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EDITORIAL

THE ANTIVIVISECTIONISTS.

The extremes to which this class will go has no apparent limit. These people have attacked scientific medical research in the most virulent manner, and given out to the public literature and statements of the most misleading character. This is usually the case when sentiment takes the place of knowledge and reason. It is an old saying containing much truth in it that as judgment is weak prejudice is strong. These people are governed by prejudice and sentiment founded upon ignorance.

They contend that experiments on the lower animals cause pain and suffering, and that this is not justifiable. They also claim that medicine has not made any real progress as the result of these experiments, and they deny the value of the statistical proofs regarding the cure of disease by the products obtained in this way. They cannot see any merit in such a potent agent for the cure of disease as antidiphtheria serum. Seriously they will assert that vaccination is of no value; indeed, that it is worse than useless, that it is only introducing into the system diseased matter.

Recently the British public has been treated to a dose of anti-vivisection views over a suit for libel against William Waldorf Astor, of the *Pall Mall Gazette*, J. L. Garvin, the chief editor, and H. Cabel W. Saleeby, on account of an article that had appeared in that publication. Some of the adherents of the antivivisection school of thought asserted their firm conviction of the truth of their position. One went so far as to state that he believed that the death of the late King Edward was due to blood poisoning caused by the use of some vaccine.

At the time of the death of King Edward VIII., a leaflet to this effect was issued, and withdrawn only because the request of the Queen objected to it. On that occasion Queen Alexandra made the statement

that "King Edward was vaccinated against the grip or pneumonia before he went to Biarritz, and he benefited much from it. It kept him in excellent health for fifteen months. His attack at Biarritz in nowise related to this treatment." Notwithstanding this denial and from so high a source, the statement is again being repeated.

There does not appear to be any limit to the degree of misrepresentation and exaggeration to which these people will go. There is no excuse for this, as the scientific facts are at their disposal, and they might with very little trouble make themselves acquainted with these to such an extent as would convince them that there is value in experimental research and that man has benefited vastly by it.

DR. A. H. WRIGHT.

Dr. Wright was born in Toronto on 6th April, 1846. During these many years he has given of his best to his native city. For many years he was actively engaged as a teacher in some branch of medicine. In the early days of the history of the Toronto School of Medicine, he was associated with the late Dr. Richard Zimmerman in instructing the students in microscopy. In these days he also acted as the secretary of the Medical School. In the college songs of those days, and at the annual dinners of the students, he would be referred to in a kindly way as the one who gently relieved the students of their "tin."

Dr. Wright specialized obstetrics and came to be in time one of the soundest exponents of this branch of the healing art. He was one of the sanest teachers that ever occupied a chair in any medical college. He was never carried away by new theories, and, yet, his ear was ever on the ground for new views and advances. These had, however, to be sifted and tested in the fire many times before he would give them out to his class. It could be accepted, and was accepted, that when he made a clear statement on any subject nothing had been left undone to find out that the announcement was founded on solid observations and facts.

Dr. Wright took an active part in bringing about the change that induced the Toronto School of Medicine to give up teaching, and re-establish the Medical Faculty of the University of Toronto as an active teaching body. This has been of immense value to the uplifting of medical teaching in this province. He has been for many years a member of the Senate of the University of Toronto. In this capacity he has ever given his influence for the improvement of medical education. We feel that his quiet, but kindly manner had much to do a few

years ago in bringing Trinity Medical College into the university scheme of college union and federation.

In another capacity also Dr. Wright has done good work for the medical profession. As one of the editors of the *Canadian Practitioner*, he has kept a high ideal before the medical profession. He has stood for a clean profession, a capable profession, and a profession that lived at peace with one another.

Few men in Canada has attended medical societies more faithfully than he. Very few annual meetings of the Ontario Medical Association or of the Canada Medical Association have been allowed to pass without his presence. He was not a silent attendant either, as he was one of the clearest of contributors to their transactions and discussions. In these organizations his influence and teachings have been wide and valuable. He has been president of both of these associations. In the early days of the Toronto Medical Society he was one of the most regular of attendants. In the work of the old Toronto Medical Society, Drs. Adam Wright, R. Zimmerman, I. H. Cameron, and R. B. Nevitt played a very important part.

Dr. Adam Wright has retired from teaching, but not from practise. We wish him many years of health to enjoy the society of his many medical friends. He was ever loyal to a friend and with Shakespeare could truly say:—

As in the remembrance of my good friends.
In nothing do I count myself so happy,

DR. F. F. FRIEDMANN'S TREATMENT OF TUBERCULOSIS.

It is too soon to state anything at all definite about the real merits or demerits of this treatment. Some patients treated by this method have died, some have made no improvement, and others have apparently improved. These latter cases may be only showing the improvement that comes from hope. We have known dying consumptives declare that they were getting better when under the treatment of the most notorious forms of charlatanism, because, for the time being, they had a sense of expectation implanted in their breasts.

Many of the leading medical journals are expressing views of a very cautious character, and advising patience, as it will take a considerable time to make clear whether the treatment is really to be classed as a "cure." We hope it may prove its right to be placed in this list.

On thing is certain, however, Dr. Friedmann cannot hold his methods secret for any length of time. It will not do that the treatment should only be given to patients by himself, or by some one appointed by him. We do not think he should be deprived of his proper rewards. The wealthy may give him money, governments may give him pensions, crown heads may confer upon him titles, universities may give him degrees of merit; but he must soon make known his methods to the fullest extent. In this way only can they be tested by other co-workers, and the real value of his claims put to the tests that will either establish them, or grind them to powder if they are not sound—and the sooner the better if they are not sound.

A discovery of this sort is so essentially different from a commercial discovery or invention that it must not be permitted to remain for long locked up in the breast of any one person. The medical profession must be made acquainted with it, in order that the public may in a proper manner receive its benefits, or be guarded against it if it is devoid of merit. There must be no surrounding wall of Egyptian darkness in a case of this kind. Dr. Friedmann has now been long enough investigating his methods, and has treated a sufficient number of patients to be in a position to come forward and remove the veil of secrecy. There may be nothing behind a high wall, yet people will try to look over it. This secrecy is creating a morbid curiosity.

