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EDITED BY
BEATTIE NESBITT,
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FISTULÆ OF THE FRONTAL SINUS.—Raphael Bois (*Arch. Gen. de Med.*) has collected thirty-six cases of this affection, when he deduces the following conclusions: Fistulæ of the frontal sinus are not rare, and can be divided into traumatic, inflammatory, and post-operative. They form the almost inevitable termination of certain lesions of the sinus, especially trauma, empyema, and cysts. The cause of their persistence depends on two factors, the cavity from which they lead having rigid walls, and at the same time communicating with the nasal fossæ. There are a certain number of signs which, taken together, allow us to diagnose that a fistula leads into the frontal sinus, but no one of them is pathognomonic when taken alone. The sign which has been held to be most conclusive, the passage of air by the fistula, must be extremely rare, as it is not recorded in one of the accounts mentioned. The diagnosis is not always easy, and the history, together with the results of direct observation, catheterization, and the examination of sequestra, must be taken into account to avoid mistakes, particularly that of confusion with orbital periostitis. Only one treatment, that suggested by the pathology, is efficacious in the cure of these fistulæ, and this consists in the complete scraping out of the walls of the sinus in its whole extent as shown by the operation. Fronto-nasal drainage is also essential to success, and the wound may then be expected to heal by the union of the soft parts by first intention.—*British Medical Journal.*

Doctor—"Are you feeling very ill? Let me see your tongue, please." Patient—"It's no use, doctor; no tongue can tell how bad I feel."

... SEASONABLE THERAPEUTICS ...

The Treatment of Influenza or La Grippe

It is quite refreshing these days to read of a clearly defined treatment for Influenza or La Grippe. In an article in the *Lancet-Clinic*, December 28th, 1895, Dr. James Hervey Bell, 251 East 32d Street, New York City, says he is convinced that too much medication is both unnecessary and injurious.

When called to a case of influenza, the patient is usually seen when the fever is present, as the chill, which occasionally ushers in the disease, has generally passed away. Dr. Bell then orders that the bowels be opened freely by some saline draught, as hunyadi water or effervescing citrate of magnesia.

For the high fever, severe headache, pain, and general soreness, the following is ordered:

℞ Antikamnia Tablets (5 gr. each), No. xxx
Sig. One tablet every two hours.

If the pain is extremely severe, the dose is doubled until relief is obtained. Often this single dose of ten grains of antikamnia is followed with almost complete relief from the suffering. Antikamnia is preferred to the hypodermic use of morphia because it leaves no bad after-effects; and also because it has such marked power to control pain and reduce fever. The author says that unless the attack is a very severe one, the above treatment is sufficient.

After the fever has subsided, the pain, muscular soreness and nervousness, generally continue for some time. To relieve these and to meet the indication for a tonic, the following is prescribed:

℞ Antikamnia & Quinine Tablets, No. xxx
Sig. One tablet three times a day.

This tablet contains two and one-half grains of each of the drugs, and answers every purpose until health is restored.

Occasionally the muscular soreness is the most prominent symptom. In such cases the following combination is preferred to antikamnia alone:

℞ Antikamnia & Salol Tablets, No. xxx
Sig. One tablet every two hours.

This tablet contains two and one-half grains of each drug.

Then again it occurs that the most prominent symptom is an irritative cough. A useful prescription for this is one-fourth of a grain sulphate codeine and four and three-fourths grains antikamnia. Thus:

℞ Antikamnia & Codeine Tablets, No. xxx
Sig. One tablet every four hours.

Dr. Bell also says that in antikamnia alone, we have a remedy sufficient for the treatment of nearly every case, but occasionally one of its combinations meets special conditions. He always instructs patients to crush tablets before taking.

THE ABORTIVE TREATMENT OF ACUTE SUPPURATIVE ADENITIS OF THE GROIN.—Gaither (*Johns Hopkins Hosp. Bull.*), referring to the general opinion of the uselessness of the so-called abortive treatment of suppurative bubo, states that recent and extended experience has led him to advocate the application of a pressure bandage, without any regard to the age of the bubo, if suppuration has not advanced to such a degree as to bring the case practically to the operative stage: a piece of cotton as large as the fist is folded on itself again and again until it has the shape of the bubo, and when placed on it does not completely cover it. This is carefully adjusted, and a wad of tightly compressed cotton as large as a cocoanut placed over it. Small pieces of cotton are also used on the inner and outer surfaces of the thigh to prevent chafing. A very tight spica bandage is then put on. Of twelve cases in which a fair trial was made of this plan of treatment, the bubo was aborted in nine, including two which seemed to be too far advanced to leave any chance of success. The bandages were renewed in from four to eight days, and the patients were able to continue work without inconvenience. In favor of this plan of treating acute suppurative adenitis of the groin, the author asserts that it is safe, that pain, as a rule, is diminished after an interval of twenty-four hours, that it does not prevent the patient from pursuing his usual occupation, and that it gives a high percentage of successful cases.—*British Medical Journal.*

"MEDICO-SURGICAL BULLETIN."—Dr. Egbert H. Grandin has retired from the associate editorship of the *American Medico-Surgical Bulletin.*

McGILL UNIVERSITY, MONTREAL

Faculty of Medicine. Sixty-Fourth Session, 1896-97.

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The Collegiate Course of the Faculty of Medicine of McGill University begins, in 1896, on Tuesday, September 22nd, and will continue until the beginning of June, 1897.

The Primary subjects are taught, as far as possible, practically by individual instruction in the laboratories, and the final work by clinical instruction in the wards of the hospitals. Based on the Edinburgh model the instruction is chiefly bedside, and the student personally investigates and reports the cases under the supervision of the professors of Clinical Medicine and Clinical Surgery. Each student is required for his degree to have acted as Clinical Clerk in the Medical and Surgical wards for a period of six months each, and to have presented reports acceptable to the Professors on at least ten cases in Medicine and ten in Surgery.

About $100,000 have been expended during the last two years in extending the University buildings and laboratories and equipping the different departments for practical work.

The Faculty provides a Reading-Room for Students in connection with the Medical Library which contains over 15,000 volumes.

MATRICULATION.—The Matriculation Examinations for entrance to Arts and Medicine are held in June and September of each year.

The entrance examinations of the various Canadian Medical Boards are accepted.

COURSES.—The Regular Course for the Degree of M.D.C.M. is four sessions of about nine months each.

A Double Course, leading to the Degrees of B.A. and M.D.C.M., of six years has been arranged.

Advanced Courses are given to graduates and others desiring to pursue special or research work in the laboratories of the University and in the Clinical and Pathological laboratories of the Royal Victoria and Montreal General Hospitals.

A Post-Graduate Course is given for Practitioners during May and June of each year. This course consists of daily lectures and clinics as well as demonstrations in the recent advances in Medicine and Surgery and laboratory courses in Clinical Bacteriology, Clinical Chemistry and Microscopy.

Hospitals.—The Royal Victoria, the Montreal General Hospital, and the Montreal Maternity Hospital are utilized for purposes of Clinical instruction. The physicians and surgeons connected with these are the Clinical Professors of the University.

These two general hospitals have a capacity of 250 beds each, and upwards of 30,000 patients received treatment in the out-door department of the Montreal General Hospital alone last year.

For information, and the Annual Announcement, apply to—

R. F. RUTTAN, B.A., M.D., Registrar,
McGill Medical Faculty.

CHEMICAL TREATMENT OF MORPHINISM.—Erlenmeyer (*Prog. Medical*) has for three years abandoned the method of rapidly cutting off morphine which is associated with his name in favor of one which he finds superior in respect of results. He noticed that the sudden deprivation of a morphinomaniac's drug was associated with the symptoms, both direct and remote, of hyperacid dyspepsia; actual investigation showed that when the sufferings caused by its discontinuance were most severe the sound revealed the presence of excess of hydrochloric acid in the stomach. The reason of this can be deduced from Alt's researches, which show that morphine injected under the skin is largely excreted into the stomach, where it must exert a narcotic influence both upon the gastric glands, inhibiting their secretion, and upon the nerves, numbing their sensibility. When the source of these actions is removed exactly the reverse changes take place: an excess of acid is poured forth upon the hypersensitive nerve endings, producing the symptoms of gastric disorder and of reflex nervous disturbances. To counteract this effect Hitzig washed out the stomach and introduced an alkaline solution of Carlsbad salts in place of the strongly acid gastric juice, with marked relief. Erlenmeyer aims, on the other hand, at the neutralization of the hydrochloric acid *in situ* by means of Fachingen water, which contains 0.35 per cent. of bicarbonate of soda. He has treated over thirty cases in this manner, with an entire absence of either gastric or nervous symptoms. It is noteworthy that, although the patients are perfectly well and comfortable without it, the craving for morphine remains unappeased, and they still shriek like maniacs for the drug. To make his treatment abso-

lutely systematic the author intends to administer hydrochloric acid during the morphine-taking period, so as to avoid the subacidity of the stomach, and to retain the natural relations of the nerves to the acid.—*British Medical Journal.*

VENESECTION.—Kronig (*Berl. klin. Woch.*) begins a study of this subject. He refers to the authorities who have recently advocated venesection in certain cases, and first discusses its use in acute pneumonia. The effect of œdema of the lung, or a very massive exudation compressing the capillaries, is such as to cause an insufficient exchange of gases, thence a co-intoxication. With this is associated a mechanical difficulty. For a time the reserve force of the right ventricle can overcome these difficulties, but when exhaustion sets in there is dilatation, and then commences the danger to the patient. The blood is driven into the left auricle with difficulty, and the heart muscle is insufficiently nourished. The pressure in the pulmonary circulation increases, and that in the aorta diminishes. To overcome these dangers two expedients are had recourse to, namely, (1) to increase the power of the right ventricle by stimulants and cardiac tonics, and (2) if this does not succeed, to reduce the mass of the blood by venesection. Often venesection then produces a diminution of the cyanosis and of the dyspnœa, and the pulse gains in strength. The author believes that the best time for venesection is near the time of the crisis. It should be repeated if necessary. He refers to three apparently hopeless cases in which venesection was followed by recovery. Again, in non-febrile affections of the heart and lungs the pulmonary circulation may become overloaded. Here venesection may give even bet-

ter results than in acute pneumonia. Occasionally in heart disease sudden exhaustion may occur in a heart hitherto acting relatively well. Cyanosis, smallness of the pulse, intermitting respiration, may lead quickly to death. By a venesection the right heart is relieved. The author refers to two such cases. The one occurred in a man, aged 58, who was seized with sudden and most severe dyspnœa. After a bleeding to 200 c.cm. the cyanosis rapidly disappeared. In the other case a girl, aged 16, with heart disease, was suddenly seized with great cyanosis. The radial pulse could not be felt, and there was Cheyne-Stokes breathing; 380 c.cm. of blood was withdrawn, camphor injections given, and artificial respiration practised. On the following morning there was no trace of the severe symptoms of the day before. There is a group of cases in which the cardiac tonics do not act satisfactorily. The author refers to one case in which the patient appeared almost moribund. Digitalis failed to relieve him until venesection had been performed, when it yielded the best results, and the patient lived for two years.—*British Medical Journal.*

INFANTILE DIARRHŒA—

℞ Bism. subgal ..... ℥ i.
Sodii bicarb ..... gr. v.
Cret. prep ..... ℥ ss.
Creosoti ..... gtt. v.
Syr. cinnam ..... ℥ iv.
Aq. dest.....q. s. ad ℥ iv.

M. Sig.: Teaspoonful after each movement.—*Griffin.*

ABSORBENT POWDER—

℞ Alum, finely pulverized.. 5.
Carbonate of lime, pulv.. 4.
Starch, pulverized .....50.

—*Sigmund.*

IT was late on Sunday night; I was sitting in my office alone. I became aware of a stillness, unusual for even that quiet hour. I turned to the old grandfather's clock in the corner of the room, an heirloom and highly prized, by the way. On opening the panel door in the case, I found the pendulum still swaying regularly from side to side, but not with its full range. The second hand on the face rocked to and fro with perfect regularity, but it did not advance over its usual circular course. The great weights had sunken as far as the fully unwound cord would admit. I had neglected to wind the clock the night before, the accustomed time for performing that weekly duty, and the faithful old servant had exhausted—almost exhausted—the last vestige of force stored there more than a week before. The food material had been all used up. I thought, will the winding restore the swing of the pendulum to its full degree? Will it bring back the tick and movement of the works and hands? I tried it and waited. The pendulum and second hand continued their weak, purposeless movements, but they gained no power. They became even fainter. There was the force, ready to act, in the suspended weights—enough of it to run the machinery for eight days. The weak, dying patient had been fed to repletion, but nothing had been gained. I gave the pendulum a slight push; the familiar tick was heard, the oscillating hand advanced; the clock was off for a week's run. I had given a stimulus.—*Samuel Wolfe, M.D., Med. and Surg. Reporter.*

TOOTHACHE—

℞ Chloral hydrate,
Camphor,
Carbolic acid,
Glycerine.....ää ʒ iss.

Introduce into tooth cavity a ball of cotton moistened with this mixture.

NEW RESULTS OF PALPATION OF THE SHOULDER.—Fabre (*L'Obstétrique*) has studied the relation of the anterior shoulder to the changing positions of the fœtus during pregnancy. He says first that it can be found with rare exceptions. In 139 patients examined with reference to this point, he failed to recognize the shoulder in five only, and in these by reason of hydramnios or multiple fœtation. One thing which aids in locating the shoulder is the fact that it is found at the level of the fœtal heart. By the situation of the anterior shoulder the examiner can determine the degree of engagement, of rotation, and of inclination of the head. Supposing, for example, that the head is normally flexed and is not laterally inclined on the trunk; the distance from the biparietal diameter to the top of the head is 5 cm.; from the biparietal diameter to the bisacromial diameter is (since no lateral inclination of the head is admitted) 8 cm. If it be found by mensuration with the calipers that the height of the shoulders above the symphysis is 13 cm., then the vertex lies at the level of the pelvic brim, and if the shoulder is 8 cm. above the pubic bone, the equator of the head is at the superior strait. Again, owing to torsion of the neck of the fœtus the anterior shoulder lies on the same side of the mother with the occiput. In a left anterior position, the shoulder is at the left of the median line and conversely. F.'s observations have shown that at the end of the eighth month the fœtus lies in posterior more frequently than in anterior position. During the ninth month the occiput gradually glides forward toward one of the anterior quadrants of the pelvis. Fabre has demonstrated the fact that the head descends synclitically by finding the same distance between the centre

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Intimate by number those you wish details of.

No. 108.—A dwelling, 8 rooms, on prominent Yonge street corner, over and behind a drug store, for rent at $16.50 per month; has been occupied by well known medical men for ten years. A choice location for physician.

No. 106 is the drug stock of physician who has left the city; nice case, with drawers and shelves, and a large quantity of drugs and bottles. It is worth $50, and is offered for $20. The case alone is worth what is asked for all.

No. 107.—An elderly physician in one of the best western towns of Ontario desires a young medical unmarried associate, capable of undertaking any surgical work which may present; one with a foreign degree preferred; no bonus asked. Requirements and full data sent on application.

No. 105. - The actual cash in this practice for the last three months is $925. This practice is worth every month from $300 to $500, is located in the extreme northwestern part of Ontario, in town of over 3,000, fully established, and positively transferable. The good will, chattels and introduction for sale at a price which will be accepted by the first man who personally investigates. The doctor is in poor health, and must secure a successor. This is a rare and choice opening.

No. 104.—County of Leeds; practice from $2,000 to $3,000; population 700; one opposition; established many years; four weeks' introduction; eight roomed house, with good stable and sheds. The whole offer for $1,700. Terms, $600 cash, balance on easy time. A great opening for either a Methodist or an Anglican.

No. 101.—E. Kootenay, B.C., practice of $2,000, inclusive of Government Grant of $500, with office contents. Price $400.

No. 100.—$2,000 practice and residence, with office contents, road outfit, household furniture, etc., with full introduction, in a village of 700, in Eastern County, without opposition. Price, $2,500. Terms, half cash. A decided bargain for Methodist.

No. 97.—In a practice and property in village of 800 near Toronto. Finest country and pay, with one weak opposition, which is a great opening for any Methodist physician. He can do from $1,500 to $2,500 per year; cash, sure. Price of property only asked, which is $1,800. Terms, $650 cash; balance on mortgage. County of York.

No. 96.—$2,000 to $3,000 practice in village of 300 in County of Leeds, with introduction; road, stable, bed-room and office outfit; one opposition; very long drives; rich country; good pay. Price, $1,000. Terms, $600 cash; balance on time.

No. 94.—$2,500 practice and lovely home in County of Bruce; population 2,000 and weak opposition; full introduction. Price $4,000, which is less than cost of house; $2,000 cash; balance on time. An inviting opening.

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A number of good instruments and books have been left at this Office on sale at very low prices. If you want any enquire for them. No charge is made for disposing of the books or instruments of deceased physicians.

Dr. Fraser, of Orangeville, wishes to exchange an Improved Harvard Surgical Chair for a Microscope. Communicate direct with him.

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We try to learn of reliable openings for physicians where they may at once locate and have plenty of work to do. These openings are furnished by men who are tired of hard work and are seeking less arduous fields to take it easy on a well-earned competency. Other openings are furnished by the death of the former physicians, new towns which require medical men, assistantships, partnerships, etc., etc., thus affording physicians who use this Office a ready means of supplying their wants with the greatest facility and security. We can pilot prospective buyers with money and those without money. Those available for locum tenens will please so intimate.

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If so, there is no way you can obtain the names of so many reliable buyers as that furnished by us. We make at a point to secure every information of our registered prospective buyers, *e.g.*, age, qualifications, experience, religious persuasion, financial ability, etc., and obtain a pledge from each as to secrecy and honorable dealings.

Possessing all necessary data relating to the practice for sale, and also of the buyer, enables us to bring together men who are likely to close a bargain very quickly.

The following have secured locations through the agency of this office: Dr. McCrimmon, Ripley; Dr. McBride, Cataraqui; Dr. McDowell, Norway; Dr. Shaw, Springfield; Dr. Proctor, Port Perry; Dr. Hutchinson, Richmond Hill; Dr. Brown, Heathcote; Dr Karn, Picton; Dr. Shaw, East Toronto; Dr. Fetherstone, Prescott; Dr. Eastwood, Peterborough; Dr. Darragh, Chippewa; Dr McTavish, Hawkestone; Dr. Watson, Arkona; Dr. Sifton, Comber; Dr. Kalbfleisch, Brussels; Dr. Rykert, St. Catharines; Dr. Stutt, London; Dr. Clarke, Thedford. and more to follow in next issue.

☞ Letters must be direct from medical practitioners interested, and must enclose stamp for reply, otherwise they will remain unnoticed.

Address— **DR. W. E. HAMILL,**

Room 11, Janes Building,

N. E. Corner King and Yonge Streets, TORONTO.

of the sagittal suture and the anterior shoulder during the labor as after the birth. In contracted pelves, on the other hand, the measurements have shown asynclitism.

