P
Med
N.

Vol. CX MAY, 1916 Number 5

NASHVILLE JOURNAL OF MEDICINE AND SURGERY

Established 1851

CHARLES S. BRIGGS, A. M., M. D., Editor and Proprietor
E. S. McKEE, M. D., Cincinnati, Associate Editor
W. T. BRIGGS, M. D., Associate Editor

PUBLISHED MONTHLY - - $1.00 a Year in Advance

Entered at the Post-Office at Nashville, Tenn., as Second-Class Matter

Williams Ptg Co., Printers, 156 Fourth Avenue, North, Nashville, Tenn.

Quality
Efficiency
Uniformity
Tongaline

Rheumatism
Neuralgia
Sciatica
Lumbago
Tonsillitis

Grippe, Gout
Nervous Headache
Malaria
Heavy Colds
Excess of Uric Acid

SAMPLES ON APPLICATION MELLIER DRUG COMPANY., ST. LOUIS

Contents for May, 1916

ORIGINAL COMMUNICATIONS.

Eclampsia 193

SELECTED ARTICLES.

Influenza 200

EXTRACTS FROM HOME AND FOREIGN JOURNALS.

Surgical.

Operation for Aneurysm of Extremity.............. 215
Thread Drainage 215
A Simple Method of Removing Flat Foreign Bodies from the Trachea of Young Children.............. 216
Intravenous Injections of Chloral in the Treatment of Tetanus 217

Medical.

Chenopodium in the Treatment of Unciniariasis...... 218
Copper Sulphate Treatment of Trachoma............ 218
Magnesium Sulphate in Non-Amoebic Dysentery...... 219
Mobilization of the Lung in Treatment of Pulmonary Tuberculosis in Early Stages..................... 219

Obstetrical.

Painless Childbirth 220
Cesarean Section 222

EDITORIAL 223

REVIEWS AND BOOK NOTICES.......................... 226

PUBLISHER'S DEPARTMENT 237

LISTERINE

In the treatment of Summer Complaints of Infants and Children

"The clinical basis of treatment is antisepsis and disinfection of the intestinal tract; not with a purpose to completely destroy the offending bacteria and their toxines, which we know to be neither possible nor necessary, but to assist the normal defenses of the body to gain the ascendancy."

"There are four principles of therapy which govern the treatment of these infections:

"(a) To give the gastro-intestinal tract physiological rest."

"(b) To remove as much as possible of the infective elements."

"(c) To stimulate natural defenses."

"(d) To reinforce these natural defenses with local antisepsis."

"By local antisepsis we can inhibit many of the pathogenic bacteria in the bowel before they enter the mucosa. The antiseptic agent must be selected with a view to certain requirements: for example, it must not be strongly acid. It must not coagulate mucin. It must not be astringent. It must be easily soluble and not upset osmotic conditions, and finally it must be non-irritant and non-toxic."

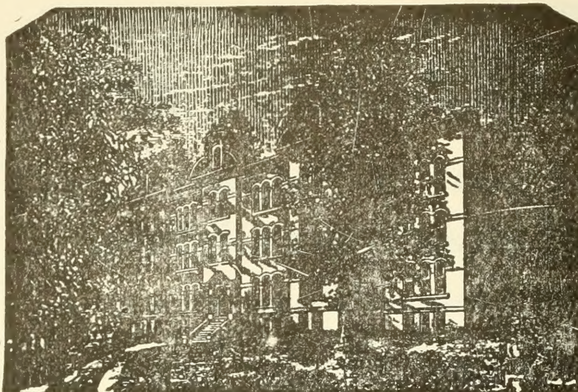
"Listerine answers to all these requirements and furnishes an ideal agent of local antisepsis in these cases. It has the additional advantage of being compatible with almost any other medicinal agent with which the physicians may desire to administer it."

The above is abstracted from a pamphlet entitled

"Acute Intestinal Infections of Children"

a copy of which we shall be pleased to send to physicians upon request.

Lambert Pharmacal Company, 2101 Locust St., St. Louis, Mo., U.S.A.



Beechhurst Sanitarium

Louisville, Ky.

H. B. SCOTT, A.M., M.D. - - Medical Supt.
E. P. THOMAS - - - . Business Manager

A Sanitarium for the Treatment of Mild Mental Diseases, Drug Addictions and Alcholism.

The main building at Beechhurst is commodious, and has been remodeled and newly furnished. Detached apartments for special cases, besides arrangements in both male and female departments for classification of patients. It is heated by steam, lighted by electricity, and water supplied by city waterworks.

Grounds elevated, ample, and beautifully wooded. Location retired, although within half a mile of East Louisville Station, and four hundred yards from the street car line.

Treatment: Such as is ordinarily employed in proper institutions of similar character.

Long Distance Telephone, East, 257-A. Home Telephone, 3565.

SANMETTO FOR GENITO-URINARY DISEASES.

A Soothing Healer to Inflamed Conditions.
A Tonic-Stimulant to the Reproductive System.

Specially Valuable in Prostatic Troubles of Old Men—Irritable Bladder—Enuresis—Cystitis—Urethritis—Pre-Senility.

SOOTHING—RELIEVING—RESTORING.

DOSE:—One Teaspoonful Four Times a Day. OD CHEM. CO., NEW YORK.

THE EASY BODY REST

SOLID COMFORT.

Get one now. You need it for sitting or lying in bed. A solid unbreakable steel frame attachable to any metal bed. Change from flat to reclining or sitting posture instant and easy. Makes reading, writing or eating in bed a pure pleasure.

In sickness a Godsend to patient, doctor and nurses or attendants in the sick room. A boon to nursing mothers. Better than medicine for convalescents. Changing position relieves bed weariness, nervousness, strain, bed sores. No shifting or bunching of hot pillows. Cool, hygenic. Drops out of way and out of sight when not needed. For present comfort and possible emergency should be in every home.

Used in all hospitals, sanitariums and in 100,000 homes. Highly recommended by doctors and nurses everywhere. Price only $5. F. O. B. Chicago. Money back if not perfectly satisfied. Order today.

Illustrated Booklet Free.

OVER 65 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. HANDBOOK on Patents sent free. Oldest agency for securing patents.

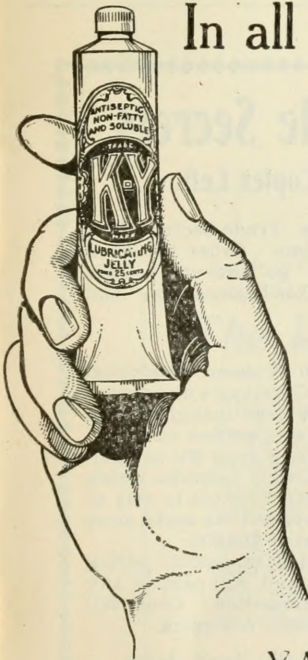
Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

In all forms of *PRURITUS*



no measure affords more prompt and gratifying relief than

K-Y Lubricating Jelly

(REG. U. S. PAT. OFF.)

In addition to its remarkable soothing and antipruritic properties, K-Y also presents certain other qualities—such as **non-greasiness, water-solubility** and complete freedom from staining or soiling of clothing or bed linen—that make it at once superior to all other similar applications.

In brief, K-Y may be relied upon to allay itching and smarting—often when other local remedies prove disappointing—and with the great advantage of being delightfully clean and free from staining or soiling tendencies.

VAN HORN & SAWTELL

NEW YORK, U. S. A.
15-17 East 40th Street

AND

LONDON, ENGLAND
31-33 High Holborn

TULANE UNIVERSITY
OF LOUISIANA

MEDICAL DEPARTMENT (Under-Graduate)

77th Annual Session opens October 1, 1910. Four years' course; unexcelled laboratory and clinical facilities. Dormatory for medical students in first two years. Over 70 teachers.

DEPARTMENT OF PHARMACY

Established in 1838. Two graded course of 32 weeks for degree of Ph.C. Food and drug analysis for students prepared. Women admitted on same terms as men.

OPPORTUNITIES FOR CLINICAL INSTRUCTION UNSURPASSED BY ANY MEDICAL COLLEG IN THE UNITED STATES. FEES AVERAGE ABOUT $1.50 PER SESSION.

FOR CATALOGS ADDRESS

DR. ISADORE DYER, Dean

P. O. Drawer 261 **New Orleans, La.**

ST. JOSEPHS MATERNITY

Cor. Magazine and Race Sts., New Orleans, La.

This institution is prepared to accommodate married patients as well as those desiring strict privacy during pregnancy and confinement.

Private rooms and ward service. Special confinement and operating-room, and all other modern facilities for attention to maternity patients.

For further particulars address

SISTERS OF CHARITY,
Cor. Magazine and Race Sts.,
New Orleans, La.

J. J. RYAN, M. D. Physician in Charge.

Kramer's $5.00 Book of Trade Secrets

Reduced to $1.00 While They Last. Only Few Copies Left.

The price of Kramer's Book of Valuable Formulas, Recipes, Trade Secrets, Processes," etc., has been reduced from $5.00 to $1.25 for a short time. Order the book while you can get it. "Its" a spring tonic for any business. Did "go" into every State and Canada, besides several foreign countries this year. "It" makes business "go" and brings in the $ $ $ to you. Endorsed by all manufacturers.

THERE IS ONLY ONE KRAMER'S BOOK

"Kramer's Book of Trade Secrets" was written by Adolph Kramer, Analytical Chemist, assisted by other experts. Mr. Kramer was educated in Germany's most noted Technical schools, and was for over 30 years connected with the large manufacturing concerns in Germany and the U. S. It is the most complete thing ever written on flavoring Extracts, giving formulas that have never been published, costing from 30c per gallon and wholesaling for $3.50 per gal. up. It contains hundreds of other formulas which never have appeared in print, where the cost has ranged for each formula to sets of formulas, from $5.00 to $100.00. Every person who is out of employment can make more out of this book than a person in ordinary business can on a capital of $10,000.

"**KRAMER ON ICE CREAM**" is a booklet which has just been issued, telling how to make a prime **ICE CREAM** for 10c gal., absolutely pure and will pass in any food law State, besides giving a number of other formulas and information. Can't tell all about it here. Regular price $2.50, now $1.00 or both books $2.00. Act quick.

SIOUX PUBLISHING COMPANY, Desk U. **Sutherland, Iowa.**

DO BUSINESS BY MAIL

Start with accurate lists of names we furnish—build solidly. Choose from the following or any others desired.

APRON MFRS.
CHEESE BOX MFRS.
SHOE RETAILERS
TIN CAN MFRS.
DRUGGISTS
AUTO OWNERS
WEALTHY MEN
ICE MFRS.
DOCTORS
AXLE GREESE MFRS.
RAILROAD EXPLOYES
CONTRACTORS

Our complete book of mailing statistics on 7000 classes of prospective customers for the asking.

ROSS-GOULD **North 9th St.** **ST. LOUIS**

The Ideal Electrical Illuminating Outfit

FOR EVERY PURPOSE AND USE

The most practical and convenient outfit for Physicians and Surgeons where a good light is required and an advantage in making his emergency calls to examine and treat the Throat, the Nares, Eye, Ear and many other uses. This complete outfit with all attachments including Tongue Depresser, Ear Speculum and curved and straight metal attachments for the mouth, etc., and regular pen light which carries in the pocket like a fountain pen, also includes three separate light attachments; mailed anywhere in receipt of $3.50. Literature on request.

Ideal Electrical Supply Co.

299 BROADWAY *NEW YORK CITY*

The Jefferson Medical College

1825 OF PHILADELPHIA 1909

A Chartered University Since 1836

90th Annual Session Begins Sept. 24th, 1914, and Ends June 6th, 1915

The Course is of four years duration and is eminently practical throughout. Practical manual training in ten different and fully equipped laboratories. Recitations by members of the Faculty and others. The new Jefferson Hospital, with unsurpassed facilities for clinical teaching, entirely owned and controlled by the College, is devoted to the instruction of students. Small sections and intimate personal contact with patients in the wards and dispensaries. A library of 4,200 volumes, in charge of a trained librarian, is available for the use of the students, without charge. An opportunity for every graduate to enter hospital service. An optional Five Year Course is offered. Post-graduate Courses throughout the summer and during the session. Special students possessing sufficient qualifications are admitted to all courses.

Special Announcements will be Sent Upon Application to

ROSS V. PATTERSON, M.D., Sub-Dean

TABLETS

A DEPENDABLE REMEDY IN

Cardio Vascular Diseases

Clinical results have proven to thousands of physicians that Anasarcin is of unsurpassed remedial value in the treatment of disorders of the circulatory system and of ascitic conditions.
It controls heart action, relieves dyspnoea and eliminates effused serum.

