregon 7/20.

Bismuth 7/20.

Peter 7/20.

Cerebral softening.

mg. 7/20

Terminal Broncho

pneumonia.

Beginning Fibrosis
of liver and Kidneys.

10:40

8:58

10:08

10:35 and
a beach

Sept 4:23

avg. 4:35 about

Lo 5:04

Hi 5:14

Take temp twice
daily 4 & 6 P.M.

Mrs. F. H. Wilson.

^{L. Jones}
Broncho Pneumonia

Vegetative Mitral

Endocarditis.

Wm Jones.

Lobar Pneumonia

Pleurisy and Pericarditis.

Cuerna 5 ²/₃ Quarts

Whiskey 1 ¹/₂

Coffee 1 ¹/₂ gr.

lit 5. ¹/₂ gr.

John Mitchell

phone 2992

J. A. MAJORS COMPANY

MEDICAL BOOKS

1301 TULANE AVE.

NEW ORLEANS, LA.

New Orleans, La., Dec 13, 1914

RECEIVED OF Dr John. G. Schelling -

Twenty seven and 00/100 DOLLARS

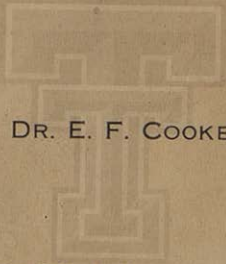
100

\$ 27 ¹⁰ - Warrant
not cash

J. A. MAJORS COMPANY

Per

[Signature]



DR. E. F. COOKE

LABORATORY OF CLINICAL PATHOLOGY

HOUSTON, TEXAS

view of the foregoing facts, and also knowing that no city in the Southwest possesses these advantages at the present time, and after thorough deliberation, The Physio-Medical College of Texas has decided to cast its lot with The College of Medicine and Surgery of Chicago.

This college with its own hospital and excellent equipments and great Cook County Hospital only a block away, offers advantages not surpassed, if equalled by any other institution of its kind in the American continent. Therefore, The Physio-Medical College of Texas heartily commends The College of Medicine and Surgery of Chicago to all its undergraduates, as well as to all prospective students in medicine and surgery.

P. HOLT,
J. M. MASSIE,
LESTER H. PAINTER,
R. L. SPANN.

The Samuel D. Gross Prize.—The conditions annexed by the testator are that a prize of fifteen hundred dollars "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be American citizens."

It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross Prize of the Philadelphia Academy of Surgery.

The essays, which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 S. 13th St., Philadelphia," on or before January 1, 1910.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing same motto, containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize.

Investigation of Diastase Ferments.—Among medicinal agents which may be classed as legitimate pharmaceutical preparations few are more widely advertised than are the starch-digesting ferments, the diastases. Several are good preparations. Some grossly exaggerate their claims in such a manner as to lead to distrust. Those which have merit have not always been marketed by methods which are wholly free from criticism. In most cases the method of reporting the digesting value is too obscure. Statements regarding the digesting power of diastases should be based on standard and uniform methods of testing. Recognizing the importance of uniformity in such work the sub-committee of the Council on Pharmacy and Chemistry has had a large number of comparative tests carried out on the more important products of this class, employing several methods of analysis. A comparison of the results made with the statements which appear in the manufacturers' circulars, etc., show the digestive powers are all lower than claimed, when the test is carried to the colorless endpoint reaction, and anhydrous starch conversion. For obvious reasons results should always be calculated to anhydrous starch for reporting.

The widest discrepancy between the values as claimed by the manufacturer and those found by actual tests seems to be shown in the case of Taka-Diastase. The liquid preparation has been tested a number of times in different samples and has always been found weak; some samples, in fact, were quite inert. This ferment appears to lose strength very rapidly in solution, as the manufacturers now concede. The stability of the solid product is also far from satisfactory, and appears to be less than that of the ferment as marketed some years ago.

Below is given a table of sugar formation in ten minutes. Column A gives the weight of ferment required in each case. Column B gives the weight of sugar formed in each case.

	A.	B.
Panase.....	8.85	622 mg.
Holadin.....	9.79	634 mg.
Taka-Diastase.....	62.5	611 mg.
Diazyme Essence.....	163.4	633 mg.
Diazyme Glycerole.....	163.4	635 mg.
Vera Diastase Essence.....	238.1	630 mg.

Frederick Stearns & Co., "Patent Medicine" Vendors.—Physicians who attended the Chicago session of the American Medical Association doubtless noticed while riding on the street cars the blatant advertisements of the headache remedy SHAC (Stearns Headache Cure). This nostrum, which seems to have been responsible for at least two cases of poisoning, is put on the market by Frederick Stearns & Co., Detroit, a fact that was noted in these pages a few months ago. It was not unnaturally assumed that these Peruna-like advertising tactics had been adopted by an enterprising local representative anxious to make a "showing." The June issue of the *New Idea*—a monthly journal published by Frederick Stearns & Co. and devoted to advertising their products to retail druggists—shows that this assumption was not well founded. In their journal they inform the druggist that "a new series of SHAC street-car cards are now ready for use in the large cities."

The evils of the indiscriminate use by the public of such powerful and insidious drugs as are contained in the various headache remedies need no further iteration. The question has long since ceased to be an academic one, and no casuistic reasoning nor specious arguments can hide the fact that enormous harm is being done by the exploitation of these acetanilid-containing nostrums, and the medical profession has expressed itself in no uncertain tone regarding the matter.

SHAC, however, is not the only "patent medicine" put on the market by Frederick Stearns & Co. Just as extensively advertised—and in the same mediums, the street cars—are Zymole Trokeys "for husky throats." Then there is Pam for the dyspeptic, a "tiny tablet of wonderful power," of which the modest statement is made that "every ferment of the digestive tract that is available is used in these tablets, fitting them for use in all kinds of indigestion." Surely, with such drugs at their command, dyspepsia need give physicians no further cause for worry!

These are some of the products put on the market by Frederick Stearns & Co., and vigorously "pushed" by them in advertisements to the laity. A form which, while soliciting the patronage of physicians through the pages of medical journals, is at the same time furthering the interests of self-drugging and dangerous nostrum-taking, will be looked on with distrust and suspicion by the medical profession—*Journal of the A. M. A.*

Examination Questions Submitted by the Texas State Board of Medical Examiners at the Examination Held in Waco, June 30, 1908.

SURGERY.

1. How would you prepare linen and gauze for a surgical operation? 2. How would you treat a lacerated wound? 3. Give diagnosis and treatment of a varicocele. 4. Give symptoms and treatment of fracture of the clavicle. 5. What are the symptoms and treatment for stone in the kidney? 6. In what position would you dress the thigh after amputation of the lower third? 7. What is pyemia, its symptoms and treatment? 8. Name the inflammatory diseases of the bones. 9. How does nature repair a fracture? 10. What is caries, and what are the causes and treatment?

E. P. BECTON.

MEDICAL JURISPRUDENCE.

1. Describe the phenomena of death, and signs of same. 2. By what means may the dead be identified? 3. Describe asphyxia, and the conditions found after death resulting from it. 4. Give the post-mortem appearances resulting from acute and chronic starvation. 5. What are the common causes of death following criminal abortion? 6. What are the most important proofs of a living birth? 7. What is meant by infanticide? 8. Define illusion, delusion, and hallucination. 9. What is meant by a lucid interval, and what is the importance of its recognition? 10. Describe a post-mortem examination in a case of strychnin poisoning.

J. D. OSBORNE.

PHYSICAL DIAGNOSIS.

1. Give topography and method of palpating the spleen. 2. Give the differential diagnosis between cholecystitis, appendicitis, and gastric ulcer. 3. Describe a case of multiple neuritis. 4. Discuss enterostenosis and how to locate the obstruction. 5. What are the physical signs of a typical case of typhoid fever? 6. Differentiate between chronic parenchymatous nephritis and chronic interstitial nephritis. 7. How would you diagnose a case of gastrectases? 8. Differentiate between cardiac and bronchial asthma. 9. Differentiate between tabes dorsalis and multiple neuritis. 10. Give significance and diagnostic value of Kernig's sign, Von Graefe's sign, Dietl's crisis, Argyll-Robinson's pupil, Kopplek's spots, Romberg's symptom, and McBurney's point.

G. B. FOSQUE.

CHEMISTRY.

1. Differentiate the terms caloric and thermal unit. 2. What is the chemical effect of the galvanic current when applied to the human body? 3. Differentiate between a physical and a chemical change. 4. Give the definition of an acid. 5. What terminal end-

ings are affixed to the names of acids to distinguish the higher and lower acids of a related acid group? 6. The finding of an excess of chlorides and nitrites in a water supply would indicate what? 7. How would you determine the presence of hydrochloric acid (free) after withdrawal of a test meal? 8. Describe the poisonous effects of nitric acid, and say how you would antidote it. 9. Describe a method (test) of determining the presence of arsenic in stomach contents. 10. Name and describe two tests for each of the following abnormal substances found in urine: albumen, sugar and indican.

T. J. CROWE.

BACTERIOLOGY.

1. Name three culture media (omit agar). Describe accurately the manufacture of agar media. 2. What is the Widal reaction? (a) State its significance. (b) Describe accurately the steps you would take to obtain it. 3. Name three antibacterial serums in common use. (a) State theory of their action. (b) What is an homologous vaccine? 4. Define the following: (a) phagocytosis, (b) chemotaxis, (c) opsonin, (d) lysin, (e) ptomaines. 5. Describe the technique of staining with Gram's method. (a) State its significance. (b) Give formula of solution used. 6. Describe the two most common pyogenic bacteria, and name the bacteria found in erysipelas, cellulitis, and pyemia. 7. State accurately the steps you would take to stain, mount, and examine a specimen of (a) sputum from an advanced case of tuberculosis; (b) section through a diphtheria membrane in the trachea. 8. Name and describe a malarial parasite. 9. What bacteria are likely to be mistaken for the tubercle bacillus, and how may this error be avoided? 10. What is a diplococcus? Give the name of two pathogenic diplococci.

J. P. RICE.

OBSTETRICS.

1. What is meant by the term abortion? Missed abortion? Give causes of abortion; treatment of threatened and of inevitable abortion. 2. Define ectopic pregnancy? Classify, based upon the situation of developing ovum. Give diagnosis. 3. What equipment would you carry in your grip to a case of labor and your conduct of a normal case? 4. Give your management of the puerperium, including care of mother and child. 5. Give indications for the use of forceps. Describe application of forceps. 6. Name some pathological conditions met with in labor, causing delayed labor. 7. Give diagnosis of breech presentation. Mechanism of labor in breech presentation. Prognosis and treatment. 8. Give frequency, causes, diagnosis, prognosis, and treatment of face presentations. Mechanism of labor in face presentations. 9. What is version? Indications for it? Describe podalic version. 10. Define and classify embryotomy. Describe craniotomy, and give indications for it.

J. D. MITCHELL.

HYGIENE.