THE PRONE POSITION FOR VERSION.—Mesigna (*Centralb'. f. Gyn.*) advocates the prone position for version. His reasons are that the operator has more room, and his arm being prone his sense of touch and muscular feeling is much more acute than in the supine position of the operating hand. The uterus is shortened and the os pressed into the pelvis; the vagina is shortened and more dilatable, and the introduction of the hand thereby facilitated; the os uteri is more easily passed. The patient lies at full length with a pillow below her thorax and her head turned to one side; the operator sits on a stool by the bedside. Such accidents as separation of the uterus from the vagina or embolism from the introduction of air into the womb are prevented. The operation is less painful; the less the opposition the less the force required, and the less the force the more delicate the sense of touch. Chloroform is not necessary. An injection of morphine may be given if desired. The perineum is under ocular inspection, though it cannot invariably be saved. M. has used this method for the past eight years with increasing satisfaction.

CUTANEOUS IRRITATION OF MEASLES—

℞ Lanolini puris ..... ℥ i.
Vaselini ..... ℥ iij.
Ol. ricini ..... m ij.
Aq. dest ..... ℥ v.

Ft. ung. Sig.: Apply as required. —*Practitioner.*

THE POULTICE A HOT-BED OF BACTERIA.—Dr. J. C. Biddle, in the *Lehigh Valley Medical Magazine*, calls attention to the abuse of poultices, and says that he knows of many cases where the application of a poultice has done irreparable damage. He has seen many cases where poultices were applied to abrasions, contusions, sprains, simple and compound fractures, until the skin and underlying tissues were water-soaked. "Should this be done," he asks, "with our present advanced knowledge of medicine and surgery?" Most certainly not. The ordinary poultice has no longer a place among the resources of the aseptic surgeon or the practitioner who has any knowledge of bacteriology.

The poultice is a hot-bed for bacteria, and, such being the case, should not be used, especially where the circulation or tissues have been destroyed, as in an injury of any kind. For this reason I teach that we should cease applying the culture medium of the streptococci and their congeners. As a general rule uninjured epidermis is impervious to organisms but when we soften it, as with a poultice, we open the sweat ducts and give the micro-organisms easy access to the tissues beneath.—*American Therapist.*

OBESITY—

1. Ex. fucus vesiculosus.. 8 fl. ozs.
Sig.: Tablespoonful three times a day.—*Chapman.*

2 Potass. permanganat.. 4-16 grs.
Aquæ ..... 4 fl. oz.
M. Sig.: Dessertspoonful three times daily.—*Bartholow.*

3. Ammon. brom..... 2 drs.
Aquæ ..... 8 fl. ozs.
M. Sig.: Dessertspoonful three times a day, well diluted.—*Tanner.*

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. . . AND . . .
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ORIGINAL ARTICLES.

[No paper published or to be published elsewhere as original, will be accepted in this department.]

PRACTICAL NOTES.—CHRONIC INFLAMMATION OF THE BLADDER AND ITS TREATMENT.*

By J. F. W. Ross, M.D., Toronto, Ont.

Chronic inflammation of the bladder in women is a disease that is not very frequently met with. Subacute cystitis is quite common. In some cases, however, in spite of treatment the subacute variety of the disease runs into chronic. When this happens the patient becomes a very great sufferer and begs for relief. The urine is at times horribly offensive; the pain after passing it is excruciating. The frequency with which the bladder is called upon to empty itself becomes a bar to sleep, and the patient is in a condition of endless torture. In such cases ulceration of the bladder is frequently present. The finger, when introduced, feels as if it was entering a cavity lined with chalk or covered with plush. In the former cases the phosphate of lime is deposited on the surface of the thickened mucous membrane, and in the latter the mucous membrane is soft, thickened, velvety, and liable to bleed at the least touch.

When examining by the bimanual method the finger in the vagina detects a globular mass, giving to the finger much the sensation of a child's rubber ball; that is, one of the balls inflated with air. Examination per vaginam and pressure on the bladder may give rise to either a great deal of pain or be scarcely felt. In cases of tubercular cystitis the tubercular nodules can frequently be felt by the finger introduced into the bladder, and in one or two cases I have found the interior of the bladder divided, as it were, into crypts into which the finger could be readily introduced. In such cases the bladder

*Read before the Toronto Clinical Society.

feels almost as if filled with a malignant growth, but the cystoscope and the progress of the disease generally eliminate the presence of a neoplasm.

Tubercular disease of the bladder is frequently found as an accompaniment of tubercular disease elsewhere. I have seen it accompany tubercular peritonitis. It is more frequently met with in early life, and, as a consequence, most cases of persistent cystitis in youth are considered to be of tubercular origin. I have one case to report in which tubercular disease was suspected, but the diagnosis was not borne out by the subsequent history of the case.

Two years and six months ago a young woman, wasted and thin with disease, was placed under my care. She had already seen the seven doctors living in her immediate vicinity, and had had a variety of opinions given. A surgeon in the west then explored the bladder with the finger, advised a certain line of treatment, eliminated the presence of stone, and sent the patient home. Various solutions were used for the purpose of washing out the bladder, but without giving any relief. The patient then consulted several other doctors, went to two sanitariums and became somewhat addicted to the use of morphine. She was told by one physician that she was hysterical and nervous and that she had no actual disease.

As she was unable to obtain relief from the regulars, the quacks were called in. Various nostrums were used, but without avail. One lady, pushing the virtues of a certain treatment that is taking hundreds of dollars out of the country every month, found some hair that was passed in the urine—at least she said it was passed in the urine. A sample was brought to me for examination. The hairs were mixed in color, some being bright carroty red and others pure black. The supposition was that these hairs were passed from some dermoid tumor that opened into the bladder. I felt satisfied that this was not so.

I never saw anyone suffer more. She emaciated until nothing was left but skin and bone. Temperature at times was elevated to 102° and 103°, urine loaded with pus and mucus, and could only be retained for a few minutes at a time. Patient was tired out for want of sleep, as the vesical tenesmus kept her awake.

I undertook the charge of the case on one condition, namely, that I was to be allowed to do what I thought was best without any question, and that the patient was to be left under my care for a prolonged period of time. I endeavored to examine the bladder with the electrical cystoscope, but the mucous membrane bled so profusely that this was impossible. This attempt was made with the patient under chloroform. The bladder was explored with the finger, and its interior felt like velvet. An incision was made through the vagina into the bladder, the edges of the opening were cauterized to prevent healing by first intention in order to allow the bladder to drain. Profuse hæmorrhage kept up from the mucous membrane and not from the walls of the incision, as this was entirely checked by the action of the actual cautery. This oozing continued for two or three days after the opening was made. For a long time I was forced to visit her twice a day and then daily, to wash out the bladder. She could not bear to allow a nurse to touch her and screamed with pain even during the gentlest manipulations.

For nine months she remained under treatment and then left for home with a nurse who had been instructed how to wash out the bladder. The nurse remained for some time and the patient was removed to the hospital in the town. The bladder was opened in June, 1894. On the 24th of February, 1896, at the urgent request of her friends and the doctor in attendance, I went up to the town in which she resided and opened the abdomen. Since the discovery of the hairs there had been many conflicting

opinions regarding the causation of the cystitis. The urine had been examined on different occasions and no tubercle bacilli were found. They are frequently absent from the urine even when tubercular disease of the bladder and kidneys is present.

I opened the abdomen to explore. The ovaries were drawn up and found healthy, without a single adhesion. The uterus was perfectly normal; right and left kidney were felt in position and normal. The intestines were freely movable in the cavity of the abdomen. The omentum was normal. No tubercular deposit could be found anywhere and the wound was closed. Patient made an uninterrupted recovery. The bladder by this time had reduced in thickness so that it was now not much thicker than normal. After the bladder had drained for two years and three months and the urine had been for a long time normal, I closed the opening with silver wire sutures. Before this was done the patient had regained perfect health. She has been the marvel of the town.

In the middle period of her illness I gave a certificate under oath to be used in the Court of Chancery, that I believed the case to be incurable. My experience in a previous case assisted me very much in conducting the progress of the case just related.

A poor miserable looking woman, sallow, thin, cachectic, and pinched with pain, consulted me. I found her suffering from chronic inflammation of the bladder. The urine was extremely offensive. Concretions were from time to time passed and now and then smart hæmorrhages would occur. The patient was a physical wreck from continual pain and want of sleep.

I drained the bladder by vaginal incision about three weeks after the menstrual period. Her next period did not come on, and, much to our amazement, we found that she was pregnant. She had just conceived about a week or ten days before the bladder was opened. She went through the confinement. The bladder was washed out by a visiting nurse twice a day for a long period of time, and then once a day until finally the washing out was omitted. The finger was passed from time to time through the vaginal opening into the bladder to insure free drainage. After eighteen months I closed the fistulous opening and to-day the patient is in perfect health.

When the friends of the first case related were in doubt and were losing confidence, I advised them to see case No. 2. They did so, and confidence was restored. I have drained a number of other cases of chronic cystitis and have had every reason to be well pleased with the treatment.

Before undertaking such a case it is wise to insist that absolute control over the patient will be given; that no time limit must be placed. If this is done and all interference from outside sources prevented, the surgeon will succeed in curing the disease in a large proportion of the cases.

He must refuse to close the opening until he has satisfied himself that the proper time has arrived. The patients are all anxious to be relieved from the discomfort accompanying continual drainage, and a great deal of care is required to prevent excoriation to the external genitals.

Solutions that are used should be well diluted. In my cases I have used four. First, nitrate of silver twice a week, of the strength of one to two grains to the ounce; secondly, peroxide of hydrogen 1-4; thirdly, boracic acid, two grains to the ounce; fourthly, biborate of soda, three or four grains to the ounce. In the commencement of some obstinate cases I use a solution of nitrate of silver, thirty grains to the ounce, after applying a two per cent. solution of cocaine. This is applied as follows:

The patient lying on her back, gum elastic catheter is fastened to the end of a small glass funnel or to a large sized urethral syringe from which the

piston has been removed. The urine is then drawn off. A solution of warm water is washed in and out of the bladder several times in order to dilute the urine. The two per cent. solution of cocaine is introduced and allowed to remain for three or four minutes; this is then drawn off. The bladder is again washed with plain water to remove the excess of cocaine solution and prevent the precipitation of the silver. The silver solution is used, and after its introduction the bladder is pressed on with the finger in the vagina to bring every portion of its surface into contact with the solution. The solution of silver is then allowed to run off and it comes away looking milky white from the formation of the chloride which is insoluble. The bladder is thoroughly washed out with water to remove all excess of the solution, and a dram or two of the two per cent. cocaine solution introduced and allowed to remain. If the pain is excessive a hypodermic of morphine may be required. I have never found it necessary to apply such a strong solution of nitrate of silver more than four or five times at intervals of a week.

After progress has been made and the disease has begun to subside, one must be careful not to use solutions that will keep up irritation. The best solution that can be used during the latter months of treatment is No. 4, biborate of soda, three or four grains to the ounce.

After an opening has been made into the bladder it may be difficult to secure complete drainage during the first few months. The mucous membrane is swollen and tends to bulge into the opening. I have found it necessary in such cases to use for a time one of Skene's self-retaining catheters. These require to be frequently removed and cleansed. They should be cleansed by dipping into a dilute solution of nitric or hydrochloric acid to remove the incrustation of salts.

After a time it is advisable to give up the use of the catheter and introduce the finger through the vaginal opening, at least once a week, to keep it continually torn open. Vaginal drainage is useless unless the bladder is drained. Vaginal drainage does not mean the puncture of the bladder from the vagina. Such a puncture will tend to close and the urine will only escape when the intra vesical pressure becomes great enough to force it out through the opening. After the vaginal opening has been made the bladder should be thoroughly washed out once or twice a day with a large quantity of water by placing the patient on a waterproof sheet and allowing the water to run from a douche bag through the bladder down into a foot bath.

Washing the bladder as it is ordinarily carried out is of little service. A quart or two quarts of water should be run through at a time. When a vaginal opening exists this can be readily done, mucus is washed out and the bladder is left in a thoroughly cleansed condition.

DIPHTHERIA AND ITS TREATMENT.*

By ALEX. TAYLOR, M.D., Goderich, Ont.

You see my name is down on the programme to read a paper on "Diphtheria and its Treatment." I was not aware of it until ten days ago, when I received the notice. Well, gentlemen, I have not had the time, and I am sorry to say I have not the ability, even if the time was much longer, to give you as good a one as I would like to, but will do the best I can from memory. Unfortunately the record I had was burned amongst other papers when they were renovating the house where I had the last cases of diphtheria. Since I started to practice medicine I have had considerable experience in the treatment of diphtheria. I do not think there has been a year but that I have had one or more patients with diphtheria, and unfortunately I have seen whole families wiped out, and as many as four in one family, three and two in others, and was commencing to feel as if I was of very little, if any, use in the treatment of a malignant case of diphtheria; but I am pleased to state that my opinion has changed very much as to its treatment within the last two years, or since the introduction of antitoxin. The first patient in which I saw this treatment used was one in which I was called in consultation with Dr. Hunter. There were two in the family ill with it, and they had the malignant type indeed. The eldest child was lying in a semi-conscious state with rapid and very labored breathing which could be heard in any part of the house—the larynx was not affected. When the child opened his mouth there was no difficulty in seeing the membrane, for the pharynx, the tonsils, uvula, the soft and a considerable portion of the hard palate were covered with it; the pulse was fast and weak. It was difficult to get the little patient to take even water, let alone food, stimulants or medicine. I gave a very unfavorable prognosis, and as I knew there was some antitoxin in town I advised its administration. As neither Dr. Hunter nor myself ever thought of the child recovering under the old treatment, we decided to give him the full maximum dose of the antitoxin, which we did about two o'clock at night, again at nine in the morning, and when we saw him again about two in the afternoon the child was not only holding his own, but we thought if anything slightly better. At six in the evening, although the change was very slight, still we thought if there was any change it was for the better, and after giving another injection we advised them to continue the old treatment and stimulants. Upon our return on the following morning there was a decided improvement in all the symptoms, the membrane became spongy looking and the edges commenced to roll up and separate from the mucous membrane. We gave him another injection. Neither of us having any experience in the antitoxin treatment, we decided to give him another dose. From this on the little patient continued to improve steadily until he got quite well. Some months after, his little sister, a child about five years old, was nearly as bad; the diphtheritic membrane was fully as extensive, except that it did not extend down the palate as far, and the antitoxin was given much earlier in the disease, and she made a quicker and better recovery.

* Read at meeting of the County of Huron Medical Society.

The next patient that I had worth reporting was in a family some miles out in the country. I was sent for in the evening of one day, but the roads were so badly drifted with snow that I could not possibly reach him until the afternoon of the next. When I arrived I found that he had been ill for five days. There were ten in the family. The weather was so stormy that it was impossible to isolate them except keeping the well ones as far away from the sick as we possibly could. The tonsils, uvula and palate were covered with the membrane. He was delirious, could not get him to take any medicine except the antitoxin hypodermatically. In a short time four others contracted the disease, and as I was attending daily I gave them the antitoxin soon after they contracted the disease, and they recovered rapidly. For some cause I did not visit the family for three days, and on my return I found the eldest daughter, about sixteen years old, as bad as either of the first two cases reported, or her father who had been ill for five days before I saw him. I gave her a full dose of the antitoxin, and a second one in the evening, and continued the same until the third day, when there were marked symptoms of improvement. The other treatment that I used in all the cases was a mixture of iron and chlorate of potash, stimulants, and as much nourishing food as I could get them to take. I also sprayed the parts alternately with bichloride and peroxide of hydrogen. Some of you may ask why I did not give it as a preventive. Well, one reason was that I had only one bottle of the antitoxin, and the weather was so stormy that I did not know when I could get a fresh supply; the other was that it was a remedy that I had very little experience with, and that I had read of two sudden deaths immediately after its administration.

Drs. Seibert and Schwyzer, after a number of experiments, claim that antitoxin, even if administered in large quantities, would not cause sudden death, neither would the carbolic acid which is used in small quantities to preserve it, but they think that small quantities of air getting into the circuation might cause sudden death. I do not claim that antitoxin is a specific in all cases of diphtheria, but I do believe that it is the most useful remedy we have at present. I have no doubt but that a number of failures were caused by the quality of the antitoxin. It is a new remedy, and I do not know of any means by which we can tell when it is a proper strength or quality. Fortunately, the larynx was not affected in any of my patients, but if it acts there similar to what it does in the throat, I think the physician should always be prepared to either intubate or perform tracheotomy, for when the membrane commences to separate it becomes spongy and so much larger that I can easily understand how it might choke the little patient. What I want particularly to draw your attention to is the necessity of administering the antitoxin early in the disease. Not only is the death rate very much diminished according to statistics, but the recoveries are shorter and more satisfactory in every way as far as my experience goes. In all in which its administration was delayed the recoveries were prolonged, and some had the sequelæ of the disease. I am only referring to the malignant cases, and some of you may say that they were not so bad to commence with, but I truly believe that all the members of the last family would have been equally bad if it had not been administered early in the disease. I believe that the antitoxin should be kept in the country. It is too far to send to Toronto for it, and I move that this Association appoint a committee to wait on the members of the County Council at its next meeting to induce them to keep it in Clinton or some other central place in the county.

British Medical Association Column.

MONTREAL MEETING.

While the local branch has been busy organizing the meeting in Montreal, it would seem that the authorities of the British Medical Association in London have also been very active. We learn that they have addressed circulars and forms of application for membership to every practitioner in Canada, inviting membership of the nearest local branch. If there are any who have not received this prospectus, the local branches, at Montreal, 2,204 St. Catherine Street; at Toronto, Dr. W. B. Thistle, McCaul Street; at Halifax, Dr. G. C. Jones, 136 Hollis Street; at Victoria, B.C., Dr. G. L. Milne; and at Ottawa, Dr. C. P. Dewar, will be glad to forward all information and forms of application.

The branch of the Association at Ottawa was established on the 15th ult., and we heartily congratulate our confreres for the enthusiasm they displayed in thus uniting together. Dr. Roddick, president-elect, was present and addressed about forty out of fifty practitioners in the city, and of these over thirty applied for membership. Dr. C. R. Church was elected President; Dr. L. C. Prevost, Vice-President; Dr. W. C. Cousens, Hon. Treasurer; Dr. C. P. Dewar, Hon. Secretary; and the Council of five includes the well-known names of Sir James Grant, H. P. Wright, W. R. Bell, A. J. Horsey and P. A. MacDougall.

At the annual meeting of the Montreal branch, thirty-one new members were added, and in the short time that has elapsed since then, close upon forty further applications have been received by the Secretaries in Montreal.

We may again point out that members may be transferred from the Montreal and other local branches to other branches which may be formed in their neighborhood during the ensuing few months. It is in all respects advisable that members belong to the branch in their immediate neighborhood. By a resolution passed at the last meeting of the Montreal branch, it was determined that the subscription, including the delivery of the *Journal*, should be reduced to $5 25 for all members living outside Montreal and suburbs.

The *British Medical Journal* of December 5th may almost be called a Canadian number. It contains a very full article upon Montreal, its medical institutions, ways of reaching Canada, and the proposed excursions, as well as papers by Dr. G. E. Armstrong, Dr. Wyatt Johnston and Dr. McTaggart, Dr. C. F. Martin and Dr. G. H. Mathewson. We learn that the authorities in London were anxious to make this an even more distinctly Canadian number, and that articles were invited from leaders of the profession outside Montreal, but that the time given for preparation was altogether too short.