Anasarcin's Distinctive Features

Dependability of the cardiac stimulant and diuretic properties of its ingredients made certain by standardization.
Prevention of toxic cumulative effect.
Distinct, definite dosage.
Absence of ill effects after prolonged administration.
Constructive influence upon circulatory and nutritive processes.
Restoration of balance between arterial and venous systems.
That you may observe the action of Anasarcin and subject it to an exacting clinical test, we will supply a sufficient quantity for that purpose without expense. To physicians only.

The ANASARCIN CHEMICAL COMPANY

WINCHESTER, TENNESSEE.

Thomas Christy & Co., London, Agents.

CHIONIA

A true hepatic stimulant that does not produce catharsis

Remarkably serviceable in the treatment of Biliousness, Jaundice, Intestinal Indigestion, and the many conditions caused by hepatic torpor.

PEACOCK'S BROMIDES

The BEST because the PUREST for prolonged Bromide Treatment

PEACOCK CHEMICAL CO.
St. Louis, Mo.

Dorris, Karsch & Co.

FUNERAL DIRECTORS

AUTO-AMBULANCE SERVICE

TELEPHONE MAIN 479

TELEPHONE MAIN 1369

CORNER OF COMMERCE STREET AND NINTH AVENUE, NORTH, NASHVILLE, TENNESSEE

"MAN BEGINS TO DIE AS SOON AS HE IS BORN!"

Obstipation---Stasis---Autotoxemia

hastens the process

To treat this Syndrome requires perfect lubrication.
Perfect lubrication calls for INTEROL.

Why experiment?

INTEROL has correct body, effective viscosity; no suggestion of flavor or odor (even when heated to 100° C.); has been hyper-refined and is safe.

INTEROL SECURES RESULTS IN HANDS THAT KNOW HOW—AND WHEN—TO USE INTEROL.

Obtainable of your druggist. Booklet on request.

VAN HORN and SAWTELL
15 and 17 East 40th Street
NEW YORK CITY

"The Moving Finger Writes"—

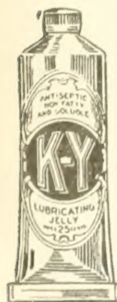
The examining finger hurts!

So does any instrument of penetration.

K-Y LUBRICATING JELLY
(Reg. U.S. Pat. Off.)

Friction's Antidote

makes the passage of sound, speculum, catheter, 'scope, etc., easy and minimizes pain or discomfort.



K-Y Lubricating Jelly

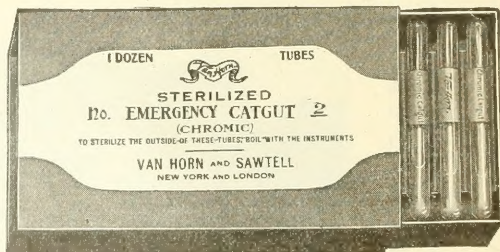
Is greaseless and water-soluble.
Does not stain or irritate.
Economical, convenient.

Also for pruritus, the surgeon's hands, burns, skin irritation, bed sores, etc.

At all druggists. Booklet on request.

VAN HORN and SAWTELL
15 and 17 East 40th Street, New York

A Stitch In Time— Without Waste



20-inch lengths, plain and chromic, all sizes
A dozen tubes in a box. A Dollar a box

For
- Face and Scalp Lacerations
- Crushed and Lacerated Fingers
- The "extra" suture or ligature for finishing the major operation

"*Van Horn*" EMERGENCY CATGUT

Order from Your Dealer,
or Sent, Upon Receipt of Price, by

VAN HORN and SAWTELL
New York, U.S.A. 15-17 E. 40th Street AND London, England 31-33 High Holborn

NASHVILLE JOURNAL
— OF —
MEDICINE AND SURGERY

CHARLES S. BRIGGS, A.M., M.D., Editor.
W. T. BRIGGS, B.A., M.D., Associate Editor.

VOL. CX. MAY, 1916. No. 5

Original Communications

ECLAMPSIA.*

BY SAM K. COWAN, M.D.,
Nashville, Tenn.

Eclampsia is a symptom complex, presented by pregnant women, of which convulsions, followed by coma, are the most prominent manifestations.

Its history dates back to the time of Hippocrates, who mentions convulsions occurring in those pregnant women who had headache, and were inclined to sleep.

It occurs in from 2 to 4 per cent of pregnancies and usually during the later months of gestation, although fatal cases are known in the 4-6 mo., and it has been reported as early as 10th week.

In about 20 per cent of cases convulsions appear during pregnancy, 60 per cent during labor, and 20 per cent during puerperium.

Cause—All authorities agree that it is a toxemia, about the origin of which many theories have been advanced, but none have been proven. The liver is accused by some, the

*Read before Nashville Medical Symposium, March 22, 1916.

kidney by others, on account of the pathology of these organs found on autopsy. Franke claims ferments in the placenta may produce the toxins.

Disturbed glandular balance between the organs with internal secretions is another theory. Lange has cured the albumin of pregnancy by the administration of iodothyrin, and believes the thyroid gland responsible. Others have used thyroid extract successfully in albuminuria, also acid intoxication has its followers. Quite a few men claim it is an infection on account of its febrile nature, occurring in previously healthy women after a few days prodromata, and on account of the fact that it frequently follows tonsillitis or some other acute infection; also on account of the frequency of sepsis in eclamptics.

It is thought to be allied to uremia, and while albumin is found in the urine of all eclamptics it has not been decided whether the kidney lesions are the cause or result of the cause.

Cause of convulsions—The toxins, if they are the cause irritate the nerve centers as do other specific poisons—strychnine, tetanus, etc., with a special affinity for the cortex of the fore part of the brain, and as in other poisons, are induced by external irritants, as slamming doors, jarring bed, external or internal examination, induction of labor, hypos, enemas, etc.

Predisposing causes are previous attacks, primiparity, especially in advanced years, heredity, excessive nervous irritability, multiple pregnancies, contracted pelvis, infantalism and previous diseases of liver and kidney.

Pathology is found on autopsy in brain, liver, kidneys, circulatory system, lungs, and changes corresponding to those in mother are found in fetus. *In the brain* there is flattening and moderate edema of convolutions with anemia or congestion. Hemorrhages or areas of central softening with thrombosis.

The liver shows the most typical and constant changes. There is albuminoid degeneration with hemorrhagic and

anemic necrosis around the small portal vessels and a fatty degeneration of the periphery of the lobules, resembling acute yellow atrophy. *Kidney* lesions also appear in practically all cases of eclampsia, cloudy swelling and fatty degeneration of epethelium are the rule. These changes are believed by most authorities to be secondary to liver changes.

Circulatory system—The ventricles are contracted, the auricles full of dark-red blood, which does not clot readily. Heart muscle is fatty with tiney hemorrhages, necrosis, and thrombi; it tears easily. Thrombi and emboli are very common in the fine vessels of the lungs, liver, kidney, brain, and skin. Microscopic findings in blood are not constant. Marked leucocytosis, the multinuclear predominating, is sometimes found. Congestion and edema of lungs are usually shown.

Symptoms—Eclampsia may attack a pregnant woman, who has apparently been in good health up to the moment of the onset. However, this is not the rule. Prodromal symptoms exist from a few hours to several weeks before the seizure. Severe headache, frontal or occipital, dizziness, disturbances of vision, and sometimes complete blindness from edema or albuminuric retinitis. Puffiness of eyes and cheeks and upper extremities, insomnia or inclined to sleep. Nervousness, twitching of muscles, cramps, epigastric pain, nausea, and vomiting, tenderness over pit of stomach and liver. High blood pressure and accentuated 2d heart sound. Urine is usually diminished; high specific gravity and low in urea output and total solids. Albumin with hyaline and granular casts.

The convulsions are epileptiform in character and consist of a stage of tonic followed by a stage of clonic contractions. Patient becomes unconscious, pupils dilate, eyes and head turn to one side, usually left, mouth opens and tongue protrudes, and there may be a cry or sigh. Then comes a brief period of tonic contraction in which respiration ceases and patient is cyanotic. This stage lasts about one-half minute or less and is followed by general clonic

contractions involving all the voluntary muscles. (During this stage she should have especial care to protect from injury, but should not be forcibly held.) Slight respiratory movements now occur and the cyanosis gradually disappears. This stage lasts about three minutes and is followed by coma for a brief period in some cases while in others it exists until the onset of another convulsion. In favorable cases the woman wakes in from thirty minutes to an hour bewildered and with severe muscular soreness. In a little while if she is to have more the attack comes again. In the serious cases the attacks come even more frequently than thirty minutes.

During the attack temperature rises, pulse becomes rapid, blood pressure very high and urine suppressed or diminished. It frequently contains blood, and nearly always albumin, so much that it almost solidifies on boiling.

Pains usually begin if the convulsions are severe, or if they come during labor it is usually terminated rapidly. After labor the cases are usually more favorable. However, pregnancy is not always interrupted by eclampsia and it is not always necessary to terminate pregnancy in the treatment. De Lee reports the delivery of a living child in which the mother had two seizures within three weeks' time, and the convulsions so severe that the jaw was dislocated.

More usually the attack kills the fetus, the symptoms abate and the product is expelled in due time.

Diagnosis—It must be differentiated from epilepsy, hysteria and convulsions or coma due to cerebral diseases, diabetes or acute poisoning. Anemic convulsions can hardly be differentiated, but the general line of treatment is about the same.

Epilepsy is eliminated by history of previous attacks, the contracted pupils, diminished or absent reflexes. The urinary findings, low blood pressure and absence of fever.

Hysteria, by the atypical convulsive seizure, length of time it lasts, spastic contraction of muscle groups, mobile

pupils, absence of cyanosis, stertorous breathing, or urinary findings.

Spinal puncture may be required to differentiate the organic diseases of brain, and history of case usually excludes poisons.

Prognosis is always serious, both for mother and child. Over 20 per cent of women die. Mortality is higher in multipara than in primipara. The greater the number of fits the higher the mortality, being 50 per cent in cases where there has been over twenty convulsions. It is also graver when the convulsions and coma are prolonged with rising temperature and diminished urine. Mortality is highest during pregnancy and least during puerperium. Death results from coma, hemorrhage into brain or pulmonary edema.

In severe cases which recover prolonged mental symptoms may continue and even insanity result, or if hemorrhage has occurred, a paralysis.

Fetal mortality is influenced by period of gestation, at 7 months it is almost 100 per cent, becoming less as term is approached. At best it is 40 to 50 per cent, causes of death being prematurity, toxemia, asphyxiation, drugs administered to mother and injuries sustained during birth, especially in forced deliveries.

Treatment—There is no routine treatment of eclampsia, the cases vary so in severity. All pregnant women should be looked on as subjects of eclampsia, and if they are watched carefully the condition can be prevented in the majority of instances.

The rules of the hygiene of pregnancy should be strictly followed. Always on the lookout for evidences of toxemia, urine should be examined at least every three or four weeks during first six months and every two weeks during last three months, and if patient is not doing well, weekly or even daily examinations should be made. Albuminuria is most important finding and is never marked without evidences of toxemia. Diminished daily amount of solid and output is next in importance. Casts, unless granular or

cellular, are of little significance, and the percentage of urea is not reliable unless associated with albuminuria. A rising blood pressure is a warning but is considered safe under 150 m. m.

When first symptoms of toxemia appear, treatment must be instituted at once; diet regulated so that least nitrogenous food possible is given. Milk, vegetables, and fruits given with large amounts of water, unless there is considerable edema and heart already overloaded. Stimulate emunctories, plenty of fresh air and rest. If symptoms do not subside under this and patient grows progressively worse with convulsions, then the treatment is surgical, according to a number of authorities, while others still hold to the medicinal plan and treat expectantly for a short time, not usually over forty-eight hours.

Straganaff's treatment is expectancy with narcotics. Patient is placed in a quiet room disturbed as little as possible, given 1/4 gr. morphine by hypo. and 30 gr. chloral by rectum every three hours, according to indication, which is convulsions. For each internal examination, catheterization or enema and convulsions, chloroform or ether is given.

Venesection and saline solutions, catharsis, hot packs, and toxin. If patient grows worse operative delivery is performed. Veratrum viride, thyroid extract, para thyroid extract, alkalies, amyl nitrate, lumbar puncture, all have their advocates in expectant treatment, but all agree in terminating pregnancy if patients do not improve in short time.

Deebhsen's dictum is, after first convulsion, put patients under anesthetic and deliver at once, and statistics show that rapid emptying of uterus after first convulsion gives best results. Peterson, collecting 615 cases of early delivery, as soon as possible after first convulsion, showed mortality of 15.9 per cent, as compared to 28.9 per cent treated conservatively. R. Friend reports from Berlin charity 551 cases delivered within one hour after convulsion with no mortality.

Another advantage of early delivery is that more children are saved. Methods of delivery depend first on period of

pregnancy; second, environment of patient; third, state of cervix; fourth, extraneous complications, as contracted pelvis, tumors, placenta previa, etc.; fifth, skill of the attendant, If cervix is dilated, forceps should be applied and delivery accomplished at once. In hard, rigid cervix, vaginal or cesarian section, some claiming latter the better operation, being quicker and with less shock, while others claim the same for the first.