1. What are the normal constituents of atmospheric air? 2. What hygienic measures are advisable for the prevention and eradication of scrobutus? 3. What diseases are communicated by stool and sputum, and what are the best methods of prevention of communication? 4. How would you care for an infant artificially fed? 5. Name the qualities desirable in water for drinking and domestic purposes? 6. Mention the sources of infection in tuberculosis, and describe suitable preventive measures. 7. What precautions are necessary, and what is the length of quarantine of (a) variola, (b) scarlet fever, (c) diphtheria, (d) yellow fever? 8. What occupations cause a predisposition to pulmonary diseases? 9. What is the difference between contagious and infectious diseases? 10. What methods would you prescribe for the care of a typhoid fever patient to prevent the spread of the disease?

J. F. BAILEY.

PHYSIOLOGY.

1. Describe the physiological action of gastric juice; of bile. Give the daily quantity secreted and chemical reaction of each. 2. What constitutes the cerebro-spinal axis? Give the relative position and function of the white and gray matter of the spinal cord. 3. Where are the following cerebral centers: expression, phonation, auditory, taste and smell? 4. Give the name, distribution and function of the third cranial nerve. 5. Give the essential difference between blood and chyle. 6. Give the name, number of each and the order of eruption of the temporary and permanent teeth. 7. Give the specific gravity, chemical reaction, average quantity in the body and normal constituents of human blood. 8. Describe the two routes through which lymph gains entrance to the general blood current; name the vessels through which it passes and into which it empties on each route. 9. Give the specific gravity, chemical reaction, daily quantity secreted and the physical composition of human lymph. 10. In what respect does the circulation of the lymph differ from that of the blood?

M. E. DANIEL.

GYNECOLOGY.

1. Define: (a) Menstruation, (b) amenorrhea, (c) dysmenorrhea, (d) menorrhagia, (e) menopause, (f) vicarious menstruation. 2. Define endometritis, acute and chronic. Name three forms and give treatment for each. 3. Name four classes of dysmenorrhea, and give treatment for each class. 4. Define: (a) Antelexion, (b) anteversion, (c) retroflexion, (d) retroversion. Give remedy for each. 5. Define: (a) Vulvitis, (b) vaginitis. Give etiology and treatment of each. 6. Give operative technique for amputation of the mammary gland, and for what pathological condition would you advise an operation? 7. Name ten indications and five contraindications for abdominal section in operative gynecology. 8. Give differential diagnosis between carcinoma of cervix and submucous uterine fibroid. Give operative technique of suprapubic hysterectomy. 9. Give differential diagnosis between chronic cystitis and stone in the bladder. Give operative technique for removing the stone and draining the bladder. 10. How would you prepare a patient for abdominal section? What are the three chief dangers of abdominal section and what would be the after-treatment from the first to the tenth day?

R. O. BRASWELL.

ANATOMY.

1. Describe the scapula and name the muscles attached. 2. Name the bones and ligaments forming the ankle joint. 3. Describe collateral circulation after ligation of the common carotid artery. 4. Describe the rectum, giving its nerve and blood supply. 5. Describe the stomach in detail. 6. Fully describe the inguinal canal. 7. Give subdivisions of the abdominal cavity, naming the viscera. 8. Name the muscles that flex the leg at the knee. 9. Name the flexor group of muscles of the forearm. 10. Give the origin, course and terminal distribution of the sciatic nerve.

Substitute Questions.

1. Describe the collateral circulation around the knee joint. 2. Describe briefly the kidney.

W. B. COLLINS.

HISTOLOGY.

1. Define histology. 2. Name the layers of the retina. 3. Describe the histological structure of the thyroid gland. 4. Describe the histological structure of the suprarenal gland. 5. Describe the phenomena of indirect cell division or karyokinesis. 6. Name the different forms in which connective tissue occurs. 7. Describe the histological structure of the liver. 8. Give histological structure of the neurons. 9. Differentiate the striated and non-striated muscular tissue. 10. Name the different cell formations in the body.

J. P. RICE.

PATHOLOGY.

1. Give pathology of thrombosis. 2. Give pathology of la grippe. 3. Give pathology of dysentery. 4. Give pathology of syphilis. 5. Give pathology of acute endocarditis. 6. Give pathology of appendicitis. 7. Give Cohenheim's theory of tumor formation. 8. Give pathology of tuberculosis. 9. Name the varieties of sarcoma from the kinds of cells that predominate. 10. Give pathology of simple anemia.

J. J. DIAL.

DISTRICT SOCIETIES.

THIRD OR PANHANDLE DISTRICT.

The Panhandle District Medical Society met in Quanah July 14th and 15th. The meeting was called to order by the President, Dr. A. F. Lumpkin, of Amarillo. After the invocation by Rev. J. S. Jesse, ex-Senator D. E. Decker, of Quanah, delivered the address of welcome. The Section on Practice was opened by Dr. J. M. Ballew, of Memphis, and the following program was presented: "Volvulus, a Report of Case," Dr. R. D. Gist, Amarillo; "Hydrotherapy," Dr. Geo. W. Carter, Plainview; "X-ray Treatment of Skin Diseases," Dr. Geo. D. Bond, Fort Worth; "Hereditary Plus Acquired Nervous Exhaustion," Dr. J. H. Turner, Fort Worth; "Goiter and the Surgical Treatment, with Reports of Cases and Specimens," Dr. Chas. H. Harris, Fort Worth; "Surgical Maniacs, Varieties and Causes," Dr. J. H. McLean, Fort Worth; "Surgical Treatment of Wounds of the Extremities," Dr. J. H. Reeves, Decatur; "The Country Doctor as a Surgeon," Dr. Sneed Strong, Bowie; "Report of a Case," Dr. Hines Clark, Crowell; "Medical and Surgical Treatment of Streptococcal Infection," Dr. Irl Dyeus, Archer City; "Peri-phalangeal Cellulitis," Dr. J. C. A. Guest, Wichita Falls. Addresses by the following: Dr. Mike Walker, Wichita Falls; Dr. A. C. Scott, Temple; Dr. H. D. Barnes, Tulia; Dr. H. Z. Pennington, Claude; Dr. J. N. Stoops, Estacado; Dr. Geo. T. Thomas, Amarillo; Dr. J. J. Hanna, Quanah; Dr. A. J. Caldwell, Amarillo.

All the papers were thoroughly discussed. The clinics were better at this meeting than ever before. Dr. Saunders did a double herniotomy. Dr. Small demonstrated the removal of ingrowing toe nails, and gave a splendid clinical lecture. The physicians and their wives never enjoyed a reception and banquet more than they did the one given at the home of Dr. and Mrs. G. W. Radford.

SIXTH OR CORPUS CHRISTI DISTRICT.

District Personal.—Drs. M. F. Vick, N. W. Atkinson and J. J. Boerum have recently been appointed to serve on the board of health of Alice, Texas.

EIGHTH OR DEWITT DISTRICT.

District Personals.—Miss Cassie Ledbetter, daughter of Dr. A. A. Ledbetter, of Hallettsville, died June 27th.

Dr. J. W. Burns, of Cuero, reached home July 10th from Europe, where he has been for the past four months.

Graduating Exercises

*of the Medical Department
of the University
of Texas*



SIXTEENTH ANNUAL SESSION
1906-07

May Thirty-first, Nineteen hundred and seven
Eight fifteen o'clock

SCOTTISH RITE CATHEDRAL
GALVESTON, TEXAS

Programme

MARCH

Entrance of Regents, Faculty and
Graduating Classes

PRAYER

Rev. Glenn Flinn

ANNUAL FACULTY ADDRESS TO GRADUATING CLASSES

Marvin L. Graves

MUSIC

CONFERRING DEGREES TO GRADUATES OF SCHOOLS OF
MEDICINE AND PHARMACY, AND CERTIFICATES OF
PROFICIENCY TO GRADUATES OF SCHOOL OF
NURSING

President David F. Houston

MUSIC

ANNOUNCEMENT OF HONORS

BENEDICTION

Rev. Glenn Flinn

MUSIC

The Degree of Doctor of Medicine is Conferred upon
the following Members of the Class
in Medicine:

Enga Mitchell Arnold
Charles Marion Aves
Charles Adolph Bahn
Simon John Clark
Ralph Emerson Cloud
Joel Isham Collier
Charles Christopher Cooke
Fredrick Donald Cooke
*Joe Dyer Davis
James Graham Flynn
Lawrence Robert Harris
*Henry Carl Hartmann
René Hector Huvelle

Oscar Hunt Judkins
*John Otto Kemp
*Harry Obadiah Knight
Oscar Victor Lawrence
Simm Harit Moore
Thomas Margemon Morris
Henry Fuller Phillips
Charles Walker Skipper
Sam Houston Spruiell
Herbert Rogers Wardlaw
Willis George Youens
Beverly Thomas Young
James Wells Young
James Guy Jones

The Degree of Graduate in Pharmacy is Conferred upon
the following Members of the Class
in Pharmacy:

Harvey Earl Cone
*George Adolph Hensel
*Alexander John Hinman
Elisha Roy Jones
Erwin Marcus Joseph
Thomas Kyzer
William Ludwig Meier

*Philip John Pfeiffer
Henry Reid Robinson
Hubert Lo Shield
Miss Columbus Annie Shipe
Orrin Lewis Sholars
Charles Garner Tanner
Joseph Emmet Tims
*William George Whittington

The Certificate of Proficiency in Nursing is Conferred
upon the following Members of the
Class in Nursing:

Harriett Leslie Allen
Josephine Christine Bohn
*Mary Ferguson Brittnelle
Frances Nina Duty
Leola Gaedcke

Mabel Lott Humphries
Margaret Sealy Ladd
*George Harriett Lott
Mary Edna Neff
Annie Laurie Van Arsdale.

*The Graduates whose names are marked by an asterisk have attained
honors by an average grade of ninety per cent or over, for the entire term.

The South Texas District
Medical Association



All members of the County Medical Societies of the 9th and 10th Councilor Districts are members of the *South Texas District Medical Association* and are cordially invited to attend this meeting

J. M. O'FARRELL, PRES'T
E. F. COOKE, SEC'Y

Galveston, : : Texas

Meeting Place, Caronkaway Hall

N. W. Cor. 21st & Market Sts.

December 9th, 1909

Program

Meeting called to order at 10 o'clock a. m.