The Toronto branch of the Association was established during the past month with Dr. I. H. Cameron as President; Dr. W. J. Wilson, Vice-President; Dr. Machell, Hon. Treasurer; Dr. W. B. Thistle, Hon. Secretary; and with the following members of Council: Drs. Allen Baines, John Caven, Chas. Sheard, A. McPhedran and R. A. Reeve. Drs. Wilson, Baines and Caven are Presidents of the Medical, Clinical and Pathological Societies of Toronto, respectively. With so active and influential a list of officers, it is evident that Toronto is joining most cordially in the attempt to make the meeting a success.

That the Montreal City Council is most anxious to render help is evidenced by the fact that $3,000, to this end, has been inserted among the items of the loan for which the city seeks authorization from the Quebec Government.

Among the local entertainments to be given to the members of the Association and its guests at the meetwill be the excursion to Ste. Agathe and Monte Tremblante in the lovely country fifty miles north of Montreal; an afternoon excursion down the river in one of the finest boats of the Richelieu and Ontario Navigation Company; a similar excursion to Ste. Anne and down the Lachine rapids, and an entertainment upon the mountain. These will be given by the local branch. It is as yet too early to make any statement with regard to private acts of hospitality.

The museum, devoted to the exhibition of foods, apparatus, medical preparations, books, and everything of special interest to physicians, promises to be an important feature of the meeting. The Museum Committee are authorized to spend $1,000 in fitting up and arranging the Victoria skating rink, the largest and most convenient building which could be obtained for this purpose, and the exhibition will be made attractive to the general public as well as to the profession.

Already leading manufacturers of medical specialties, both in England and in the States, are making active enquiries about the museum, which promises to assume an international character, the leading firms in England and France desiring to introduce their goods into America; the American firms being anxious to familiarize the visiting members of the Association with the qualities of American products, there will thus be much competition shown and the exhibition promises to be a remarkable one.

CREMATION. — It is proposed to establish a crematory in connection with the Mount Royal Cemetery in Montreal, but the measure has not yet been decided upon by the directors, and vigorous opposition to it is expected from the conservative members of the board.

Special Selections.

THERAPY OF VERATRUM VIRIDE.*

By JOHN M. BATTEN, M.D., Pittsburgh, Pa.

Veratrum viride slows the heart's action and makes it more feeble. It was first used by Magendie and Andral in physiological experiments in 1821. Meisner first discovered it in the seeds of veratrum sabadilla in 1818. Bardsley first used it in rheumatism and dropsy in 1826. The curative effect of veratrum viride lies in its influence on the heart to retard its action in acute inflammatory diseases wherein the pulsation is very much accelerated. I have been able to produce the physiological effects of the drug in cases of inflammatory diseases with a dose of Norwood's tincture not larger than three drops every three hours. By this dose I have been enabled to reduce the pulse beat twenty or thirty in a minute, especially when the high pulse rate has been caused by inflammation. In inflammatory rheumatism I have had good results with this drug by keeping the pulse at or near normal until convalescence began. In the early stages of measles, scarlet fever, and in some cases of smallpox, it acts favorably in governing the heart's action. In typhoid fever where the heart's action is irregular, I have thought that this drug in one drop doses aided in steadying it. For this purpose I have in the treatment of typhoid fever continued the drug in one drop doses till convalescence set in. In all acute inflammatory diseases of the chest it is an excellent remedy; in acute pneumonia, pleuropneumonia and pleurisy. If in acute pneumonia the pulse can be kept at or near normal by this drug in the

* Read before the Pennsylvania State Medical Society, 1895.

stage of congestion, we may often be able to jugulate it or prevent it from entering upon the hepatized stage. Even in a sthenic case in the second stage veratrum viride acts well. The heart's action is lessened without loss of blood as in venesection.

"Should we Bleed or not Bleed in Acute Pneumonia?" was the title of a paper read by a gentleman before the American Medical Association at its session held in Milwaukee, Wis., in 1893. In the discussions of the paper opinions were diverse. One gentleman advocated veratrum viride in the treatment of acute pneumonia. He had such entire confidence in the treatment of the disease with this drug by keeping the pulse at or near normal, that he made the bold assertion that all cases could be jugulated, or cut short, by this mode of treatment.

February, 27th, 1896, I attended William McC., male, aged forty-six. The disease (pneumonia) was about entering the second stage, both lungs were involved. The pulse was 82, temperature 102 degrees, respiration 32. The expectoration bloody mucus. I prescribed veratrum viride, three drops every three hours. February 28th, expectoration rusty, mixed with blood, temperature 101.5 degrees, respiration 30, pulse 80. I prescribed in addition to veratrum viride, gr. 1-40 of nitrate of strychnia every eight hours. February 29th, temperature 99 degrees, respiration 28, pulse 79. Sputa less rusty. March 1st, pulse 78, temperature, 99.5 degrees, expectoration rusty. After this, during the course of disease, etc., neither the pulse nor temperature rose above normal. On March 5th the rusty sputa disappeared. On the 16th patient was sitting up in bed, and made rapid convalescence.

In the same house, on March 12th, I attended a male aged sixty-six, entering the second stage of typhoid pneumonia; both lungs were involved. Tongue thickly covered with a brown coat, red around the border; delirious; temperature 103 degrees, respiration 30, pulse 109; rusty sputa. I treated him in the same manner as the former patient till the evening of March 15th, when he had an attack of heart failure. I withdrew the veratrum viride and substituted whiskey, continuing the strychnia. From this time, during the course of the disease, the pulse did not rise above 90. The respirations for four days after that of my first visit were 36, 35, 35 and 38 respectively, then receded gradually. March 20th it was 30, and in a few days down to 19. The pulse became gradually slower, and March 22nd it was below normal. The patient had convalesced April 6th.

The heart failure of the second case was caused by the cumulative effect of the veratrum viride. It is my opinion that the failure of the heart acted favorably on the course of the disease, as the turning point seemed to be established at this time. In both of the cases I enveloped the chest in oil silk jackets.—*Journal of the American Medical Association.*

A SUMMARY OF DR. WALDEMAR HAFFKINE'S WORK AGAINST CHOLERA.

The following sketch of the life of the distinguished cholera expert has been compiled by Mr. Ernest Hart, editor of the *British Medical Journal*:

Waldemar Mordecai Wolff Haffkine comes of a respectable Jewish family, and was born at Odessa, in South Russia, on March 15th, 1860. At the age of twelve he entered the Gymnase of Berdiansk, and from the very first the bent of his mind was in the direction of science, and rested on a firm foundation of fact that could be tested by direct experiment. This determined Haffkine's career. In 1879 he entered the University of New Russia, which has its

local habitation at Odessa, as a student in the Faculty of Science. In 1883 he took his degree of Doctor of Science. The path of academic glory was, however, closed to him on account of his Jewish birth. But although he could not hope for a professor's chair he remained in the university for five years working in a laboratory fitted up for his special use in connection with the Zoological Museum of the University of Odessa. Haffkine fully justified the liberality of his patrons by the truthfulness of his work. He grappled with difficult problems of the fundamental phenomena of organic life, and he opened up new and highly promising lines of original research.

At the beginning of 1888 Haffkine was appointed assistant to Dr. Schiff, professor of physiology in the University of Geneva, and about the middle of 1889 he found his true sphere of work in the Pasteur Institute of Paris. In 1891 he had so far progressed that when Prince Damrouy, brother of the King of Siam, called on M. Pasteur and asked him to supply a remedy for cholera, the illustrious scientist turned to Haffkine for aid. A few month's later Haffkine's first paper on the subject was given to the world.

In 1892 M. Pasteur applied to the Russian Government for leave to test the method in the dominions of the Czar, where cholera was then raging, but the request was not acceded to. M. Pasteur next asked permission of the King of Siam, where no year passes without the whole country being invaded with the disease. In the meantime, however, Lord Dufferin, the British Ambassador in Paris, had suggested that the place where the experiment could best be tried was the so-called endemic area of Bengal. Lord Dufferin, who during his brilliant career as Viceroy of India had always shown himself alive to the importance of what Carlyle called "the condition of the people question," took the liveliest interest in the matter, and urged it on the attention of the Secretary of State for India. At the same time the Russian Ambassador to France and others recommended Haffkine to the British Government. He began his operations in India in April, 1893, and continued vaccinating all sorts and conditions of men and women till the end of July, 1895, a period of twenty-nine months. During that time he vaccinated 294 British officers, 3,206 British soldiers, 6,629 native soldiers, 869 European civilians, and 125 Eurasians. The vaccinations were not in any way forced upon the people; no official pressure was brought to bear upon them; only those were inoculated who expressed a wish to be so. Mr. Haffkine's work was greatly facilitated by the fact that the principle of protective inoculation against infectious disease is claimed by the natives of India as a discovery of their own. At Calcutta, up to July 15th, 1895, Mr. Haffkine vaccinated 4,397 persons. Opportunities for comparing the liability of cholera of vaccinated as compared with unvaccinated persons, living under precisely similar conditions, presented themselves in thirty-six houses. In these thirty-six the total number of inmates was 521; of this number 181 were vaccinated and 340 were not. Among the non-vaccinated persons there were altogether 45 cases of cholera, of which 39 ended in death; among the vaccinated there were only 4 cases, all fatal. These figures show that the non-vaccinated persons were, roughly speaking, six times more liable to death than the vaccinated. In these cases no allowance has been made for the time that has elapsed since the vaccination. It is found, however, that the full protective power of the vaccination does not manifest itself until about a week after the material has been introduced into the system. If the figures are corrected in accordance with the fact, it is found that vaccinated persons are twenty times

safer from attack and eighteen times securer from death than the unvaccinated. One instance which particularly struck Dr. W. J. Simpson, the distinguished health officer of Calcutta, was the following: About the end of March, 1894, two cases of cholera and two cases of choleric diarrhœa occurred in Kantan Bagan Bustee, in a population grouped around two tanks. This outbreak led to the vaccination of 116 out of 200 persons in the Bustee. After the performance of the vaccinations nine cases of cholera, of which seven were fatal, and one of choleric diarrhœa, occurred in the Bustee. All these cases occurred among the unvaccinated portion of the inhabitants, which formed the minority in the Bustee; only one of the vaccinated was affected. Then, take the case of Gaya jail. M. Haffkine was invited to go there in 1894, and at a time when cholera had already broken out; six cases, five of them fatal, had occurred. During the epidemic, which lasted a fortnight after his arrival, there were on an average of 409 prisoners in the jail; of this number 207 were vaccinated and 202 were not. Among the latter there were twenty cases of cholera with ten deaths; among the former there were eight, with five deaths. Here again making the proper correction for lapse of time after the vaccinations, we find that during the last six days of the outbreak there were eight cases, with two deaths among the non-vaccinated, and not a single case among the vaccinated.

Enough has been said to show that there is already good evidence that Haffkine's vaccinations afford a very distinct measure of protection against cholera. More than this, it would not be wise to say at present. Haffkine himself, with that admirable reserve of judgment which is characteristic of the Pasteur school of investigation, does not claim that the efficacy of the method has been fully proved. In the opinion of Professor Koch, however, the demonstration is already complete, and Dr Simpson is almost equally convinced. One thing may certainly be taken as fully proved, and that is the absolute harmlessness of the vaccinations.

DIPHTHERIA ANTITOXIN.

The report of the committee appointed by the American Pediatric Association, to collect and arrange statistics on the use of the serum, contains an account of over six hundred cases from the private practice of physicians, showing treatment of 3,628 cases. Some of these cases were not included in the report, for the reason that the diagnosis might be regarded as doubtful. In about two-thirds of the whole number of cases the diagnosis was confirmed by culture tests. The object was to restrict the report to undoubted cases of diphtheria. The result was that there were left for analysis 3,384 cases, which had occurred in the practice of 613 physicians, in 114 cities and towns, and fifteen different States of the Union, the District of Columbia and the Dominion of Canada. It was the general opinion of those who furnished reports that the cases were, to say the least, of average severity. In 1,256 cases the larynx was affected, either alone or with other parts. In addition to the cases furnished by the correspondents, the committee had also placed at its disposal the facts relative to 942 cases, treated by the New York Health Board in their tenement homes, and 1,468 cases treated in their homes by the Health Board of Chicago. The total number of cases is thus swollen to 5,794 cases. Of this number, including every case returned, 713 died, equal to a mortality of 12.3 per cent. As, however, 218 patients were moribund at the time of injection, or died within twenty-four hours after the first injection, the percentage of deaths in the cases where the serum might be

said to have a chance is reduced to 8.8 per cent. The earlier in the course of the disease the injections were made the lower was the proportion of deaths. In those injected in the first three days the mortality was 7.3 per cent., and if from these we deduct those which were practically moribund at the time of injection the mortality was only 4.8 per cent. After the third day the mortality rises rapidly and does not differ materially from ordinary diphtheria statistics. Nevertheless, in certain cases striking improvement is said to have taken place even when the serum was injected as late as the fifth or sixth day.

As regards the age of patients, the highest mortality occurred before the second year. After that age there was a steady decline in mortality up to adult life. Contrary to what has been asserted by some observers, evident improvement was seen in adult cases treated by the serum. Of 359 patients, over fifteen years of age, but thirteen died. Four of these were moribund at the time of injection; two, both sixty years old, suffered from preceding organic disease, one of the heart and the other of the kidneys. Others were injected late. Omitting the moribund cases the mortality of 355 adult cases, treated with the serum, was 2.5 per cent. It does not appear that the serum has a notable power of preventing the development of diphtheritic paralysis unless it be used early in the disease. Even then, in severe cases, nerve cells and fibres may be so greatly damaged that paralysis will follow.

The most decided evidence of the value of this method was observed in laryngeal diphtheria. Every one knows the danger of this localization where mechanical obstruction to respiration is superadded to the depression produced by a specific intoxication. The number of laryngeal cases reported was 1,256, and yet of these, 563 recovered without operation. Of 565 operative cases, sixty-six were either moribund at the time, or died within twenty-four hours after injection; if these be deducted, the mortality of those operated upon by intubation or tracheotomy is 16.9 per cent. The best result in operative cases, prior to the introduction of the serum treatment, was a mortality of 51.6 per cent.

After the report had been read and accepted, the society agreed that for a child over two years old the dosage of antitoxin should be in all laryngeal cases with stenosis, and in all other severe cases 1,500 to 2,000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement; a third dose after a similar interval if necessary. For severe cases in children under two years, and for mild cases over that age, the initial dose should be 1,000 units, to be repeated as above if necessary; a second dose is not usually required. The dosage should always be estimated in antitoxin units, and not the amount of serum. Antitoxin should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given unless the progress of the case is favorable and satisfactory.

From the reports obtained, it appears that in the great majority of cases but one injection was made. In very severe cases two and three were given.—*The Medical Bulletin.*

THE SURGEONS' COMPANY IN 1796.

So many jubilees and centenaries have been celebrated this year that most people appear to have lost sight of the important events which were happening to the Corporation of Surgeons a hundred years ago. The surgeons left the barbers in 1745, and with the assistance of John Ranby,

the kings' sergeant-surgeon, were incorporated as "The Masters, Governors, and Commonalty of the Art and Science of Surgery," a body which was known familiarly as the Surgeons' Company. The company led a struggling and inglorious existence for half a century, and then died by accident. The circumstauces attending its dissolution are thus described by Mr. South: "On July 7th, 1796, Mr. Cline, junior, Surgeon to St. Thomas's Hospital, was elected a member of the Court of Assistants of the Surgeons' Company in place of William Walker, who had died whilst one of the two governors or wardens of the corporation. This election was a very remarkable one, as the meeting of the court at which it was made put an end to the legal existence of the Corporation of Surgeons. This originated from the following circumstances. By the Act of Incorporation, 18 George II., the Court of Assistants of the Company was to consist of a Master or Chief Governor and two Governors or Wardens, with other members, of whom it was enacted that the Master and one Governor, together with one or two ordinary members, should form a Court for the despatch of business. It happened that William Walker, one of the Governors, died in May of this year (1796), the other Governor, John Wyatt, was lying blind and paralytic in Warwickshire, and though his son was sent down at great expense to bring him up to town, he was so ill that it was impossible to move him. Therefore, when the Court met there was only the Master, William Cooper, and some of the members of the assistancy present, but not *one* of the Governors or Wardens, as ordained by the Act, consequently the meeting was not a court legally. The persons present, however, determined on proceeding to business, and, as just mentioned, they elected Mr. Cline into the Court. They soon found that they had got into a very serious scrape, and, on laying the case before the counsel, there was no doubt that their corporation was destroyed by the illegal construction of the last Court."

A bill was therefore brought into Parliament to legalize these Acts of the Corporation and to give the Corporation greater power over the profession. Violent opposition was offered by those who, like old Army and Navy surgeons, were practising without the diploma of the Company, as well as by those who, like Saumarez, saw but too clearly the many points in which the Company had failed in its duty to the profession. It is probable that these opponents would have been overcome, for the bill had passed through the Commons and got into committee in the Lords, where it was lost by the influence of Lord Thurlow, owing, it is believed, to the hatred he bore to Surgeon-General Gunning, who, in reply to that nobleman's observation, "There's no more science in surgery than in butchery," had promptly replied, "Then, my lord, I heartily pray that your lordship may break your leg and have only a butcher to set it."

The loss of the bill exposed the Company to great mortification, and not a few insults. Many of the members of the Company declined to pay their quarterages, and the routine of business came to a standstill, for neither assistants nor examiners could be elected.

The examination of Navy surgeons, which had long been a lucrative branch of the Company's business, was undertaken by "The Sick and Hurt Office," which was not tender to the feelings of the old Company, for "Mr. Lucas informed the Court on October 5th, 1797, that a gentleman who had been examined at a Court of Examiners on September 7th last, and had been passed for a second mate of the third rate, had called upon him and informed him that the day following, on his going to 'The Sick and Hurt Office,' for his qualification, he had been required to

undergo, and had undergone, another long examination in surgery there, and that the Commissioners of that office had certified him to be qualified for a first mate at any rate, and that he had actually gone to sea in that capacity." The Court of the Company continued to meet ut it was not until March 22nd, 1800, that the Royal College of Surgeons in London was established by a charter from George III. The Company was then reinstated in its former position on condition that it resigned its municipal privileges. The titles of Master and Governors—which had been used by the Barber-Surgeons from time immemorial—were still retained, for it was not until February 13th, 1822, when the College received a supplemental charter from George IV., that the chief officers acquired the right to be called the President and Vice-Presidents. The present style of "The Royal College of Surgeons of England" only dates from the Charter of 1843, which established the higher order of members known as the Fellows.—*Brit. Med. Jour.*

THE HOUR OF DEATH.