We do not hesitate to state in the interest of the public, the medical profession, and Dr. Friedmann himself that the time has come when full information must be given out. If this is not done the medical profession would be fully justified in turning its back upon Dr. Friedmann and his methods.

THE TORONTO GENERAL HOSPITAL.

The annual report of the Toronto General Hospital for the twelve months ending 30th September, 1912, has come to hand. It is a matter of no small interest to look over its pages and note the amount of work that has been done within its walls during the year.

The board of governors, the medical, surgical and special services are given in detail. The house staff, and those in charge of the training school for nurses find their place also. There is a list of the house staffs from the year 1871 down to the present time. As one runs down the list the work of the bygone years is revealed in the numbers that have the sad word "deceased" after their names! Many others have attained to distinction in their own country and abroad. The old Tor-

onto General Hospital has ever been a good nurse that sent forth her children well equipped to fight the battles of life.

An account is given of the work done in the hospital in the various departments. As one looks at this it appears that the hospital is doing a work that compares well with that of other large hospitals. The various services and officers are to be congratulated on the report for the year. The cost per day was \$1.58, and the death rate was 5.39.

SMALLPOX.

This disease from time to time makes its appearance in various parts of the country. Of late years in Canada and the United States it has been of a mild type, and people have come to look upon it with a certain air of contempt. It will not do to play with fire, nor to keep on crying "wolf"; for "a little fire is easily trodden out, but being suffered rivers cannot quench," and the real "wolf" may come some day.

It does much harm to any city or town to have a number of cases of smallpox. It disturbs the life and business of the place seriously. All this could be prevented, but those who do not know have been propogating anti-vaccination teaching for years, and so many think that vaccination is a positive curse.

Many years ago a certain German collected a considerable amount of statistics against vaccination. These he garbled in a very bad way and made them tell remarkable untruths. These figures have been used as the stock in trade of the antivaccinationists ever since.

It was a wise move on the part of the Ontario Legislature a year ago to pass an act taking the control of vaccination out of the Boards of Education and placing it under medical health officers.

MEDICAL EDUCATION IN CANADA.

Few countries can boast of so high a standard of medical education as Canada. or a more educated body of medical practitioners. In the early period of medical education in this country the colleges were proprietary concerns, and the profit from the students' fees went mainly to the owners of the building in which the teaching was carried on. This condition has passed for good.

But it must be said for these old time medical colleges that they did excellent work and strove with zeal to give the students a sound training in medical science as it was then known and taught any where. The old Toronto School of Medicine, Trinity Medical College, the Woman's Medical College, all of Toronto; the Royal College in Kingston; the early days of the Medical College in Winnipeg; the Medical College in London, and the College in Halifax, are examples of excellent teaching under difficult and adverse conditions.

These schools gradually became merged into some university, and the various lecturers held their appointments from the university with which they became attached. This was a great movement onwards, and was of advantage alike to the students and teachers. It had the effect of giving a dignity and a status to medical education and the medical profession that had not been enjoyed under the former system.

At the present moment there are about 2,000 persons studying medicine in Canada in the eight medical colleges, namely, the University of Manitoba, Winnipeg; the Western, London; the University of Toronto; Queen's, Kingston; McGill, Montreal; Laval in Montreal and Quebec; and Dalhousie, Halifax. It is true that these colleges have not equal facilities for their work, but there has been an honest effort to better the conditions, and these efforts are bearing good fruit.

For a long time each province had its own standard of qualification and there was no dealings between the Jews and the Samaritans. The student of one province could not practise in another province until he qualified himself afresh. It was felt that something should be done to remove some of these restrictions. For many years efforts had been made more of an educative character than an executive one. When the proper time came the leader came also.

Dr. Roddick, of Montreal, held a seat in the House of Commons for that city. After much thought on his part and with the advice of many members of the profession, he introduced the Canada Medical Act, and succeeded in having it placed on the statute books of the country. There was a section in it that required the consent of all the provinces before it could become operative. This gave rise to some years' delay and a good deal of further discussion. At last the provinces agreed upon certain amendments that should be made in the original act. By this time Dr. Roddick was no longer a member of Parliament, and these amendments were placed in the hands of Dr. Black of Hants, N.S. These were approved of by the Federal Parliament, and the Canada Act is now operative in all the provinces.

Following this up a council has been appointed to put the act in force. This council has met and organized itself. In due time examinations will be held under its authority and diplomas issued that will

enable the holder to practise in any province. This act does not do away with the councils of the several provinces. Each province has still the same powers it formerly enjoyed of controlling the standard of admission to practise in its province.

Medical men who have been ten years or more in practice may now locate in any province without examination. Those who are of more recent date of graduation must qualify by passing the examinations to be prescribed by the Dominion Medical Council. So the medical tree has been steadily growing, and we say *Velut arbor crescat*.

THE MARRIAGE ACT.

Hon. Mr. Hanna has introduced a bill for the purpose of regulating marriages, and limiting the possibility of defects securing a license for marriage. There is nothing more securely founded by biological science than the importance of heredity. We are not going to argue this out just now, but there is much truth in the saying "a chip of the old block."

It is a very proper thing to take care of defectives and provide homes for them, but it is more important to prevent the increase of these as far as possible. In the bill three very important provisions appear: (1) Persons who have lived less than 15 days in a locality must publish notice of approach of marriage for three weeks preceding application for license; (2) Ministers are liable to a fine of \$500 or imprisonment for 12 months if they perform the marriage ceremony if they have any reason to think that either contracting party is an idiot, insane, or under the influence of liquor; and (3) deposed clergymen are under the same penalties if they marry a couple.

These regulations will do some good, and they cannot do any harm. There is not a medical practitioner who has not witnessed the deplorable results of the marriage of the unfit. This bill is a step on in practical eugenics.

REPORT ON TUBERCULOSIS.

The Departmental Committee on Tuberculosis with Waldorf Astor, M.P., for chairman, has issued its final report. The following are its salient features:

The committee is of opinion that it would be well to fall back upon compulsory isolation in cases of marked infectivity where the

home surroundings are unfavorable, and especially where it is impracticable to induce the infected person to adhere to measures that would destroy infection. All premises that have become infected should be thoroughly disinfected.