1. The Present Status of the Glycuronic Acid Question
..... DR. A. E. AUSTIN, Galveston (By Invitation)
2. A Note on the Value of Repeated Widal Tests in Doubtful Cases of Fever
..... DR. ETHEL LYONS, Galveston (By Invitation)
3. Infant Feeding..... DR. L. B. KLINE, Houston
4. Differentiation of Diseases Affecting the Lower Right Abdominal Quadrant.....
..... DR. D. S. WIER, Beaumont
5. Nervous Influences in Rheumatism..... DR. S. C. PARSONS, San Angelo (By Invitation)
6. Pellagra..... DR. JOHN T. MOORE, Houston
7. Report of a Case of Pellagra..... DR. W. G. PRIESTER, Houston
- Report of a Case of Pellagra..... DR. E. B. STOKES, Crockett
8. A Hitherto Unpublished Operation for Hæmorrhoids under Local or General
Anæsthesia..... DR. WM. KEILLER, Galveston
9. Biliousness and Hepatic Insufficiency..... DR. F. H. NEUHAUS, Houston
10. Some Interesting Observations on the Surgery of the Gall Bladder
..... DR. J. E. THOMPSON, Galveston
11. Larva Migrans, with Report of a Case..... DR. L. R. HARRIS, Galveston
12. A Plea for More Knowledge for the Laity in Regard to Cancer
..... DR. BELLE C. ESKRIDGE, Houston
13. Eclampsia DR. H. O. SAPPINGTON, Galveston
14. Is the Origin of Lobar Pneumonia Bronchogenic or Pleurogenic?.....
..... DR. JAMES GREENWOOD, Galveston
15. Some Cases of Angio-neurotic Œdema..... DR. ALLEN G. HEARD, Galveston

The following Counties compose the Ninth and Tenth Councilor Districts and all members of these County Societies are members of The South Texas Medical Association and are entitled to all rights and privileges:

Ninth District

AUSTIN
BRAZORIA
BRAZOS
BURLESON

FORT BEND
GALVESTON
GRIMES
HARRIS

MADISON
MONTGOMERY
WALKER
WASHINGTON

Tenth District

CHAMBERS
HARDIN
JASPER
JEFFERSON
LIBERTY

NACOGDOCHES
NEWTON
ORANGE
POLK

SAN AUGUSTINE
SAN JACINTO
SHELBY
TYLER

Announcements

The South Texas District Medical Association will hold its meeting in Caronkaway Hall on the Northwest Corner of 21st and Market Streets, Galveston, Texas, December 9th, 1909, at 10 o'clock a. m.

ENTERTAINMENT:—The Following Extract from a letter of the Secretary of the Galveston County Medical Society tells the story:

"The night of the meeting we will give an oyster roast for the visiting brethren, and want everybody to come and to stay for this notable event. Those who desire can take the early morning train for home (the News train.) We will have some one capable of putting each visitor aboard."

BUSINESS SESSION AND ELECTION OF OFFICERS:—A business session will be held at the call of the Presiding officer, at which officers will be elected for the ensuing year.

DEAR DOCTOR:

Our South Texas District Medical Association meetings have been growing steadily in scientific interest. You are making a mistake if you do not attend. Medicine is progressive, and you must keep up with the crowd. You will find some Doctors still treating cases of Hook-worm anæmia for Chronic Malaria. These are the men who never attend Medical Society meetings. How many cases of Pellagra are you treating for Eczema? Even if the Papers do not interest you, remember that you can find some fellow who will be glad to talk over that case that is puzzling you so much. And if all these arguments fail, come and get some of Galveston's famous oysters under your skin.

E. F. COOKE, SECRETARY.

MEDICAL DEPARTMENT OF UNIVERSITY OF TEXAS

Galveston, Texas, June 1, 190⁶

The following grades were attained in the studies of
the **FIRST YEAR CLASS IN MEDICINE**

By J. G. Schilling Student
in said class in this Institution, Session 190⁵-⁶

	First In- termediate	Second In- termediate	TERM	FINAL	General Average
Major Subjects:					
Anatomy	92	94	93	88	90.5
Physiology	—	85	85	90	87.5
Chemistry	77	86	81.5	78	79.75
Materia Medica	88	—	88	93	90.5
Histology	80	69	74.5	86	80.25
Minor Subjects, with frac- tional values indicated:					
Physics ($\frac{1}{3}$)	73	—	73	86	79.5
Biology ($\frac{1}{3}$)	—	—	—	91	91
Embryology ($\frac{1}{3}$)	—	—	—	85	85

For promotion, a grade of at least 60 is required, both in Term and Final marks. If Term Grade is less than 60, a Final Grade of at least 75 is requisite for promotion. If a student fail in more than three branches, he will be required to repeat the course in its entirety.

[Redacted Signature]
Sec'y of Faculty.

MEDICAL DEPARTMENT OF UNIVERSITY OF TEXAS

Galveston, Texas, June 1, 1907

The following grades were attained in the studies of
the **SECOND YEAR CLASS IN MEDICINE**

By John G. Schilling Student
in said class in this Institution, Session 1906-'07

	First In- termediate	Second In- termediate	TERM	FINAL	General Average
Major Subjects:					
Anatomy	86	83	84.5	87	85.75
Physiology	76	92	84	93	88.5
Chemistry	78	80	79	66	72.5
Therapeutics	65	90	77.5	90	83.75
Pathology	76	66	71	70	70.5
Minor Subjects, with frac- tional values indicated:					
Minor Surgery ($\frac{1}{2}$)	—	95	95	94	94.5
Physical Diagnosis ($\frac{1}{3}$)	—	—	—	85	85
Bacteriology ($\frac{1}{3}$)	—	—	—	81	81

For promotion, a grade of at least 60 is required, both in Term and Final marks. If Term Grade is less than 60, a Final Grade of at least 75 is requisite for promotion. If a student fail in more than three branches, he will be required to repeat the course in its entirety.

[Redacted Signature]
Sec'y of Faculty.

EXTRAIT DU PRIX COURANT GÉNÉRAL

(Prix sauf variations)

SPÉCIALITÉS

Bière de malt de Déjardin	le flacon	1 10
Capsules de goudron Guyot.....	—	2 25
Cigarettes Legras.....	la boîte	1 80
Crème Simon.....	le pot	1 90
— —	le demi —	» 95
Goudron liquide Guyot.....	le flacon	1 75
Pepto-fer Jaillet.....	—	3 25
Poudre Legras.....	la boîte	1 80
Papier d'Arménie.....	le cahier	» 25
Pétrole Hahn	le flacon	3 50
Pilules Suisses.....	la boîte	1 10
Phénol Bobœuf.....	le flacon	1 25
Sel de sedlitz Gustave Chanteaud	—	2 »
— — Charles	—	2 50
Sirop Jane	—	2 »
Sel de Vichy-Etat.....	par 10 paquets	» 80
Thé Chambard.....	la boîte	» 85
— Russe purgatif, dépuratif.....	—	1 »
— antilaiteux	—	1 »
Thymol Doré.....	le flacon	1 25
Tisane des Shakers.....	le grand —	3 50
Vin de Bugeaud	le flacon	3 »
— glycérophosphatique du D ^r Gérard.....	le litre	6 »
— de Mariani	le flacon	4 40

Spécialité d'Huiles de Foie de Morue (voir page 14)

Produits Chimiques et Pharmaceutiques

Le Prix des vases sst à ajouter aux prix ci-dessous

Acide borique, dose pour 1 litre.....	» 15
— plâtrique — —	» 40
Antipyrine Knorr	le gramme » 20
— — — — —	les 10 — 1 50
Bicarbonate de soude sursaturé.....	les 125 — » 25
— — — — —	les 250 — » 40
— — — — —	les 500 — » 70
Bromure de potassium.....	les 30 — » 60
— — — — —	les 100 — 1 50
Capsulés de goudron pur.....	les 100 — » 75
— — — — —	les 250 — 1 50
Eau boriquée.....	le litre » 80
— plâtrique.....	» 80
— sédative.....	» 40
Farine de lin (toujours fraîche et moulue à la maison), le kilo	» 80
Glycérine chimiquement pure, à 30'.....	le litre 4 »
Huile de ricin préparée à froid.....	— 2 50
— — — — —	les 30 grammes » 20
Magnésie calcinée	le flacon » 80
— — — — —	le demi — » 50
Noix de kola, dose pour 1 litre.....	» 50
Orge perlé.....	les 125 grammes » 20
Pastilles de Vichy à la menthe.....	— » 40
— — — au citron.....	— » 40
— — — à l'anis.....	— » 40
— de soufre.....	— » 60
— de Tolu.....	— » 60

Rob Dépuratif Végétal H. Gérard (voir page 12)

MANIÈRE DE NETTOYER LES BAS ÉLASTIQUES

Les mettre tremper dans l'eau froide pendant trois ou quatre heures avec un morceau de carbonate gros comme une noix; brasser et jeter cette eau. Ensuite faire bouillir de l'eau avec la même quantité de carbonate en ajoutant une poignée de son; laisser tiédir et verser sur les bas en brossant en tous sens. — Lessiver à l'eau froide sans tordre et éviter le soleil ou le feu pour le séchage.



Bas simple



Genouillère



Chaussette



Douche émaillée (Canule deux usages)



Molletière



Lanière en crin tissé ou crin brosse



Poire à lavement



Injecteur



Irrigateur



Tétine



Enémas anglais

Pour tous ces articles nous avons différentes qualités et différents prix.

PROPRIÉTÉS ET MODE D'EMPLOI

DES

Produits Chimiques et Pharmaceutiques

LES PLUS USUELS

Acide boriqué. — S'emploie en solution saturée (4 0/0). C'est un antiseptique précieux dans les inflammations aiguës des muqueuses, qui ne présente pas les inconvénients de tant d'autres produits usités autrefois. Dans la conjonctivite on doit employer la solution boriquée aussi chaude que possible.

Alcool camphré. — Est employé en frictions comme stimulant et antirhumatismal.

Aloès. — S'emploie avec avantage dans les cas de constipation atonie, et comme dérivatif dans la congestion cérébrale. N'en user que modérément, car il prédispose aux hémorroïdes.

Alun. — Astringent énergique très employé en gargarismes ou en injections.

DOSE. — Une cuillerée à bouche de poudre pour un litre d'eau.

Amidon. — Employé en poudre pour calmer les démangeaisons dans les maladies de peau : *dartres*, *eczéma*, etc. On en fait des cataplasmes émollients, des bains adoucissants (500 grammes par bain). On en poudre les petits enfants pour éviter les gerçures, etc.

Antipyrine. — Son action est remarquable dans la migraine, névralgie, douleurs rhumatismales et goutteuses, principalement chez les personnes arthritiques.

DOSE. — Un à trois grammes dans les vingt-quatre heures en cachets ou en solution.

Baume tranquille. — Calme les douleurs rhumatismales ou névralgiques. Frictionner matin et soir la partie douloureuse.

Bicarbonate de soude. — Constituant le principe actif des eaux de Vichy et de Vals, il est employé comme antiacide et comme diurétique pour empêcher la formation des graviers dans les reins et les concrétions dans la goutte.

DOSE. — Une cuillerée à café par litre d'eau.

Bismuth (sous-nitrate). — Remède populaire de la diarrhée, utile aussi dans certaines affections de l'estomac.

DOSE. — Deux à quatre grammes par jour, en plusieurs fois et au moment des repas.

John G. Schilling,

Special Pathology, Final Examination

May 15, 1909.