Ether is the anesthetic preferred and as little as possible should be given.

In closing, I wish to make a plea for better attention to pregnant women so that not only eclampsia, but other toxemias and complications may be noted and the pregnant woman carried to confinement under the most favorable conditions possible.

Selected Articles

INFLUENZA.*

O. A. SCHMID., M.D.,
St. Joseph, Mo.

Not since Pfeiffer isolated the influenza bacillus in 1892 has a disease term been so widely used and misused, and because the disease is so varied in its form and clinical manifestations is this misuse apparent. Therefore we can find no more appropriate subject for discussion and study at this time. Holt and Wollstein in their investigations say that we can consider as influenza only those cases in which the bacillus of Pfeiffer are found. Yet the folly of such practice is at once brought to notice when we consider that the Pfeiffer bacillus is not easily isolated either in blood culture or from the secretions and can often be found in quantities in supposed normal individuals. For instance, these investigators discovered the organisms in 85 persons of whom 42 were suspected of having influenza and 43 were not—15 of the latter were nurses and physicians in intimate contact with patients suffering from the disease. I take it for granted that the latter 43 were not having symptoms of any sort. I have tried during the present epidemic (in a rough way, I admit), to find the bacillus in the secretions and out of 25 cases in which I made the attempt found them in but two.

Most authorities describe the disease in types depending upon the localization of the toxins. Leichtenstern's classification is as follows: 1. The purely toxic variety which is

*Read before the Buchanan Medical Society, St. Joseph, January 5, 1915.

subdivided into: (a) Simple influenza fever; (b) the nervous form. 2. Toxic inflammatory (a) The catarrhal respiratory; (b) gastro-intestinal.

Osler's classification is a more usual one: 1, respiratory; 2, gastro-intestinal; 3, nervous, and 4, febrile.

The usual English classification is as follows: Simple catarrhal fever; catarrhal fever with pulmonary complications; and fever with abdominal complications. But back as far as in the epidemic of 1848 Peacock stated that he found influenzal fever with catarrhal symptoms and even influenza without fever. Peacock's findings are plainly evident at the present time. Therefore, the latter classification is useless. A study of 848 cases of influenza recorded at the Massachusetts General Hospital showed the majority to be of respiratory type while a large number of patients at entrance so simulated typhoid that they were placed on enteric precautions.

All forms of the disease show certain symptoms and features in common and yet these symptoms are so various in each case that it will be convenient to describe first of all, the usual or simple catarrhal influenza may present symptoms that are common to the various types; therefore, it will be necessary to resort to considerable repetition later on when describing the disease under its classifications.

The first and most striking symptoms about influenza in all its forms is the suddenness of attack. I have seen, during the past few weeks symptoms and symptom groups which I did not realize were possible in this disease, namely:

Mrs. J., age 42, in good health, arose one morning with apparently nothing wrong and prepared the usual morning meal and of a sudden relatives about the house noticed her acting strangely. She suddenly became maniacal and this lasted several hours, and then she went through the usual course of a very severe influenzal attack.

Mr. N., salesman, left his home feeling well and stepped into his machine for a ride, and after being out not more than twenty or twenty-five minutes, was suddenly attacked

with violent headache and lumbar pains and was unable to drive his machine home. He had to be assisted from same. He then went through a severe clinically influenza.

In no few cases do we see some mild delirium which is rather sudden of onset. Goodhart, of England, states that he saw a case in which the patient, while out driving, without warning or previous complaint, fell from his cart in an insensible condition; was picked up, put into the cart, and he himself drove home, and although he had a broken rib, was so dazed he insisted on retiring without removing his clothes and was thought to be drunk. Another case he recites was that of a medical man, who, on going to bed in his usual health arose during the night to void urine fell to the floor and required assistance to get to bed again, after which he went through a severe form of influenza.

But in the usual case our patient presents himself with the statement that he was suddenly attacked with violent pains of bones and muscles over entire body; but lays especial stress upon the peculiar pains in back over lumbar region and of such character as to remind one that he is dealing with the prodromal back pains of variola. There are also frontal and occipital pains in head, which are intensified upon movement of head from backward and forward position, or on stooping, reminding one of a frontal sinus involvement. There is also complaint of pressure and fullness in the head; of dizziness and pain in eyeballs. The chest pains complained of are usually the same in all cases, viz.:

The patient will describe a course about the abdomen indicating the attachments of the diaphragm. He also places his hand over the sternum and explains that the pains are there. And states that all these pains are deeply seated and that he is afraid he has pneumonia. Usually about the same time a profuse coryza and watery eyes. The patient is often interrupted in narrating his complaint by a fit of uncontrollable harsh, dry, brassy cough. While these things are occuring he has chilly sensations, especially up and down

the spine. Often the patient will say that he can place his hand over a spot on his back which is constantly cold. There are paroxysms of inward burning sensations. A day or two later he may have a series of violent chills. But there is no regularity of onset of these chills and in fact in most of my recent cases they came on after two or three days of temperature.

The tongue presents a thick heavy coat and is itself thick and tremulous and indented by the teeth. The breath has a peculiarly offensive odor and there is nausea, sometimes vomiting. Patient complains that he does not care for nourishment; and when he does partake of same, says it does not smell or taste as it should and often complains there is no taste at all. The patient suffers from a sudden prostration altogether out of proportion to the duration or apparent severity of his illness.

The temperature in influenza is as varied as the other symptoms and in no other infectious disease is there a greater temperature range. A great many have subnormal temperatures in the very beginning. I now have a patient running a temperature of 96 to 97 F. Others range from normal temperature to that of 103 deg., which continues from three to six days and then subsides, leaving the patient as weak and depressed as if he had gone through an extended serious illness. Oftentimes there occurs great body loss. Few cases have a tendency to recurrence of fever. About the time the temperature has subsided there begin drenching sweats which last for several days, and have an odor similar to that of an extremely septic condition. During the height of the attack, I have found some who were extremely drowsy, this existing especially in children. I had one case in a dentist's family in which the child slept almost continually for two days and the doctor called up and asked whether or not medication contained a narcotic.

The foregoing is the symptom complex as they might occur singly or all in any simple catarrhal case even when no complications exist, and these symptoms may be quite alarm-

ing. This brings us to the disease under its various forms.

The Respiratory Form—This is by far the most common form of the disease, but the question often arises whether or not this additional symptom and pathology is a part of influenza or is a complication thereof. In this form there is the usual harsh, dry cough. The pharynx shows a highly congested condition, and while there may be no evidences of pneumonia, the air seems to enter the small bronchi very badly. There may be even loud bronchial rales indicating some congestion. This is the usual simple catarrhal type of moderate severity. Take these symptoms and add, scattered or even localized, areas of dullness—sometimes amounting to almost absolute flatness on percussion—with these areas full of loud sticky rales that makes one sure he is dealing with an acute pneumonia. Often with flushed cheeks and high temperature, but not an extremely high respiratory rate, but with respiration somewhat embarrassed and one deals with a severe pulmonary type of influenza. This condition will often increase in intensity and extend over a whole lung or considerable portion of it. Delirium supervenes and the pulse mounts up and the case terminates fatally without any physical evidence of consolidation being present. Oftentimes we will find areas of dullness with rales, with high temperature, and rapid respiration and find on the next day that these symptoms have disappeared, viz.:

Miss D., age 25, on afternoon of December 22, while out shopping suddenly began coughing and complaining of severe headache. She returned to her home and that evening complained of severe chest pains and soon had a severe chill. I was summoned hurriedly, relatives stating that patient had difficulty in breathing. Temperature 102.6 F., pulse 100, respiration 22. Physical examination of chest showed the entire right side, posteriorly and anteriorly, dull on percussion, in fact nearly absolute flatness, breath sounds barely audible, or not at all in some areas. Occasionally loud rale over apex. High in the axilla I found a slight indistinct

pleuritic rub. I felt sure I was dealing with a pleurisy with an effusion and told the family so. I returned the next morning prepared to aspirate to confirm my diagnosis. I found the chest signs very much improved and dullness somewhat lessened. I decided to wait with the aspiration, and that evening found the chest signs entirely cleared up with the exception of a few bronchial rales. Patient went through a moderately severe clinically influenzal attack and a few days later was up and about, despite my advice.

It is in cases under this head that we often find a severe laryngitis with complete loss of voice; with a complaint of severe lancinating pains in throat.

Expectoration is usually scanty at first and later becomes profuse and of a mucopurulent character and often blood-streaked. Actual hemorrhages may occur without previous signs of pulmonary condition being present. I have seen one case expectorate a considerable amount of blood and careful examination of chest following recovery of disease showed no signs of other trouble. According to some investigators, the influenza bacilli alone were found. Others found pneumococci. Giving rise to the argument that in some cases we are dealing with complications and not the primary disease. Yet when we consider that on the very day that the patient first notices his illness, which is clinically a true influenza, with the influenza bacillus present in the secretions, and we find these symptoms on the first day or two after onset we must believe that the complaint is the primary disease and that we have not had time for such severe complications to take place.

Gastro-Intestinal Type—In this type of the disease we have accompanying the usual symptoms of the disease either a severe constipation which is the rule, and is very obstinate or rarely a diarrhea. There is complete loss of appetite and the tongue is more coated than the average simple case. In a few I have seen a very red tongue with patches of grayish spots and sometimes a tongue very near a strawberry type. The patient complains of some tender points

over abdomen and there is some tympanites. There is extreme nausea, seldom vomiting. In not a few of these cases one is reminded that he may possibly be dealing with a typhoid patient because of the drowsiness and headache and severe pains in gastric region with occasional blood-streaked stools and feeling described as emptiness. The Germans report observations in which Peyer's patches and mesenteric glands were swollen. Ulceration of the jejunum has been reported by Kuskow. The influenza bacilli were isolated from the pus of an appendix abscess by Adrin. Fisch and Hill have reported a case of purulent peritonitis with isolation of the influenza bacillus in pure culture.

Nervous Type—Of this type I have had very little experience, except in the case of acute mania already cited. In addition to the headache delirium, there is restlessness and insomnia. Cases have been reported with hemiplegia, myelitis, encephalitis and paralysis, and more frequently with neuralgia and multiple neuritis. And according to Leichtenstern's report of such cases, scarcely any portion of the nervous system escaped injury from the influenza bacillus and its toxins.

Complications and Sequela—Of the complications, pneumonia is the most dangerous and is most frequent and may be broncho or lobar. In broncho pneumonia as in most cases of such, a very close examination must be made, because the areas of consolidation are often so small that areas of dullness may be overlooked. I have already spoken of the frequency of multiple areas of consolidation. In eleven fatal cases reported by Smith, bacilli of Pfeiffer were found in the exudate, in culture, and sections of the pneumonic foci; in one case four lobes showed foci of consolidation, three lobes three times, two lobes once and one lobe six times. The right upper lobe was involved in five cases.

Cardiac Involvement—Just where to place the frequent heart involvement that often follows influenza (since they are found in apparently simple cases, but most often they follow the respiratory form), remains a question. The pa-

tient presents no stethoscopic signs or symptoms of cardiac involvement, except that he complains of occasional sharp pains around cardiac regions. Often one finds an accentuated first sound but usually all sounds are normal. It is later that the symptoms of cardiac involvement presents themselves as follows: There is a feeble, irregular, rapid pulse. The cardiac area is not increased on percussion, but the sounds are indistinct. There is after this, a faint feeling accompanied by considerable pallor. After several days rest and patient makes attempt to get out of his bed because of his feeling much better, he finds he becomes faint again and pulse often mounts up. In some cases I have found a rather low pulse, one ranging from 50 to 60 and patient feeling very weak.

Complications of meningitis and nephritis are rare. Infections of the joints have been reported in which the influenza bacillus was found. Sometimes we see chronic bronchitis and even chronic influenza following acute attacks, and of course, as we all know, we have those frequent complications as otitis media and abscesses in the nasal accessory sinuses.

In fact, when we speak of the complications and different types of influenza, it seems to me that we may have manifestations or complications of any, or all mucous or serous surfaces and even some of the glandular structures may be involved. (And unless we can get a definite bacteriological diagnosis it is often the question whether we are dealing with complications or the disease itself with local manifestations.)

Diagnosis—The diagnosis of influenza, in a great majority of cases usually presents no difficulty. Usually we see the disease during an epidemic. The abrupt onset with alternating flashes of heat and chilliness is typical and aids us in our diagnosis. Then there are the severe aching, the soreness of eyeballs and headache and distressing pains over the body. If doubtful, the bacillus should be looked for in the sputum and the secretions.