The report recommends that care should be given to town planning so as to secure as sanitary a condition as possible. The dwellings of the poorer classes should be inspected with the view of having them put in a better condition.

Bovine tuberculosis should receive careful consideration. The statement is made that the disease among cattle can be eradicated, though this will take considerable time. Any effort in this direction must be general. Great care should be given to secure a milk supply that is free from infection. All animals that give a tuberculin reaction should be destroyed.

Much attention is paid to the case of children. The report is quite emphatic that they may be infected through milk. All suspected cases in school should be dealt with specially, either by being excluded or by being sent to special open air classes when well enough to attend such. The medical inspector of schools and the family physician should be in communication with each other.

The report advises the appointment of a permanent committee to carry on research work. It also states that a permanent secretary should be appointed with administrative capacity. From this central committee all the work of research and efforts at prevention would be directed. A number of workers of known ability should be engaged on research work, and this work should be extended throughout the entire kingdom.

It is also recommended that medical students and practitioners be given every opportunity of becoming familiar with the disease in all its phases and in all stages at the dispensaries, sanatoria and other institutions.

The Insurance Act provides for one penny per insured person may be retained by the commissioners for research work. This will yield annually the handsome sum of £57,000. With such a sum much can be accomplished.

ALIMENTARY TOXAEMIA.

In the practice of medicine there are few subjects of greater importance than this. It has a wide aspect from the standpoints of the physician, the surgeon, the bacteriologist and the therapist. On these

aspects of this subject four members of the medical profession took part in a symposium at the Royal Society of Medicine, London.

Dr. W. Hale White, Physician to Guy's Hospital discussed some of the causes. The first he took up was pyorrhoea alveolaris. This condition prevents proper mastication and, at the same time, mixes the food with disease causing micro-organisms. These organisms may cause intestinal toxæmia, or they may enter the blood stream and give rise to septicæmia.

Other organisms play an important part. It is claimed by high authorities that the adult human being excretes from the intestinal canal about 128 billions of bacteria, and that 99 per cent. of these are dead. Another thing that must be remembered is the influence one form of bactericidism has over the other. Thus the colon bacillus seems to be inimical to others, and destroys the typhoid bacillus. But the bacillus enteritidis may destroy the colon-bacillus. It has been observed that in hot climates the flora of the intestinal canal is much more abundant than in cold climates. In far north regions the intestinal canal may become sterile.

Up to the present no one has been able to show what these intestinal toxins are. Much has been said about the presence of indican and ethereal sulphates in the urine; but a person may void these constituents in the urine for a long time and remain in apparent good health. Experiments in the laboratory must not be taken as too conclusive, as the absorption of a toxin from the alimentary canal is not by any means the same in effects as when it is injected into the animal either by way of a vein or under the skin.

There is no definite clinical picture of intestinal toxæmia. One form of intestinal irritation and toxæmia may arise from an excess of carbohydrate food. In the case of a child who is thus fed, the stools contain a green coloring matter with an excess of fatty acids, and they irritate the anus. The intestines are distended with gas. In enterogenous cyanosis there is in one variety of nitrite in the blood and in another there is hydrogen sulphide. The relief of the constipation relieves the cyanosis.

Much has been said about constipation as a cause of toxæmia. There are some things that must be borne in mind, however, in this connection. In the case of toxæmia from bacterial origin there need not be constipation, as the amount of toxin will depend upon the number and kind of bacteria. So that toxæmia is no proof of intestinal stasis. It has been held by some that there are adhesions, bands, kinks, spurs, etc., but there are not a sufficient number of cases of any one type to justify the conclusions that these conditions are the causes of intestinal toxæmia.

The symptoms of alimentary toxæmia have been described many times, and yet we do not know what the toxin is. Care must be taken that the term be not used in a loose way such as has come to be the case with the terms rheumatism, gout, uric acid diathesis, etc. Many diseases, such as cystic degeneration of the breasts, duodenal ulcer, and cancer in different parts of the body, have been attributed to intestinal toxæmia; but proof is lacking to show that those who are said to suffer from intestinal stasis are more liable to these diseases than are a similar number of others. It must not be overlooked that intestinal stasis is much more common among women than among men, and yet duodenal ulcer is commoner among the latter.

It has not been satisfactorily proven that intestinal stasis is a cause of Bright's disease. In the same manner the claim that an operation for the cure of stasis has cured exophthalmic goitre is not good reasoning, as some cases of this disease get well with rest and ordinary care.

It is not possible to remedy intestinal toxæmia by avoiding the ingestion of the bacteria. Some have advocated intestinal antiseptics, and they may do some good, but their value has been greatly overestimated. Many cases are benefited by the use of aperient waters. Of late operations have been performed for the cure of stasis and toxæmia; but Dr. White does not feel convinced they do the good that has been claimed for them. If most cases were properly treated in their earlier stages, they would never require an operation. What the final outcome of operative treatment may be time must decide; but rhetoric should be checked by logic.

THE LONDON MEETING OF THE DOMINION MEDICAL ASSOCIATION.

The medical profession in London are making strenuous efforts to make the next annual meeting of the Dominion Medical Association an unqualified success. The meeting will be held on the 24th, 25th, 26th and 27th of June. Already arrangements are well advanced. The first two days will be devoted to Sections in Medicine, Surgery, Gynaecology and Obstetrics, Pathology, Public Health, Eye, Ear, Nose and Throat, and X-rays. On the forenoon of the third day, Dr. McPhedran, of Toronto, will open a discussion on Diseases of the Stomach, and Dr. Stockton, of Buffalo; Dr. Martin, of Montreal; Dr. Aaron, of Detroit; H. J. Patterson, F.R.C.S., London, Eng., and others will take part. On the afternoon of the same day a symposium on the Thyroid Gland will occupy the attention of the association. Dr. Ochsner, of Chicago,

will open the discussion on the surgical aspects of disease of the Thyroid. On Friday forenoon, Dr. Billings, of Chicago, will conduct a medical clinic before the association. In the afternoon of that day, Dr. J. B. Murphy, of Chicago, will give a lantern demonstration on surgical diseases of bones and joints. Among others outside of Ontario who have intimated their intention of attending the meeting are Dr. McKechnie, of Vancouver; Dr. Lehman, of Winnipeg; Dr. Angus McLean, of Detroit; Dr. Halfpenny, of Winnipeg, and Dr. Emil Beck, of Chicago. The last mentioned will give a lantern demonstration entitled, "Eight Years' Experience with Bismuth Paste in the Treatment of Sinuses." Dr. Gallie and Dr. Robinson, of Toronto, will contribute a lantern demonstration of experiments in bone transplantation. The presidential address will fall to Dr. H. MacCallum, of London, the president-elect; the address in surgery will be given by Dr. Hutchison, of Montreal; the address in medicine by Dr. Llewellys Barker, of Johns Hopkins, and the address in gynaecology by Dr. Cullen, of Baltimore. A definite announcement of the program will be made in the next issue.