1. Give the morbid anatomy of cerebral apoplexy, including the usual locations thereof.
2. Describe grossly and minutely red softening of the brain.
3. Give the morbid anatomy of "Insular Sclerosis"
4. Describe grossly and minutely the changes found in an old case of anterior poliomyelitis.
5. Draw a properly labeled diagram showing the spinal degenerations which will follow a hemorrhage into the right ~~inter~~ capsule.
Do the same where the lesion involves the transverse axis of the cord at the level of the second dorsal vertebra.
6. Tell what you can of chronic interstitial neuritis.
7. Give the etiology of tuberculosis of the joints.
8. Give briefly the usual blood changes in (a) typhoid fever, and (b) malaria.
9. Tell what you can of hypertrophy of the kidney.

Answer any 8. Sign pledge in full.

Give seat number.

Not optional

John B. Schilling

First Intermediate Examination in Pathology

Junior-Senior, December 17, 1908.

- ✓ 1. Discuss the congenitally cystic kidney.
2. Give the cellular changes in progressive pernicious anemia.
- ✓ 3. Give the gross and minute changes in a typical kidney of chronic interstitial nephritis.
- ✓ 4. Describe tuberculosis of the urinary bladder.
5. What do you mean by the following: a. hemoglobin index, b. megaloblast, c. myelocyte, d. microcyte, e. polychromasia, f. poikilocytosis, g. hyperleucocytosis, h. chlorosis.
- ✓ 6. Discuss urogenic suppurative nephritis.
- ✓ 7. Discuss briefly the congenital anomalies of the kidney.
8. Classify the leucocytes met in the circulating blood.
- ✓ 9. Describe the microscopic picture in the large white kidney.

Give pledge in full. Answer any eight.

DRS. N. AND J. G. SCHILLING
CEDAR BAYOU, TEXAS

Diabetes Mellitus
Definition -
(Osler)

A disorder of nutrition,
in which sugar accumulates
in the blood, and is excreted
in the urine, the daily
amount of which is
greatly increased.

For a case to be considered one of diabetes mellitus
it is necessary that the form of sugar
eliminated in the urine be
grape sugar, that it must be
eliminated for weeks, months or
years, and that the excretion
of sugar must take place after
the ingestion of moderate
amounts of carbohydrates.

Diabetes Mellitus—

Definition
(Edwards)

A disease of metabolism characterized (a) by a permanent lessened capacity of the organs fixing, storing and consuming grape sugar; (b) by excess of sugar in the blood (hyperglycemia), resulting in (c) grape sugar in the urine (glycosuria); and (d) causal changes in the pancreas.

Normal amt of sugar in urine
0.01 to 0.02 %

~~Definition~~
Etiology.

1. Incidence -
2. Hereditary influences -
3. Sex -
4. Race -
5. Obesity -
6. Nervous Influences - { mental shock, severe, mental strain & worry.
7. Injury to or disease of spinal cord -
8. Experimental Diabetes -

DRS. N. AND J. G. SCHILLING
CEDAR BAYOU, TEXAS

Location of Bullet wound.
Mr Willis.

Bullet entered at the upper median portion of the anterior axillary fold, and ranged downwards and towards the back, apparently. A swelling or mass was felt on left side of back at about the level of 12th rib and 2 inches to the left of median line, which was thought to be the bullet, and was afterwards removed by Dr Shearer.

Urine was examined on following dates and sugar was present each time.

12-18-10 first.
12-27-10 2 1/4 hr 12 pints 63
1-20-11 2 1/4 hr 7 pints 78 1/2.
3-27-11-24 hr 8 pints
4-28-11-24 hr 7 1/2 pints.
8-24-11-24 hr 5 pints. 9 % sugar

W. T. KEENER & CO.,
Medical Booksellers, Publishers and Importers,
90 Wabash Avenue, CHICAGO.

NOW READY.

The
Accessory Sinuses of the Nose
and their relations to neighbouring parts.

Illustrated by fifteen coloured plates

by

Dr. Gustav Killian,
Professor of Laryngology and Rhinology, Freiburg in B.

Translated by

D. R. Paterson, M. D., M. R. C. P.
Assistant Physician in charge of Throat Department, Cardiff Infirmary.

Price, \$7.50 Net.

This atlas owes its origin to the author's observation that the formalin method of preparing tissues is particularly suitable for the proper display of the nasal accessory sinuses. He found that the membrane of the cavities might be readily separated from the surrounding bone and still retain its original shape and that the bone might be removed piece by piece without disturbing the form and relations of the mucous membrane—a point of much importance in the investigation of the exact relations of the intricate system of accessory sinuses.

A series of preparations were therefore planned and carried out by Prof. Killian to illustrate the topography of the accessory sinuses and this atlas is the result.

An endeavour has been made in it to show the sinuses from all aspects and to obtain illustrations that will be of practical service to the operator. At the same time special attention has been directed to the relations of the sinuses to the neighbouring organs, e. g. nasal fossae, mouth cavity, orbit including the eye and its accessor parts and more particularly the brain, and for this purpose removal and fenestration of superficial structures has been largely used.

The drawing of the preparations has been carefully carried out under Prof. Killian's supervision by an experienced artist and the use of colors helps to represent the complex relations more clearly and graphically. A special explanatory sheet accompanies each plate and the drawings are consequently not disfigured by reference lines.

In the text the description of the preparation is confined as far as possible to the particular specimen, general statements being avoided. Each description is complete in itself so that it may be easily understood without having to refer to other plates. Taken altogether, these notes constitute a topographical account of the accessory sinuses of the nose based upon actual specimens. The latest results of research in Embryology and Comparative Anatomy have been embodied and for the first time in an account of the nose, purely morphological terms have been adopted throughout and are more especially used in dealing with the ethmoidal cells and frontal sinuses.

The Atlas will be of special value to those interested in affections of the accessory sinuses and will serve as a sound basis for studying the problem of the extension of accessory sinus disease to neighboring parts.

Prof. Killian's work will not only appeal to rhinologists and laryngologists but will prove of great value to the general surgeon the ophthalmologist and the neurologist. It opens up several new points of view in pathological anatomy and brings the general anatomist into closer relations with a region of much practical importance.

Extracts from Reviews of the German Edition:

Deutsche Medizinische Wochenschrift.

In view of the keen interest taken in disease of the accessory sinuses of the nose even by those who are not specialists this atlas must be regarded as a very welcome addition to the literature. An accurate picture is given of the relation of the accessory sinuses to the face, the nasal fossae, the base of skull, to the brain and its regions and not merely from one but from several aspects. For the display of these anatomical relations it is hardly possible to conceive better representations than those contained in this atlas. . . . It is to be hoped that the work will receive the greatest attention in professional circles.

Monatsblätter für Augenheilkunde.

Professor Killian, the well known laryngologist, has devised a new method to demonstrate anatomically the relations of the accessory nasal cavities to the orbits. . . . The regions of special interest to the ophthalmologist are so admirably depicted and described and give such excellent information upon operative procedures that every ophthalmic surgeon who studies the important subject of accessory sinus affections may be referred to this work.

Annales des Maladies de l'oreille, du larynx, du nez et du pharynx. Bd. XXX. 20. Juli, 1904.

The large colored plates used to illustrate Prof. Killian's preparations are a new departure. . . . By means of an interesting method of preparing the parts the author was enabled to preserve the exact size of the sinuses and also their precise relations to the neighboring parts as in the living subject. . . . Such plates are much more instructive than mere photographs from frozen sections and leave no possibility of erroneous impressions. In a word this atlas gives the exact detail wanted. . . .

Internationales Centralblatt für Laryngologie, Rhinologie und verw. Wissenschaften, Jahrg. XX. Heft 6.

Dr. McBride (Edinburgh) says: "In this large work all those striking qualities of the Frieburg observer are prominent which have already secured him at a comparatively early age a place among the most eminent living authorities. . . . Plate V is of great importance for the clinical study of Rhinology. In it the outer wall of the nasal cavity has been exposed and then fenestrated only narrow bony bridges remaining. The intimate relation of the posterior wall of the antrum to the nerves and vessels of the palate is very well brought out, as also the relation of accessory sinus and lachrymal canal. . . . I cannot conclude without thanking Prof. Killian in the name of rhinologists for his highly artistic and excellent work. . . . The atlas deserves a place in every medical library."

Zentralblatt für Chirurgie, No. 49. v. 10. Dez. 1904.

During the last few years a number of new methods of operating for nasal accessory sinus disease have been introduced with the result that many cases formerly but little benefited are now successfully treated. Only those however who have a clear understanding of the complex relations of these parts can use these methods with safety and success. . . . Killian's Atlas should therefore be welcomed by all in any way interested in accessory sinus disease, not only by the rhinologist but by the surgeon, the ophthalmologist and even the neurologist.

The Pathology of the Eye. By J. Herbert Parsons, F. R. C. S., Assistant Ophthalmic Surgeon, University College Hospital; Curator and Pathologist, Royal London (Moorfields) Ophthalmic Hospital, etc. In four volumes with over 700 illustrations, Volume I, Histology; Part I, 8vo, 388 pages with 264 illustrations. Just ready. Cloth, net \$3.50.

"No complete monograph on the Pathology of the Eye has yet been written in any language. Various attempts have been made from time to time to discuss and illustrate the chief facts of the pathological Histology by Wedl, O. Becker, Pagenstecher & Genth, Alt, Wedl & Bock, Greef, Ginsberg and others. All of these, with the exceptions of Ginsberg's Manual and the incomplete works of Greef, are inadequate and out-of-date; and even the latter works are not available for our English speaking ophthalmologists."

"The object of this work is to give as complete an account of the Pathology of the Eye as is possible in the present state of our knowledge."

The work will be divided into four volumes, the first two volumes dealing with the Pathological Histology of the Eye; the last two with the General Pathology of the Eye.

"In Volumes I and II, the parts of the eye and its annexes will be taken seriatim, and the histology of the various morbid conditions described. In Volumes III and IV, the diseases which effect the eye as a whole will be discussed, and an endeavor will be made to trace them to their ultimate causes. They will therefore include such conditions as glaucoma, sympathetic ophthalmia, congenital malformations, etc. The microscopic features of these conditions will be more conveniently dealt with in immediate relationship with them. The volumes will be profusely illustrated by photographs and diagrams specially prepared. In all there will be nearly 750 separate illustrations."

"This is the most complete work of its kind ever undertaken in any language. Even in Germany the 'Ginsberg Manual' is the only book which may be said to compare with Mr. Parson's work. The first volume by its excellence promises much for those that are to follow. The work presents more than its title indicates. It abounds in practical applications of pathology to the surgery and treatment of eye diseases. In discussing a given condition, in addition to its pathology and histology, Mr. Parsons has collected the theories and opinions of the world's authorities, and has most successfully welded them into a practical, homogeneous whole. Many of the more valuable of the later methods of laboratory technic are also given."—*Journal American Medical Association.*

Diseases of the Ear. A text book for practitioners and students. By James Kerr Love, M. D., Aur. Surgeon Glasgow Royal Infirmary; Lecturer on Aural Surg., St. Mungo's College; Aurist Glasgow Deaf and Dumb Institute. With fifty-four stereoscopic photographs, illustrative of the Surgical Anatomy of the Ear, and explanatory keys. Four plates, two of which are fully colored, and many illustrations in the text. This work is designed mainly to spread amongst practitioners and students an accurate knowledge of the modern treatment of Middle-Ear Suppuration and its Complications and a corresponding sense of their responsibility in regard to it. A true appreciation of the difficult anatomy of the temporal bone is made easier by the beautiful photographs which have been produced at great cost. A simple stereoscope is furnished gratis. One volume, 8vo. Half green Morocco. Net \$10.00.