Influenza is the dumping ground for diagnosis of many obscure symptoms and it is here that I want to state the misuse of the term. Whenever we get a history of malaise, chilly sensations and muscular soreness with headache, there is a tendency to immediately think of influenza and such practice is not only unscientific but can, and often does, lead to serious error and grief to the attending physician. The warning can not be too frequently given that any beginning sepsis or localized abscess formations may present such prodromal symptoms. Another fault, and a serious and most frequent fault in our diagnosis, is that we are inclined to call every severe cold and coryza, influenza, and it is here again that the misuse is apparent. How many acute exacerbations of tuberculous origin are called influenza. I believe that when a patient presents himself with a history of malaise, and achy pains over chest and shoulders, with possibly some dull headache and chilly sensations, and with frequent persistent paroxysm of coughs, we frequently make serious error in immediately diagnosing our case as influenza without a thorough examination of the chest. Whenever a patient presents himself with the above symptoms and tells me that he has had three, four or even five such attacks, I look with suspicion upon the case and inquire minutely into the history of such attack, and closely examine the lungs and many times have I found such cases to be of slow progressing tubercular process. Yet when I make such argument, I must admit I have seen cases wherein the history showed, and where I have often seen one member of family who had, what appeared to be, nothing but an ordinary cold or coryza and within three to four days see one or more members of same family have a very severe form of influenza. Such occurrences, when seen so often, makes one believe the ordinary cold was caused by the Pfeiffer bacillus.

The differential diagnosis from typhoid, it seems to me, should offer no serious obstacle, since in influenza our temperature record is of short duration and is not the characteristic typhoid temperature. If in case the temperature

should persist and be high, a Widal should clear up our diagnosis. Again the bacillus of Pfeiffer should be looked for in the bronchial and nasal secretion. Pneumonia is often the stumbling block in the diagnosis of influenza and has frequently been mistaken for such, when the chest signs have been unusually severe. But pneumonia is usually unilateral, while in influenza, the symptoms are usually bilateral. In the former there is usually a larger and more distinct area of dulness and is usually confined to one lobe or area, while in influenza we may have scattered areas of dullness. In the former, also, there are more distinct rales, while in influenza, the rales are not of a subcrepitant character and are not constant and usually clear up within 24 to 48 hours.

Etiology—Etiology of influenza has been found, and is generally accepted today as the bacillus of Pfeiffer. But this remains in doubt to some because the bacillus has been frequently found in quantities in fatal cases of measles, diphtheria, and scarlet fever, and similar organisms have been found in conjunctivitis and whooping cough. Even in patients suffering from influenza clinically, often the influenza bacillus is not found, and this has had a tendency to increase this doubt. Cushman, in an epidemic, reported the presence of the pneumococcus in 46 out of 49 cases, and so all sorts of cocci have been reported found in acute infectins resembling influenza. Therefore, because of doubtfulness of our bacteriological findings, we are still in the dark relative to a true diagnosis in a great many cases resembling influenza. Clinicians are described under three heads, depending upon the stand they may take relative to what part the influenza bacillus may play as to the cause of the disease, viz., those who call any acute cold influenza; secondly, those dwelling upon the widespread occurrence of the bacillus in other diseases. Even when they find the influenza bacillus in the secretions of the suspected case, questions whether these bacilli may not be saprophytes, and hesitate to call the disease influenza. The third are those who take the stand

that where the influenza bacillus is found, there is influenza.

Yet we must recognize when we pursue the findings of some investigators that many of our cases of influenza are truely caused by the influenza bacillus alone. Horder reports a case of endocarditis in which the influenza bacillus was isolated from the blood four times during the interval of six weeks. The influenza bacilli were again isolated from the valve in pure culture at autopsy. Ghedini cultivated this organism from the blood in eighteen cases out of twenty-eight and from fourteen spleen punctures, found the bacilli in eight. He insists that the blood culture must be taken during the fever period. The disease occurs in epidemics and pandemics and seems every so often, as every ten to fifteen years, to sweep the whole country. In such epidemics as 1892 occasionally sweeps the world. Every quarter of the globe has been visited by the disease. Influenza is not a new disease, since it was described in England as far back as 1650 when it swept England with about the same characteristics as our present epidemic.

Modes of Conveyance—The disease usually follows the ordinary lines of human and commercial travel and is undoubtedly communicable by contagion. Just what the mode of entrance of the bacillus into the body is, is not yet known, but it is undoubtedly through the respiratory tract. Some believe that the primary point of infection is often the conjunctiva, others pretend that the alimentary canal is the host of the bacillus.

Predisposing Causes—All persons are susceptible to the contagion. Age has some influence, the period of greatest susceptibility being from the twentieth to the thirtieth year, the very young are least susceptible. Those whose vitality has been lowered by some chronic affections are usually the most susceptible.

Immunity—None are immune from influenza and one attack seems to predispose to another, since it is very frequent to find reoccurrences with each epidemic.

Prognosis—The prognosis is usually good in the milder forms. The fatalities occurring in most parts in the respiratory form and in complications with pneumonia and the heart. It acts very severely in those individuals suffering from tuberculosis, valvular disease of the heart, and in nephritis. The average death rate being about 2 per cent.

Treatment—Prophylaxis—No drug, so far known, is of prophylactic value. Urotropin is said to be of value as a prophylactic, but this is very questionable unless it would be so in regards to the meninges and the spinal canal. I have given it in a few exposed to the disease and found two who had taken it that developed moderately severe cases of influenza.

In the study of one pandemic, according to Smith, it was shown that new districts became infected, when visited by persons with the disease.

Parsons reports that of several thousand persons engaged in deep sea fishing in the North Sea, not one was known to have contracted influenza at sea, and also showed that epidemics occurred on board vessels only after communication with another vessel. It will be interesting to note later just how the disease has effected Europe, if at all, during this epidemic and whether the great decrease in amount of travel and commercial intercourse has had any effect. It has occurred to me, from what meager information could be obtained, that the disease and its complications has been most severe in the Northern and Lake cities and the two coasts. Study of reliable sources of information will interest us and we may determine that it has followed the main arteries of travel. Isolation is difficult in the mild cases because of the doubt of diagnosis. It has been my practice with my cases to have them use old cloths or pieces of gauze in collecting the secretions of the nose and having them burned. In sneezing and coughing, the patient is to protect the face with these cloths. I have also been in habit of advising members of the family, in contact with the disease, to use sprays

into the nose and to use some sort of an antiseptic mouth wash. Isolation of the most severe cases is recommended.

Patient should be placed in bed as soon as diagnosis is made and put upon a light and nutritious diet and instructed to dring large quantities of cold drinks. Ten grains of Dover's powder is given at bedtime on the first day of attack; this is followed up by broken doses of calomel. The salicylates seem to be the drug of choice; I usually give it in the following combination: Acid acetylo-salic, grains 5; sodium benzoate, grains 2; camphor monobromate, grains 2, in capsule every two hours. I have no faith in the use of quinine in these cases. It seems to increase the nervousness of the patient and adds to the discomfort of the headache and sleeplessness. If the sleeplessness demands attention, I usually give some hypnotic, as sulfonal. For the coryza I usually use in the nose frequent applications of 10 to 20 per cent solution of argyrol; following this I usually spray the nares with some antiseptic solution, such as Dobell's solution or liquor antisepticus compound alkaline; better still, a spray of some oily solution. I usually use albolene spray solution. Steam inhalations of tincture of benzoin compound are serviceable. The most difficult symptoms to control is the distressing cough and I have found nothing that relieved this condition to any extent, although I frequently use the following: Ammon. muriate, gr. 10; potass. iodide, grs. 3; fl. ext. glycerrh,. min. 10; syrup of prunus virgin. q.s., drs. 1, every two or three hours. If the cough still was very distressing, one-eight of a grain of codeine phosphate was added. The most serviceable drug that I have found, perhaps, was the creosote carbonate. The temperature, when it was present to any degree, was controlled in the usual way. The profuse sweating, when present, was usually easily controlled, when necessary, by small doses of atropine. The vaccines I have found of little use. I believe this is generally accepted to be the fact.

It is well here to voice a protest against the promiscuous use of stock vaccines. I heartily disapprove of using a gun-

shot vaccine containing the products of from four to eight different kinds of bacteria in cases diagnosticated from symptoms alone. It seems foolhardy to me to follow this practice unless we have a definite bacteriological diagnosis. If I had a severe case of pneumonia without a definite and sure bacteriological diagnosis I would certainly hesitate to have the patient go through even a mild negative phase unless I was certain that the end results would effect the infecting micro-organism. Such practice is not only not good practice but is certainly unscientific.

Respiratory Type—This type is treated as in the ordinary type, except that when the bronchial symptoms are very severe and there is considerable congestion, some counter-irritation to the chest is serviceable. The one I find most useful, being in the form of a mustard plaster. Of course if pneumonia complicates the trouble, it should be treated as ordinary pneumonia.

Gastro-intestinal Type—This form also resists treatment to a degree as in the other forms, small broken doses of calomel are given, patient placed upon a liquid diet and encouraged to drink large quantities of water. Champagne in small amounts will frequently take care of the vomiting. Another preparation that I have found useful in these cases, is the bile salts combined with pepsin and pancreatin.

If circulatory symptoms arise, the patient is kept absolutely quiet in bed and strychnine, one-fiftieth grain doses, given three times a day.

Convalescence—The convalescence gives the attending physician his greatest worry, as it is usually long compared with the severity of the disease. And because of the great debility and prostration, the patient complains so often that he does not recover as quickly as he thinks he should. He can not understand why this should be. And while he may not be confined to his bed, he should be confined to his home and warmly clothed but in a room well ventilated. Good nourishing diet with some supportive treatment should be

given until patient feels quite himself again. A strychnine tonic in these cases is never amiss.

Since this paper was written, Mathers, of Chicago, has made some valuable bacteriological findings in regards to our present epidemic. He has found a hemolytic streptococcus in the secretions of the nose, the pharynx and bronchi. But I believe we must make further search before we can accept conclusively bacteriological findings of these secretions. From what has been quoted above, influenza is a general systemic infection and blood cultures and cultures taken at post-mortem will determine the true etiology. During any systemic infection, no matter what its nature, we have increased numbers of all sorts of bacteria in the above secretions. For instance in any sputum examination of an advanced tuberculous condition we find streptococci and staphylococci and even influenza which often predominate. Yet from our symptoms of the disease and the extreme prostration following it, Mathers' findings seem to be of a great deal of importance to us.—*The Medical Herald.*

Extracts from Home and Foreign Journals

SURGICAL

OPERATION FOR ANEURYSMS OF EXTREMITY.

The patient whose case is cited by Bernheim had an aneurysm of the right popliteal artery, of one month's duration, but which was increasing in size somewhat rapidly. At the operation a spindle-shaped tumor presented and was opened on its dorsal aspect, revealing only two openings, the entrance and exit of the popliteal artery, the two points being distant about an inch and a half from one another, and only the faintest sign of a groove being apparent between them. The popliteal vein was so densely adherent to the sac that it was impossible to separate it without taking part of the sac wall, which was done. A reconstructive Matas endoaneurysmorraphy was impossible, hence Bernheim removed about 15 cm. of the internal saphenous vein from the affected leg at the knee and, after proper preparation, interpolated about 15 cm. of it between the severed ends of the popliteal artery. Only the ends of the sac were cut away, the remainder being left to be folded around the transplant as a partial reinforcement. Carrel's end-to-end suture was used. At the conclusion of the suturing blood went through the graft in a normal manner. An uninterrupted convalescence ensued. All pain and discomfort in the leg disappeared and a curious operative "dead feeling" of the great toe had given way to a normal feeling. Pulsation could be felt all along the vein graft as well as in the arteries of the foot.—*The Journal of the Amer. Med. Asso.*

THREAD DRAINAGE.

Chaput expatiates on the advantages of one or more threads, silk fibers, wires or rubber pencils from 3 to 7 mm.

in diameter to drain wounds, abscesses and fistulas. He insists that the drainage is always good because the thread passes through openings very large in comparison to its diameter; there is no dead space, and the lips of the wound fit around the thread drain like a valve, preventing ingress of air. Abscesses and other lesions heal more rapidly than with tube drains; leave no traces. The abscess can be punctured at several points and a small silk thread introduced at each, thus facilitating with the least disfigurement. He reviews his extensive experiences with this filiform drainage, as he calls it, in abscesses of the breast and anus, tendon-sheath phlegmons, suppurating wounds of the knees or other joints, in peritonitis, in tuberculous bone and joint affections, and after hysterectomy and other operations. A number of minor technical points are mentioned for each of these applications. Among the advantages extolled are that the filiform drains leave no scar, protect against sloughing of tissues, are not so painful as drain tubes, avert complications, and protect against infection from without. They heal up a purulent pleurisy in a few days, without leaving a fistula or requiring resection of ribs. They do not keep the wound discharging, like tube drains, and he found that all wounds and cavities, aseptic or infected or tuberculous, healed up remarkably fast, as a rule in from ten to fifteen days.—*The Journal of the Am. Med. Asso.*

A Simple Method of Removing Flat Foreign Bodies from the Trachea of the Young Child.