As this subject has lately been discussed in the press, it may be useful to draw attention to the attempts which have been made by competent observers to compile reliable statistics to throw light on the question. It is very difficult in comparing these statistics to come to any definite conclusions, as the tables have not been prepared with any uniformity. If some understanding were come to beforehand as to the exact form in which such tables should be compiled, it would be well worth while to get a series of observations from different parts of the country, and see how far the curves represented by such tables would coincide. One of the best papers in English is that published by Dr. Finlayson (*Glasgow Medical Journal*, New Series, vi., 171). The statistics used in this paper were put together by Mr. West Watson, the City Chamberlain in Glasgow, and consisted of the 13,000 deaths which occurred in that city during the year 1865. Taking the deaths as a whole, it is found that the greatest number occurred between the hours of 4 and 10 a.m. This agrees roughly with the results of a very elaborate calculation by Dr. C. F. Schneider (*Virchow's Archiv*, xvi., 95) based on 57,000 deaths in Berlin. Dr. Finlayson's curve reaches its highest point between the hours of 5 and 6 a.m., and Dr. Schneider gives his greatest mortality as occurring between 4 and 7 a.m. This is again corroborated by Berens (*Philadelphia Medical Times*, v., p. 420), who found that in 1,000 deaths in Philadelphia the most fatal hour was from 6 to 7 a.m. It is interesting to compare the conclusions of Dr. Finlayson and Dr. Schneider in the following table:

Proportion of Deaths per 1,000.

	Watson (Finlayson).	Schneider.
Deaths.....	13,854	57,984
A.M., 12—4	159	169
" 4—8	180	191
" 8—12	174	169
P.M., 12—4	162	152
" 4—8	166	163
" 8—12	159	157

The figures of both Dr. Finlayson and Dr. Schneider show a peculiarity as regards the hours 11 and 12 p.m., and 12 midnight to 1 a.m. In Glasgow the deaths between 12 and 1 were 474, and in the previous hour, 11 to 12 p.m., 611. The Berlin figures for the same periods are 1,867 and 2,629. Dr Finlayson thinks that this incongruity is accounted for by the fact "that the public might incline to to put cases occurring at this doubtful time within the day on which they had been watching for the fatal event." It is quite obvious that, taking all the circumstances into consideration, very little reliance can be placed on the returns as to the exact

hour of death. The same incongruity appears from a series of deaths at the Glasgow Town Hospital, but, curiously enough, the balance is on the opposite side. Dr. Finlayson's explanation for this is "that the officials at a workhouse might be supposed to prefer to return such ambiguous cases for the fresh day on which, as night nurses, they were entering." This difference between hospital statistics and those of deaths in private houses is borne out by some figures of Dr. Steele (*Journal of Statistical Society*, 1861, p. 395), in an article on patients treated at Guy's Hospital, 1854-61. There he shows that between 11.30 and 12.30 there were 58 deaths, and between 12.30 and 1.30 111 deaths. It is pretty plain that these discrepancies are due to some extraneous cause, and that they would be rectified by a uniform system of registration. In any future attempts to investigate this subject it will be necessary carefully to consider the source of the statistics. Experience shows that the hours of death in acute diseases differ considerably from those in chronic diseases, and it would be misleading to treat these two sets of cases as though there were no difference between them.—*Brit. Med. Jour.*

RADIOGRAPHY AND THE HEART.

Dr. Bezley Thorne writes to us: The reinforcement which radiography has brought to the resources of surgery, has naturally prompted the inquiry whether the new art may not lend itself in an equal degree to the service of medicine. I will not attempt to offer a reply to the general question, but I venture to say that, unless the new process should undergo a very remarkable evolution, expectation with regard to observation of the heart should not be pitched very high.

In the first place, whether the rays approach the heart from before or behind, they encounter in the spinal column an impenetrable obstacle, which conceals some of the parts which are of the greatest interest and clinical importance to the physician. Then it has to be borne in mind that, in different parts of the organ they meet with tissues differing from each other in density. Thus the double ventricular walls present a mass of material and effectual density, while those of the auricles, and especially those of the left, where they appear in the upper profile of the heart, may, in some cases, be so easily penetrated as to impose no definite image on the receptive plate. Such was found to be the case in an adipose subject of great chest girth, with the result that the left auricular appendix was altogether omitted from the contour of the heart. That particular difficulty is one which may possibly be overcome by practice and experience; but there remains at least one other which nothing short of instantaneous radiography can overcome, namely, that arising from the movements of the heart itself. It is inevitable that they should impart to the margin of the image a nebulous character which is incompatible with accurate observation. The unrest of the heart may, however, not be the only cause of the indefinite outline.

In two cases which I recently had the advantage of observing in conjunction with Mr. Harris, M.R.C.S., L.R.C.P., of Cranbrook, in the laboratory of Mr. Wilson Noble, the area of dulness was defined with all possible care and precaution before and after an exposure of thirty minutes. During that interval the long axis of the heart had been reduced in one case by about an inch and a half, and in another by about two inches, while in both cases there was evidently a consistent concentric shrinkage of the entire contour. It remains to be ascertained whether such a change is of constant occurrence; whether it is

the result of some physiologicol influence with which the rays are endowed, and whether such influence, should its reality be established, is of a therapeutic or of an injurious character. However that might be, such shrinkage would oppose an additional obstacle to accurate observation; and if, in addition, the differences of actual size and of relative position which are liable to arise through the influence of parallax are taken into consideration, it would appear that the diagnostic value of the X rays in affectations of the heart is not likely to be considerable.

It remains, nevertheless, to be said that the results of radiography support the contention of those who believe that the reduction of percussion areas observed to follow recourse to the now well-known Schott methods bears a definite relation to the shrinkage of a dilated heart. Nebulous though the outline of the image may be, diminution of axis and recession of contour are so obvious that they cannot be mistaken for incidental errors. On the other hand, the lack of a definite outline and the errors which are liable to arise through the influence of parallax, forbid the attempt to make any accurate measurement of the changes. It would therefore appear that, as regards the heart, radiography is likely to yield results of academic interest rather than of clinical value.—*Brit. Med. Jour.*

ULCERATIVE ENDOCARDITIS SUCCESSFULLY TREATED BY ANTISTREPTOCOCCIC SERUM.

The serum-treatment of disease is being constantly extended and with steadily increasing confidence in its efficacy.

Dr. Sainsbury, at the Royal Free Hospital, London, had the case of a lad, aged thirteen years, who had both renal and cardiac disease with febrile and other symptoms confirmatory of the diagnosis of malignant endocarditis. A treatment by injection of an antistreptococcic serum, beginning with a dose of 20 c.c., and continuing at half that dose, 70 c.c. in all being administered, was adopted. The disease, in the opinion of Dr. Sainsbury, as reported in the *Lancet*, London, October 17th, responded so promptly and satisfactorily to the serum-treatment that no apology is needed for recording it. Before the injections were commenced the patient had lapsed into a condition of marked cachexia; within two or three days the improvement in the aspect and bearing of the boy was unmistakable—he was clearer-looking, brighter, and the desquamating skin cleaned rapidly. Neither local reaction at the site of the puncture, nor any general reaction was observed except on September 1st, the time of the last injection, when the sudden rise in temperature, the general appearance of illness, and the pain at the site of the injection, followed so speedily upon the treatment, that there seemed no other explanation for the symptoms than the dose of serum. The boy, however, soon rallied, and then, curiously, took a fresh start; his temperature for the first time became normal, and his advance was then so rapid and uninterrupted that there was no excuse for another injection. Thus all the injections were markedly effective, but most so this last injection, which produced definite local and general symptoms. Was this reaction an unnecessary concomitant—the result of a by-product, or was it to be regarded as of the nature of a curative reaction?

In a recent case of ulcerative endocarditis at the Victoria Park Hospital for Chest Diseases, the antistreptococcic serum failed to arrest the disease, and seemed to have no beneficial effects; in this case, however,

there was, in addition to the endocarditis, grave kidney-disease with cortical destruction, which may account for the failure; the disease was, moreover, in a more advanced stage, and of more virulent type.

INFECTIOUS DISEASE AND SHELLFISH.

Conclusions from Special Report to the *British Medical Journal*, by G. E. CARTWRIGHT WOOD.

From the experiments recorded in this report it must be accepted that the disease germs(cholera and typhoid fever bacilli) with which we have here to deal can probably exist in sea water for at least two months, and that these would possibly, or even probably, still remain more or less virulent and infective in their character. The laboratory experiments carried out with infected oysters have shown that the cholera germs do not disappear rapidly, as stated by Giaxa, and we have every reason to believe from comparative experiments that other pathogenic microbes would persist in a similar fashion. Although these results, as already stated, are not directly applicable in a quantitive sense to what may occur in the oyster beds, yet they indicate sufficiently clearly in a general way what we hold to take place in the oyster beds. We are accordingly forced to conclude that the contamination of sea water in the neighborhood of oyster beds may undoubtedly lead to the molluscs becoming infected with pathogenic organisms. The nature of the risk incurred by those who partake of such oysters is accordingly obvious; the degree of risk, however, we cannot pretend to estimate. The probability of the oysters becoming infected would vary no doubt from time to time in the same locality, as has been pointed out by Professor Conn, who states in his report on a typhoid epidemic traced to oysters, quoted at the earlier part of this report, "that it would only be an exceptional condition that would produce the result." It is, however, unnecessary to consider further those conditions in special cases which probably would be requisite to favor contamination, as we could never rely upon the absence of that fortuitous concourse of circumstances not taking place at certain periods. The only principle which can be applied with safety to this question is to judge the sea water as we would a drinking water, and condemn all oysters which originate from beds subject to more or less recent contamination.

It is, however, obviously impossible to leave the public themselves to judge as to whether the oysters in question have originated from a desirable or undesirable locality, since it would be usually quite impossible for them to ascertain their true origin. It must also be pointed out that on this question we cannot rely to the same extent upon the local authorities endeavoring to improve the hygienic condition of their oyster beds as they would in the case of other insanitary conditions which affected their own inhabitants. As a rule, very few of the oysters are consumed in the locality in which they are reared, so that the results of any contamination are not felt locally; but the oysters being distributed through the general market may give rise to numerous foci of infective disease whose origin cannot be traced, but which may determine local epidemics. As these oyster beds are usually an important source of revenue for the locality, there would be the strongest opposition to their being given up should they prove insanitary, while the diversion of the sewage elsewhere, which would be necessary to render them free from danger, would, also on the ground of expense, be subject to equal opposition. It is evident,

accordingly, that we cannot trust the local authorities in this matter to protect the general public from being supplied with dangerous oysters. On the other hand, it is hardly possible, now that the danger is recognized, for the central authorities to allow oysters which are subject to this risk to be put upon the market and passed off upon the public, who have no means of distinguishing the good from the bad. The only way out of the difficulty would seem to be that the central sanitary authority should permit oysters to be taken only from those places which are free from contamination, and that all others should be closed until the objectionable conditions have been obviated.

THE FEEDING OF YOUNG INFANTS DURING THE FIRST YEAR.

About one-fifth of all deaths in New York city occur before the end of the first year of life. The most frequent cause of this early infantile mortality is due to gastro-intestinal disease. Three-quarters of all deaths from such complaints under two years are met with before the termination of the first year.

Why do we have such an appalling death-rate from one cause alone? Simply because of the ignorance prevalent in regard to the proper method of feeding these young infants. There is really no perfect substitute for mother's milk. It very rarely happens that an infant brought up exclusively on breast-milk dies of disturbances of the digestive tract. It is the effort to add extraneous articles or their complete substitution which gives rise to these troubles.

Immature children are the most difficult to feed. The "couveuse," or "incubator," or "brooder," has done good work in retaining the body-heat of these weaklings. Still they usually succumb from inappropriate nourishment in spite of the most zealous care. These babies have not the power to nurse, and hence the impossibility of putting them to the breast. Recourse must then be had to diluted preparations of cow's milk given through special feeders shaped like medicine droppers.

For children normal at birth but deprived of mother's milk, the first and best substitute will always be the milk of a healthy wet-nurse. For various reasons this is not always practicable, and then we are driven to artificial substitutes. Mixed cow's milk gives us the next best choice. A chemical examination of the mother's milk at the time of bottling the baby will suggest the proper composition of the substituted milk. Or a study of the average composition of milk at the various nursing periods in large numbers of nursing women will give a fairly reliable standard for all practicable purposes. These ends are now achieved in New York and Boston by the establishment of the Gordon-Walker laboratories, devised and sustained by their able projector, Dr. Rotch, of Boston. The chief objection to milk thus prepared—so-called "modified milk,"—is the cost, which makes it unapproachable to the largest proportion of cases which occur amongst the poor.

We must then, as a rule, fall back upon good cow's milk, boiled in winter or sterilized in summer, and diluted according to the age of the child with the different cereals—oatmeal, rice or barley-water. These latter are given according as the bowels tend respectively toward constipation or diarrhœa. At the age of seven or eight months soups or meat-juice may be added. Cornstarch in milk, or a soft boiled egg, makes a pleasant semi-solid food for such children. A zwieback or crust of white bread may be put in the baby's hand about this time.

Although the process of dentition is actively going on at this period, it must be remembered that seldom

does it cause disturbances. It is always a good rule to first examine into the baby's dietary before examining the gums.

In times of emergency, when the milk supply to a large city is cut off —as during severe snow-blockades in winter—condensed milk will be of service. The degree of condensation varying among the different specimens, and the proportions of sugar being unstable, it will be well, as a rule, to rather select freshly obtained cow's milk.

The artificial foods rank last on the list of desirable foods for such young infants. No two preparations are exactly alike. The addition of foreign substances, such as malt, etc., deviates from the natural mother's milk, and the fact that these foods are often kept for long periods in the shops does not free them from the suspicion of having begun to undergo chemical decomposition at the time they are prepared for the baby's stomach.—*American Therapist.*

RENIPUNCTURE IN THE TREATMENT OF ALBUMINURIA.

Mr. Reginald Harrison in the London *Lancet*, October 17, is reported as having addressed the London Medical Society on the above subject. He said that certain cases of albuminuria had come under his notice in which he had performed an operation for the relief of some morbid condition which was supposed to exist, but was not found when the kidney was exposed; the symptoms, however, were relieved and the condition of the urine improved. This had led him to think that in certain cases of albuminuria good might result from puncture of the kidney.

He related three cases in which he had so exposed the kidney: (1) A boy aged eighteen years was suspected of having suppuration around the kidney following scarlet fever. There was lumbar pain, and the urine was albuminous and contained casts. A small lumbar-incision was made and the kidney found to be tense and engorged. An incision was made through the capsule, and there was a full discharge of blood and urine; the wound healed the tenth day. The urine now became abundant, the albumin lessened, and then disappeared altogether, the boy making a good recovery. (2) That of a man aged fifty years who worked underground. He had presented symptoms of renal calculus for some time. Three months after being first seen his urine was constantly albuminous, and he had pain in the right lumbar region. The kidney was exposed, but no stone was found. The condition of the patient improved, the urine became normal, and the patient remained in good health. (3) That of a woman aged forty-four years, who had had hæmaturia for one year and pain on pressure over the left kidney with albuminous urine at times. There was some history of her having passed a calculus at one time. A lumbar incision was made and the kidney was found to be swollen and tense. This was incised and free drainage of urine and blood ensued. The woman recovered, the urine becoming normal. The first of these cases he considered to be scarlatinal nephritis, the second to be due to cold, and the third a subacute attack following influenza. He then referred to two cases of movable kidney (published by Dr. Newman of Glasgow, in the *Medical Week*, Jan. 6, 1896, p. 29) in which the albumin and casts which were present before the operation disappeared entirely after the kidney was fixed, and also to another case under the care of Dr. Hoeber, of Hamburg, in which relief had followed incision into the right kidney. Having referred to the views of Sir Thomas Grainger Stewart and Sir Thomas Watson on the consequence of hyperæmia in the

initial stage of nephritis, he pointed out the disastrous effects which increase of tension produced in the eye and other organs, and the relief which resulted from operative interference. The editorial comment on Mr. Harrison's address will be especially interesting to those wide-awake surgeons who allow even a surprise to serve as an experience.

The editor says of the subject that it is a happy instance of the benefit which may be obtained from the careful consideration of unexpected results. Many times have surgeons cut down on the kidney in a patient with severe lumbar pain, albuminuria and other renal symptoms, in the expectation of finding a renal calculus or some other gross lesion, and have been disappointed, and yet when the wound has healed the symptoms of which the patient has complained have completely disappeared. The explanation that was usually given was that some constricting band had been divided, or that the result was due to the effect of the operation on the mind of the patient; but there is much to be said in favor of the view put forward by Mr. Harrison that the result in some cases at least is due to the relief of tension. That increased pressure in the renal veins will lead to albuminuria and to a diminished secretion of urine has long been known. The explanation is less certain, though numerous theories are not wanting; but whatever theory we may adopt to explain the presence of the albumin, or even if we consider none of those advanced to be satisfactory, yet we can not doubt that the venous congestion does give rise somehow to the albuminuria, and in active hyperæmia of the kidney albuminuria is no less certain. In other parts of the body more accessible than the kidney we can diminish congestion, whether arterial or venous in origin, by local blood-letting, so we have good a priori reasons for thinking that it is possible to relieve a congestion of the kidneys by punctures or incisions, and if this were done it can not be doubted that at least in some cases the albumin in the urine would disappear and the amount of urine excreted would increase. So many conditions that used to be considered wholly within the province of the physician have now come under surgical treatment that we can hardly be surprised at a farther advance in the same direction, but no one anticipated that the aid of the surgeon would ever be invoked in acute nephritis and other allied pathologic conditions. The matter is, of course, not yet one on which a decided opinion can be expressed, for the cases are too few, but the unsatisfactory results of the treatment ordinarily pursued in albuminuria and in suppression of urine from nephritis are amply sufficient to justify a method of procedure which promises so much.

ROENTGEN RAYS.

Mr. John Carbutt, at a meeting of the Philadelphia County Medical Society, spoke only on the practical side of radiography. In the use of the plates, a great deal of success lies in the development. The plate on which most of the subjects shown were made is prepared with a fluorescent substance in the emulsion which causes it to absorb X-rays and prevents their passing through the plate. It was early observed in the use of the dry plate in X-ray work that on the ordinary plate the developed image showed almost as soon on the back as on the front. It was at once concluded that the X-rays had such penetrability that a greater part of the rays must be lost. This loss was attributable to the prolonged exposure in the early part of this year, some of the plates being exposed from one to one and one-half hours by Prof. Goodspeed. In the second or third week in February, Mr. Car-

butt took at the Maternity Hospital, for Prof. Magie, of Princeton, a radiograph of a woman's hand, and with one of his most sensitive plates, with an exposure of twenty minutes, got merely a silhouette of the hand without showing bone-formation. He then employed the special or X-rays plate, giving the same exposure, and got full delineation of the bones of the hand. Dr. Goodspeed made an exposure of one the same day in twenty-five minutes and good negatives were secured from that time to the present. Mr. Carbutt said that a good deal of the best work had been done by Prof. Goodspeed, and good results have been obtained in from four to seven seconds. The average time for those who make radiographs is from two to three minues for the hand; thicker parts of the body, the elbow or arm, require from ten to fifteen minutes.