Whiting. The Modern Mastoid Operation. The Development and Technique of the Modern Mastoid Operation. By Frederick Whiting, A. M., M. D., Professor of Otology in Cornell University Medical College; Professor of Otology in the New York Polyclinic; Surgeon to the New York Eye and Ear Infirmary. Illustrated by a series of twenty-four elaborate full-page engravings, with key plates, drawn from life by a special artist under the supervision of the author. Royal square octavo. Half Morocco, \$6.00 net.

The Treatment of Diseases of the Eye. By Dr. Victor Hanke. First Assists. in the University Eye Clinic of Hofrath. Prof. E. Fuchs in Vienna. Translated by J. Herbert Parsons, B. S., D. Sc., F. R. C. S., Asst. Ophthalmic Surgeon, University College Hospital; Asst. Surgeon, Royal London (Moorfields) Ophthalmic Hospital; Ophthalmic Surgeon Hospital for Sick Children, Great Ormond Street; Lecturer on Physiological Optics, University College, London; and George Coats, M. D., F. R. C. S., Chief Clinical Assistant, Royal London (Moorfields) Ophthalmic Hospital. Cloth, \$1.25 net.

The present book aims at supplying the practitioner with some hints and indications for the treatment of the diseases of the eye. The numerous excellent textbooks can hardly give this subject all the attention which it deserves, for on the one hand they have to deal with a vast number of subjects and can therefore only sketch the treatment in broad lines while on the other hand it is scarcely possible for the practitioner to procure the latest editions so as to keep himself in touch with recent advances and innovations. The author has therefore set himself the task of putting together the results of some years of experience in a short yet detailed book of reference.

Trachoma. By Dr. J. Boldt, Translated by J. Herbert Parsons and Thomas Snowball, M. B., C. M. With an Introductory chapter by E. Treacher Collins, F. R. C. S. Royal 8vo. \$3.00 net.

The Neurology of Vision. With Plate and Illustrations. Demy 8vo.
Price \$1.00 net.

Squint Occurring in Children. By Edgar A. Browne, F. R. C. S. and Edgar Stevenson, M. D. Cloth, net \$1.00.

Cleft Palate and Hare-Lip. The Earlier Operation on the Palate. By Edmund Owen, F. R. C. S. Illustrated. Cloth, net \$1.00.

Adenoids. By Wyatt Wingrave, M. D., Physician and Pathologist, Central London Throat and Ear Hospital; late President British Laryngological, Rhinological and Otological Association. Cloth, net \$1.00.

Commoner Diseases of the Eye. How to detect and how to treat them. Especially addressed to the general practitioner and students. By Casey A. Wood, C. M., M. D., D. C. L., Professor of Clinical Ophthalmology in the University of Illinois, etc., and Thomas A. Woodruff, M. D., C. M., L. R. C. P., Professor of Ophthalmology in the Chicago Post-Graduate School. One volume; 12 mo; 500 pages, (5x8 inches); 250 illustrations; seven colored plates. Cloth, net \$1.75.

Diseases of the Nose, Throat, Ear, and their Accessory Cavities. By Seth Scott Bishop, M. D., D. C. L., LL. D. Third edition, thoroughly revised and enlarged. 8vo; 564 pages, with 94 colored lithographs, and 230 illustrations. Cloth, net \$4.00; Half Russia, net \$5.00.

W. T. KEENER & COMPANY,
MEDICAL BOOKSELLERS,
PUBLISHERS AND IMPORTERS,
90 Wabash Avenue, = CHICAGO.

AN ANALYSIS OF "SHOCK".

by

Major S. F. Seeley.

T. Col. O'Reilly, U.S.
with minor changes.
S. F. Seeley,
Maj. U.S.

- A. Hemorrhagic.
- B. Traumatic.
 - 1. Mechanical
 - a. Intestinal manipulation and or exposure.
 - b. Trauma to large muscle-groups.
 - 2. Thermal
 - a. Freezing of tissues.
 - b. Burning of tissues.
- C. Vasogenic.
 - 1. Crotalin.
- D. Neurogenic.
 - 1. Psychic trauma.
 - 2. Severe, sudden stimulation of important visceral centers, epigastrium, testes.
- E. Circulatory.
 - 1. Acute heart failure.
 - 2. Increased intrapericardial pressure.
 - 3. Compression of important venous trunks.

PHYSIOLOGICAL PROCESSES IN VARIOUS TYPES OF "SHOCK".

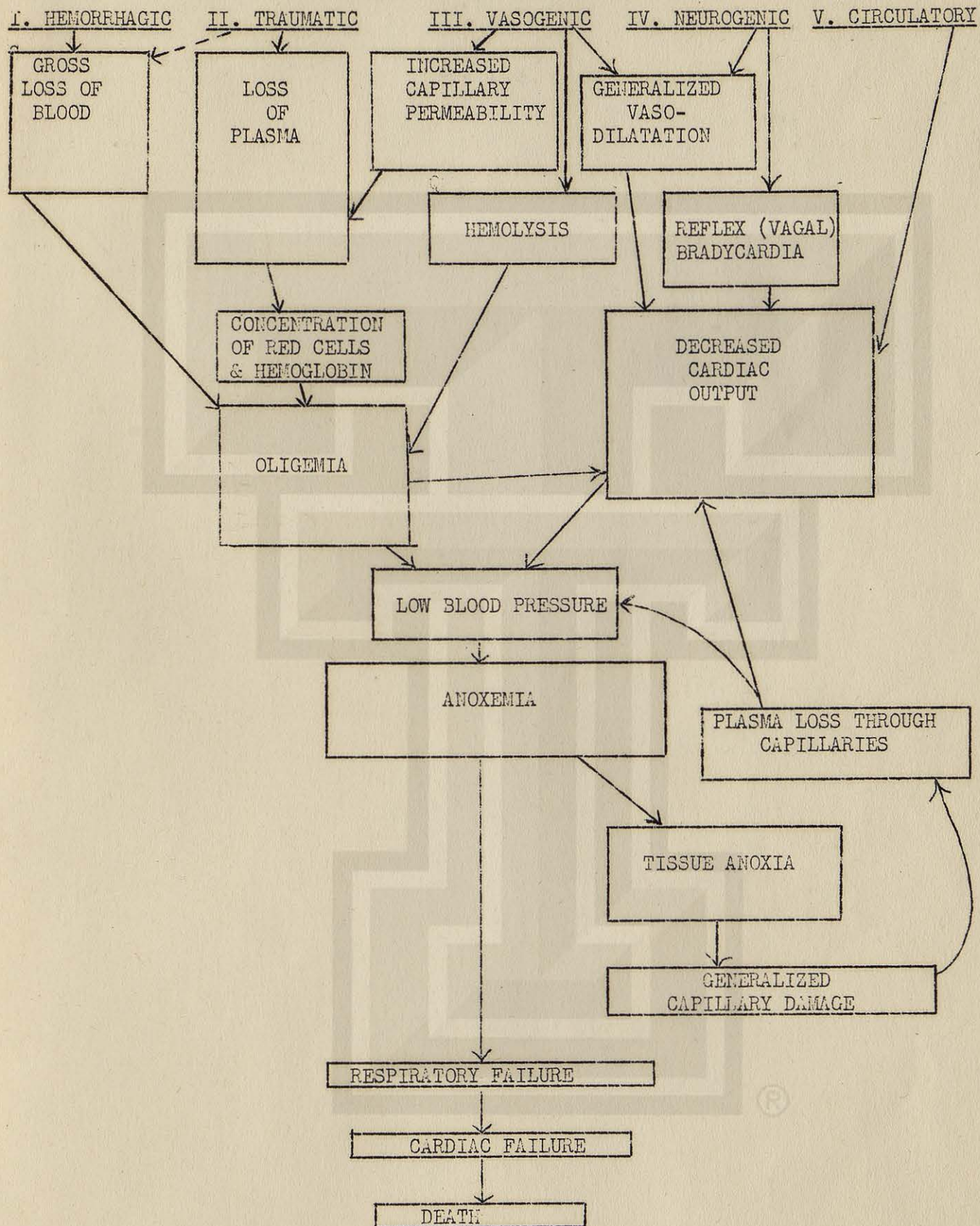


Chart 1.

SYMPTOMS AND FINDINGS AT INTERVALS ACCOMPANYING CHART I.

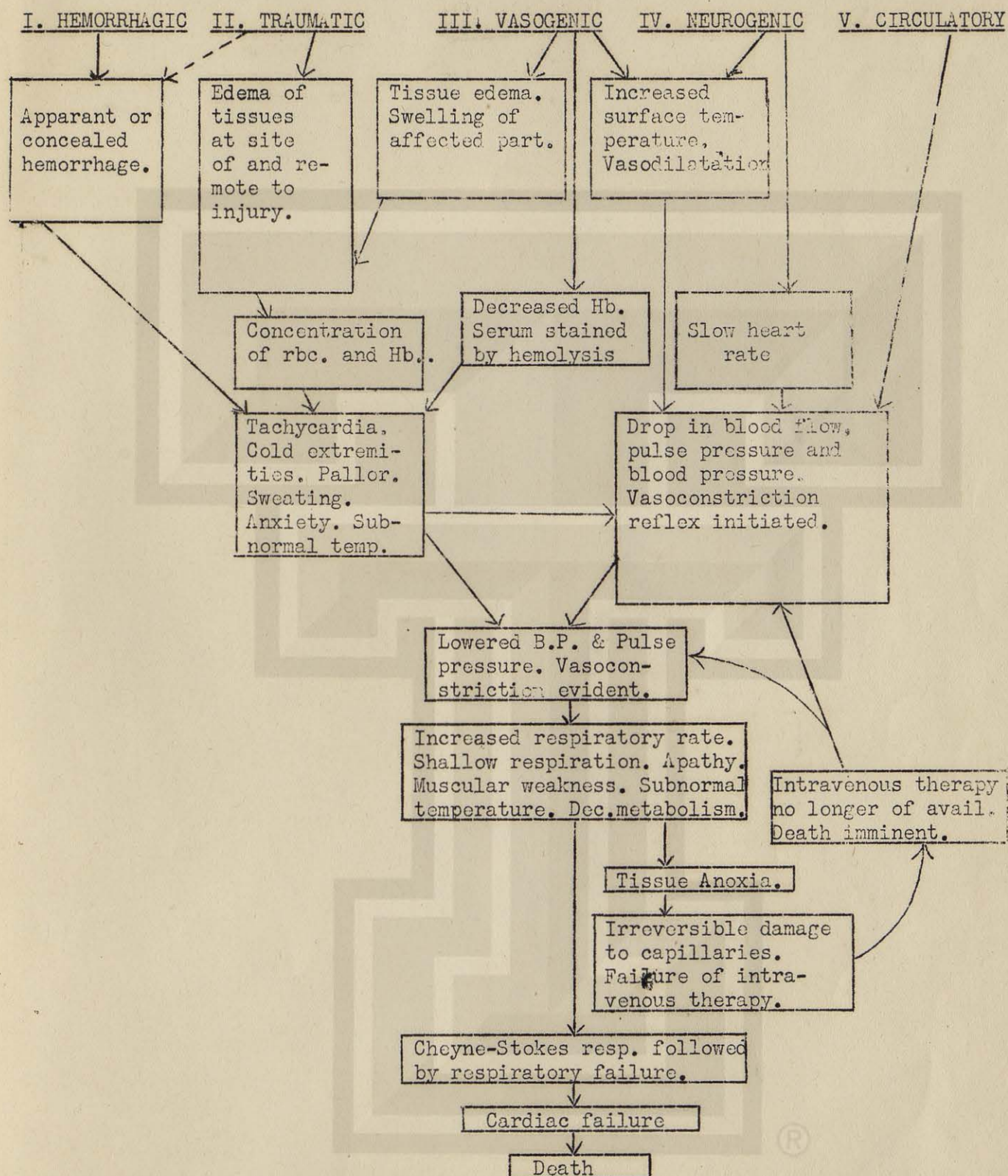


Chart 2.

$$Y = 0.02$$

Chart 3.