The method to be described is designed for the rapid removal of flat foreign bodies from the trachea of infants and children up to the age of three years. To the beginner no operation is more difficult than the removal of foreign bodies through the small bronchoscopes designed for infants. To the expert the operation is sometimes fraught with difficulty, because it is not easy to work through a 4 mm. tube unless the child is asleep, which adds to the danger of trach-

eoscopy. Flat foreign bodies, such as watermelon seed, seldom pass into the bronchus of an infant or young child. They lodge in the trachea almost invariably, and necessitate a tracheoscopy for removal. To obviate the difficulties of working through a small tube, I had a small Jackson separable speculum made which measures 9.5 cm. in length and 10 mm. in diameter, with the light 1 cm, from the end of the tube. With the handle detached the speculum is passed into the throat, with the child's head straight on the table. The epiglottis is pulled up, and, with the child breathing, the trachea can be explored to the bifurcation. A foreign body can be easily seen, and if it is light in weight, as a watermelon seed, it moves up and down with expiration and inspiration. Forceps, introduced between the vocal cords, are made to grasp the object, which is quickly removed. No anesthetic is used. Atropin is given to dry up secretions. In the removal of two watermelon seeds from the trachea of yound children I was surprised at the excellent view of the entire trachea with the head straight on the table. I have no doubt that this method will work equally as well with foreign bodies of other shapes. Thus far I have had occasion to use it only with flat foreign bodies.—*Maryland Medical Journal.*

Intravenous Injections of Chloral in the Treatment of Tetanus.

M. Roch and Mlle. E. Cottin (Gazette Medical de Paris) report the case of a boy aged 13 years in whom this method of treatment was successfully employed, in addition to the administration of chloral by the mouth and by the rectum. The patient weighed 23 kilograms and in the course of 20 days received 156 grams of chloral, of which 7 were administered by the mouth, 112 in suppositories or in enemata, and 37 in intravenous injections. The effect of this method of treatment was a remarkable control of all the spasmodic phenomena. As regards the proper solutions of chloral

when these are given intravenously, the author states that they should not be of greater concentration than 5 per cent, and should be allowed to flow into the veins very slowly.—*Medical Progress.*

MEDICAL

Chenopodium in the Treatment of Uncinariasis.

In the *Journal of the American Medical Association* of November 6, 1915, Bishop and Brosius reach these conclusions:

1. The method of administration of chenopodium is simple, and is attended with less inconvenience and discomfort than is thymol. This would give the drug an important place in the field work in uncinariasis.
2. Chenopodium can be given at shorter intervals than can thymol, and a cure can thereby be more quickly established, which gives it a greater economic value.
3. Chenopodium is non-toxic in therapeutic doses.
4. Chenopodium is a more efficient vermifuge than thymol in the treatment of uncinariasis.—*The Therapeutic Gazette.*

Copper Sulphate Treatment of Trachoma.

Prince's copper sulphate treatment of trachoma and allied conditions is carried out as follows:

A 10 per cent solution of copper sulphate in glycerin is used as a mother liquor. From this the patient is directed to make an aqueous solution daily by adding one drop of the mother liquor to nineteen drops of water. This 1:200 copper sulphate solution is instilled into the eye, three, four, or even six times a day. If it causes too much reaction, it is further diluted. On the other hand, as the eye gets accustomed to it, the solution is made more and more concentrated Prince, however, states that some of his patients used a solution of 1:50 or even stronger. The aqueous solution does

not seem to keep well, and hence should be made up fresh every day.

This treatment was first devised by Prince, of Springfield, Ill., who found it to work well in trachoma and its complications (corneal ulcers and pannus). He also used the undiluted 10 per cent glycerin solution as an application after expression in trachoma. The diluted glycerin in Dr. Alexander Duane's hands has given excellent results in non-trachomatous follicular conditions.—*Critic and Guide.*

MAGNESIUM SULPHATE IN NON-AMEBIC DYSENTERY.

Dr. F. Wyatt-Smith (*British Medical Journal,* November 27, 1915), has this to say: In February, 1898, when our forces engaged against the Waziris on the northwest frontier of India were being exhausted by dysentery, you were good enough to publish my experience in South America in the treatment of non-amebic dysentery by dram doses of magnesium sulphate every two hours. I found it to be a specific; and the observation was confirmed by correspondents at the front, by the medical officer in charge of the goal at Mauritius, and later in the South African war, by friends engaged in it. The observation is not new, for a correspondent in Belfast pointed out that it was published at least three hundred years ago.—*Critic and Guide.*

MOBLILZATION OF THE LUNG IN TREATMENT OF PULMONARY TUBERCULOSIS IN EARLY STAGES.

Kuhn has now ten years of experience with his suction mask, a devise worn over the mouth and nose which by valvular action impedes inspiration while permitting free expiration. The consequence is that the air in the air passages becomes rarefied, the muscles of chest and neck work harder, and the upper part of the chest is mobilized as under no other conditions. He says that his mask has been applied in thousands of cases, and the lungs and diaphragm thus ex-

ercised provide better conditions for recuperation and cure of tuberculous processes than any other means can offer. The blood and lymph flow more rapidly and abundantly through parts thus being exercised, while the conditions with the suction mask prevent any tugging on the tissues and ward off all tendency to hemorrhage. The lungs can be vigorously exercised in this way in cases in which the slightest physical exertion otherwise is contraindicated.

The suction mask also realizes a kind of autoinoculation therapy. The temperature is a delicate index of the action of toxins, and hence the record of the temperature is the guide as to the practicability of the suction mask in the individual case. By mobilization of the lung in this way, the blood and lymph sweat through it and wash out bacterial products into the general circulation, thus realizing what amounts actually to a course of tuberculin treatment, with resulting production of antibodies. When the slight rise in temperature shows that toxins are being swept into the general circulation, he then gives the organism a chance for complete rest while the production of antibodies is going on. His mask thus aims to accomplish the exact reverse of the induced artificial pneumothorax, and his experience with thousands of cases has demonstrated, he reiterates, that this mobilization treatment in the early stages is the most promising of all methods of treating pulmonary tuberculosis, and that some contrivance like the suction mask seems to be the means best adapted for the purpose.—*The Journal of the Amer. Med. Asso.*

OBSTETRICAL

Painless Childbirth.

On Wednesday, March 1, 1916, at Carnegie Hall, was held the first Birth Control mass meeting. The oratory—as much as we were able to endure of it—was a fiasco, but the immense audience, which filled that huge hall from the or-

chestra to the back row of the topmost tier, loudly applauding whenever they caught a bold word in favor of birth control, was eloquent testimony to the fact that at last the people insist on knowing the ways and means of preventing conception.

Not long ago, the profession shook its dignified head when Twilight Sleep settled over the land, but the lay agitation for Dammerschlaf plainly showed that the people had grown tired of biblical curse of maternity in Genesis III, 16, "I will greatly multiply thy sorrow, thou shalt bring forth children,'—and were demanding painless childbirth. Whether morphine-scopolamine is the ideal combination matters little, for the proper drugs can be found later, but it is of great social significance that women refuse any longer to bear children in agony—and they are wholly right. After many centuries of travail, the mothers of the race have finally learnt that there is such a word as eutocia in the medical dictionary.

Carl Henry Davis, associate in obstetrics and gynecology, Rush Medical College, is only lukewarm for the Frieburg method, but he is most enthusiastic for nitrous oxid-oxygen analgesia in labor, and has written a little volume on the subject, which has recently been published by Forbes and Co., of Chicago. About twelve years ago at the Presbyterian Hospital, the use of nitrous oxid and oxygen in obstetrical work was begun by Dr. Davis' chief, J. Clarence Webster, and the present production voices their ideas and recounts their results.

"It is the right of woman," says Dr. Davis, "to demand relief from the pains of childbirth, and it is the duty of the physician to relieve her of these pains in the same spirit that he relieves other suffering. The pain of labor causes shock, and is, I believe, more dangerous than the proper use of any of the analgesics now employed. According to the author, the analgesic of choice is nitrous oxid-oxygen.—*Medical Review of Reviews.*

Cesarian Section.

In 1879, Felkin, an African traveler, witnessed a cesarian section performed by the natives in the heart of Uganda. The woman was held in a reclining posture by two men. At her side was a gourd of banana wine, and she was half drunk The operator stood at her left. First he washed his hands in banana wine, then he washed the belly with the same—active antiseptic measures. With a short curved knife he made one incision through the belly, right into the uterus and quickly delivered the child alive, an assistant holding the uterine incision open by hooking his fingers into it. By uterine massage, the placenta was expressed and hemorrhage controlled. Several bleeding points were cauterized with a hot iron. The cervix was dilated from above with the fingers. The assistants then turned the patient on her side to allow the blood to drain out of the peritoneal cavity, the intestines being retained by a square of plaited twigs, after which the belly was sewed up with pins and figure-of-eight sutures. The pins were made from bamboo stick, the sutures from reed fibres. The wound was covered with a paste made of aromatic herbs. The patient recovered in 11 days, having run a mild febrile course. Without doubt, this operation must have been performed for many centuries for the technique to be so perfectly developed.—DeLee, *Illinois Medical Journal.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at $1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail. either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D. corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

THE PRESENT HIGH STANDARD IN MEDICAL EDUCATION.

The present high standard in medical education is the result of the hard work of a relatively small number of physicians earnestly interested in an altruistic work. Not only the medical profession but the public should feel deeply grateful to these unselfish men; the profession, because of the higher plane it will attain, the public, because of the better service it will get.

But, however much we respect those men and admire the results of their efforts, we can not help but feel that the present high standard is far from an absolute good.

We hope there are some very weak links in our chain of reasoning, but all evidence at hand points to the fact that the future dangers to be mentioned below are, or rather will be, actual and not fanciful. In making these observations we do not wish to be classed with those who think there is danger of the physician becoming "overeducated." No such danger ever did or ever will exist, though there is some danger of the education running too deep in wrong channels.

It is not the danger of overeducation that threatens but rather the danger of undersupply of the educated product—a lack of physicians; and the evil effects of this as we see them are as follows:

1. A medical aristocracy.
2. A scarcity of physicians in rural communities.
3. More extensive use of patent medicines.
4. A great increase of irregulars.

Taking these headings seriatim:

1. The study of medicine will be impossible for many. The higher preliminary education, the longer time in the medical school, and the final hospital work all together mean 6-10 years time, and those dependent on others can hardly expect the most generous father to bear the burden of expense unless he is fairly well to do. Some boys, of course, will work their way through college, but the number must necessarily be relatively small in this day and time when there are so many fields of activity open to young men.

2. Men will not spend so much time and do such hard work in order to prepare themselves to practice in rural communities. Furthermore, the man raised in luxury and affluence will seldom voluntarily give up that mode of life for the hard life of a country doctor. Our future graduate will head for the city, and his aim will, of course, be some specialty. Since many will go to cities the competition will be great. This will drive some to the smaller towns, but hardly to communities of 200-500 people. This simply means such small communities will suffer for want of doctors. Wherever there is one physician, there should be at least two, since otherwise there is no competition and the people are the sufferers. In the near future, however, small communities will be glad to have anything looking like a doctor.

3. If physicians are scarce, the use and abuse of patent medicines will become even greater than at present. This is so evident that it would not be surprising to find patent medicine manufacturers the strongest advocates of the high standard in medical education.

4. If irregulars flourish and get rich in our cities where many worthy young doctors are almost starving, what must be expected later in small communities where there will be no doctors. To answer this is unnecessary because you have

already pictured in your mind's eye the swallow-tailed fake plying his trade and collecting his fortune.

(The above are some of the dangers as we see them. They may not be real, they may be the product of imagination, but we hardly think so.)

Since writing the above we have read an article by Gordon Wilson—J. A. M. A., April 8, 1916—in which he points to a future undersupply of physicians. To avoid this he suggests two types of medical school, one of which types will train its students for teaching, research work, sanitation, etc., as a representative of which he mentions Johns Hopkins, the other type, represented by the average first class school of today, will train its students for actual practice. We hardly think this plan feasible, except insofar as every medical school should offer special lecture courses for students intending to take up teaching, research work, etc. No medical school should be allowed to lose sight of the ultimate aim of all medical education—the prevention and cure of disease. And in order that no such weakness may develop among our full-time professors—we have seen evidences of this very weakness—the regular course of study, hospital work and several years of practice, should be the *sine qua non* of a full time professorship of any subject.

In this same article he shows how the freshman enrollment of students in the Baltimore schools, aside from Johns Hopkins, has decreased from 265 in 1905 to 44 in 1915. (Here in Nashville there has been a similar decrease, the 1915 freshman enrollment being about 30, while in 1905 the enrollment was at least 180.) He furthermore shows in two tables, as an actual fact, the danger we mentioned under caption (2), comparing Johns Hopkins with the other Baltimore schools his tables show that graduates from the former seldom locate in rural communities.