In the use of the Crookes' tube, one has to study the color of the rays that are produced inside the tube. When it has been working for some time, the cathode rays will be greenish-yellow, and these are best for observation with the fluoroscope, but when the rays are of an apple-green color, they give the best photographic effect. The development of a plate made especially for this purpose should be continued from six to twenty minutes, because the film, being of double thickness, requires a longer time for the developer to penetrate. On developing such plates, rarely will any image be visible on the back even after ten minutes in the developer. Mr. Carbutt has placed two of them together, and the upper one yielded a fine negative and the lower had a mere ghost of an image. In experimenting on the penetration of celluloid films, Mr. Carbutt has put eight films together and they have yielded six very good negatives, showing that glass is a greater preventive of the rays passing through. He has under way now experiments with an entirely different sort of soluble haloid, with the hope that a silver haloid can be obtained which will be more sensitive to the X-rays.

Comparing the action of the rays on a plate to that of daylight through the lens, he found that the longer the plate is exposed to the rays, the more dense the result on the margin, which is just the reverse of what takes place with daylight; as, if an over-exposure in the camera takes place, only a thin flat image results, and the exposure may be continued so that a reversal of the image is secured; but with the X-rays, the longer the exposure, the greater the density, the silver haloid being so acted on where the rays have had full action as to give a thicker, heavier deposit so opaque that light cannot pass through it. A radiograph of a rat was exposed fifteen minutes, yet the margin of the background is so dense that it remains white when the image is fully printed, and that without intensification of the negative.

THE SERUM TREATMENT OF SYPHILIS AND CARCINOMA.

The *Deutsche Medizinal-Zeitung* for November 12th contains abstracts of two articles, one of which, by Prof. Tarnowsky, of St. Petersburg, deals with the serum treatment of syphilis alone. It appeared in the *Archiv fur Dermatologie und Syphilis.* Reflecting upon the absence of positive results from employing the normal serum of animals, that of animals inoculated with syphilitic products, or that of persons affected with constitutional syphilis, Tarnowsky thought it most rational to use serum obtained by a process as nearly as possible the same as the one employed in the preparation of antidiphtheritic serum, but the practical difficulty presented itself of finding an animal susceptible to syphilis. However, he thinks he has found such an animal in the foal. Although, on inoculation, the foal does not show any outward signs of

syphilis, changes extraordinarily like those due to that disease are found in different internal organs and in the blood-vessels and the lymphatic glands in the course of two or three months. Accordingly, he has endeavored to syphilize two foals with moist syphilitic papules by implanting them in incisions into the skin, by applying them to a blistered surface, and by injecting an emulsion of them subcutaneously.

After these inoculations had been many times repeated, blood was drawn from the animals and the serum was administered subcutaneously to six patients, usually in doses of from ten to twenty cubic centimetres. In five of the patients the disease was quite recent and had not been treated before; the remaining one had tertiary manifestations. The therapeutic result was nil, even after long persistence in the treatment; the cases followed their course precisely as if no treatment had been practised. Moreover, the injections seemed to have a detrimental effect. Three of the patients lost flesh, their general health grew worse, and they had transitory albuminuria. In four cases an itching erythema appeared, with pains in the muscles and joints, also purpura in two instances. When large doses were used the temperature was decidedly raised.

The other article, by Dr. Ludwik Rekowski, appeared in the *Gazeta lekarska.* It relates to the serum treatment of both syphilis and carcinoma. This author conceived the ingenious idea of subjecting the serum-yielding animal to a course of injections of antisyphilitic or anticarcinomatous drugs, as the case might be —mercury salicylate to generate an antisyphilitic serum and sodium arsenite to render the serum effective against cancer. In the antisyphilitic serum thus produced traces of mercury could be detected by means of chemical tests. It was injected into patients with tertiary syphilis in doses of ten cubic centimetres every third day, and the results are represented as astonishing; as soon as after the third or fourth injection the gummatous lesions began to disappear and soon vanished completely.

Traces of arsenic were found in the anticarcinomatous serum. It was used on two patients with cancer of the face, ten cubic centimetres being injected subcutaneously twice a week for six weeks, and at the end of that time the author was satisfied that the patients' general condition had improved notably. What the ultimate results were is not stated. On the whole, it can hardly be said that these two communications are very encouraging; they both show, however, that no stone is to be left unturned to perfect the serum treatment of disease and to extend the field of its application.—*N. Y. Medical Journal.*

CHANGES IN THE CORD IN PERNICIOUS ANÆMIA.

The *Lancet* for September 19th has the following extract from a paper on the above subject by Dr. K. Petren, of Stockholm, in a recent issue of the *Nordiskt Mediciuskt Arkiv*, from which it would appear that the cord changes are far from uniform in this diseased condition. Petren has examined the cords in nine cases of pernicious anæmia. In two of these cases there was clinic evidence of cord affection. In four of the cases the vessels were found to be affected with hyalin degeneration; in five were found scattered throughout the cord small hæmorrhages or patches of sclerosis which had been caused by hæmorrhages. In two cases in which no spinal symptoms were detected there was chronic degeneration of the posterior columns. In the first of the two cases with spinal symptoms, that of a woman aged thirty-six years, these consisted in impairment of

sensibility, ataxy and paresis of all extremities, especially the lower, loss of knee-jerks and incontinence of urine. Throughout the cord, except in the sacral region, there was degeneration of the posterior columns extending as high up as the medulla. In the cervical and upper part of the dorsal cord there was complete degeneration of Goll's columns; in Burdach's columns there were patches of sclerosis more or less confluent, while in the lumbar region the whole posterior columns were similarly degenerated. The second case was that of a man forty-two years of age, who had been troubled with weakness in the legs three years before. Under treatment this passed off. But two years later the weakness came on again and increased so that the patient was unable to walk, and before death there was evidence of pernicious anæmia and of severe spastic paraplegia in the legs. After death there was found marked degeneration of the posterior columns of the cord, most marked in the upper part and gradually lessening toward the lower end of the cord. The lymph spaces round the vessels also were swollen and filled with granular bodies and detritus. According to Petren there are usually in the cord in the case of pernicious anæmia small hæmorrhages which may lead to some sclerosis without clinic manifestations. The vessels also not uncommonly have thickened walls. In many cases, however, of pernicious anæmia there is a true spinal cord affection which is not to be regarded as merely coincident. From the anatomic view no doubt differences are found in the affection of the spinal cord in different cases, but these differences are to be explained by the manner in which the process develops in different cases. Petren is of the opinion that those cases, as regards the affection of the spinal cord, make up a special group, and that probably a toxic process underlies the affection of the spinal cord as well as of the blood.

THE PHYSICIAN OF THE NEAR FUTURE.

Unwilling to combine in any manner with his fellow-workers for his own protection, giving the best of his early energy to work in institutions which take the very bread from his mouth by treating and caring for those who are not poor, his work competed with on every hand by an ever increasing host of special fads and frauds, what will be the doctor's source of income in the near future unless a change is worked?

A crusade, organized to reclaim the holy shrines in Palestine, incidentally booms the sale of Jerusalem drops and other remedies supposed to originate with the Franciscan friars. The Kneipp curists do not walk long in dewy grass before the discovery is made that Kneipp remedies for all known ills should be placed on sale in every city of the world.

Park commissioners are asked to extend the courtesies of the grass to the early morning sockless perambulator with the sole object of advertising the Kneipp company's wares.

Faith, hope and charity healers, mind, brain and thought curers, hypnotic, hydropathic, magnetic, electric, eclectic, spiritualistic, human and divine workers of miraculous cures increase and flourish. The reputable physician walks to his dispensary class and treats many who should be going to his own or to his brother's office, and will to-morrow run off to "a divine healer" and leave a bank bill on his table in return for the benefit they hope will come from the laying on of hands. There are many things the self-respecting physician cannot fight against, but how some men can put up with the indignities placed upon them by hospital authorities and continue to respect themselves is more than we can explain. —*Medical Record.*

DIABETES MELLITUS.

Dr. R. C. M. Page, in *New York Polyclinic*, says, in summarizing an able article on this subject: "The diagnosis of the disease depends on the finding of sugar in the urine. Polyuria is not present in every case. The rising at night to urinate should always excite suspicion, even if there be no polyuria, as it may result from irritation of the genito-urinary tract. Itching about the vulva in women, especially at the menopause, should always lead to a careful examination of the urine. In the same way balanitis and swelling of the prepuce in men is often due to irritation produced by sugar in the urine. Double sciatica, pains in the calves of the legs, and cramps, with disturbance of vision and muscular weakness, should always excite suspicion.

The prognosis will depend greatly upon the age of the patient. Occurring in a patient under forty-five years old, it is almost sure to be inherited, and hence of the malignant type. Especially is this true in men from twenty to thirty-five. For such cases there is only one outlook, and that is death in about four years, on the average. Sometimes it is deferred longer, and sometimes it occurs within a few weeks. On the other hand, glycosuria among well-to-do elderly people, or women at the menopause, is not only highly amenable to treatment, but many such cases are permanently cured. The occurrence of sugar in the urine, even in slight quantity, must always, however, be regarded as a serious matter. Neglected glycosuria soon becomes malignant diabetes. It is easy, therefore, to see that early recognition of the existence of the disease is an important factor in the prognosis. The occurrence of tubular nephritis, or phthisis, severely complicates the disease, and the appearance of carbuncle, as Brunton truly says, is of evil omen. It is a good sign if the patient perspires freely and is inclined to be corpulent, rather than thin with a harsh, dry skin. The outlook is bad if under strict antidiabetic diet the amount of sugar in the urine is not markedly diminished, and the symptoms in general are not ameliorated.

The treatment may be divided into (1) hygienic, including climate, diet, and exercise; and (2) medicinal, which is chiefly symptomatic.

First, then, regarding the hygiene of diabetic patients. They should be sent to a warm, dry climate, just as in the case of phthisis. Cough, which is often troublesome, and lung complications, so liable to occur, are treated more successfully and guarded against more effectually in such a climate. Moreover, the patient can better take out-of-door exercise, which is the first importance, owing to the muscular debility. The skin can be better made to act vicariously for the sorely tried kidneys. This should be encouraged by daily baths; for keeping the skin in good condition not only aids the kidneys, but lessens the liability to the occurrence of furuncles and carbuncles. The exercise should be varied and moderate—never going to the point of exhausting the patient. Massage is of the first importance. The bowels should be regular and constipation avoided. It is in this way that the Carlsbad water acts so beneficially in diabetic patients—it stimulates the hepatic function and relieves or obviates constipation. The alkalinity of the water also tends to lessen irritation and inflammation of delicate mucous membranes, notably in the kidneys and lungs.

The diet is of the utmost importance. Various lists have been printed by authors; but that of Seegen, first published in 1861, and still used as a guide at Carlsbad, is about as good as any. It is as follows:

I. ALLOWED.

(a) Dishes—Meats of every kind, beef, veal, mutton, game, fowl, brain,

pancreas, calves' feet, calves' head (sour), smoked meat, tongue, ham, sausage, tripe, kidneys, all fish, oysters, clams, snails, caviar, sardines, anchovies, crabs, lobsters, calves' feet jelly, butter, cheese, fat, bacon, eggs in any form.

Soups—Bouillon, beef-tea, egg-soup, turtle and mock-turtle soup.

Vegetables—All green vegetables, e.g., spinach, lettuce, endives, cabbage, sauerkraut, asparagus stalks, cress, artichoke, radishes, string beans, mushrooms, nuts, almonds.

In moderate quantity—cauliflower, asparagus tops, strawberries, currants, sour apples, American compot.

(b) Liquids—water, soda-water, simple acidulous water (gieshubler, apollinaris) tea, coffee, (without sugar or milk), Bordeaux wines, light Austrian, Hungarian and Moselle wines.

In moderate quantity — cream, brandy, whiskey, rum, lemonade and milk of almonds (not sweetened), Pilsner bitter beer.

II. FORBIDDEN.

(a) Dishes—liver, flour of any kind, (bread, rolls, zwieback, in small quantity, according to the physician's instructions), sugar, molasses, honey, potatoes, rice, sago, hominy, beans, beets, peas, tomatoes, carrots, celery, parsnips, chestnuts, and all sweet fruits, whether uncooked or as compot.

(b) Liquids—milk, champagne, beer, cider, sweet-burgundy wines, liqueurs, fruit essences, ice creams, cocoa, chocolate.

There appears to be no good reason why liver should not be used. It is true that it may contain a little sugar, but how much liver would it take, when cooked, to make any appreciable amount of sugar? One author goes so far as to say that oysters may be eaten if their livers be cut out, yet he allows chocolate to be drunk! Tomatoes and onions may be allowed, and cucumbers are certainly not objectionable. Sacharin may be used instead of sugar if tea and coffee must be sweetened, and instead of ordinary wheaten bread, the Watertown or other diabetic flour may be used. They all, however, contain more or less starch. In bad cases aleurinate (vegetable albumin) may be used. It contains an infinitesimal amount of starch and resembles bread. Regarding vegetables in general, it may be said that all green vegetables growing above ground may be used, while all roots and the like that grow under ground are to be avoided on account of the starch or sugar they contain.

As carbohydrates are forbidden, the hydrocarbons may be used instead; hence fats, oils and butter are indicated.

In all cases, however, the tolerance of any given patient for carbohydrates is to be ascertained. After about two months of strict antidiabetic diet, sugar will have entirely disappeared from the urine or been reduced to a minimum. We now begin cautiously to feed the patient on starchy food, gradually increasing until we find the urine voided about two hours after the principal meal (the bladder should be emptied just before such a meal) shows a slight increase of sugar. If there be no increase we allow daily three or four ounces of ordinary wheat flour, or its equivalent, alternating, perhaps, with the special diabetic food. In this way the patient will eat the greatest amount of carbohydrates without increasing the amount of sugar. This point is insisted on since not only will the general condition be improved by a moderate amount of carbohydrates, but it becomes necessary for sustaining life. So far as thirst is concerned, the patient should be allowed to drink freely of pure water. It not only does no harm, but it does great good by diluting the glucose in the blood and tissues. It is, therefore, unnecessary and cruel to deprive diabetics of pure water. Alcohol in moderate quantities does no harm. A little claret and water with meals helps to strengthen the

patient and promotes digestion, but great care should be taken to avoid champagne, liqueurs, sweet wines and cider, and such like.

We now come to medicines. The drug that has most control over diabetes is opium in some form. At Carlsbad codeine is largely used, but it is expensive and I believe morphine is as good. Lawson Tait, Saunby, and others, recommend the watery extract of opium. It is truly a great boon to diabetics, for it promotes sleep and prevents rising in the night to urinate. It allays neuralgic pains which sometimes are excruciating, and in some way not known it does actually lessen the amount of urine excreted in many cases. Further than opium no medicine is worth talking about.

What about alkaline mineral waters? Willis, about 1676, first introduced the use of these waters in diabetes under the supposition that they increased the combustion of sugar in the blood by setting the oxygen free. It is needless to say that this theory has been exploded. The only beneficent action they have is counteracting the irritant action of the glucose, stimulating the hepatic function, and preventing constipation as already stated. For these reasons the Carlsbad waters stand at the head and front of all mineral waters in the treatment of diabetes.

Should diabetic coma be threatened, as evidenced by the premonitory symptoms already described and the presence of diacetic acid in the urine, no time must be lost, but a brisk purgative is to be given. No matter how regular the bowels have appeared to be, one is astonished at the amount of fæcal matter brought away by croton oil, for instance. Diaphoresis may also be tried, but generally the coma comes on so rapidly that the brisk purge is our chief reliance. Should this not succeed in eliminating the poison, the patient usually dies.

Complications are to be treated as they arise. In all cases the patient should forever avoid imprudence in diet and exercise, and especially mental worry, as otherwise the glycosuria will appear or rapidly increase and then it has all to be gone over again.

In conclusion we observe (1) That there is no specific remedy, including mineral waters, for the treatment of diabetes mellitus, but that opium or some of its preparations, notably codeine, can be used to great advantage. (2) That the skin is to be kept in good order by the moderate use of baths and proper clothing. (3) That moderate exercise is to be insisted on to prevent atrophy of the muscles and to promote digestion. (4) A generous allowance of pure water with the addition of such moderate stimulation as the physician may deem proper. (5) The diet should be strictly anti-diabetic with just so much starchy food as the patient will be found to tolerate in any given case, by experiment, the average being about an ounce and a half of American wheat flour or its equivalent in the twenty-four hours.

VACCINE VIRUS IN LIQUID FORM.

Formerly the vaccine virus employed by the health department of New York was the serum which issued from the base of a vaccine pock, dried on quills or ivory points. To determine the most valuable part of a vaccine vesicle, the following experiment was made: A typical vesicle was chosen, and the crust, the underlying pulp and base, and the serum exuding after the former were removed, were collected separately. Each was mixed with glycerine in the proportion of sixty per cent. vaccine matter and forty per cent. glycerine, then thoroughly comminuted in a mortar, and the products were used in the multiple vaccination

of children. The pulp showed by far the best, the crust the next, and the serum the poorest results, as determined by the percentage of successful vaccinations. Other similar experiments confirmed these results, and it was concluded that the largest proportion of the active virus is contained in the pulp. Therefore the virus now issued is in the form of a glycerinated vaccine pulp. Before using the virus derived from an animal, first, the animal from which it was obtained is sent to autopsy and the organs are examined for any evidences of disease; second, two samples of the virus are given, one to the bacteriologist and the other to the medical tester of virus, and no virus is issued unless the reports of the pathologist, bacteriologist and clinical tester are all satisfactory. The clinical test consists in the inoculation of the virus after scarification in three places on each of five children who have never been previously vaccinated. There is thus a case test of five and an insertion test of fifteen points. The results from the new method with this rigid system of tests are shown in the records of the last three months. Since July 1st, 1896, there have been vaccinated in the routine way thirty calves from which virus has been collected and tested as above described. All this virus gave one hundred per cent. case and one hundred per cent. insertion success at the original test, and the same percentages of success at the last re-test made about October 1st, 1896. There can therefore be no doubt that the durability of the virus is assured for at least three months from the date of collection. In all the primary vaccinations made during September and October by the department vaccinators in which the results are known, more than seven hundred in number, there was not a single failure. The virus is a syrupy, opaque, brown emulsion of uniform consistency. It is put up in capillary tubes containing each enough for a single vaccination, and in vials of two sizes, one containing one-fifth of a cubic centimetre for ten vaccinations, and the other containing one cubic centimetre for fifty vaccinations. In using the new virus the skin is scarified in the usual way, and a drop of the liquid virus (discharged from a capillary tube by blowing out the contents with a rubber tube furnished for the purpose) is then thoroughly rubbed into the scarified area with a slip of wood, which accompanies each tube. The new virus, like the other products of the health department laboratories, is furnished free to all public institutions in the city on application. It is also supplied to physicians at a moderate price.

RHUS TOXICODENDRON IN MUSCULAR RHEUMATISM.