1. $\frac{2.5 \text{ in yds}}{\text{m.p.h.}} = \text{Time in seconds for cloud to pass from A to B.} = 705 \text{ seconds. Ans.}$

$$\begin{array}{r} 96 \\ 2 \\ \hline .272 \overline{) 192.000} \end{array}$$

$$\begin{array}{r} 24 \\ 60 \\ \hline .272 \overline{) 1440.000} \end{array}$$

$$\begin{array}{r} 192.000 \\ 1704 \\ \hline 1600 \\ 1360 \\ \hline 240 \end{array}$$

$$\begin{array}{r} 1440.000 \\ 10560 \\ \hline 38400 \\ 37060 \\ \hline 13400 \\ 10560 \\ \hline 2840 \end{array}$$

10

2. (a) Precautionary 7.12 to 5 m. Respirator must be some where within reach.

(b) Ready 7. 5 to 2 miles. Respirator hanging over right shoulder.

(c) Alert 7. 2 to 0 miles. Sometimes in bushes or trees it may be over 2 mile limit. Respirator carried in alert position.

3. (1) Lachrymatory { (a) Brom acetone
 (2) Asphyxiant { (b) Ethyl iod acetate
 (a) Chlorine
 (b) Phosgene
 (3) Paralyzant { (a) Prussic Acid.
 (b) Arsenic
 (4) Skin Irritant { (a) Mustard gas
 (b) Sulfur trioxide.

10

3. ^{contd.}

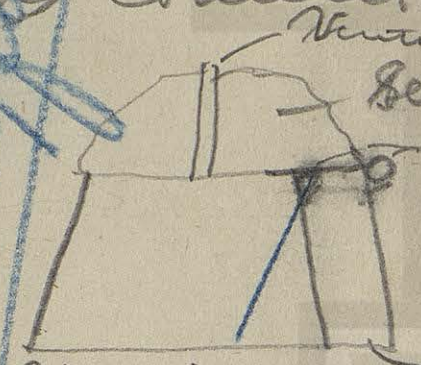
There is another sometimes given known as suffocating and CO is the best example of this. (also known as "accidental gas".

4. April 22, 1915 at Ypres against French and Canadians. Chlorine gas.

5. to kill or cause casualties.
Barrage.

Prevent repair of entanglements.

Counter battery work.

6. 
 Ventilating pipes closed during gas attack.
Several feet of earth etc.
Blanket rolls that are to be kept moistened and covered during attack or even when there is no attack if in a very dangerous position for gas.
Double entrance which is placed further out at the foot so that blankets will always lie snugly against the door jamb.
Side view.

Blankets have stays of wood, those on the inside are short enough to come inside the opening and those on the outside are directly opposite but are too long to come through the opening.

Blankets have stays of wood, those on the inside are short enough to come inside the opening and those on the outside are directly opposite but are too long to come through the opening.

Blankets stand
away from

SHEET No.

UNIVERSITY OF TEXAS.

Bacteriological Report by

W. A. Dupree & J. G. Schilling

of study of *B. Coli*

LABORATORY OF BACTERIOLOGY.

Date 11-27-66.

Galveston, Texas.

NAME OF MICROORGANISM *B. Coli* SOURCE *S. Terrill*

MORPHOLOGY: (Grown 24 hrs. in medium at 18-20°C.: hrs at 36°-38°C.)

- a. Shape of individuals *rod shaped*
 b. Arrangement of individuals *irregularly*
 c. Size of individuals *4-6 diameter, 11-3.6 length*
 d. Capsules
 e. Spores *no spores*; position of spores; time of development
 f. Motility and flagella *motile, 4-12 peritrichous flagella*
 g. Pleomorphism on different media from above; characteristics of same

h. Stain: *Ag. Gent. Violet* *Decolorized by Gram*

GROSS CHARACTERS OF COLONIES:

- a. *Agar* *+1.5* reaction):
- Puncture 24 hrs. at 35-36°C.
 Form *Beaded*; Line of Puncture *Beaded*; Gas Bubbles
 Color of Surface *Slightly yellowish*; Color of Puncture *Slightly yellowish*; Size of Surface *3-4 mm*
 Shape of Surface *Amoeboid*; Elevation *Raised*; Edges *lobate - lobulate*
 Internal Structure and Consistence *Refraction strong, homogeneous, translucent*
 Optical Characters *Sebaceous, glistening*
 - Stroke 24 hrs. at 35-36°C.
 Extent *3-4 mm*; Form *homogeneous*; Elevation *Raised*
 Edges *lobate - lobulate*; Internal Structure *Ref. strong*; Color *Slightly yellowish*
 Optical Characters *Sebaceous, translucent*
 - Plate 24 hrs. at 35-36°C.
 Surface Colonies: Size *1/2 mm*; Shape *round*; Color *white*; Edges *entire*
 Internal Structure *Ref. strong, fine gran.*; Consistence *dry*
 Optical Characters *Opalescent*
 Magnified *Same as above except edges are undulate*
 Deep Colonies: Size; Shape; Color; Edges
 Internal Structure; Consistence
 Optical Characters *Same as above only darker*
 Magnified
 Gas Bubbles
 - Changes in Medium: Consistence
 Color
 Odor
- b. *Iselatin* *+1.5* reaction):
- Puncture 24 hrs. at 35-36°C.
 Form *grayish white*; Line of Puncture *Filiform*; Gas Bubbles
 Color of Surface *grayish white*; Color of Puncture *grayish white*; Size of Surface *2 mm*
 Shape of Surface *Round*; Elevation *Flat*; Edges *Entire*
 Internal Structure and Consistence *Refraction strong, homogeneous, translucent*
 Optical Characters *Opalescent*
 - Stroke 24 hrs. at 35-36°C.
 Extent *1 mm*; Form; Elevation *Raised*
 Edges *lobate - lobulate*; Internal Structure *Ref. strong*; Color *grayish white*
 Optical Characters *Opalescent*
 - Plate 24 hrs. at 35-36°C.
 Surface Colonies: Size *1 mm*; Shape *Round*; Color *Branish white*; Edges *entire*
 Internal Structure *Refraction strong*; Consistence *Frag*
 Optical Characters *Opalescent*
 Magnified *Same*
 Deep Colonies: Size; Shape; Color; Edges
 Internal Structure; Consistence
 Optical Characters *Same*
 Magnified
 Gas Bubbles
 - Changes in Medium: Consistence
 Color
 Odor

c. Bouillon (reaction + 1.5) 24 hrs. at 35-36 °C.
Change in transparency becoming translucent appeared 24 hours after growth;
Change in color cast colored appeared 24 hours after growth;
Character of growth producing turbidity diffused thru out liquid & on bottom
Presence and character of surface growth none
Presence and character of deposit grayish white, stringy
Odor —; change in reaction acid, in 24 hrs. later alkaline (15 day)

cf. Fermentation in Glucose, Lactose, Saccharose, Bouillon:

Time of growth	G <u>24</u> hrs.	G <u>48</u> hrs.	G.....hrs	L.....hrs	L.....hrs	L.....hrs	S.....hrs	S.....hrs	S.....hrs
Amount of gas	<u>1 cc</u>	<u>2 cc</u>							
Pressure of air									
Temperature	<u>35-36</u>	<u>35-36</u>							

Absorbed by Na OH.....
HCO₂ ratio.....
Relative growth in arms of fermentation tube.....
Special characteristics of growth in above.....

c2. Acid production acid; Peptone production —
Indol production Positive; Diastatic ferments.....
Reduction of Nitrates.....; Invertin ferments.....
Phenol production.....

d. MILK: (35-36 °C.)
Does — curdle after 144 hours; character of curd flocculent; effect of boiling —
Whey small amt.
Gas —
Reaction acid
Digestion.....
Peptones.....
Color not changed; odor.....
Consistence marsh
Litmus milk curdled & reddened. Reddened first.

e. BLOODSERUM: 24 hrs. at 35-36 °C., shows colonies of
Extent 1-2 mm.; Form.....; Elevation Raised
Edges.....; Internal Structure.....; Color grayish white
Liquefaction annulate; Odor.....; Color of medium opaque
Optical characters.....
Consistence.....
Magnified.....

f. POTATO: 24 hrs. at 35-36 °C., shows colonies of
Extent.....; Form.....; Elevation flat
Edges.....; Internal Structure Ref. weak; Color gray
Liquefaction.....; Odor.....; Color of medium gray not changed.
Optical characters Ref. weak
Consistence marsh
Magnified.....

OPTIMUM TEMPERATURE.....°C.; Limits of Temperature.....°C. to.....°C.
THERMAL DEATH POINT.....°C. minutes exposure.....
ANAEROBIC CONDITIONS.....

SPECIAL MEDIA Elements Potato growth in 24 hrs.
Lactose Litmus Agar changes to red in 24 hrs.
Later loses its color and becomes lighter.

PIGMENT AND ITS PHYSICAL CHARACTERS.....

PATHOGENESIS.....

SHEET No.

UNIVERSITY OF TEXAS.

LABORATORY OF BACTERIOLOGY.

Bacteriological Report by

of study of

Date 11-24-06

Galveston, Texas.

NAME OF MICROORGANISM

SOURCE

MORPHOLOGY: (Grown

hrs. in medium

at 18-20°C.

hrs at 30-36°C.

a. Shape of individuals

b. Arrangement of individuals

c. Size of individuals

d. Capsules

e. Spores

; position of spores

; time of development

f. Motility and flagella

g. Pleomorphism on different media from above; characteristics of same

h. Stain:

GROSS CHARACTERS OF COLONIES:

a.

1. Puncture

hrs. at 35-36 °C.