It is confidently expected that the attendance will ensure a return rate on the railways at a single fare, and in order to make this more certain, all members, however near the place of meeting, are specially requested to procure a standard certificate from the railway agent at the place of starting. The single fare rate will be a material consideration to those attending from a distance.

London is one of the most attractive cities in the Dominion, especially in the summer months, and this fact, coupled with the outstanding reputation of a large number of the men who are to participate in the program, should ensure a record attendance. The Forest City promises its guests a generous hospitality on the occasion of this meeting.

MEDICAL COUNCIL OF CANADA.

The next meeting of the Medical Council of Canada will be held at Ottawa on the seventeenth of June, and four following days, and that it is expected by that time it will be in a position to open the new register to all those who have been in active practice in Canada for ten years prior to the seventh of November, 1912, which was the date on which the Act came into force. For information write to R. W. Powell, of Ottawa.

ORIGINAL CONTRIBUTIONS

SOME ASPECTS OF RENAL SURGERY.*

BY RAMON GUITERAS, M.D., NEW YORK.

DR. GUITERAS began his talk on the kidney by saying that as he understood the audience was formed of surgeons, physicians, specialists and general practitioners, he felt that he could not divide his slides in such a way as to give a talk to any particular group that would be interesting the other groups, and that he would therefore stroll through his slides, showing them hastily.

He began with anomalies of the kidney, and took up first the variety known as single, unilateral or assymetrical, stating that they were very rare, and that, according to statistics, such a condition was found once in between four and five thousand bodies at autopsy—that in a period of ten years at Guy's Hospital, London, during which 4,632 autopsies had been performed, there had only been one case of single or unilateral kidney. He further stated that in teaching operative surgery on the cadaver for eight years, during which time he had frequently had eight or nine classes of four each running at one time, and in each class both kidneys were operated upon, he had never seen a case of unilteral kidney; and yet, in a small hospital—the Columbus—with which he was connected (of less than 100 beds), in a period of nine months, during which only 15 autopsies were performed, that three of these cases, or 20 per cent., proved to have but one kidney. He showed the three specimens from his slides, calling attention to their large size, and also to the fact that they were all lobulated and fissured, and said that such a condition was typical of a unilateral kidney. In one of these cases one fissure was very deep, extending from the pelvis to the outer border, and dividing the organ into two parts. Both the upper and lower segments of the kidney had each a fissure extending nearly half-way across it at right angles to the pelvis. This kidney had but one ureter, and was in the proper position, and it showed how easy it would be to have such an organ converted into two, if there had been two ureters present and one-half of the kidney in each renal fossa; or to have found such a kidney displaced low down in the median line, with its two segments attached by an isthmus, which would form an organ corresponding to a horseshoe kidney. The lecturer

*An illustrated lecture, delivered before the Academy of Medicine, Toronto, February 4th, 1913.

showed that a large quantity of tubercles were scattered over the kidney, and stated that statisticians, in speaking of unilateral kidneys, said that they were frequently affected with tuberculosis. This particular unilateral tubercular kidney had been referred to him from the medical side, with the diagnosis made a number of years ago, for operation on the following day, and he had made an incision down to the kidney, found it tubercular, and had removed it. The patient developed anuria immediately after the operation, and died of asthenia in eight days. There were no uremic symptoms. Autopsy showed the absence of the kidney on the right side, although there was a long projection of liver extending down, which closely resembled a kidney on palpation. An operation of this kind would be rare to-day, as kidney cases are better studied now than previously. We do, however, find cases in which we cannot feel the kidney on the other side, nor see its ureter nor catheterize it, if we do see it, and in such cases we must believe that no kidney is present on this side; and even if we contemplate operation in the other kidney, we must confirm our belief by an exploratory lumbar incision. In some cases, if we do see and catheterize the ureter, we find no urine coming down from it, and it is in such cases, as well as in cases of unilateral kidney, that we must believe that either both ureters go to the same kidney, or, more probably, that a non-functionating kidney is present on that side, and that the removal of the kidney on the other side would be followed by death.

He then took up the subject of another variety of anomalies—that of misplaced or ectopic kidneys—which he considers very interesting and instructive. He stated that they must not be confused with the displaced kidneys which were known as movable, which are held out of place by adhesions, the blood-vessels of which come from the normal side. The misplaced or ectopic kidneys which he had encountered had the origin of the vascular pedicle below the normal site. He stated that the usual sites of ectopic kidney were at the sacro-iliac synchondrosis, on the promontory of the sacrum and in the pelvic cavity. He then showed the slide of a kidney in the pelvic cavity which had been mistaken for an ovarian cyst; another slide of a kidney situated at the sacro-iliac synchondrosis, he had considered it a case of movable kidney, which had become adherent to the tissues in that region. He had made the ordinary kidney incision in the loin, and thought that he felt the organ moving up and down with the respiration, and in an effort to cut down upon it through the mass of fat present, he went through the peritoneum and exposed a flattened spleen with a rounded border. He closed the peritoneum, and, cutting down farther, found the kidney, which was hydronephrotic. After freeing it, he pulled it up as far as possible and fixed it. The patient, however, suffered more pain than

before the operation, and as the amount of kidney tissue was not great and the other kidney was perfectly healthy, he removed the organ, which he showed as a specimen of hydronephrosis. He said that all cases of ectopic kidney that he had had were hydronephrotic.