Dr. A. L. Benedict, of Buffalo, says in *American Therapist*, after discussing etiology and pathology of this complaint: From its chronicity, morphine and similar narcotics are contra-indicated, the coal tar sedatives are also liable to affect the heart unfavorably, or, if not distinctly contra-indicated, they are nevertheless apt to lose their efficacy after a few repetitions. External applications are objectionable on account of the trouble and the odor which most of them have. In some instances, patients actually complain that even liniments containing belladonna and chloroform increase the pain. Hot applications are good, if used by patients who can keep indoors for a time, but they rather predispose to fresh colds and exacerbations of the myalgia, if used by persons compelled to go into the open air on cold days immediately after the application. When we recall that the persons most liable to myalgia are the very ones thus limited as to leisure and opportunities to avoid exposure, the contra-indication

becomes a practical one. In all these cases, the writer has for some time been in the habit of prescribing fluid extract of rhus toxicodendron, in cubic centimetre doses, three times daily, either diluted with water or with syrup of sarsaparilla, or in some such combination as the following:

℞ Potassii bromidi 5
Ext. rhois toxicodendri fl 20
Syr. sars. co 50
Aquam ....ad 100
S. Teaspoonful (5 c.c.) P.C.

My experience has been that rhus toxicodendron is an excellent medicine both for relieving and eradicating this troublesome ailment, though it is not a panacea. I have had no instances of poisoning from the therapeutic use of the fluid extract, though I have heard from a patient who was quite seriously affected with the typical dermatitis, resulting from the external use of a liquid preparation of the plant, prescribed by a homœopath.

TREATMENT OF RETAINED MENSES.

If the average student were asked the proper treatment for retention of the menses, he would probably answer that the fluid should be aspirated with every precaution through an orifice made *ad hoc* through the hymen or the structures representing the same. This answer is correct in respect of cases of hematocolpus, properly so-called, viz., cases in which the retention is due to imperforate hymen or to atresia of the vagina low down, but it is very inadequate in the not uncommon instances of complete absence of a vagina, either from congenital deficiency or as the result of acquired atresia high up. In this case the uterus itself is necessarily distended, and there is a real danger of the dilatation extending to and involving the Fallopian tubes, constituting hematosalpinx. Several important facts call for consideration in this class of cases.

In the first place, access to the os uteri has to be obtained through a passage artificially dissected out between the bladder in front and the rectum behind. Now this passage, when destitute of a mucous lining, is practically impossible to maintain patent, and reaccumulation of the fluid, with recurrence of the symptoms, sooner or later follows. In the second place, the treatment of cases of hematometra associated with hematosalpinx is somewhat dangerous, owing to the risk of regurgitation of the fluid contained in the dilated tubes, or of their rupture. In view of these two conditions, it has been urged that the proper treatment is really to perform abdominal section, in order to remove the uterine appendages with the object of determining cessation of menstruation. Obviously, no such grave intervention would be justified except in the presence of a formal diagnosis of hematometra, plus total absence of the vagina. When the defect is congenital it not infrequently happens that the uterus and ovaries share in the arrest of development, in which case no treatment may be called for. Gynæcologists may consider themselves dispensed from the obligation of setting to work to create a vagina simply because the patient does not happen to be provided therewith, for unless by ingenious plastic devices a mucous lining can be secured their labor will be in vain, the aperture invariably undergoing gradual closure owing to progressive cicatricial contraction. Such cases are not always easy to diagnose, and when diagnosed they often present considerable difficulties in the way of successful treatment. Fortunately, they are tolerably rare, though most gynæcological surgeons of much experience have met with a certain number—*Medical Press and Circular.*

BICYCLE "CAVEATS."

There is an evil in the prevalent bicycle craze, which we have not seen mentioned, but is suggested by the observation that in certain cases the power of walking has been seriously impaired. The muscles specially exercised in supporting the weight of the body in walking, are neglected, relatively, by those who put great tours of duty on the other leg muscles in propelling the bicycle. Neglected muscles become weakened and atrophied. Hence, some of those who have substituted extensive bicycle-riding far natural locomotion, are beginning to find that they cannot walk a mile without undue fatigue; and others will probably find it so in time. Whatever benefit may be derived from devotion to any one mode of exercise, will surely be paid for at the expense of other interests of the system, and will thus impair the balance that is necessary for full health and prolonged life.

With respect to the female sex, especially in childhood and youth, there is another danger in the bicycle —the same as in the riding astride of a horse, only aggravated—which is of so delicate a nature that one hesitates to allude to it, although some of our medical contemporaries have very plainly and emphatically denounced it. It certainly behooves the family physician to consider it seriously, and to put parents of daughters on the alert against the unavoidable attrition of organs unnecessary to name, from which the most lamentable physical and moral consequences are liable to result. There seems to be no possibility of adapting a bicycle saddle to avert the objectionable contact. *The inexperienced simplicity which will treat this warning with contempt is one of the most enviable of negative endowments personally; but professionally, it would be a deficiency both disqualifying and inconceivable.—The Sanitary Era.*

CONTRA-INDICATIONS OF SALICYLIC TREATMENT IN ACUTE RHEUMATISM.—Jaccoud (*Sem. Med.*) holds that the beneficial action of salicylate of soda in acute rheumatism is confined to the joint affection, and has no effect on the visceral complications. He never prescribes it where there is endocarditis; in pulmonary complications it increases the dyspnœa, promotes the appearance of albuminuria, and when there is headache, delirium, or other cerebral phenomena, might entail the patient's death. In the more common form of rheumatism in which the visceral complications are of moderate intensity and do not show till the second week, it is not unusual to meet with a sort of alteration in the severity of the arthritis and the cardiac or pleuro-pneumonic affection. Salicylate of soda, he believes, in relieving one aggravates the other, and to a proportionate extent. He quotes statistics of Donald Hood, S. Coupland, G. Smith and Bodt, to show that visceral complications are more common in cases treated by salicylates of soda than in others, and concludes it ought never to be given when such complications exist.

PERITONITIS IN TYPHOID FEVER.—Dieulafoy (*Sem. Med.*) discusses the varieties of peritonitis in typhoid fever in relation to operative interference. Peritonitis due to perforation usually supervenes at the period of stasis or during recurrence of typhoid fever, and any part of the intestine involved in the typhoid process may be its seat. It is met with in mild as well as in severe cases, and the diagnosis would be a matter of great difficulty but for a constant and often solitary sign, namely, sudden fall of temperature. In three cases of intestinal perforation the temperature fell below 35° C. It would be a mistake to suppose that all such falls in temperature indicate perforation. In many cases the defervescence is as

sudden as in pneumonia, or, again, such falls follow copious hæmorrhages. In the latter case, however, the temperature rises again rapidly, while in perforation it remains low or rises very gradually. Perforation peritonitis lasts from three days to a week, during which time deceptive remissions may occur. The end is almost invariably fatal. In rare cases protective adhesions form, and recovery ensues. In the peritonitis due to the propagation of the infectious process through the ulcerated but not perforated intestine there is a lesion of the vermiform appendix, which may ulcerate and be perforated at the level of its abundant lymphoid tissue. The symptoms are the same as those of other typhoid perforations. "Paratyphoid peritonitis" is due to the remnant of a typhoid lesion of the appendix, and is characterized by a rise of temperature. Surgical treatment of this condition should be the same as in ordinary appendicitis. The problem of when to operate in a perforative peritonitis is a much more serious one, owing to the difficulty of determining that perforation has taken place, the necessity of speedy and opportune intervention, and the fact that there may be several coincident perforations. Operation, however, holds out some hope of success, and in spite of the ulceration suture may bring about healing.—*British Medical Journal.*

DIABETES AND CIRRHOSIS OF THE LIVER.—Pusinelli (*Berl. klin. Woch.*) records the case of a man, aged 48, who in 1887 had a slight attack of jaundice, and in the following year 1½ to 2 per cent. of sugar was present in the urine. The sugar subsequently disappeared, but was present again after 1892. In 1893 there was much ascites with œdema of the legs. Both the liver and spleen were enlarged. Ten litres of fluid were drawn off, and subsequently the tapping was twice repeated. The puncture then remained open, and after its spontaneous closure there was no further accumulation of fluid. No unevenness of the surface of the liver was ever made out. The amount of fluids taken by the mouth was at first greater than that eliminated; but eight weeks after the last tapping the order was reversed, and the ascites and œdema disappeared. The patient improved so much that he was able to resume his business; the jaundice also disappeared, and the liver became less in size. Later albuminuria supervened, and now and then œdema of the legs. The sugar disappeared from the urine while the ascites was present, coming back again as soon as the ascites was gone. This fact is difficult of explanation. As regards the treatment, perhaps the last tapping with a large trocar and the escape of fluid for several days afterwards may have been of importance, but this alone hardly accounted for the great improvement. Perhaps the large doses of cream of tartar taken produced this beneficial result. This remedy has been recommended by Sasaki in daily doses of 8 to 40 g.; if the patient's general condition is unsatisfactory, iron, quinine, etc., are given in addition. The author discusses the relation of the liver affection to the diabetes. The cirrhosis was certainly first in point of time, jaundice appearing a year before the glycosuria. As regards the form of the cirrhosis, syphilis, alcohol, and gall stones could with certainty be excluded. The course of the case differed in many respects both from Laennec's atrophic and Hanot's hypertrophic cirrhosis. Perhaps it is a special form of cirrhosis associated with diabetes; the liver and spleen are enlarged, there is periodical jaundice and considerable ascites, the course is prolonged with a tendency to recover, and there are no gastrointestinal symptoms. The author, among other conclusions, points out that attention should be given to the liver in diabetes and to

the presence of glycosuria in cirrhosis. After two years and a-half of fairly good health the patient died. There was an evenly distributed cirrhosis of the liver with some shrinking. The pancreas was atrophied to half its size. There were recent tubercles in the peritoneum and pleura. Under the microscope the cirrhosis was found to be of a mixed type, with hyperplasia of the minute bile ducts.

THE TECHNIQUES OF INTUBATION IN CHILDREN; SOME REMARKS ON THE TIME FOR OPERATION AND AFTER-TREATMENT.—Dr. Thomas J. Hillis, of New York County, read a a paper with this title before the New York State Medical Association. He recommended that the child should be prepared for intubation by wrapping it in strong muslin, the arms hanging by the sides and the forearms and hands crossed on the abdomen. This position, and the use of muslin instead of a blanket, secured to the operator more room for the necessary manipulations. Instead of keeping the tube and introducer vertical and in the median line during the whole process of intubation, as was usually done, space could be economized, and in some instances the operation facilitated, by tilting the introducer and tube during the first part of the introduction, so that the tube would lie transversely across the tongue. Of course, as soon as the tube touched the guiding finger, the instrument should be quickly restored to the vertical position in the median line of the body, and inserted into the larynx. Among the various methods that had been proposed for extraction of the tube there was one simple procedure which was applicable to infants under a year old, in whom the cartilaginous rings of the trachea were soft and yielding. This consisted in placing the infant on its back, with a small pillow under the neck, and the head thrown well back, and, by means of the thumb and fingers, "expressing" or forcing the tube upward and backward into the mouth, where it could be seized with the thumb and index finger of the disengaged hand. The speaker highly commended the ingenious contrivance for extraction which was invented by Mr. Dillon Brown. He said that no hard-and-fast rule could be laid down as to the number of days the tube should be allowed to remain in the larynx, but it was always well to err on the side of leaving it in a little longer than was absolutely demanded. There would be slight obstruction present for a short time after the removal of the tube; but if this was not very great, it need cause the physician no special uneasiness. It was well known that considerable difficulty was often experienced in feeding children while the tube was still in the larynx. The difficulty was commonly overcome by placing the child on the nurse's lap, on its back, with the head hanging down over the edge of the lap. Personally, he preferred to have the little one lie on the stomach, face down, as this gave greater command over the constrictors.—*The New York Medical Journal.*

THE SURGICAL TREATMENT OF TRAUMATIC JACKSONIAN EPILEPSY.—Braun (*Centralbl. fur Chir.*) at the recent meeting of German scientists and medical practitioners, reported a successful case of trephining for traumatic epilepsy, the patient having remained quite free from recurrence during a period of six years since the date of the operation. An analysis was given of twenty-two cases treated by removal of the motor centre from which the epileptic attacks in each instance had started. In fourteen of these cases the treatment had been completely successful, but in five patients only had the interval from the date of operation and the date of the last report exceeded one year. The author has come to the conclusion that, as in many cases of trau-

matic Jacksonian epilepsy, cure may be effected by removal of the injured portion of the skull or of degenerated and adherent meningeal structure, extirpation of the affected motor centre is not indicated until after failure of the former operation. In a case of traumatic epilepsy originating in a motor centre which is not in direct communication with the injury, should removal of diseased bone and cerebral membrane give no good result, it would be necessary, after having determined the affected centre by electrical stimulation, to resort to its extirpation.—*British Medical Journal.*

TREATMENT OF FLATULENCE.—Dr. Stephen McKenzie states that a certain amount of air is swallowed in the process of mastication and deglutition, but this has never produced any of the phenomena associated with flatulence. This condition is also attributed to fermentation occurring in the stomach, but he does not believe the gas of flatulence is the result of food fermentation, for fermentative processes are too slow for the rapid development of the flatulence observed in dyspepsia. Sir William Roberts has shown that a certain amount of flatulence may occur in acid dyspepsia through the action of an acid mucus upon the alkaline saliva swallowed with the food; but this is certainly a rare and minor cause in the production of gas. The regurgitation of carbonic-acid gas from the duodenum may sometimes occur and cause a flatulent distension of the stomach, but this is also a rare phenomenon and occurs only when the gastric juice is hyperacid. The writer, after discussing other theories, concludes that flatulent dyspepsia is due to a lack of gastric tonicity. In other words, the wall of the stomach being weak, flabby and lacking in tone, suddenly dilates, and a volume of gas which was before somewhat compressed expands and fills out the enlarged viscus. The gas does not increase in quantity in the stomach, but only in volume. Associated with this gastric atony and perhaps dilatation, there is often a slight catarrhal condition of the stomach which lessens the power of normal gastric digestion and helps also to weaken the walls of the stomach. The most important thing in the treatment of flatulent dyspepsia is to use remedies which will increase the nervous vigor; hence tonics, and especially nerve tonics, are of the greatest importance. Nux vomica and strychnine should be placed at the head of the list. When there is gastritis associated with flatulent dyspepsia, with a coated tongue, the author gives bicarbonate of soda, strychnine and spirit of chloroform, dissolved in a bitter infusion of calumba or gentian, two ounces three times a day, between meals. If pain is associated with the flatulence, bismuth is added to the mixture, or a pill containing carbolic acid, valerianate of zinc and alum is given. The compound asafœtida pill and the extract of belladonna are sometimes useful. In cases in which pain is located lower in the bowels, Indian hemp in doses of one-third of a grain often answers better than any other remedy. For the violent spasmodic attacks which these sufferers often have, associated with distension of the stomach and intestines, a mixture is given composed of equal parts of spirit of cajuput, aromatic spirit of ammonia and spirit of chloroform; a teaspoonful in a wineglassful of water every half or quarter of an hour. The writer does not believe in the use of charcoal in flatulence, nor does he place great stress on the value of bismuth. The purpose of his paper is, he says, to urge the importance of tonics and antispasmodics as the rational and effective treatment of flatulence by improving the muscular tone of the stomach.—*Practitioner.*

COCAINE ANÆSTHESIA.—In an address commemorating the introduction of ether, delivered by Dr. Roswell Park at the University of Buffalo, the following tribute was made to the discoverer of cocaine, which is worthy of reproduction: "I will spend no further time upon the subject, save to do justice to modern anæsthesia by a very different method and by means of a very different drug, which is to-day in so common use that we almost forget to mention the man to whom we owe it. I allude to cocaine and its discoverer, Koller. Cocaine is now such a universally recognized local anæsthetic that there is the best of reason for referring to it here—the more so because it affords another opportunity to do honor to a discoverer, who has rendered a most important service to not only our profession, but to the world in general. The principal active constituent of coca leaves was discovered about 1860 by Niemann, and called by him cocaine. It is an alkaloid which combines with various acids in the formation of salts. It has the quality of benumbing raw and mucous surfaces, for which purpose it was applied first in 1862 by Schroff, and in 1868 by Moreno. In 1880 Van Aurap hinted that this property might some day be utilized. Karl Koller logically concluded from what was known about it that this anæsthetic property could be taken advantage of for work about the eye, and made a serious of experiments upon the lower animals, by which he established its efficiency and made a brilliant discovery. He reported his experiments to the congress of German oculists at Heidelberg, in 1884. News of this was transmitted with great rapidity, and within a few weeks the substance was used all over the world. Its use spread rapidly to other branches of surgery, and cocaine local anæsthesia became quickly an acomplished fact. More time was required to point out its disagreeable possibilities, its toxic properties, and the like; but it now has an ass red and most important place among anæsthetic agents, and has been of the greatest use to probably ten per cent. of the civilized world. To Koller is entirely due the credit of establishing its remarkable properties. Had he patented his discovery he would have been vastly richer in pocket, though poorer in fame, than at present. He is now established in New York, where he enjoys a modest competency, but is by no means in receipt of the income which is properly his due from the world at large. To a man who has been the means of relieving so much pain as Karl Koller, no amount of pecuniary return is too great."

CONTRIBUTION TO THE PHYSIOLOGY AND THERAPEUTICS OF THE KIDNEYS.—Several explanations have been offered for the fact that the xanthin series, caffein (trimethylxanthin), theobromin (dimethylxanthin) and monomethylxanthin, produce diuretic effects on some animals and not on others. It has been ascribed to the composition of the blood, to the diet, etc., but an extensive series of experiments by Corin, described in the *Annales de la Soc. Méd. Chir. de Liége*, for September, with a review of the subject in all its phases, demonstrates that the diuretic effect of caffein on the rabbit and its absence in the dog, is the result of a vagus tonus possessed by the dog and absent in the rabbit. Hence to place the two animals on a level in this respect, it is necessary to render the vagus inactive in the dog by sectioning it or paralyzing it with atropin. When this is done the caffein produces exactly the same decided diuretic effect on both animals. Corin has established the fact that excitation of the vagus itself, excluding the ramifications that extend to the heart, directly diminishes the urinary secretion. This excitation is without results if the animal has previously been intoxicated with atropin, which demonstrates that atropin paralyzes the vascular or

other terminals of the pneumogastric in the kidneys, just as it paralyzes its terminals in the heart. It is therefore to be assumed that the rabbit is without this vagus tonus for the kidneys, as we know it is without it for the heart. He closes with the remark that if there is a renal vagus tonus in man, as there is in dogs, which everything tends to establish, then chloral is not to be considered the best adjuvant for caffein, but atropin or the belladonna preparations are indicated. He is now experimenting on man, to confirm this assertion.—*Jour. Amer. Med. Assoc.*

DANGERS OF "SCORCHING."—A patient whose case illustrates the subjective dangers of "scorching" was recently under the treatment of Dr. Hansell in the hospital. A young man, who had imperfectly convalesced from a severe attack of typhoid fever, exercised violently on his bicycle for two or three successive days in direct opposition to the advice of his physician. After his last run, he noticed a defect in his visual field. It was found that he had sustained a circumscribed local detachment of the retina from hæmorrhage into the choroid. A somewhat similar case was recently reported by an English ophthalmic surgeon. In this patient the hæmorrhage was due to the rupture of a retinal vessel. Another accident, occurring in the person of the writer, is thus far unique in the literature of bicycling. After a hard and hilly ride over stones and ruts the contents of the bladder were found to be, in large measure, blood. In the next micturition but little difference was noted and in twelve hours the urine had regained its normal color. Examination of urine subsequently passed showed the presence of large numbers of blood cells and some bladder epithelium. The hæmorrhage was therefore probably from a small vein in the bladder wall. Accidents of this and like nature should be widely reported, in order that bicyclers, who constitute so large a proportion of the young and middle-aged, may regulate their exercise according to their physical powers and endurance, and they should accept these instances of threatened blindness as warnings against immoderation.—*Philadelphia Polyclinic.*

OPERATION FOR ATRESIA VAGINÆ.—Mackenrodt (*Centralbl. f. Gyn.*) points out that attempts to keep the artificial vagina open by tampons after operations for this condition are seldom permanently, if even temporarily, successful, and states that he has recently in two cases successfully substituted a vaginal wall by transplantation of flaps obtained in operations for prolapse on otherwise healthy women. The new canal is prepared and plugged with iodoform gauze till its inner surface is covered with healthy granulations, and is then lined either by several single flaps, which are kept in position by a tampon, or a lining is formed by sewing a number of flaps together around a Cusco speculum and introduced with its wounded surface external into the granulating canal, and fixed by a tampon, which in either case is not removed for eight or ten days.—*St. Louis Medical Journal.*

VINEGAR AS AN ANTIDOTE TO CARBOLIC ACID.—Applied to the skin or mucous membrane burnt by carbolic acid, vinegar causes a rapid disappearance of the characteristic whiteness as well as the numbness produced by the acid; it also prevents the formation of a slough. Vinegar also neutralizes carbolic acid introduced into the stomach. In cases where carbolic acid has been swallowed, therefore, Professor Carleton suggests, the patient should be made to drink vinegar diluted with an equal quantity of water, and the stomach should then be washed out.—*Practitioner.*

THE DOMINION · MEDICAL · MONTHLY

... AND ...