Form

Line of Puncture

Gas Bubbles

Color of Surface

Color of Puncture

Size of Surface

Shape of Surface

Elevation

Edges

Internal Structure and Consistence

Optical Characters

2. Stroke

hrs. at 35-36 °C.

Extent

Form

Elevation

Edges

Internal Structure

Color

Optical Characters

3. Plate

hrs. at 35-36 °C.

Surface Colonies: Size

Shape

Color

Edges

Internal Structure

Consistence

Optical Characters

Magnified

Deep Colonies: Size

Shape

Color

Edges

Internal Structure

Consistence

Optical Characters

Magnified

Gas Bubbles

4. Changes in Medium: Consistence

Color

Odor

b.

1. Puncture

hrs. at 35-36 °C.

Form

Line of Puncture

Gas Bubbles

Color of Surface

Color of Puncture

Size of Surface

Shape of Surface

Elevation

Edges

Internal Structure and Consistence

Optical Characters

2. Stroke

hrs. at 35-36 °C.

Extent

Form

Elevation

Edges

Internal Structure

Color

Optical Characters

3. Plate

hrs. at 35-36 °C.

Surface Colonies: Size

Shape

Color

Edges

Internal Structure

Consistence

Optical Characters

Magnified

Deep Colonies: Size

Shape

Color

Edges

Internal Structure

Consistence

Optical Characters

Magnified

Gas Bubbles

4. Changes in Medium: Consistence

Color

Odor

c. Bouillon (reaction.....)..... hrs. at°C.
Change in transparency....., appeared..... hours after growth;
Change in color....., appeared..... hours after growth;
Character of growth producing turbidity.....
Presence and character of surface growth.....
Presence and character of deposit.....
Odor.....; change in reaction.....

c1. Fermentation in Glucose, Lactose, Saccharose, Bouillon:

Time of growth.....	G..... hrs.	G..... hrs.	G..... hrs.	L..... hrs.	L..... hrs.	L..... hrs.	S..... hrs.	S..... hrs.	S..... hrs.
Amount of gas.....									
Pressure of air.....									
Temperature.....									

Absorbed by Na OH.....
HCO₂ ratio.....
Relative growth in arms of fermentation tube.....
Special characteristics of growth in above.....

c2. Acid production.....; Peptone production.....
Indol production.....; Diastatic ferments.....
Reduction of Nitrates.....; Invertin ferments.....
Phenol production.....

d. MILK: (.....°C.)
Does..... curdle after..... hours; character of curd.....; effect of boiling.....
Whey.....
Gas.....
Reaction.....
Digestion.....
Peptones.....
Color.....; odor.....
Consistence.....
Litmus milk.....

e. BLOODSERUM: 72 hrs. at 35-36°C., shows colonies of
Extent 1-2 mm; Form.....; Elevation Raised
Edges lobate-lobulate; Internal Structure.....; Color grayish
Liquefaction.....; Odor.....; Color of medium brown
Optical characters transparent
Consistence marsh.
Magnified.....

f. POTATO:..... hrs. at.....°C., shows colonies of
Extent.....; Form.....; Elevation.....
Edges.....; Internal Structure.....; Color.....
Liquefaction.....; Odor.....; Color of medium.....
Optical characters.....
Consistence.....
Magnified.....

OPTIMUM TEMPERATURE.....°C.; Limits of Temperature.....°C. to.....°C.
THERMAL DEATH POINT.....°C. minutes exposure.....
ANAEROBIC CONDITIONS.....

SPECIAL MEDIA.....

PIGMENT AND ITS PHYSICAL CHARACTERS.....

PATHOGENESIS.....

SHEET No.

UNIVERSITY OF TEXAS.

LABORATORY OF BACTERIOLOGY.

Bacteriological Report by Madame J. L. Schelling
of study of Ps. PyocyaneaDate 12-3-66

Galveston, Texas.

NAME OF MICROORGANISM Ps. Pyocyanea SOURCE Dr. FerrillMORPHOLOGY: (Grown 72 hrs. in medium agar stroke at 18-20°C.; hrs at 36°-38°C.)

- a. Shape of individuals rods
 b. Arrangement of individuals irregular
 c. Size of individuals
 d. Capsules
 e. Spores; position of spores; time of development
 f. Motility and flagella
 g. Pleomorphism on different media from above; characteristics of same

h. Stain: aq. Indian Violet.

GROSS CHARACTERS OF COLONIES:

- a. Agar +1.5 reaction):
 1. Puncture 48 hrs. at 35-36 °C.
 Form Beaded; Line of Puncture Beaded; Gas Bubbles
 Color of Surface yellowish white; Color of Puncture yellowish white; Size of Surface 3 mm
 Shape of Surface ameboid; Elevation Raised; Edges auriculate
 Internal Structure and Consistence Ref. strong, homogeneous, finely granular
 Optical Characters Opalescent
 2. Stroke 48 hrs. at 35-36 °C.
 Extent 3 mm; Form —; Elevation Raised
 Edges lobate, lobulate; Internal Structure Ref. strong; Color yellowish white
 Optical Characters Opalescent
 3. Plate 48 hrs. at 35-36 °C.
 Surface Colonies: Size 1 mm; Shape round oval; Color green; Edges auriculate
 Internal Structure Ref. strong, finely gran; Consistence Dry
 Optical Characters Ceraceous
 Magnified Color not shown
 Deep Colonies: Size same; Shape lens; Color slightly tan; Edges same
 Internal Structure same; Consistence same
 Optical Characters same
 Magnified same
 Gas Bubbles
 4. Changes in Medium: Consistence none
 Color to green
 Odor unpleasant

- b. Gelatin +1.5 reaction):
 1. Puncture 48 hrs. at 18-20 °C.
 Form filiform; Line of Puncture filiform; Gas Bubbles
 Color of Surface —; Color of Puncture —; Size of Surface —
 Shape of Surface —; Elevation liquefaction crater; Edges —
 Internal Structure and Consistence Ref. weak
 Optical Characters Ceraceous
 2. Stroke 48 hrs. at 18-20 °C.
 Extent 3-4 mm; Form —; Elevation liquefaction
 Edges entire; Internal Structure Ref. weak; Color grayish white
 Optical Characters vitreous
 3. Plate — hrs. at — °C.
 Surface Colonies: Size —; Shape —; Color —; Edges —
 Internal Structure —; Consistence —
 Optical Characters —
 Magnified —
 Deep Colonies: Size —; Shape —; Color —; Edges —
 Internal Structure —; Consistence —
 Optical Characters —
 Magnified —
 Gas Bubbles
 4. Changes in Medium: Consistence —
 Color —
 Odor —

c. Bouillon (reaction +1.5) 48 hrs. at 35-36°C.
Change in transparency turbid, appeared 48 hours after growth;
Change in color to greenish, appeared 48 hours after growth;
Character of growth producing turbidity thin pellicle easily disturbed & settling to bottom
Presence and character of surface growth surface growth round.
Presence and character of deposit _____
Odor _____; change in reaction _____

cl. Fermentation in Glucose, Lactose, Saccharose, Bouillon:

Time of growth	G.....hrs.	G.....hrs.	G.....hrs.	L.....hrs.	L.....hrs.	L.....hrs.	S.....hrs.	S.....hrs.	S.....hrs.
Amount of gas									
Pressure of air									
Temperature									

Absorbed by Na OH _____
HCO₂ ratio _____
Relative growth in arms of fermentation tube _____
Special characteristics of growth in above _____
c2. Acid production turns rosolic acid paper greenish blue; Peptone production _____
Indol production Positive; Diastatic ferments _____
Reduction of Nitrates _____; Invertin ferments _____
Phenol production _____

d. MILK: (35-36°C.)
Does curdle after 48 hours; character of curd flocculent; effect of boiling _____
Whey small amorph. mass in 72 hrs.
Gas _____
Reaction _____
Digestion partly.
Peptones _____
Color whey yellowish; odor _____
Consistence _____
Litmus milk bottom decolorized, digested & alkali produced. 72 hrs. decolori-
yes & volume reduced.

e. BLOOD SERUM: _____ hrs. at _____ °C., shows colonies of _____
Extent _____; Form _____; Elevation _____
Edges _____; Internal Structure _____; Color _____
Liquefaction _____; Odor _____; Color of medium _____
Optical characters _____
Consistence _____
Magnified _____
f. POTATO: 24 hrs. at 35-36 °C., shows colonies of _____
Extent 3 mm.; Form _____; Elevation Raised
Edges slate colored; Internal Structure _____; Color light brown
Liquefaction none; Odor _____; Color of medium whitish gray.
Optical characters iridescent.
Consistence moist
Magnified _____

OPTIMUM TEMPERATURE _____ °C.; Limits of Temperature _____ °C. to _____ °C.
THERMAL DEATH POINT _____ °C., _____ minutes exposure _____
ANAEROBIC CONDITIONS _____

SPECIAL MEDIA Eisner's Potato medium. 24 hrs. growth.

PIGMENT AND ITS PHYSICAL CHARACTERS Pyocyanin is soluble in chloroform and
turns it blue. It is not very soluble in alcohol and does not
precipitate even on chloroform.

PATHOGENESIS _____

SHEET No.

UNIVERSITY OF TEXAS.

LABORATORY OF BACTERIOLOGY.

Bacteriological Report by

of study of

Date

Galveston, Texas.

NAME OF MICROORGANISM *M. Pyogenes Aureus* SOURCE

MORPHOLOGY: (Grown 72 hrs. in medium Bouillon at 18-20°C. 35-36 hrs at 36-38°C.)