He then spoke of the study of a recent case of ectopic kidney. He stated the patient had entered the hospital complaining of some difficulty in urinating, of a swelling in the hypogastric region, of constipation and a general feeling of discomfort in the pelvis which prevented him from work. When standing up, no tumor could be felt, but when lying down, one could be easily outlined, extending from the pubes up to within two inches of the umbilicus. Bimanual palpation showed the tumor beginning above the prostate. The patient, after emptying his bladder, was catheterized, and no residual urine was found present. Cystoscopy revealed a normal bladder; the ureters had normal mouths and were easily catheterized, although the excursion of the cystoscope was somewhat impeded behind. Many diagnoses were made by the different attendants connected with the hospital. His own diagnosis was that of an hydatid cyst or a misplaced hydronephrotic kidney. The patient was prepared for operation, and, assisted by another surgeon of the hospital, he opened the abdominal wall down to the peritoneum, and found the anterior wall of the bladder normal. He incised the peritoneum above the bladder and found a tumor situated in the lumbosacral region, and extending down into the pelvis, very much as a woman's net containing her hair hangs over the occiput. There was no hydatid cyst present. The tissues over the tumor were tense. An aspirating needle was inserted, and some fluid withdrawn. He sent this specimen to the laboratory to be examined for urea and pus, and waited for the report. In a few minutes the report came back that neither urea nor pus was found, but that there was albumin. This eliminated from his mind the presence of a misplaced kidney, and he thought it must be some kind of a cyst situated outside of the peritoneum, and that it would be advisable to unite the anterior and posterior layers of the peritoneum, leaving sufficient space to open the cyst, put a drain in and treat it as one would a cystic cavity. This was done. The following day, on going to the hospital, he learned that both urea and pus had been found in the fluid escaping through the drainage tube, pointing to the probability of an ectopic kidney. Shortly after this he had the patient radiographed with X-ray catheters in place, and found that while one catheter went up to the pelvis on one side (the left) that the right one curled up in what resembled the bladder. The patient was then cystoscoped, and the instrument allowed to remain in place during the radiograph taking, thinking, perhaps, that the catheter might have slid down from the ureter into the bladder. This showed

that the one catheter had gone into the pelvis of the kidney and the other had gone into a cavity over the lumbo-sacral region, and had curled up there. Accordingly, collargol (10%) was injected, giving a beautiful view of the pelvis of the left kidney, which was seen to be in place, and also the shadow of a large mass in the lumbo-sacral region. This mass corresponded in position to the cyst that had been operated upon. Six (6) ounces of collargol had been injected into it. He feared if he had injected more it might have given rise to too great reaction. As it was, the reaction was marked. It was then decided to again operate upon this patient, and an incision was made from just above the anterior superior spine of the ilium down along Poupart's Ligament, giving sufficient space to pull back the peritoneum and tissues contained in it to the other side until the kidney was reached. The kidney was then removed and a slide was shown, giving the position of the renal vessels and the ureter. The squeezing of the kidney forced the urine from the pelvis into the bladder. The specimen of the kidney was then shown, and the hydronephrotic condition easily seen.

The lecturer then threw upon the screen three kidney specimens, showing three different grades of hydronephrosis, and the condition, size and shape of the pelvis of the kidney in these cases, as well as the condition and position of the ureters. He spoke of the various causes of hydronephrosis, and then stated that it usually began early in life, in which case it was dependent upon the valvular conditions of the ureter, which were probably congenital. When it began it was acquired and due to obstruction.

Rupture of the kidney was then considered briefly, and the different varieties described. He showed a slide representing the body form of a patient who had had a fall of some 20-odd feet eleven days before entering the hospital. It resembled a large watermelon tucked into one side of the peritoneal cavity, extending from the diaphragm to the pubes. "As the patient had no hæmaturia, and there was no history of any, it appeared to be a rupture of the spleen, and an anterior abdominal incision was made, extending through the peritoneum. The intestines were found to be flattened out between the anterior and posterior peritoneal walls on account of something situated posteriorly to it which pushed the posterior layer forward. I accordingly closed the wound, turned the patient on to the healthy side, and made a loin incision into the kidney region, excavating several quarts of reddish-brown fluid, containing whitish particles, typical of the fluid present in case of rupture of the kidney. Whether this was due to some action of the urine or whether pus was present, I do not remember. At any rate, if pus was present at the time, it was but a very small percentage. The fluid was evacuated and the cavity was washed with peroxide and

salt solution, and a drain inserted. After a few days the patient began to run a temperature, and it was found that pus was present in the cavity about the kidney. A second operation was performed, and the kidney was found to be ruptured, and also the pelvis. The other kidney was found to be in good condition and the diseased kidney was removed."

Dr. G. then showed a picture of the ruptured kidney, with the urine extending through both the pelvis and the kidney. He stated he believed that a kidney which as an enlarged pelvis, dilated either by urine (hydronephrosis) or by pus (pyonephrosis) is more liable to be injured than any other variety, and he thinks that a pyronephrotic kidney due to stone is especially liable to rupture. He said that this was a case of subparietal rupture of the kidney, with an extensive accumulation of blood and urine about it; that he would later show a case of subparietal rupture, in which the fluid was subcapsular. He stated that he had had quite a number of cases of subparietal injury from one cause or another, but only one open wound, a direct injury resulting from a stab wound in the back.

Nephrolithiasis.—The lecturer then showed slides of a few kidneys containing calculi, illustrating the changes brought about in these organs through them. His first picture was that of the kidney of a middle-aged woman, who entered the hospital complaining of dyspepsia and malaria. She said that she had suffered from dyspepsia for a number of years, but it was only within the last few years that she had had the attacks of malaria which had lasted from a few hours to a few days, accompanied by chills, fever and sweating and then subsiding. On examining her abdomen, a large mass was found on the right side, tender to the touch, which she said was an enlargement of her liver that she had ever since the malaria began. It was evident, however, that it was not the liver, but an enlarged kidney below it. It was quite prominent in the front. She was kept under observation for a few days, and her urine changed considerably, sometimes containing a large amount of pus, and at other times comparatively little. The pus came from the right side. Her attacks of malaria were evidently those of renal retention in a perinephritic kidney. When the urine was clear the kidney was enlarged and the patient was septic, and vice versa. The urine coming from the right side was mostly pus, and contained but a small quantity of the normal solids, showing that it was a case of pyonephrosis in a practically destroyed kidney. The other kidney was functioning sufficiently well to carry on the necessary elimination in case that it proved advisable to remove the right organ. A loin incision over the enlarged kidney showed it to be about nine inches long, and of relative width. It was removed, and on opening it, the five stones