The questions we would raise are: 1. how will our rural districts fare with few or no physicians and weak, inefficient laws against quacks and quack medicines, and (2), will the

advocates of the high standard be satisfied for the present until we know more definitely the remote effects, or will they continue to raise the standard regardless of the public welfare?—W. T. B.

THE GALLOWAY MEMORIAL HOSPITAL.

The recent campaign in Nashville to raise $200,000 in ten days for the completion of the Galloway Memorial Hospital, was a grand success in every respect. Not only was the required amount pledged, but $70,000 in addition. There were more than 500 men and women working hard to raise the necessary amount and while in the mid-part of the campaign the outcome seemed dubious to some, never once did the general enthusiasm waver. While the work of all interested was commendable, that of the Vanderbilt student body and the local nurses, both those in training and the graduates, deserves special mention. The large gift of $20,000 by Miss Johnson, of Gallatin, and $60,000 by Mr. J. P. Moore of Franklin, as well as the $12,000 donated by the N., C. & St. L. Railroad, played a large part in the final outcome.

The unit of the hospital for the completion of which this sum was subscribed should be rushed on to completion, not only because Nashville is in sore need of more hospital space, but also in order that the Vanderbilt medical students, who have worked so hard for the hospital, may get the benefit of the better teaching facilities this institution will offer.

With this hospital and the million-dollar endowment acquired a few years ago, the Vanderbilt Medical School should soon stand forth as a power in the medical education of the United States.—W. T. B.

EXTRA COPIES.

Many physicians will receive sample copies of the NASHVILLE JOURNAL OF MEDICINE AND SURGERY and be asked to subscribe to this old, sterling publication. We offer

as premiums to new subscribers a handsome certified clinical thermometer in case with chain and a ten-weeks trial subscription to *Harper's Weekly*, a publication that presents war pictures and war news of the greatest interest to everyone fortunate enough to obtain copies. The Journal for one year, *Harper's Weekly* for ten weeks, and a reliable clinical thermometer, all for $1.45. We trust our readers will appreciate the advantages we offer and send in their names as subscribers. The Journal is essentially an independent, non-partisan publication, devoted to the needs of the general practitioner and open always to communications for the benefit of the medical profession. Let us have your subscription without delay.

Officers of Tennessee State Medical Association.

The officers elected for the ensuing year were: Dr. C. N. Cowden, of Nashville, president; vice presidents, Dr. C. J. Carmichael, Knoxville; Dr. J. T. Moore, Algood; Dr. J. L. McGehee, Memphis; secretary, Dr. Olin West, to succeed Dr. Cowden as member of the board of trustees, and treasurer, Dr. J. A. Gallogher; the two latter of Nashville.

Preliminary Program American Proctologic Society. Eighteenth Annual Meeting, Detroit, Mich., June 12 and 13, 1916.

Headquarters and Place of Meeting, Hotel Slater.
The Profession is Cordially Invited to Attend All Meetings.

Executive board meets at 11 a. m.

First regular session at 2 p. m.

Annual Address of the President—Subject: Why Proctology has been made a Specialty. T. Chittenden Hill, Boston Mass.

PAPERS.

1—A Review of Proctologic Literature for 1915. Samuel T. Earle, Baltimore, Md.

2—Post-Operative Treatment in Rectal Surgery. Wm. H. Stauffer, St. Louis, Mo.

3—Auto-rectal Injuries. Samuel G. Gant, New York City, N. Y.

4—Some Observations on Hernia in Relation to Intestinal Stasis. Wm. M. Beach, Pittsburg, Pa.

5—Intestinal Symptoms due to Achylia Gastrica. Alois B. Graham, Indianapolis, Ind.

6—Non-Specific Ulceration of the Rectum and Anus, with Report of a Case of Anal Herpes Zoster. Lewis H. Adler, Jr., Philadelphia, Pa.

7—Malignant Transformation of Benign Growths. Frank C. Yeomans, New York City, N. Y.

8—Acute Angulation and Flexure of Sigmoid as a Causative Factor in Epilepsy; Report of nine new Cases with four Recoveries. Wm. H. Axtell, Bellingham, Wash.

9—The Vaccine Treatment of Pruritus Ani. W. H. Kiger, Los Angeles, Cal.

10—Report of Experience with the Vaccine Treatment of Pruritus Ani. Louis J. Hirschman, Detroit, Mich.

11—Posture as an Etiologic Factor in Splanchnoptosis. Rolla Camden, Parkersburg, W. Va.

12—Photography for Record and Teaching; Lantern Slide Demonstrations. Collier F. Martin, Philadelphia, Pa.

13—The Present Status of Operations for Carcinoma of the Rectum and Lower Third of the Sigmoid. Samuel T. Earle, Baltimore, Md.

14—Observations on Fissure of the Anus. Rollin H. Barnes, St. Louis, Mo.

15—The Treatment of Hemorrhoids by a New Method. E. H. Terrell, Richmond, Va.

16—The Relation of Colonic Disease to the Kinetic System. James A. MacMillan, Detroit, Mich.

17—The Consideration of Rectal and Colonic Disease in Life Insurance Examinations. Alfred J. Zoebel, San Francisco, Cal.

18—Spasmodic Stricture of the Rectum. Louis J. Krouse, Cincinnati, Ohio.

19—Some Important Pathological Conditions found About the Rectal Outlet. Lantern Slide Demonstration. Granville S. Hanes, Louisville, Ky.

20—The Relation of the Roentgenologist to the Proctologist. Walter I. Le Fevre, Cleveland, Ohio.

21—Syphilis of the Rectum. G. Milton Linthicum, Baltimore, Md.

22—Position for Sigmoidoscopic Work. Donly C. Hawley, Berlington, Vt.

23—Sixth Report on the Treatment of Pruritus Ani by Autogenous Vaccines. Dwight H. Murray, Syracuse, N. Y.

24—Gangrenous Hemorrhoids; Reports of Cases. John L. Jelks, Memphis, Tenn.

Typhoid Fever Reduced in Rural Communities.

Reduction in typhoid fever and improvement in sanitary conditions have followed the intensive investigations of rural communities carried on by the United States Public Health Service in co-operation with local and State health officers, according to the annual report of the Surgeon General of that service. During the past fiscal year 16,369 rural homes in eight different states were visited and many of them revisited. In each of these homes information was obtained as to the prevalence of disease and insanitary conditions and a complete sanitary survey of the premises conducted. This was followed by reinspections to determine if remedial measures had been instituted. In but a relatively small percentage of the cases did the persons concerned, after having their attention drawn to the danger of a particular unhygienic condition, fail to inaugurate corrective measures. Stimulus was given to work by means of public lectures, the formation of active sanitary organizations, and the enlisting of all public-spirited citizens in the campaigns

for reform. Public buildings were also inspected and local authorities given expert advice in solving such sanitary problems as the disposal of excreta, the prevention of soil pollution, and the maintenance of pure water supplies.

The surveys made during the year 1914 had shown that in rural communities less than 1 per cent of the homes had sanitary toilets, and that more than 50 per cent of the people were using water from polluted sources. This condition, according to the Public Health Service, made the rural sanitation question loom large among the matters vitally affecting the welfare of the nation. Following these studies, and as a result of the interest aroused, the typhoid fever rate, an excellent indicator of the sanitary status of a community, has in some places frequently been cut to one-quarter of its previous figure. In Berkeley County, West Va., the cases of typhoid fever were reduced from 429 to 40 in one year. In Orange County, North Carolina, the rural sanitation campaign resulted in a reduction of the cases from 59 to 17.

The tangible results of operations in rural sanitation indicate that marked advancement in maintaining hygienic and satisfactory surroundings in country districts is possible by the application of the common principles of preventive medicine. Insanitary conditions exist largely because they are not known to be such. Actual demonstrations of their harmfulness, together with definite recommendations for their correction, remain one of the most gratifying and successful methods for instituting reforms and has been, in the experience of the Public Health Service, invariably accompanied by definite and measurable results.

EXAMINATION OF CANDIDATES FOR ASSISTANT SURGEON.

Treasury Department.
United States Public Health Service.

Washington, April 1, 1916.

Boards will be convened at the Bureau of Public Health Service, 3 "B" Street, S. E., Washington, D. C., and at a

number of the Marine hospitals of the Service, on Wednesday, May 31, 1916, at 10 o'clock a. m., for the purpose of examining for admission to the grade of Assistant Surgeon in the Public Health Service.

The candidate must be between 23 and 32 years of age, a graduate of a reputable medical college, and must furnish testimonials from two responsible persons as to his professional and moral character, together with a recent photograph of himself. Credit will be given in the examination for service in hospitals for the insane, experience in the detection of mental disease, and in any other particular line of professional work. Candidates must have had one year's hospital experience or two years' professional work.

Candidates must be not less than 5 feet, 4 inches, nor more than 6 feet, 2 inches, in height, with relatively corresponding weights.

The following is the order of examination: 1, Physical; 2, Oral; 3, Written; 4, Clinical.

Candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

Examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise covers the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital.

The examination usually covers a period of about ten days.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order. They will receive early appointments.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Passed Assistant Surgeons, after 12 years' service are entitled to examination for promotion to the grade of Surgeon.

Assistant surgeons receive $2,000, passed assistant surgeons $2,400, surgeons $3,000, senior surgeons $3,500, and assistant surgeon-generals $4,000 a year. When quarters are not provided, commutation at the rate of $30, $40, and $50 a month, according to the grade, is allowed.

All grades receive longevity pay, 10 per cent in addition to the regular salary for every five years up to 40 per cent after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For invitation to appear before the board of examiners, address "Surgeon-General, Public Health Service, Washington, D. C."

Do You Know That

Sags in roof-gutters may act as mosquito breeding places?

America's most valuable crop is babies?

The public cigar-cutter is a health menace?

The United States Public Health Service maintains a loan library of stereopticon slides?

The typhoid rate measures accurately community intelligence?

Whooping cough annually kills over 10,000 Americans?

Bad housing produces bad health?

Rocky Mountain spotted fever is spread by a wood-tick?

The Samuel D. Gross $1,500 Prize, Philadelphia Academy of Surgery.

(Essays will be received in competition for the prize until January 1, 1920.)

The conditions annexed by the testator are that the prize "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 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, 19 S. 22d St., Philadelphia," on or before January 1, 1920.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the 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.

William J. Taylor, M.D.,
John H. Jopson, M.D.,
Edward B. Hodge, M.D.,
Philadelphia, March 1, 1916. *Trustees.*

Pellagra Prevention—Spring Diet Determines Summer Symptoms.

A faulty or restricted diet at this season of the year is the chief factor in the production of pellagra. Measures to prevent the development of the disease should be instituted during the early spring months, according to a circular of information issued today by the United States Public Health

Service. While the manifestations of pellagra are in most cases not in evidence until June or July, the condition invariably dates from a faulty diet of earlier months. Therefore, if due precautions are exercised by individuals at the present time the havoc wrought by this scourge may be greatly lessened, if not entirely eliminated.

DANGER SIGNALS.

The report further calls attention to certain danger signals which should be recognized by those who reside in pellagrous districts or those who have had previous attacks of the disease. Among such warning symptoms are extreme nervousness or change in the mental characteristics of the individual. Weakness or debility, a disinclination to undertake the ordinary daily tasks, and unexplained digestive symptoms may all be premonitory signs. These symptoms do not, of course, necessarily mean the development of pellagra, but taken in connection with the history of a one-sided, monotonous, diet, they serve as a definite warning of the possibilities of its onset.

SPRING DIET.

The diet recommended by the health service for the prevention of pellagra will not produce results if followed for a week or ten days only, but if continuously and consistently used, under circumstances similar to its administration in the various institutions where the experimental tests have been performed, it will protect the individual against the development of the disease. Necessarily, a rigid unvaried diet is wholly undesirable and the menu recommended is only to indicate in a general way the character of the food to be prescribed. Frequently the element of poverty, inaccessibility to market supplies, or even personal idiosycrasy, may require some modification of the diet table, so that strict adherence to its components may not in all respects be practicable. The object of the diet as submitted is to minimize the consumption of the carbo-hydrate (starchy and sweet) foods and to increase the amount of fresh animal protein and of fresh legumes (peas and beans).

The breakfast, for example, should consist of oatmeal and cream, without sugar, with either ham or breakfast bacon and two eggs. Not more than two thin slices of whole wheat bread should be taken, preferably untoasted. Hot bread or biscuits are inadvisable. A glass of fresh milk is to accompany the breakfast and either oranges or grape fruit may be the initial course. The dinner should consist of either pea or bean soup, prepared from dried peas or beans, with a meat stock. The meat may be beef, pork, ham, chicken, veal, or mutton, prepared in whatever manner is the most appetizing, preference being given to roasting or broiling rather than frying. Hamburger steak, meat hash, or fish may be substituted to afford variety. Care should be exercised that the meats are not overdone. Of vegetables, Irish potatoes, boiled in the jacket or baked, cabbage, turnip or mustard greens, collards and lettuce, are to be recommended. For dessert, stewed, fresh or dried fruit will prove sufficient. The dinner should be acompanied by not more than two thin slices of whole wheat bread and a glass of buttermilk. The supper should consist of pork and beans, or baked beans properly seasoned, the usual amount of bread and a glass of buttermilk. If preferred, eggs, scrambled or otherwise prepared, may be substituted for the more substantial ingredient of the meal.