- a. Shape of individuals *Spherical*
 b. Arrangement of individuals *In ones, twos + threes*
 c. Size of individuals *2-3 micron*
 d. Capsules
 e. Spores; position of spores; time of development
 f. Motility and flagella *Non-motile non-flagellate*
 g. Pleomorphism on different media from above; characteristics of same
 h. Stain: *Löffler Blue Grams. Stains best by Grams.*

GROSS CHARACTERS OF COLONIES:

- a. *Agar + 1.5* reaction):
 1. Puncture 24 hrs. at 35-36°C.
 Form *Beaded*; Line of Puncture *Beaded*; Gas Bubbles *None*
 Color of Surface *Yellow*; Color of Puncture *Slightly yellowish*; Size of Surface *3-4 mm*
 Shape of Surface *Contoured*; Elevation *Slightly elevated*; Edges *Undulated*
 Internal Structure and Consistence *Refraction strong, Homogeneous, Granular*
 Optical Characters *Butyrous*
 2. Stroke 48 hrs. at 35-36°C.
 Extent *3 mm*; Form *—*; Elevation *Raised*
 Edges *Lobulate*; Internal Structure *Strong, homogeneous granular*; Color *Yellow*
 Optical Characters *Butyrous*
 3. Plate 48 hrs. at 35-36°C.
 Surface Colonies: Size *1 mm*; Shape *round, confluent*; Color *yellow*; Edges *Entire*
 Internal Structure *Refraction strong*; Consistence *Thick*
 Optical Characters *Butyrous, resistant*
 Magnified *Same as above, but faintly granular*
 Deep Colonies: Size *1 mm*; Shape *round oval or lens*; Color *Yellowish*; Edges *Entire*
 Internal Structure *Refraction strong*; Consistence *Thick*
 Optical Characters *Butyrous, granular*
 Magnified *Same as above*
 Gas Bubbles *No gas*
 4. Changes in Medium: Consistence
 Color
 Odor
 b. *Gelatin + 1.5* reaction):
 1. Puncture 48 hrs. at 35-36°C.
 Form *Beaded*; Line of Puncture *Beaded*; Gas Bubbles *—*
 Color of Surface *purplish yellow*; Color of Puncture *purplish yellow*; Size of Surface *7-8 mm*
 Shape of Surface *Round*; Elevation *Basal*; Edges *—*
 Internal Structure and Consistence *weak homogeneous*
 Optical Characters *Sebacious*
 2. Stroke 48 hrs. at 35-36°C.
 Extent *2 mm*; Form *—*; Elevation *Raised*
 Edges *lobate-lobulate*; Internal Structure *Refraction strong*; Color *faintly yellow*
 Optical Characters *Macareus*
 3. Plate 48 hrs. at 35-36°C.
 Surface Colonies: Size *1 mm*; Shape *round*; Color *purplish white*; Edges *—*
 Internal Structure *—*; Consistence *—*
 Optical Characters *strong homogeneous homogeneous*
 Magnified *Same as above*
 Deep Colonies: Size *—*; Shape *—*; Color *—*; Edges *—*
 Internal Structure *—*; Consistence *—*
 Optical Characters *—*
 Magnified *Brownish with coarse gran center, purplish pink gran*
 Gas Bubbles *none*
 4. Changes in Medium: Consistence
 Color
 Odor

c. Bouillon (reaction + 1.5) hrs. at °C. within
Change in transparency..... appeared 48 hours after growth;
Change in color..... appeared..... hours after growth;
Character of growth producing turbidity Uniformly turbid
Presence and character of surface growth None
Presence and character of deposit None
Odor.....; change in reaction.....

e1. Fermentation in Glucose, Lactose, Saccharose, Bouillon:

Time of growth.....	G.....hrs.	G.....hrs.	G.....hrs.	L.....hrs.	L.....hrs.	L.....hrs.	S.....hrs.	S.....hrs.	S.....hrs.
Amount of gas.....									
Pressure of air.....									
Temperature.....									

Absorbed by Na OH.....
HCO₂ ratio.....
Relative growth in arms of fermentation tube.....
Special characteristics of growth in above.....
e2. Acid production none in 72 hrs.; Peptone production.....
Indol production 15 days culture in bouillon Negative; Diastatic ferments.....
Reduction of Nitrates.....; Invertin ferments.....
Phenol production.....

d. MILK: (36-37 °C.) fluid in center
Does yes curdle after 5 days hours; character of curd Solid around edges; effect of boiling.....
Whey no whey
Gas no gas
Reaction neutral
Digestion none
Peptones.....
Color None; odor.....
Consistence flocculent
Litmus milk 4 hrs. no acid. 48 hrs. small amt. of acid.

e. BLOOD SERUM: 48 hrs. at 35-36 °C., shows colonies of.....
Extent 2 mm; Form.....; Elevation Raised
Edges Auriculate; Internal Structure Refractive strong; Color Grey
Liquefaction.....; Odor.....; Color of medium.....
Optical characters.....
Consistence Thick
Magnified Same as above.

f. POTATO: 48 hrs. at 35-36 °C., shows colonies of.....
Extent 1 mm; Form.....; Elevation Raised
Edges undulate; Internal Structure Refractive strong; Color Orange
Liquefaction.....; Odor.....; Color of medium Grey
Optical characters dull
Consistence not very thick
Magnified Same as above.

OPTIMUM TEMPERATURE 37 °C.; Limits of Temperature..... °C. to..... °C.
THERMAL DEATH POINT..... °C. minutes exposure.....
ANAEROBIC CONDITIONS.....

SPECIAL MEDIA.....

PIGMENT AND ITS PHYSICAL CHARACTERS.....

PATHOGENESIS.....

SHEET No.

UNIVERSITY OF TEXAS.

LABORATORY OF BACTERIOLOGY.

Bacteriological Report by *Wadsworth & Schilling*
of study of *B. typhosus*.Date *11-26-'06*

Galveston, Texas.

NAME OF MICROORGANISM

SOURCE

MORPHOLOGY: (Grown *48* hrs. in medium *Agar + 1.5* at *18-20°C.* *48* hrs at *36°-38°C.*a. Shape of individuals *rods*b. Arrangement of individuals *irregular*c. Size of individuals *5-8 μ 1-3 μ long*

d. Capsules

e. Spores: position of spores; time of development

f. Motility and flagella *8-20 peritrichous flagella, very actively mobile*

g. Pleomorphism on different media from above; characteristics of same

h. Stain: *Agar, Gentian violet* *Is decolorized by*
Grahn's.

GROSS CHARACTERS OF COLONIES:

a. *Agar + 1.5* reaction):1. Puncture *48* hrs. at *35-36°C.*Form: Line of Puncture *Beaded*; Gas BubblesColor of Surface *yellowish white*; Color of Puncture *yellowish white*; Size of Surface *2 mm*Shape of Surface: Elevation *Raised*; Edges *lobes lobulate*Internal Structure and Consistence *Ref. strong, granular*Optical Characters *Opalescent*2. Stroke *48* hrs. at *35-36°C.*Extent *2-4 μ*; Form: Elevation *Raised*Edges *irregular*; Internal Structure *Ref. strong*; Color *yellowish white*Optical Characters *Opalescent, bluish*3. Plate *48* hrs. at *35-36°C.*Surface Colonies: Size *1 mm*; Shape *round, oval*; Color *white*; Edges *entire*Internal Structure *Ref. strong, granular*; Consistence *Dry*Optical Characters *Opalescent*Magnified *Same as above*Deep Colonies: Size *1 mm*; Shape *leaves*; Color *brownish*; Edges *entire*Internal Structure *Ref. strong, granular*; Consistence *Dry*Optical Characters *Opalescent*Magnified *Same as above*Gas Bubbles *none*4. Changes in Medium: Consistence *no*Color *no*

Odor

b. *Reaction* reaction): *1.5*1. Puncture *48* hrs. at *26°C.*Form: Line of Puncture *Filiform*; Gas Bubbles *none*Color of Surface *no surface*; Color of Puncture *greyish white*; Size of Surface *no surface*Shape of Surface *none*; Elevation *none*; Edges *none*Internal Structure and Consistence *Ref. weak*Optical Characters *Opalescent*2. Stroke *48* hrs. at *26°C.*Extent *1 mm*; Form: Elevation *Raised*Edges *undulate*; Internal Structure *Ref. weak*; Color *greyish white*Optical Characters *Opalescent*3. Plate *48* hrs. at *36°C.*Surface Colonies: Size *1 mm*; Shape *round, oval & leaf-like shapes*; Color *white*; Edges *entire*Internal Structure *Ref. strong*; Consistence *Dry*Optical Characters *Opalescent*Magnified *Same as above*

Deep Colonies: Size: Shape: Color: Edges:

Internal Structure: Consistence:

Optical Characters:

Magnified:

Gas Bubbles:

4. Changes in Medium: Consistence *Same*

Color:

Odor:

c. Bouillon (reaction..... 1.5 acid.....) 48 hrs. at 35-36°C:
Change in transparency..... Opacifying....., appeared 2.4 hours after growth;
Change in color..... Faintly pink....., appeared 2.4 hours after growth;
Character of growth producing turbidity..... Fine granular.....
Presence and character of surface growth..... None.....
Presence and character of deposit..... None.....
Odor.....; change in reaction.....

c1. Fermentation in Glucose, Lactose, Saccharose, Bouillon:

Time of growth.....	G..... hrs.	G..... hrs.	G..... hrs.	L..... hrs.	L..... hrs.	L..... hrs.	S..... hrs.	S..... hrs.	S..... hrs.
Amount of gas.....	none								
Pressure of air.....									
Temperature.....	35-36								

Absorbed by Na OH.....
HCO₂ ratio.....
Relative growth in arms of fermentation tube.....
Special characteristics of growth in above.....
c2. Acid production..... no acid in 10 days.....; Peptone production.....
Indol production..... slightly positive should not..... Diastatic ferments.....
Reduction of Nitrates..... Invertin ferments.....
Phenol production.....

d. MILK: (.....°C.)
Does..... not..... curdle after 14 hours; character of curd.....; effect of boiling.....
Whey.....
Gas.....
Reaction.....
Digestion.....
Peptones.....
Color.....; odor.....
Consistence.....
Litmus milk..... Faintly acid, not curdled in 48 hrs.....

e. BLOODSERUM: 48 hrs. at 35-36°C, shows colonies of
Extent..... 1-2 in. in.....; Form.....; Elevation..... Raised.....
Edges..... Undulate.....; Internal Structure..... Ruffled strong.....; Color..... Greyish white.....
Liquefaction..... none.....; Odor.....; Color of medium..... Brown.....
Optical characters..... Translucent.....
Consistence..... Moist.....
Magnified..... Same as above.....

f. POTATO: 48 hrs. at 35-36°C, shows colonies of The growth is moist & movable
Extent.....; Form.....; Elevation.....
Edges.....; Internal Structure.....; Color.....
Liquefaction.....; Odor.....; Color of medium.....
Optical characters.....
Consistence.....
Magnified.....

OPTIMUM TEMPERATURE.....°C.; Limits of Temperature.....°C. to.....°C.

THERMAL DEATH POINT.....°C..... minutes exposure.....

ANAEROBIC CONDITIONS.....

SPECIAL MEDIA..... Lactose Litmus Agar No change in 72 hrs.
..... Elmer's Potato medium no growth in 25 hrs.

PIGMENT AND ITS PHYSICAL CHARACTERS.....

PATHOGENESIS.....

1. Explain what is meant by catalysis
▽ give example.
2. Prep. prop. & uses of I.
3. Give ... & occurrence of Oxalic Acid.
4. ... formula for sal soda, sal
pyrrolle, carbonic acid, hypophos-
phoric acid, saleratus, magnesia
USP, acetone & Chloral hydrate.
5. Process of est. of Cl in potable waters
▽ explain significance of increase
of Cl in potable waters.
6. Describe prep. of Ferrous Carbonate &
name official prep. which contain
it.
7. Describe the diapa reaction in
urine & explain the importance.
8. Give process of est. C, H, & O in
organic substances.
9. Describe prep & prop. of CHCl_3 &
reactions.
10. Give name of substances having
formula $\text{C}_6\text{H}_{10}\text{O}_5$ & tell what
class of substances to which they

belong. Tell what you know about the important members of this class.

11. Give graphic formula for sal-phonal, salicylic acid, antefebrom, phenacetin, resorcin, nitro-glycerin, acetic ether & benzoic acid.

12. Chem. names of