seen were found, one of which was bifurcated and four inches long. This particular stone evidently originated in two of the kidney calyces, and they had grown down into the pelvis, and there formed a common trunk, which trunk engaged in the pelvis opening and caused from time to time temporary unilateral anuria; but when sufficient pus and urine had collected in the kidney pelvis to dilate it, a stretching of the organ caused it to push the pelvic opening away from the part of the stone lodged in it, and the retained urine escaped again. The other stones were from $2\frac{1}{2}$ to $1\frac{3}{4}$ inches in width, and were more or less rounded. It was the variety of kidney which called for removal. The stone showing the particular formation plugging the ureter was then shown. Very recently he had removed a kidney eleven inches long, with two such bifurcated stones, one of which was so wedged into the ureter that no amount of dilatation was sufficient to discharge it.

Another case of pus kidney due to stone was then shown, which the lecturer had seen on a certain afternoon and which he had sent to the hospital for observation and probable operation. The patient had a temperature of 101, pulse of 90, respirations 36. On arrival at the hospital in an ambulance she had a temperature of 105, pulse of 130, respirations 46, and was in a state of collapse. She responded to stimulation, however. On examining her on the following day the well-defined renal tumor which had been felt the day before was simply an ill-defined mass in the loin. The case seemed a clear one of pyonephrotic kidney, with renal retention due to stone, which had ruptured during the trip to the hospital, giving rise to perinephritic abscess. The abscess was opened and drained. A few days later an exploratory nephrotomy was performed, but no renal stone was found on palpating the pelvis. As the patient continued to run a septic temperature and lose strength and weight a nephrectomy was performed showing a stone embedded in a large mass of fibrous tissue that had not been detected at the time of nephrotomy, into which a probe could not be passed from the pelvis of the kidney. This was a displaced, movable, pyonephrotic kidney containing a calculus.

Another case of unilateral anuria with great enlargement of the pelvis of the kidney due to an impacted stone at the beginning of the ureter was then shown. The tumor had been an enormous one (9 or 10 inches in all diameters) convoluted and distended. It was considered an emergency case and was removed as such, although it should have been opened and drained. At the time of the operation the kidney was almost hidden, but later on, after the pelvis of the kidney had been opened sufficiently to see the impacted stone, there was sufficient leakage of fluid from the cavity to show the presence of considerable good renal tissue. It may here be said that a kidney 10 inches in

length when removed, after it has been opened and the pus and stones removed, and it has been preserved in fluid, may decrease to less than one-half the size. He considered cases of anuria due to stone the most interesting in renal surgery, and stated that he had had numerous cases of patients with but one functioning kidney who had no idea that one of their kidneys was useless. At home he has slides of many such cases which he calls derelict kidneys.

Cysts.—A few cystic kidneys were then shown. The first one was that of a large serous cyst which are generally single, although there may be two in one kidney. In this case there were three small cysts and one large one. The kidney tissue was very much deformed and the lower part of the organ was almost entirely destroyed. The lecturer said it was considered one of the best specimens of serous cyst ever removed.

Hydatid Cyst.—The next was a case of hydatid cyst of the kidney. The patient had come in suffering from great pain in the right loin. She had had a slight hæmaturia. The kidney was felt to be very long and very tender. The patient had slight elevation of temperature. Incision showed a very long kidney extending into the renal fossa downward to the ilac fossa. It was very adherent to the diaphragm. The lower end of the kidney was somewhat curled. A beautiful white cyst the size of a duck's egg, but round, was seen. It seemed to spring from the junction between the kidney proper and its pelvis. This was opened and a large number of small white cysts escaped running down by the side of the ureter and out of the wound. A piece of very white thickened membrane was found and removed from the inner part of the sac. It was a typical case of hydatid cyst with daughter cysts present. The outer side of the cyst wall was cut away and the remaining part was treated with pure carbolic acid, followed by alcohol. The patient had ether pneumonia after the operation, but later had a satisfactory recovery. The lecturer stated that at the time of writing his book he had found no other illustration of hydatid cyst of the kidney than this case of his and that the literature of the subject had been thoroughly gone over.

Polycystic Kidney.—The next slide showed the kidneys of a patient in one of his hospitals who died of uremia. This patient was 55 years of age and his kidneys had been gradually increasing in size for many years. The right was 10 x 5½ inches, weighing 56 ounces; the left 9¼ x 5 inches, weighing 49 ounces.

The next slide showed an illustration of the larger kidney split in two—a beautiful exhibition of cystic development. It seemed wonderful how anyone could go through life with such enormous kidneys suffering but little inconvenience excepting from their weight. The

urine in these cases showed about the same changes as in interstitial nephritis. They were probably due to congenital causes, either beginning at the time of birth or shortly thereafter, increasing gradually but slowly in size. Such cases should be considered inoperable, unless an abscess is present when it can be opened and drained. The removal of one such kidney is very fatal, and in case of an operation the patient would probably not live as long as if the kidney had been left alone.

Malignant tumors of the kidneys were then considered and the first slide shown was that of a sarcoma. The patient had entered the hospital suffering from great pain on the right side where a large tumor could be felt. He was much emaciated and had constitutional symptoms. Although his condition was very serious an exploratory incision was made, revealing an enormous kidney with a papillomatous appearing mass sprouting out through the capsular propria. The growth was very extensive and so fragile and friable that a great portion of it could have been scraped away with the finger, but it was extremely vascular and bled profusely when touched. The bleeding was stopped by very hot water and peroxide and the wound closed, a drain going down to the kidney. The patient died very shortly after the operation and the specimen was secured. He said that the specimen showed what great changes can take place after its removal, as this papillomatous mass of friable and fragile tissue composing the tumor after it had been kept for some days in the preservative fluid had changed into solid looking tissue which, on cross section, closely resembled a piece of beef. He further said that only a few days before he had removed a prostate tissue of which very much resembling that which he had described in the kidney; that he had immediately placed it in gauze and taken it to be photographed, and even in an hour's time it had changed so as to look like a mass of beef.