DIET CHEAP AND AMPLE.

A diet such as the above is not prohibitive as to cost, at least to but few of the residents of the country, affords a sufficient number of heat units, if taken in reasonable quantity, and will effectually prevent the development of a disease which alone caused 8,000 deaths in the United States during the past year.

Seventy-six out of eighty-seven cases of typhoid fever which occurred in a recent outbreak have been traced by the United States Public Health Service to infected milk. Had the first cases been reported to a trained health officer the outbreak could have been stamped out promptly. When will we learn that disease prevention is sure and cheap?

Reviews and Book Notices

The Practical Medicine Series, Comprising Ten Volumes on the Year's Progress in Medicine and Surgery, Under the General Editorial Charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Vol. 1. General Medicine. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College. Series 1916. Chicago. The Year Book Publishers, 327 S. La Salle St.

The attention of our readers is called to this exceedingly useful publication consisting of a series of ten volumes for the year issued at monthly intervals on medicine and surgery. Each volume is complete on the subject of which it treats, so that the physician can buy only the parts they desire. This volume is on general medicine and has been prepared by the well known Chicago physician, Dr. Frank Billings. The entire subject is presented in astonishingly small volume and is complete as giving the reader a succinct presentation of every medical subject, all of which is brought fully up-to-date, presenting the latest changes and advances in the science and practice of medicine. As a reference book it is unexcelled, as it gives a quick and accurate picture of diseases, their recognition, etiology, pathology, and treatment. This one volume is worth the price of the entire set, and the other numbers to be issued promise to be equally as good.

Publisher's Department

The Remedy of Choice in Cardiac Affections.

It is interesting to note the growing interest medical men are taking in Cactina Pillets as a safe and dependable cardiac tonic. This is not surprising; indeed the only surprising feature is that the efficiency of this remedy has not been more generally realized. Hardly any one drug, with the possible exception of digitalis, has a broader field of activity, and there are many competent observers who place it first among cardiac remedies. Experience has shown that the most conspicuous influence of Cactina upon the heart is its effect on the local nutrition and consequent increase of the muscular-motor energy. Certainly it is the heart tonic par excellence, since it increases heart action and restores nerve function with a promptness that is rarely observed with any other remedy.

Made from a dependable preparation of Mexican Cereus Grandiflorus, Cactina Pillets are especially effective in functional disorders of the heart associated with feeble, irregular pulse, more or less dyspnea and a sense of chest oppression. In such cases the effect of Cactina Pillets is exceedingly gratifying, the heart being promptly steadied and strengthened, and dyspnea markedly relieved. Tachycardia and palpitation are quickly controlled, and the precordial sensations which cause so much apprehension are soon dispelled.

In accomplishing the foregoing, the physician does not have to apprehend toxic or untoward effects, for Cactina Pillets are not only non-cumulative but totally devoid of all unpleasant or disagreeable action. It is hardly to be wondered at, therefore, that careful, painstaking physicians are not only using Catina Pillets more extensively than ever, but are

gradually coming to look upon this preparation of cactus as the remedy of choice in functional affections of the heart.

Chemical Food is a mixture of phosphoric acid and phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., incorporated, to whose advertisement in this issue we refer our readers, have placed upon the market a much improved form of this compound, *Robinson's Phosphoric Elixir.* Its superiority consists in its uniform composition and high degree of palatability.

Most doctors realize that as a symptom, pain has as a rule considerable diagnostic significance. Sometimes at least, if not often, the doctor is apt to overlook one fact, viz., pain to the patient is a condition not a symptom—he cares less for what it means than to get relief from it.

Hence the doctor is sometimes caught upon one horn of a double dilemma. To relieve pain by ordinary means—i. e., hypodermatic injection or narcotic, given per os, is to satisfy the patient but mask or alter the meaning of certain symptoms.

If the patient is left to suffer while the case is studied, the diagnosis is favored, but patient and friends resent what seems to them to be neglect. The use of opium or similar drugs to relieve pain is always fraught with danger—it's almost as bad as trying to cut off a dog's tail behind his ears! Nature has provided a means for pain relief or analgesia that deserves more careful and general use. In the arrangement of the sympathetic nervous system, the spinal distributing and reflecting centers, lies the explanation of the good effect of counter-irritation and analgesia produced through the skin by local and external application.

And upon such natural physiological rules and working plans is based the action of the Anodyne "First-Aid," viz., K-Y Analgesic.

Being greaseless and water-soluble, K-Y Analgesic when applied to the skin, absorbs rapidly, penetrates deeply, relieves promptly and is more or less prolonged in action and effect. The analgesic agents contained in it, camphor, menthol, and methyl salicylate are active but non-irritant or toxic, so that K-Y Analgesic can be applied as often as necessary and in any amount.

It does not stain the skin or soil clothing.

For the relief of headache, neuralgia, rheumatic pains, stiff and painful joints. lumbago, sprains, etc., K-Y Analgesic will be found to deserve a place in the doctor's mind—and in his bag, or on the shelf in his office.

Friction physiologically considered is a thing to be avoided. Its proper antidote is lubrication. The correct form of lubrication calls for slipperness which is not supplied by grease or oil. Furthermore, grease or oil is unpleasant to use and it leaves behind stains or soiled places on the patient's linen, etc.

Instruments of penetration—such as the sound, catheter, speculum, scope or the examining finger, must be lubricated and so perfectly lubricated as to slip easily. To pass such an instrument deftly, quickly, with a minimum of pain or discomfort to the patient, requires perfect lubrication, which in turn enhances the manual dexterity and deftness of the operator. Patients are growing to be increasingly critical. They note their physician's attention to the "little things" and judge accordingly. Hence anything that will add to his skill or deftness must appeal to the doctor and for that reason he must be interested in K-Y Lubricating Jelly—Friction's Antidote.

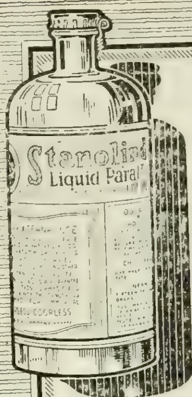
This preparation is slippery but not sticky. It is greaseless. It is water-soluble. It is transparent. It is non-irritating. It is convenient to use and economical.

Properties which will recommend it to the discriminating doctor who has his patient's best interests as well as his own

at heart. K-Y Lubricating Jelly is also a valuable emollient and protective agent, in burns, scalds, bed sores, chafes, dermatitis, urticaria, hives, etc.

It relieves pruritus in the majority of instances and is exceedingly useful as a soothing and protecting application to the skin of children suffering from scarlet fever, measles, chicken pox, etc.

K - Y Lubricating Jelly also keeps the surgeons hands smooth, prevents bichloride rash and "improves the feel."



Important

Conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association, we have changed the name of our pure medicinal mineral oil from Stanolax Liquid Paraffin to

Stanolind

Trade Mark Reg. U. S. Pat. Off.

Liquid Paraffin

(Medium Heavy)

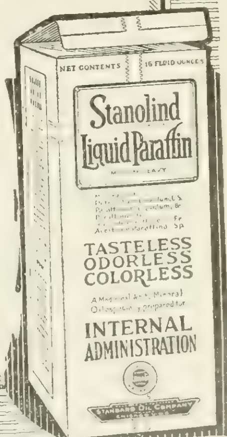
Tasteless — Odorless — Colorless

This oil has won favor with the medical profession since its introduction something over a year ago by reason of its dependability, its uniform quality, its palatability and its efficiency as a mechanical lubricant for use in the treatment of intestinal stasis and other disorders where the use of mineral oil is indicated.

If you are unacquainted with this oil we hope that you will allow us to send you a trial quantity. This we will gladly do upon request.

Standard Oil Company
(Indiana)
72 W. Adams St. Chicago, U. S. A.

27c



SAND & SUMPTER DRUG CO.
PHARMACISTS

CORNER UNION STREET AND FIFTH AVENUE, NORTH

Prescriptions Carefully Compounded
Surgical Dressing Supplies

DEPOSITORY FOR

E. R. SQUIBB & SON'S PREPARATIONS

OUT OF TOWN ORDERS PROMPTLY ATTENDED TO

Written Endersements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture Maintain Mariana Coca Preparations Inimitable.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wines and Cocaine**

Subtitutes harm patients and betray confidence in the unique properties of Coca.

VIN MARIANI

Represents TRUE COCA with a Sound Nutritous FRENCH WINE.

An Adjutant to all other Remedies in

Convalescence—Wasting Diseases—Neurasthenia

And Allied Conditions
from any cause.

THE COCA LEAF
A PERIODICAL ADVOCATING
THE RATIONAL USES OF COCA
MAILED FREE
TO PHYSICIANS ON REQUEST

Inquiries from Physicians Receive Ethical Considerations.

MARIANI & CO.,

52 West 15th Street, New York

PARIS LONDON. BERLIN. MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE.

THE CINCINNATI SANITARIUM

FOR MENTAL AND NERVOUS DISEASES

A strictly modern hospital fully equipped for the scientific treatment of all nervous and mental affections.

Situation retired and accessible. For details write for descriptive pamphlet.

F. W. LANGDON, M.D., Medical Director
B. A. WILLIAMS, M.D., Resident Physician
EMERSON A. NORTH, M.D., Resident Physician
GEORGIA E. FINLEY, M.D., Medical Matron
H. P. COLLINS, Business Manager

BOX No. 4 COLLEGE HILL CINCINNATI, OHIO

Iodinized Emulsion (SCOTT)

THE IDEAL INTESTINAL ANTISEPTIC.
Indicated in Typhoid and other slow fevers. Dysentery, Chronic Diarrhœa and gastro-intestinal troubles.

Creosotonic (SCOTT)

THE IDEAL SYSTEMIC ANTISEPTIC.
Invaluable in Tuberculosis, Bronchitis, Pneumonia, Asthma, Catarrh and as a tonic after all exhausting diseases.

Samples and Literature free on request.
The Dawson Pharmacal Company, Incorporated. Dawson Springs, Kentucky.

NEW ORLEANS POLYCLINIC

Post Graduate School of Medicine Tulane University of Louisiana. Twenty-ninth Annual Session opens September 27, 1915, and closes June 3, 1916

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery. The specialties are fully taught, including laboratory and cadaveric work. For further information, address:

CHAS. CHASSAIGNAC, M. D., Dean.
NEW ORLEANS POLYCLINIC
NEW ORLEANS, LA.

Postoffice Drawer 770

Tulane also offers highest class education leading to degrees in Medicine, Pharmacy, Dentistry, Hygiene and Tropical Medicine

The Nashville Journal of Medicine and Surgery

This standard publication has just entered upon its 108TH volume. The attention of the medical profession is called to improved appearance, and to the better character of its contents. : : : : :

Physicians who desire to read a live, PROGRESSIVE MEDICAL JOURNAL, will do well to avail themselves of the low subscription price at which this excellent periodical is offered.

A Handsome Premium to New Subscribers

A CLINICAL THERMOMETER FREE

To all new subscribers who will send $1.00 for one years subscription to the Journal from date, we will send a reliable clinical thermometer in nickel case, with pin and chain attached. This offer good as long as the supply lasts. Fill out coupon attached and mail at once, so as to get advantage of this offer.

Find enclosed $1.00 for which send the Journal and Thermometer to

Dr. ______________________________

Town ______________________________

County ______________________________

State ______________________________

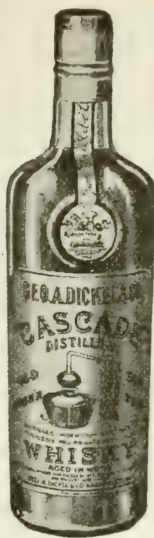
Direct from the Still

No. 1

Purified

No. 2

Purified and Aged



No. 3

These Three Bottles, Doctor, Are For You

No. 1 Contains Cascade Whisky Just From The Still—

No. 2 Contains Cascade Whisky PURIFIED—

No. 3 Contains Cascade Whisky *Just As It Comes To You*

Purified as no other Whisky on the Market and Reaching the Consumer the Absolute Acme of Quality and Flavor.

The Samples, are Designed, Doctor, to show you the Difference Between Cascade and Other Brands

The Final Purifying Process Makes

CASCADE STAND OUT AS THE LEADING MEDICINAL WHISKY

A Post Card Brings Them To You

GEO. A. DICKEL & CO., *Distillers*, Nashville, Tenn.