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USE OF THE STOMACH AND RECTAL TUBE IN CHILDREN.

Dr. W. Jay Bell read a paper on this subject before the pediatric section of the American Medical Association, which is reported in the *Journal* of November 7th. He impresses upon the profession the great value of this method in those cases of gastro-enteritis and ileo-colitis so often fatal and of such frequent occurrence. In the first of these, a child which has been progressing favorably in every way is suddenly attacked with vomiting. The child takes food greedily, but each time quickly vomits what has been taken. The vomicæ are sour and give every evidence of fermentation. The rational treatment is to completely wash out the stomach and thus remove the cause. After washing, resort may be had to gavage for nourishing the system. After the food has been administered, care must be exercised in withdrawing the tube and the mouth held open for a moment or two until the irritation of the fauces has disappeared.

In ileo-colitis, he lays particular stress on the necessity of introducing the tube as high as possible. By remembering the direction of the rectum through the curve of the sacrum onward over promontory to the left, the tube can be introduced by slight rotary motion up into the colon and as high as the transverse colon. The bowels are then thoroughly irrigated. In persistent dysentery he has often found good results follow the introduction of flax-seed water with a little tincture of opium after irrigation.

As regards the apparatus, he uses for lavage of the stomach a funnel with rubber tube connected by a short piece of glass tubing with a large, soft rubber catheter. We think for this purpose the modification suggested by Dr. Beattie Nesbitt, and reported with cases in the *Archives of Pediatrics*, has the merit of being both simple and convenient. This consists in replacing the glass tube by a Y shaped tube of glass. The catheter is attached to the

long limb of the Y, and to one of the other limbs the tube from the fountain. The other limb has attached a piece of rubber tube, which empties into a basin or other receptacle. By holding the tubes, one from the fountain, the other to the basin, over the forefinger, it is possible to regulate the entrance and discharge of the fluid at will by pressure on either tube by the thumb. The tube passing down to the basin has also a greater siphonage action owing to its length. Another point we drew attention to was the advisability of withdrawing the tube at the end of the operation while the stomach was full of water and causing vomiting. This expels large masses of curd which, often of a quite tough consistency, are entirely unaffected by the washing, and if allowed to remain serve as a nidus for fresh trouble.

RUSTY NAILS AND LOCK-JAW.

This is an age of great progress, and nowhere possibly is this more apparent than in our own domain of medicine. Yet when we consider, in the light of modern science, much of the empirical knowledge of the fathers of medicine, we cannot too highly praise the closeness of their observations and the logic of their deductions. One of the first of the bacilli to be studied in connection with the modern science of disease was the bacillus of tetanus, the principal work being done by Nicolaier, and the bacillus was named after him. This bacillus is club-shaped, or, as expressed by Bonome, a fine bristle-shaped pin-headed bacillus. There was much difficulty at first in cultivating this bacillus, as has been the case with many other pathogenic forms, but Mr R. T. Hewlett, in *London Lancet*, described how this could be successfully and readily done. The bacillus of tetanus had always been noticed associated with putrefactive bacteria. The reason for this appears from Mr. Hewlett's method. This bacillus is anærobic, but, as he points out, is readily cultivated in an atmosphere of hydrogen. With a better laboratory knowledge of every form comes a better knowledge of its life habits, and so of this one.

Prof. Welch, of Johns Hopkins, says that of all pathogenic bacteria which appear in the soil the most frequent are those of malignant œdema and tetanus. It is a fact well known that after certain battles the wounded were very liable to be afflicted with tatanus. This would be explained, as pointed out by J. Lewis Smith, by the presence of the bacilli in the soil of the battle field. He also mentions cases occurring in hospital practice where patients coming to the surgical wards from certain districts developed tetanus. It seems to be now well settled that the tetanus bacillus thrives in the soil, and more especially in those soils where putrefaction is going on, as around houses where refuse matter is thrown. This brings us back to our first paragraph. We are all acquainted with the supposed popular connection between an injury to the foot by a rusty nail and lock-jaw. Here we have that extremity which is always nearest the ground injured by the most common object, for the purpose, likely to be in the putrefactive area of civilization. In other words, you have a most successful inoculation of the bacillus nicolaier.

MEDICAL EXPERTS.

We have, ever since the commencement of this publication, advocated that in the interests of science, justice and professional dignity, the present system of expert witnesses should be abolished; that it should be in the power of the judge to select three physicians of repute who should act upon the evidence presented to them,

and upon examination made by themselves as an advisory board to the court. We do not need to go over the cases in this country (for they are legion) where a number of physicians for the prosecution swore directly contrary to a similar number for the defence, not to mention a recent disgraceful case in which there appeared the financial expert. We all know the extent to which jury manipulation has prevailed on the other side, and it would seem that when the legal talent from over the border appears here medical expert manipulation follows. In a recent case, decided October, 1896, before the Supreme Court of Illinois, the judge administered a proper rebuke to the medical experts. Here was a case of what might be called expert evidence gone mad. A woman had had a severe sprain of the ankle with rupture of some of the ligaments. She entered an action for damages, and the experts on one side swore that at a point six inches above the ankle the injured limb measured one-sixteenth of an inch more than the other. The other experts swore that it was the same size. The judge fittingly pointed out that some one was lying.

What disgraceful positions are these for professional men to place themselves in, or be associated with, when the whole thing can be avoided by the simple suggestion we have made.

The remedy seemingly must come from the profession. Ontario contains, we believe, on the average the best trained and most advanced physicians in the world. Let the reform start here.

SALICYLATE OF METHYL.

An item has been going the rounds of the medical press to the effect that two French discoverers, Lannois and Ginossier, have recommended the local application of salicylate of methyl in the treatment of subacute and chronic rheumatism, and state that during painful paroxysms it acts at times as well as when salicylates are given by the mouth. Such is the rage for anything French, German or Central African in therapeutics that we may well say, Can any good thing come out of America? To see an item like this travelling around at this late date with these gentlemen as originators and first users speaks poorly for the medical press; but when it is noted in the columns of our friend Little Thunder, then it has the Hall mark.

If the New York *Medical Record* will turn to its own files, year 1882, page 505, it will there find a report of twelve cases of rheumatism having been treated by the local application of oleum gaultheria, with the following results: complete absence of pain in three days, duration of fever 3½ days, average stay in hospital 24⅓ days. Gottheil reports, same journal, 1883, page 256, four cases, and found it reduced local swelling and relieved the pain.

The use of oleum gaultheria as an application to the joints combined with olive oil, is further recommended in *British Medical Journal*, 1889, page 347; *Lancet*, vol. 2, 1890, page 444; *Therapeutic Gazette*, 1891, page 429; *Edinburgh Medical Journal*, 1891, page 268. So much for the Frenchmen's claim and the *Record's* information.

QUITE CORRECT.

The New York *Medical Record* says in its issue of December 5th that a "cycle saddle has been introduced in England which provides complete bifurcation with an adjustable interval to suit individual requirements, and takes all pressure from the perineum. *A really good saddle is*

greatly to be desired, and physicians will welcome one which obviates the danger of undue pressure." — [*Italics* are ours. D.M.M.]

EDITORIAL NOTES.

SPREAD OF THE PLAGUE IN INDIA.—The bubonic plague is still spreading in Bombay, and is now attacking Europeans, two of whom have died.

A COLLECTION OF BRAINS.—Dr. Luys of the Salpetrière Hospital, Paris, has presented the Faculty of Medicine with his collection of 2,200 brains.

ANTITOXIN IN LOUISIANA.—The Louisiana State Board of Health has announced that it will supply antitoxin free of charge to poor diphtheritic patients.

HUCKLEBERRY WINE.--Wine made from huckleberries is now sold in large quantities in Austria and Germany. It is cheap, and Professor Pettenkofer, a hygienic authority, says it is much better than the average table-wine made of grapes.

TO LENGTHEN THE GERMAN CURRICULUM.—To stem the overcrowded condition of the profession in Germany, it is proposed to add a sixth year to the medical student's curriculum. This is to be spent in practice in hospitals or specially recognized clinics.

MR. TESLA ON THE X-RAY.—Regarding some sensational reports that have found their way into newspapers recently, in which it was stated that blind eyes were made to see through the mysterious agency of the Roentgen-ray, Mr. Tesla very properly considers them groundless. He further deplores the cruelty of raising vain hopes in the minds of the unfortunate.

BURNS CAUSED BY THE X-RAY.—A case is reported from Chicago in which the back of the patient was seriously burned in an endeavor to locate a bullet in his back by the X-ray. This is one of the many reported cases of burn produced in this way. Such wounds heal more slowly than ordinary burns. Nikola Tesla states that these effects are not due directly to the rays, or Roentgen streams, but to the ozone generated by the rays in contact with the skin. He recommends a coating of oil on the skin as a preventive measure.

A CRIME AGAINST HUMANITY.—Judge Gordon, of Philadelphia, with the able assistance of Drs. Weir Mitchell, Morton, and Mills, is now conducting an investigation of the practice of unlawfully(?) detaining insane persons in the Eastern Penitentiary of Pennsylvania. It has already developed that there are quite a number of these unfortunate cases, and it is stated publicly by Judge Gordon that there is an element in the administration of this institution which tends to promote insanity among its inmates. He also believes that for certain reasons those in charge are indisposed to give these facts publicity or assist in the removal of these prisoners to more suitable environments. It is disgraceful negligence on the part of any State, especially one maintaining such advanced ideas of statutory justice and philanthropy as does Pennsylvania, to be without separate provisions for the care of insane criminals.

The Doctor Himself.

The Publishers will be pleased to receive at any time, local or personal items from physicians which will prove of interest to the profession generally.

DR. W. L. COULTHARD, formerly of Avenue Road, Toronto, has commenced practice in Rossland, B.C.

DR. ERNEST HALL, of Victoria, who has contributed to our columns has also moved to the gold centre, as he directs the DOMINION MEDICAL MONTHLY to be sent to him at Rossland, B.C.

The Physician's Library.

Twentieth Century Practice. An international encyclopædia of modern medical science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. In twenty volumes. Volume VII. "Diseases of the Respiratory Organs and Blood, and Functional Sexual Disorders." *New York:* Wm. Wood and Company. 1896.

The publication of this volume makes the series of this great work complete up to Vol. VIII., which was issued before this. One needs to have done some publishing to fully appreciate the magnitude of the undertaking in getting out these volumes at such regular intervals in such complete form. The preceding volumes have been reviewed in these columns as they appeared, so that what we have said in a complimentary way in the past fully applies here. It is complained that systems of medicine such as this are apt to become somewhat behind the times in their first volumes ere the last are issued. As far as this criticism may apply, and it is the only serious one we have seen on such systems, it can scarcely apply to this as the whole of this immense work is to be issued in five years, and if the healing art has advanced at such a rate as to make the first volume of this work obsolete by the time the last is published, we do not think in the general rejoicing at such a consummation any one will regret the money spent. The volume before us contains the work in various sections of well known clinicians, and there is full evidence of painstaking effort on the part of each author to bring his work fully abreast of the times, and each has achieved success. Diseases of the pleura have been dealt with by Herbert Whitney, of Denver; asthma, by Franz Riegel, of Giessen; hay-fever, by E. Fletcher Ingalls, of Chicago; diseases of the mediastinum, by S. Main, of Paris; a very complete and able section on diseases of the blood, by Alfred Stengel, of Philadelphia; rachitis, by Jules Cornby, Paris. The portion devoted to sexual disorders in the male is by Charles W. Allen, of New York; in the female by Charles Cumston and Ernest Cushing, of Boston. All these sections are replete with information brought up to date, and are just what they claim to be, a system of medicine.

Deformities: a Treatise on Orthopædic Surgery, intended for practitioners and advanced students. By A. H. TUBBY, M.S. London, F.R.C.S. Eng. Illustrated with 15 plates and 202 figures, of which 200 are original, and by notes of 100 cases. Price 17s. London: Macmillan & Co., Ltd. Toronto: Copp, Clark Co.

The imprint of Macmillan & Co., that double M, is to a book what the Hall mark is to plate, a guarantee of excellence, and as we read the pages of this volume we find, as in Albutt's "System" and all their other books, that the author is a recognized authority and knows whereof he speaks. The large number of clinical cases illustrated with careful drawings and photo engravings are almost a hospital experience in themselves. There is nothing that is of so much value to the practitioner and student as carefully selected clinical cases, and when these are so fully helped out by the facilities of modern illustrating, we envy the students of to-day. Another feature about a work such as this, with its wealth of clinical material, is, that it makes a volume of standard worth, as distinct from the many pot-boilers of to-day as day is from night.

The Physician's Perfect Call List and Record. By DOCTOR G. ARCHIE STOCKWELL, F.Z.S. Flexible morocco; long 16mo; pp. 200. Price, $1.50. Detroit: George S. Davis.

The fact that this work has reached its eleventh edition, with a constantly increasing sale, is evidence of both

its popularity and great usefulness among medical men. It is of size and shape that render it convenient for the pocket, and it will not break down at the top or corners, as most books of this kind are especially prone to do.

It is universal in application—that is, it is equally available for any year, or any week or month in the year. It is free from advertisements of all kinds, the insides of covers and colored fly-leaves being taken up with such information as the medical man is apt to desire to consult hurriedly—thus the Obstetric Table (in two colors), Key to Metric Prescription Writing, Differential Diagnosis of Eruptive Fevers, Emergencies, and Poisons and Antidotes, are available upon the instant.

The Posological Information, and Tables of Doses, are entirely new, having been rewritten and brought up to October 1st, 1896.

As a whole, the work is the simplest, most complete, and most convenient ever issued, a marked improvement upon call lists generally, and the price ($1.50) is so reasonable that no medical man can afford to be without so important an aid to the keeping of professional and other accounts and records.

A Vest-Pocket Medical Dictionary, embracing those terms and abbreviations which are commonly found in the medical literature of the day, but excluding the names of drugs and of many special anatomical terms. By ALBERT H. BUCK, M.D. New York: Wm. Wood & Co. 1896.

There are certainly many occasions when a physician would find it most useful to be able to refer to a medical dictionary without resorting to a more cumbrous volume on his library shelves. Dr. Buck's Vest-Pocket Medical Dictionary certainly fills the bill.

Anomalies and Curiosities of Medicine, being an encyclopædic collection of rare and extraordinary cases, and of the most striking instances of abnormality in all branches of medicine and surgery, derived from an exhaustive research of medical literature from its origin to the present day, abstracted, classified, annotated, and indexed. By GEORGE M. GOULD, A.M., M.D., and WALTER L. PYLE, A.M., M.D. Forming one handsome imperial octavo volume of 968 pages, with 295 illustrations in the text, and twelve half-tone and colored plates. Prices, cloth, $6.00 net; half morocco, $7 00 net. Philadelphia: W. B. Saunders, 925 Walnut Street.

The advance sheets of this work are to hand, and if they are at all a guarantee of the work which we fully expect both from the names of the authors and the publisher, it will be one of the notable books of the decade. There are large numbers of curious cases scattered through medical literature, but they have never before been collected. We will give a review of this volume as soon as it appears.

Rœntgen Rays and Phenomena of the Anode and Cathode, principles, applications and theories. By EDWARD P. THOMPSON, M.E., with concluding chapter by Prof. Wm. A. Anthony. Sixty diagrams, forty-five half-tones Price $1.50. New York: D. Van Nostrand Company.

There has been much interest aroused, not only in the scientific, but especially in the medical world, over this new discovery. Much matter has been published, but in scattered form in different publications. This work fills an especial need in that it has brought together all the information and experiments which have been made to date. Any physician wishing to take up this branch can certainly not afford to be without this work, and to those who wish to be fully abreast of the most recent advances in medical science it is just as valuable.

LARYNGEAL CONGESTION OF NASAL ORIGIN.—M. Joal writes that the above cases may depend upon the following etiological conditions: (1) More or less complete obstruction of the nose. (2) Propagation of vasomotor attacks beginning in the nose. (3) Reflex action consecutive to erection of the cavernous tissue. (4) Reduction of the respiratory capacity by nasal influence. (5) Functional incapacity of the nasal reasonator. Nasal stenosis acts especially in childhood in subjects who sleep with the mouth open, and gives rise to laryngitis stridulus. Congestions by extension manifest themselves in arthritic subjects, and are preceded by a nasal fluxion as in beginning coryza. Of patients having congestive attacks of the larynx the author cites five cases in which the nasal origin was established. The hoarseness, the cough and hyperæmia of the larynx supervened some minutes after the nasal symptoms. In some cases he was able to produce experimentally laryngeal fluxion by acting upon the terminations of the trigeminal and olfactory nerves. Finally, cocaine applied to the nose arrests the progress of the laryngeal symptoms. The nasal troubles may come either from direct irritation or an exterior and distant focus. Hypertrophic rhinitis favors the development of these reflex manifestations, but they may be occasioned by any gross alteration of the mucous membrane. Nasal obstructions diminish the respiratory capacity and obscure the vesicular murmur. Excessive muscular action is demanded, and the larynx is strained. Congestive attacks are produced, and these at length constitute a chronic catarrhal condition, with alteration of the voice and serious impairment of the singing voice. The second variety includes congestive attacks associated with an insufficiency of the nasal and naso-pharyngeal cavities, considered as

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For Rooms, Nursing, etc., without Medical Attendance, the charge will be $6.00, $10.00 and $12.00 in advance.

For Massage, Electrical Treatment, etc., without residence, the fee will be $1.00 per treatment.

References given when required.

TORONTO. September 4, 1893.

chambers to secure resonance and strength of tones. In this class, again, the larynx is forced to over-exertion in order to overcome this impediment. The author cites two cases in singers who had almost lost their voices. The removal of small vegetations will free the naso-pharynx and restore the voice. The same effect follows resection of a spur, the straightening of a septum, ablation of a mucous polyp and the treatment of a hypertrophic rhinitis or a dry rhino-pharyngitis.—*Revue Internationale Rhinologie, etc.*

ECTOPIC PREGNANCY OF OLD DATE—Fort (*L'Abeille Med.*) relates that a woman who ten years previously had thought herself pregnant, and had applied for the help of a midwife at her expected term, had latterly suffered a great deal from the troubles caused by a hard tumor which had existed ever since her supposed pregnancy. His diagnosis was fibroma of the ovary, instead of which he found a fœtus. Denis (*ibid.*, No. 25), in a laparotomy done on account of vesical and intestinal troubles, found a fœtus that had been twelve years in the abdominal cavity without showing signs of maceration or forming a lithopædion. The death of the fœtus had not caused any particular symptoms, not even labor pains.—*British Medical Journal.*

ADVANTAGE OF USING WARM SOLUTIONS OF COCAINE.—Costa has found that the local anæsthetic effect obtained with cocaine is more rapid, more intense, and more lasting, if the solution is warm. The dangers of intoxication are thus much diminished, as the quantity of cocaine can be very much reduced if it is warmed. A solution at 0.5 or 0.4 per cent. heated will produce a powerful effect. —*Jour. Amer. Med. Association.*

THE PULSE IN THE SMALLEST VESSELS.—Herz (*Wiener Klinik*) has investigated this subject by a new method which he terms "onychography." It consists of a delicately-poised sphygmograph, preferably of Jaquet's pattern, the button of which is placed upon the finger-nail and kept there under regulated pressure. The limb being kept steady a curve is traced, which, according to the author, is liable to fewer sources of error than the ordinary sphygmogram. Like the sphygmogram the onychographic curve shows three principal sets of waves, the largest corresponding to the respirations, the intermediate to the heart beats, and the smallest to the secondary waves; but it has also two special varieties of large undulations, due respectively to changes in the width of the arterioles and in the rapidity of the blood flow. Differences in the condition of the pressure within the arteries and capillaries are expressed by a want of correspondence between the sphygmograms and the onychograms. The onychogram rises during inspiration and falls in expiration, these variations being accentuated by dyspnœa and diminished by valvular disease of the heart, with the exception of tricuspid regurgitation. When the cardiac rhythm is irregular in force the rapidity of the blood flow is affected, and large undulations appear upon the onychogram, though the sphygmogram may appear to be normal. The onychographic waves are diminished in size and rounded off under conditions of psychical strain, such as the performance of elaborate calculations. Heat increases and cold diminishes their volume, but the latter, if prolonged, eventually leads to dilatation. In jaundice the waves are very marked, confirming Drasche's view that the capillary walls are paralyzed in chol-

æmia; the onychogram in this case resembles that in aortic regurgitation. In fever there is a sharp descent from the summit of the curve, which is followed by a plateau; the character of the rise varies, and often tends towards reduplication. The bifid apex is especially marked in inflammatory affections of the respiratory organs, and Herz considers the second peak to be transmitted through the veins from the right heart. Affections of the mitral valve tend to abolish the onychogram, while aortic disease increases the excursions, except when associated with rigidity of the small vessels. In sclerosis of the aorta and larger vessels although the pulse is much smaller than normal, the cardiac and respiratory waves of the onychogram are much increased in size, so that it must be concluded that the smallest vessels, whose walls are not muscular, pulsate more vigorously the greater the rigidity of the tubes connecting them with the heart. The author hence deduces that the endarteritic process cannot commence in the smallest vessels, but must in them be secondary to similar changes in the aorta and larger arteries. Eventually this is associated with obliterative inflammation of the intima of the arterioles; hence these researches are strongly opposed to the Gull and Sutton theory of arterio-capillary fibrosis.—*British Medical Journal.*

OTORRHEA—After cleansing the canal with a tepid 4 per cent. boric-acid solution, Lacroix uses the following preparation, applied upon absorbent cotton:

℞ Carbolic acid..... gr. xv.
Glycerin..... ʒv.
Pure pheno-salyl .. gr. xv.
Water..... ʒiss.—M.

—*La Tribune Medicale.*

DEATH IN HYSTERIA.—Fournier and Sollier draw attention (*Journ. de Med.*) to the fact that a fatal termination may sometimes result from the different effects of hysteria, and that it is quite a mistake to look upon the disease as always having a favorable prognosis so far as life is concerned. One of the authors on a previous occasion pointed out that death may be due to spasm of the glottis so severe as to require tracheotomy. Sollier records an instance of very severe asphyxia in a child aged six, which rapidly gave way to faradism, and Fournier records a case of a girl aged twenty showing a similar condition, being saved from death on one occasion by faradism, but who afterwards died from a similar attack. The authors therefore point out that expectant treatment in hysteria, more particularly when there are laryngeal manifestations, is anything but safe. They also refer to hysterical angina pectoris, and although they admit that in this affection the prognosis is extremely favorable, they quote a case under Potain's care in which death took place, and in which on post mortem examination absolutely nothing was found. They then refer to hysterical anorexia in which there is sometimes a fatal termination, and even should recourse be had to artificial feeding there seems to be no power of absorption. The wasting continues and the patient dies. They also refer to the danger of forcible feeding in such cases, and one of their patients who presented a marked degree of anorexia expressed a wish for some cheese, and died the same evening that she ate it. The authors point out that sudden death may occur after hysterical vomiting, and

they give the notes of one such case, no lesion of any kind being found on post mortem examination. Vaginal hysterectomy is, according to one of the authors, particularly fatal in hysterical cases.—*British Medical Journal.*

CHRONIC SULPHONAL POISONING.—Schulz (*Neurol. Centralb.*,) records a case of chronic sulphonal poisoning with fatal ending. The patient, a woman aged fifty-nine, had been under treatment some years for headaches, constipation, and restlessness, and was extremely hysterical. On account of sleeplessness she had recently been taking sulphonal in doses of 15 grains, and had taken altogether about half an ounce within a month. When admitted to hospital for obstinate constipation with vomiting, there was a smell of acetone in the breath, the tongue was dry and furred, there was great thirst, with restlessness and insomnia. All the organs otherwise were normal; the urine was normal. The next evening sulphonal, gr. xxv, was given, and the following day the urine was scanty, brownish-red in color, but free from albumen. Four days later the gait was unsteady, and five days after this there was weakness of the limbs, and anæsthesia of the legs down to the ankles; knee jerks, previously normal, were now difficult to obtain. Weakness increased, the knee-jerks disappeared, incontinence of urine and fæces occurred, and two days later the patient died suddenly. The urine since the single dose of sulphonal mentioned, had continued brownish-red with no albumen, but a rew altered red blood corpuscles. The color was found to be due to hæmatoporphyrin. Schulz considers that the toxic results after only one dose of sulphonal were due to the obstinate

constipation present, causing the sulphonal to be retained in the body longer than usual. Great caution should therefore be exercised in ordering sulphonal for patients who are constipated, and where it is ordered a careful watch should be kept on the urine for hæmatoporphyrin.—*British Medical Journal.*

A NEW ABDOMINAL SUTURE.—Hill (*Wien. med. Presse*) recommends a method of suturing the abdominal wall which he has employed for the past two years, and which he considers to afford a perfect guarantee against the supervention of abdominal herniæ. The needle carrying the suture enters the tissues some little distance away from the wound, passes through skin and subcutaneous fat, and is brought out in the wound at the junction of fat and muscle. It enters the opposite side of the wound at the corresponding spot, and then passes through muscle and peritoneum, being brought back to the original side within the peritoneal cavity. It passes through the peritoneum and muscle of the original side to reappear in the wound at the junction of fat and muscle; it is carried across again to the corresponding point on the opposite side, whence it passes through the fat and skin of that side to emerge a few centimetres away from the wound. When the suture is drawn tight it forms a double loop, the lower half of which brings the muscle and peritoneum of either side in opposition and the upper half the skin and fat.

It may be made more secure still by converting the lower loop into a simple knot, and this leads, according to the author, to no extra difficulty in removing the stitches. The suture is strongest if the two knots do not immediately overlie one another, but are separated by a distance of about half an inch. By this means the thread does not pass twice through the junction of fat and muscle at the same spot, an interval of half an inch being left between the perforations. Finally, the slightly longer time occupied in tying the stitches is amply compensated for by the fact that they need only be placed at intervals of 1½ to 2 inches instead of half to three-quarters of an inch.—*British Medical Journal.*

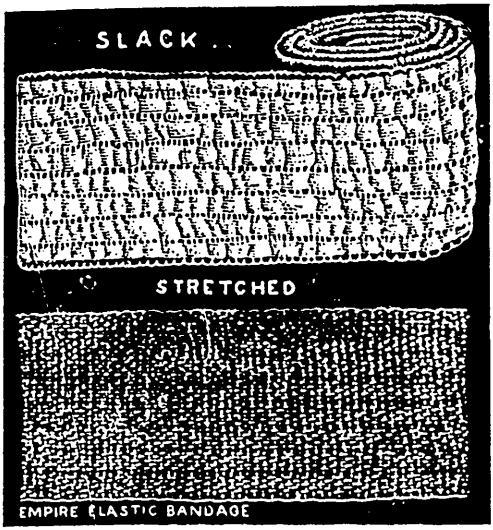
RESECTION OF THE VASA DEFERENTIA FOR PROSTATIC HYPERTROPHY.—Nove-Toperand (*Lyon Med.*) reports three cases in which resection of the vasa deferentia evidently resulted in a beneficial influence on many of the troubles caused by enlarged prostate. These, together with cases recorded by other surgeons, prove that this operation relieves the pain and reduces the increased frequency of micturition, and, in some patients, results in a complete cessation of pyuria. Such treatment, however, is rarely followed by appreciable atrophy of the enlarged prostate. Although in some recorded cases no relapse occurred after intervals of several months, it remains to be proved whether this amelioration can, as a rule, be regarded as permanent. Resection of the vasa deferentia acts, the author holds, by causing modifications in the glandular tissue, and by relieving or altogether abolishing the vesico-prostatic congestion which plays so prominent a part in the production of the symptoms of advanced prostatism. It is very probable that division of the vas deferens by suppress-

ing the testicular function removes the stimulus of prostatic congestion, and so induces a state of repose in the whole urinary apparatus. The operation is particularly indicated in the middle period of prostatism when the patient's troubles—cystitis, hæmaturia, and complete or incomplete retention—are usually the result of congestion. In a later stage, in which the enlargement and deformity of the prostate are due to well-developed structural changes, resection of the vasa deferentia, though it may render service by relieving pain, will necessarily fail to do much good.—*British Medical Journal.*

HYPERTROPHY OF THE PROSTATE TREATED BY EXCISION AND TORSION OF THE VAS DEFERENS.—Pavone (*Il Policlinico*) cites thirty-four cases of prostatic hypertrophy where the vasa deferentia were excised; four of these died of other diseases; in two cases the results were negative; the remaining twenty-eight were either cured or improved. The author believes that when good results do not follow this operation it is because complete obliteration of the vas deferens has not been obtained. He therefore advises that, in addition to excision, the ends of the canal should be twisted, so as to ensure complete closure. In the case reported about 3 cm. were excised and the ends twisted; on the same day the temperature fell, the frequency of micturition diminished, and the vesical tenesmus ceased. On the fifth day the patient could completely empty his bladder. On the fifteenth day there only remained some slight hypertrophy of the median lobe, and after two months the patient kept in the best of health.—*Brit. Med. Jour.*

TREATMENT OF ECLAMPSIA.—Mangiagalli (*Annali di Ostet. e Ginec.*), in a lengthy paper to which is appended a valuable statistical table, deals fully with the various modes of treating eclampsia. Obstetric treatment in his practice occupies the first place, medical means being regarded as preparatory or adjuvant. Preventive therapeutics are very beneficial in removing the conditions which are the expression probably of the autointoxication, and consist in milk and intestinal disinfectants, diuretics, etc. The medical treatment (bleeding, purgation, morphine, chloral, chloroform, veratrum viride, or diaphoretics) is purely symptomatic, but is the only one possible in *post-partum* eclampsia, and in other conditions is a valuable aid to the obstetric intervention. Bleeding, followed by the subcutaneous or endovenous injection of normal saline solution, has much to recommend it, but it has not been employed sufficiently often to enable us to form a just estimate of its value. The speedy evacuation of the uterus constitutes the most important means of treating eclampsia. In *intra-partum* eclampsia it is a good rule to terminate labor when the conditions permit, and even to anticipate these by means of multiple incisions of the cervix. In eclampsia in pregnancy the induction of labor by the rupture of the membranes is indicated along with the use of morphine, or chloral, or veratrum viride in large doses. If these means fail, then forced dilatation of the cervix is to be preferred to the deep incisions of Duhrssen. In some very bad cases even Cæsarean section may be a justifiable operation, especially if the fœtus be full time and alive Every operative intervention must take place with the patient deeply anæsthetized.—*British Med. Journal.*

IPECAC.—Ipecac is a vaso-motor stimulant in proper doses. The pure root, powdered, in half-grain doses, raises blood-pressure and causes constriction of the systemic arterioles and capillaries, especially of the mucous membranes. It is a noted remedy in catarrh of the stomach, of large and small intestines, of the bronchial tract, and probably of the bile-ducts. This vaso-motor property of the medicament is noted in relieving headaches of the congestive kind, also those that arise from catarrh of the gastro-intestinal mucous membranes and the peculiar condition known as "biliousness." It is a remarkable medicament in all these catarrhal states, and I may here observe that much of the hepatic congestion and engorgement and biliousness are closely related to gastro-intestinal catarrh. No single remedy, administered with skill, is capable of accomplishing so much good results in all these conditions as ipecac. Rutherford's experiments prove that ipecac is a marked hepatic stimulant; he classed it high as a cholagogue—a liver tonic—that is, it stimulates the liver cells to performance of their physiological function, the secretion of bile and depuration. Possibly ipecac has more or less influence over the glycogenic of the liver; cases are numerous of glycosuria in which small doses of ipecac have reduced the daily excretion of sugar; some have been cured by it. Considered as an alterative—using the term in a special sense as indicating control over glandular



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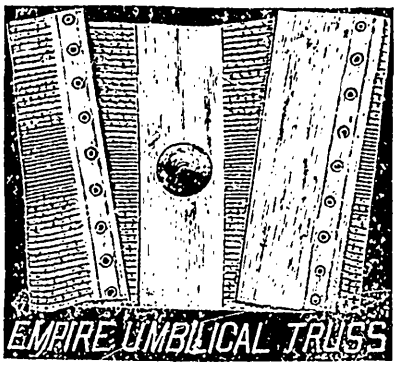

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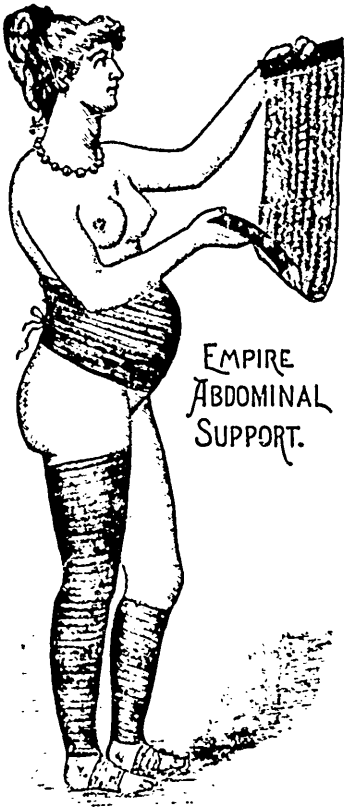

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function—ipecac has a decided influence over the processes of nutrition. It controls blood-supply, and affects nutritive processes in virtue of its influence on glandular function and on blood-supply, either of which is more or less related to central vaso-motor function. It renders mucous membrane anæmic when in a catarrhal or hyperæmic condition—this property it shares with ammonium muriate, and thus is explained how these two drugs in combination prove so valuable in catarrhal conditions of the bronchial tract and in so-called "biliousness." Ipecac is emphatically a tonic to mucous membranes and to glandular cells. Its good action in dyspepsia is proverbial.—*Joseph Adolphus in Medical Age.*

ADDISON'S DISEASE TREATED WITH SUPRARENAL TISSUE.—Tonoli (*Gazz. Med. Lombarda*) reports the case of a woman aged 20, who had suffered from Addison's disease for some fourteen months. When seen she presented all the classical signs and symptoms of the disease. On February 26th 20 gr. of the powdered suprarenal capsule were given daily in pills, the dose being gradually increased to 2½ gr. On March 6th the patient already felt better; the pains in the stomach and lower limbs had disappeared. March 31st, pigmentation less marked, appetite better, strength increased. April 10th, walks well, strength much better. Menses returned after ten months' absence; weight increased. The

patient then went out and the treatment was suspended. Meantime the temperature had come down to normal, the weight increased by 1,600 kg., the black patches disappeared from the mucous membrane, and the slight signs which had first been noticed at the apices of the lungs had disappeared. The author considers this was a case of cure (as far as it goes), and not a mere spontaneous remission in the course of the disease. —*British Medical Journal.*

PREGNANCY AND THE THYROID GLAND. — Bignami (*Wiener med. Blatter*) reports the case of a patient who passed through her first pregnancy without trouble, but a bronchocele developed during the second, and the thyroid gradually returned to its original size after delivery. During the third pregnancy the swelling reappeared, and there was much constitutional disturbance, dys-

pnœa, and dysphagia. The patient died suddenly in the eighth month, and neither tracheotomy nor Cæsarean section could be performed. There was no necropsy. Pregnancy has a bad effect on all bronchoceles, but there is a true or special bronchocele of pregnancy which does not develop until gestation commences, and disappears or diminishes after delivery, to return at the next pregnancy. It is always vascular, and as dangerous symptoms may set in the induction of premature labor is often advisable.—*Brit. Med. Jour.*

ARISTOL FOR BURNS.—In an Italian journal (*Incurabili*) Dr. Eriberto Aievoli has recently reported his experience with aristol, and expresses the opinion that in fresh wounds, burns and frost-bites, the remedy is deserving of extensive application, as it fulfils all the requirements demanded in these conditions. These properties are, essentially, lack of toxicity, rapid relief of pain, and rapid formation of a non-contractile cicatrix. The drug was always employed in a 10 per cent. ointment, which was spread on sterilized gauze and applied to the affected area. Two cases are described in detail, relating to extensive burns of the second and third degree, which healed rapidly under application of aristol ointment, while other remedies had proved inefficient. A special advantage of this treatment was the ease with which this dressing could be removed. Owing to the slight secretion and the formation of healthy granulations, the dressings did not become adherent and could be removed without pain. The superiority of aristol over boric acid was constantly demonstrated.—*N. Y. Med. Times.*