CACTINA PILLETS

A dependable cardiac tonic for FUNCTIONAL DISORDERS OF THE HEART

PRUNOIDS
A physiologic laxative that does not gripe or cause after-constipation.

SENG
stimulates gastro-intestinal functions.

A remedy of proven efficiency for supporting, strengthening, and regulating the heart's action.

SULTAN DRUG CO., St. Louis, Mo.

An Effective Alterative

rapidly readjusts bodily processes by correcting perverted functions and re-establishing normal metabolic activity. It is the capacity of

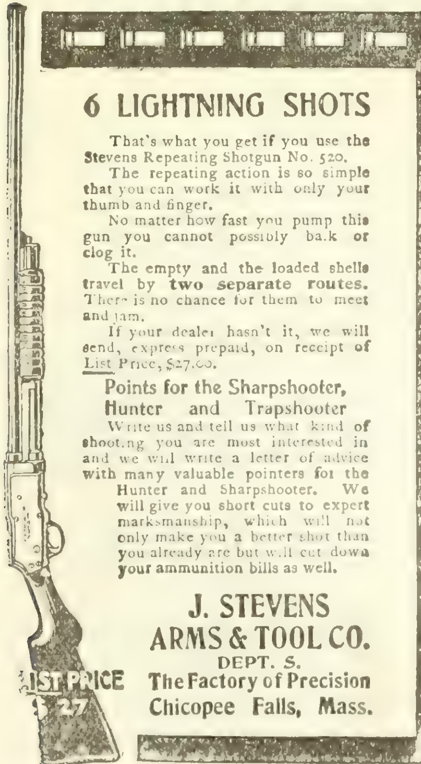
IODIA

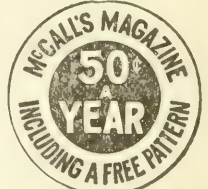
in this direction—its well known ability to restore a proper balance between tissue waste and tissue repair that makes it of such pronounced therapeutic value in RHEUMATISM, GOUT, the SCROFULOUS DIATHESIS, LATE and HEREDITARY SYPHILIS, CHRONIC SKIN DISEASES, GOITRE and CHRONIC DISEASES IN GENERAL. For many years IODIA has been the standard tonic alterative, and the uniformly satisfactory results careful discriminating physicians have obtained in treating the strumuous disorders of all ages, have proven beyond all doubt that this eligible remedy is unsurpassed in its field of activity.

BATTLE & CO.

PARIS — ST. LOUIS — LONDON

Obstetrical Charts in colors, sent on receipt of 25c postage paid. Ready for delivery





McCALL PATTERNS
Celebrated for style, perfect fit, simplicity and reliability nearly 40 years. Sold in nearly every city and town in the United States and Canada, or by mail direct. More sold than any other make. Send for free catalogue.

McCALL'S MAGAZINE
More subscribers than any other fashion magazine—million a month. Invaluable. Latest styles, patterns, dressmaking, millinery, plain sewing, fancy needlework, hairdressing, etiquette, good stories, etc. Only 50 cents a year (worth double), including a free pattern. Subscribe today, or send for sample copy.

WONDERFUL INDUCEMENTS
to Agents. Postal brings premium catalogue and new cash prize offers. Address

THE McCALL CO., 238 to 248 W. 37th St., NEW YORK.

Cerebral Sedation

is not infrequently the first and most essential detail of scientific therapeusis, and on its prompt, effective and safe accomplishment a patient's welfare is often wholly dependent. With so much therefore at stake, the selection of the hypnotic or sedative agent to be used is invariably a matter of more than ordinary importance. The preference usually given by painstaking practitioners to

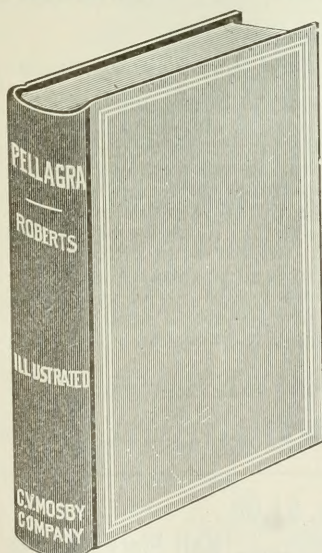
BROMIDIA

is the logical result of its well established efficacy in reducing hyper-activity of the cerebral circulation, controlling mental excitation and producing sleep that is normal, restful and recuperative.

The **exceptional quality of its ingredients,** its **absolute purity, constant uniformity** and **non-secrecy** are details that have helped Bromidia to hold its widely recognized position during the past thirty years, as **the safest and most dependable hypnotic** at the command of the medical profession.

BATTLE & CO.
ST. LOUIS
PARIS LONDON

The Latest Word on Pellagra



PELLAGRA

ETIOLOGY, PATHOLOGY, DIAGONOSIS, TREATMENT

By STEWART R. ROBERTS, A. B., M. Sc., M. D.

Associate Professor of Principles and Practice of Medicine, Atlanta College of Physicians and Surgeons; Neurologist to Wesley Memorial Hospital, Atlanta, Georgia.

250 Royal Octavo Pages-Illustrated-Price, $2.50

No other disease is so dreaded today as Pellagra. The meager knowledge obtainable about its etiology and the uncertain methods of treatmenl hitherto prevailing have caused it to be feared by all who are familiar with its ravages. For the first time in its history some tangible facts have been worked out along the line of etiology, and rational methods of treatment have been determined. Doctor Roberts has studied this disease in all its phases in America, and at the present time is completing personal observations of the disease in its natural habitat, Italy, working out the mooted points of etiology and pathology with the experts of Europe. Personal investigations have been conducted in the laboratory and in the homes of the stricken victims. It is needless to say that this monograph will be the latest word on this subject and will bear the stamp of authority.

This Book will be Ready for Distribution January 1, 1912.

C. V. MOSBY MEDICAL BOOK AND PUBLISHING COMPANY
METROPOLITAN BUILDING, Grand Avenue and Olive Street ST. LOUIS. U. S. A.

ELEGANT
PHARMACEUTICAL SPECIALTIES

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these PREPARATIONS

Robinson's Hypophosphites

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

℞ Each fluidounce contains:

Hypophosphites	Soda	2	grains
"	Lime	1⅛	"
"	Iron	1⅛	"
"	Quinine	¾	"
"	Manganese	1⅛	"
"	Strychnine	1-16	"

DOSE—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1.00.

This preparation does not precipitate—retains all the salts in perfect solution.

Robinson's
LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentary life, coupled with nervous and mental strain.

Reliable Pepsin is one of the best DIGESTIVE agents known. **Pure Lime Juice** with its APERIENT and CHOLAGOGUE characteristics with the Pepsin furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is PALATABLE and GRATEFUL to the taste.

DOSE—Adult, dessertspoonful to tablespoonful, after eating. Children one-half to one teaspoonful, according to age.

PRICE, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

SALOFORM

(***Flexner***)

Saloform is a definite Chemical Compound the component parts of which are **Hexamethylene, Tetramine, Salicylic Acid** and Lythia.

The properties of **Saloform** are those of Uric Acid Solvent and of a Genito-Urinary Antiseptic.

As a Uric Acid Solvent it is indicated in **Rheumatism, Gout,** in **Phosphaturia,** in **Gravel,** and in **Renal Colic**.

As a Genito-Urinary Antiseptic it limits suppuration anywhere along the Urinary Tract, from the Kidneys down to the orifice of the Urethera.

It has been used with most excellent results in **Pyelitis, and Pyonephrosis,** in **Cystitis,** and in **Gonorrheal and Non-Gonorrheal Urethritis**.

SALOFORM (Flexner) is obtainable in powder, tablet or elixir.

Powder in 1-oz. vials, dose 10 grains, 4 times daily (under physicians prescriptions), per 100 $1.25.

Tablets, 5 grains, to a bottle, dose, 2 tablets 4 times daily (under physicians prescriptions); per 100, $1.25.

Elixir, in 16 ounce bottles, dose, teasponful after each meal and at bedtime (under physicians' prescriptions), per bottle $2.00.

Physicians who have used Saloform are enthusiastic in their praises of its merits.

Flexner's
Solution of Albuminate of Iron

(***Liquor Ferri Albuminatis—Flexner***)

Albuminate of Iron is a definite chemical compound of albumen and Iron. In the manufacture of the preparations of this iron salt, we use fresh egg albumen only. Albuminate of Iron is the organic compound present in the red corpuscles of the blood. **It does not disturb digestion, neither does it constipate.** Contains in each teaspoonful one grain of the Iron salt, and itis perfectly stable and bland. Clinical experience has demonstrated its superiority as a chalybeate.

PINT BOTTLES, $1.00

Please prescribe ORIGINAL bottles, OUR label.

WE NOW MAKE FLEXNER'S
- Syrup Albuminate of Iron Comp. — **Pints, $1.00**
- Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine — **Half Pints, $1.00**

Please specify **ROBINSON'S** Original Bottles. For sale by Druggists.

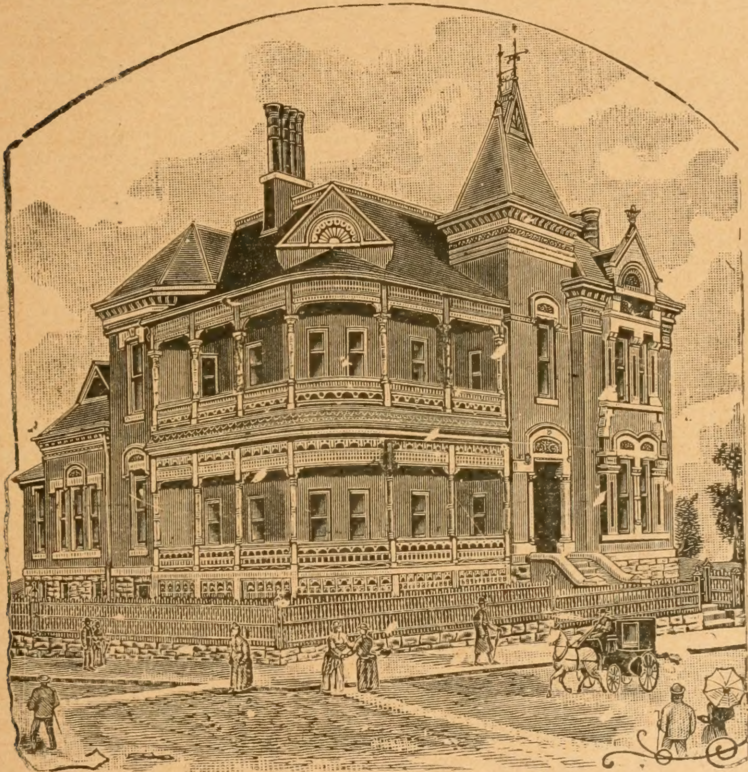
ROBINSON-PETTET CO.,
(INCORPORATED)

Manufacturing Pharmacists **LOUISVILLE, KY.**

Founded 1842. Incorporated 1890 ☞**Pamphlets gratis** to Practitioners by Mail upon request

The Briggs Infirmary

FOR THE TREATMENT OF SURGICAL DISEASES



THIS INSTITUTION is located in the central part of the city, easily accessible by several lines of electric cars. Separate buildings for male and female patients, rooms well ventilated handsomely furnished and supplied with all the conveniences of modern hospital establishments. Excellent cuisine and competent trained nurses. The operating rooms are equipped with all the requisites of modern operative surgery. Rates of board reasonable. Twenty-Third season opened September 10, 1915. For further information address—

CHARLES S. BRIGGS, A. M., M. D.,
Or SAMUEL S. BRIGGS, M. D.,

Corner Summer and Union Sts. NASHVILLE, TENNESSEE

Fellows' Compound Syrup of Hypophosphites

1866—1916

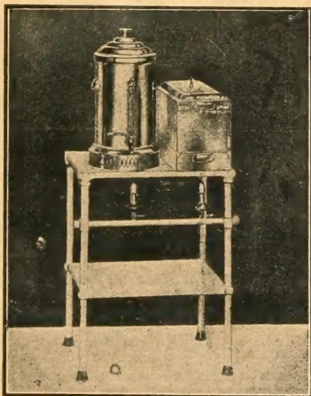
Not a new-born prodigy or an untried experiment, but a remedy whose usefulness has been fully demonstrated during half a century of clinical application.

For 50 Years The Standard

℞ Syr. Hypophos. Comp. FELLOWS'

Reject < Cheap and Inefficient Substitutes
Preparations "Just as Good"

THE FELLOWS MEDICAL MANFG. CO. LTD.
26 CHRISTOPHER ST.
NEW YORK



EVERYTHING FOR SICKROOMS

153 Fourth Avenue, North
NASHVILLE, TENN.

WRITE FOR PRICES

Theo. Tafel Co.

W. E. ENGLERT, Prop.

SURGICAL INSTRUMENTS, HOSPITAL SUPPLIES, SUPPORTERS AND TRUSSES