The lecturer then showed a beautiful specimen of carcinoma of the kidney. He had been called to see this patient on account of hæmaturia and had found him wearing a large truss just about Poupert's Ligament, specially constructed. On removing the truss he found a very large round tumor which was freely movable. He said that he had had this condition for some time which had been diagnosed as a hernia and the special truss had been made for it, but that he felt a little worried over the blood in the urine. An examination of the urine showed the left kidney to be normal—this one (the right) to contain cancer cells. The patient was operated upon and the pedicle was found to be of unusual length; in fact, so long that the tumor could be freely moved over a wide range and pushed down to the region of the bladder. The kidney was removed—nephrectomy. The patient was very uremic after the operation and only seemed benefited

by purging with large doses of blue mass. A specially constructed pen had to be made around his bed in which he constantly roamed about at night, in a delirious condition. The patient finally recovered and has lived six years and much to my surprise his family report him comparatively well.

The next case shown was one of hydronephroma. He stated that whereas the yellow mass could be plainly seen on the outside of the kidney they were much more distinctly seen on cross section. There was nothing particular about this patient excepting that he had for some time been losing weight, suffering from hæmaturia, and had some dragging feeling and occasional pain in the left side. His right kidney, however, had been found perfectly well. He had a malignant cachexia and a very large varicocele on the left side (the largest he had ever seen). I mention this because the spermatic vein on the left side runs into the renal vein and tumors of the kidney on this side are liable to cause left-sided varicocele.

SEXUAL PROBLEMS.

BY JAMES S. SPRAGUE, M.D., PERTH, ONT.

THERE are in the United States 300,000 prostitutes and it has been stated with equal authority that if these denizens of the under world were to abandon their work, within twenty-four hours after their disappearance, an equal number would take their places. It, too, has been stated publicly that in Chicago, for every lawful marriage there are six divorces. I need not make or produce extracts from the *Health Circular Social Hygiene vs. The Sexual Plagues*, issued for the public by the Indiana State Board of Health, and sent free on application, although a two-cent stamp is named to cover expenses for postage. The booklet has thirty-nine pages, and every M.D., every patriot, every clergyman, every health officer, school teacher (man or woman), and not least every legislator should have not one—but one or more dozens of copies. Of the copies I received, one was sent to Dr. McCullough, our chief Health Officer, one each, to four ministers of the gospel, and the remaining copies—except one retained by me—have been sent to fellow M.D.'s and men who are working for reform and beneficent movements. You, my brother, resting in the belief that this—our province—even if the most enlightened, as we consider, in our Dominion, is keeping even with the progressive movements in regard to the national health, and not observant of what has been done and is being done by several States of the Union—are but slumbering and in great ignorance and it is time

to awaken and to read—even the pamphlet herein named and in which appears “5th Edition—110 Thousand,” and the “*Press of the Indiana Boys’ School.*” You and I, at graduation, without taking any oaths to become the conservators of the public health, assumed the yoke and kissed the rod, and the *fideles ad urnam*, fully believing we have a trust to keep, and that the Great Architect of the Universe is a good paymaster. You and I have treated, and very frequently too, misguided youths—even adults, whose associations were with a “rag and a bone and a hank of hair”—whom the fools called “their lady fair,” and, too, we have seen these deluded and impetuous fellow-beings roam our streets at mid-day, contaminate others and even befoul their own nests through ignorance, and the lack of legislation to announce the dangers and to require the necessity of such disorders to be named communicable and reported to the local officer of health

Yes, this or the other fool “was stripped to his foolish hide—which she might have seen when she threw him aside” but “some of him lived and some of him died” and the work went on. As Gay tells of the Devon farmer, the case is worse:

“Ye gods avert that worst disgrace—
Thy ruined nose falls level with thy face;
Then shall thy wife, thy loathsome kiss disdain,
And wholesome neighbors from thy mug refrain.”

The subjects of eugenics, phylogenesis, areotology are occupying much attention as studies by many M.D.’s, and prominent divines in the United States—yet they are not forgetful of the sexual plagues in all forms. In many States there are laws—rigidly enforced—that require medical certificates to be produced by the parties under contract for marriage, and yet, not long since, a deputation of God-fearing women—who not wanting their or their sisters’ wombs to be the nursery for spawns—humbly presented an appeal for such health certificates and, that legislators but follow the advanced rulings of several enlightened States, and although kindly received, yet what was the answer of our chief officer among the legislators? Was their noble and patriotic appeal even promised “due consideration in time?” To him or her—whose words named are by Byron:—

My days are in the yellow leaf
The flowers and fruits are gone,
The worm—the canker (chancre) and the grief are mine alone.”

Yet, shall we say to him or to her in the words of Burns:—

“What’s done we partly may compute
But know not what’s been resisted.”

And that the remorse is but an after-clap; or shall we say: “Thy fury inward on thyself prey and consume thee!” No! let us repeat the soothing and yet not encouraging words of the great English dramatist:

The life of all his blood
Is touched corruptibly;
And even his own pure brain,
Which some have vainly supposed
Was the soul’s frail dwelling place,
Doth by the idle comments it makes
Foretell the ending of mortality.”

One truth is this, and Bombastus Paracelsus tells it to us: The body has been given to us without venom. Whatever makes a man sick is the venom that gets into his nature from outside.” To that chief legislature, herein so named, I refer the words of the great Virchow: “The care of the public health is the first duty of every statesman.” In my consideration of men medical there are not living any or even one who are, or who is the equal of Abram Jacobi, M.D., of New York, and I present a few of his encouraging and prophetic words: “If there be in the commonwealth any man or any class of men with great possibilities and responsibilities, it is the physician. It is not enough, however, to work at the individual bedside and in the hospital. In the near or dim future, the physician is to be set in and control school boards, health departments—and legislatures—, and we are seeing the pioneers at work—even late—in our Province, and even a Dominion Medical Board of Health, that possibly may be a co-partner with agriculture which concerns itself in raising and keeping pure Holsteins and Berkshire hogs. How dear to our gods—Apollo, Aesculapius—even Hippocrates, and the shades of our illustrious progenitors, fathers, master minds and the brightest of divinities in medicine (the first of arts and sciences) must this mundane incompatibility of interests appear when divinity act in the judgment at their tribunals! With the words of the Hon Chauncey Depew, you and I agree: “The professional man, because of his wider culture and more accurate training, is a leader in every community.” And this expression especially applies to the medical profession and to that great source and personified culture represented most frequently by that hallowed term of *Country doctor*, for he it is who sees a god in every man, and fully believes “they serve God well who serve His creatures.” How essential then is it that he—one of the McSure order—

should have a very broad and most thorough training, yes, how frequently do we bear witness to the following kindly reference:

“He who thus endowed as with a sense and faculty for storms and turbulence, is yet a soul whose master-bias leans to home-felt pleasures and to gentle scenes, sweet images! which where so'er he be, are at his heart;” even, if at times we see humanity without its masks and frills, yet, we forget not the poetry of life, and our mission is ever that of “Herakleo battling with disease, with custom, and with prejudice,” and with men's blinded hopes, disorders, toil, and prayer and winged troubles peopling daily air”—(*“Spes hominum caecos, morbos, votumque, labores, et passim toto volitantes aethere curas”*),—and yet we ever prize in leisure hours, those “studies which result in the soul, getting righteousness and wisdom,” and pleasing too it is to recall the words of Tertullian: “Quod invenitur, fuit,” “What is invented, was,” in brief that which is being used by our modern scholars as original was said before, however expressive words bear repetition for confirmation. The health of the people was considered the supreme law among the Romans, and before Romulus and Remus were suckled the Mosaic health-rulings had their origin, and are held as sacred and are observed by the faithful even now as when promulgated.

It is indeed a paradox to us who notice in several journals whose readers are women—even many young, the various measurements of the ideal young woman, and in the columns of some farm papers was noticed the measurements of the perfect horse or hog, in fact too much drifting there is to the flesh and bone—and “hank of hair”—corsets—and matters sexual in character, meretricious, not refining to the soul, or preparing young women honorably for their highest destination and destination of motherhood. In fact much current literature—so termed—is but encouraging vice, and a careful study of the writings of several women—who affix M.D. to their names, reveals the fact that lustful thoughts either possess them—or do not possess them from disappointments in life—or their medical education is as a commercial asset—or worse still, that the fountains of their youth are dried up. One fact is this “*propter ovarium mulier est;*” and another is, as Gay tells us: “’Tis woman that seduces all mankind; by her we first were taught the wheedling arts.”

If, as Kipling says: “The colonel's lady and Judy O'Grady are sisters under the skin” for proofs we have as example—the suffragettes—improperly manned, improperly halter broken, misguided, unsatisfied, neutrals, and androgyneal blots, of whom and whose furor sexualis it may be said that every inch that is not fool is rogue, “all impudence and tongue.”

“Let strictures on my conduct pass, said he,
Unnoticed let them be

'Tis the stricture somewhere else, alas!
That is deplored by me."

And thus wrestling with the *Gon Neisser*, his favorite poets' lines he recalled:—

"I only knew she came and went.—Lowell.
Like troutlets in a pool.—Hood.
She was a phantom of delight.—Wordsworth.
And I was like a fool."—Eastman."

As the actress, Estor Banks writes:—

"Just a bit of badness,
Man and woman's madness,
Studies of life's sadness
Versed with ink and pen."

These anthologia, if worthy of this definition, are introduced to illustrate the frailty of mankind in general, to point to morals, and not least to state that the wages of sin is death, has ever been and will forever prove to be the death of deaths. Concerning that fearful disorder of which the Devon farmer—herein named—was a sore victim, one may find in Persus' Satires the following lines:—*Tentemus fauces—tener latet ulcus in ore putre, quod hand deceat radere beta.*

From my old friend Horace, I make a quotation, thinking of this age is equally as wealthy, as luxurious, and as profligate as Rome and its Empire were in his days—when wealth accumulated and men decayed and their spawn trampled to the dust:—

Time sensibly all things impairs
Our fathers have been worse than their;
And we than ours, next age will see
A race more profligate than we
(With all the pains we take) have skill enough to be."

If such statements are true and have been fulfilled, it remains for us as conservators of the public health to interest our legislators in immediate reforms, to educate the public, and to see that legislation does not encourage quackery by licensing baseless, and mercenary cults—miscalled medical—to interfere with our efforts to stamp out of existence the evils named herein which walk as a pestilence in our very midst.

My trust is in the love of truth and the candor of cultivated minds, said Harvey, and if we had more believers in this assertion and more workers of *prevention* and a less number for the *cures*, the workers for morality and eugenics would gradually cease their labors for other studies, although kindred, yet for further "look up" and "lift up" interests in which the "God overhead and the heart within" nearer approaches divinity and not a blot, or marred in the making for "una-

bridged existence is bestowed on swine, unslain by indulgent codes," (Juvenal). Reader, consult Horace, read Juvenal and learn that it is the censor not the priest mankind does need, but the laws avenging hand not screened by its delay or religion's rites, and that well established fact that "he is the greatest criminal who poisons the germ cells," and another fact: "What children usually die of is their parents, and what a nation dies of is its lack of men."

Need I recall the words of Persius (A.D. 34-62): "The Great Father of the gods punishes not in vain cruel oppressors, when dire lust, tinctured with poison impetuous, moves the brains of men, etc.,—*Magne Pater divum! saevos punire tyrannos, Hand alia ratione velis, quum dira libido Moverit ingenium, fervent tincta Veneno;—Virtutem videant—intabescantque relictæ.*"

Yes, temptations wait for all, as John Boyle O'Reilly says, and even go out and ask the devil home. And it is our duty to act as conservators of the public health and even to teach or assist "eternal wisdom how to rule," and that each of the sins herein named in various moods,

"Holds such an enmity with blood of man,
That swift as quicksilver it courses through
The natural gates and alleys of the body:
And with a sudden vigor, it does posset
And curd like eagle dropping into milk,
The thin and wholesome blood,"—as told in Hamlet.

Herein are proper sermons (*Sermones propria*) and he who looks or may look for texts may find them, yes, truly.

Talia sciat oportet qui multa Vult scire. For there is "line upon line, precept upon precept; here a little and there a little." For we well know:

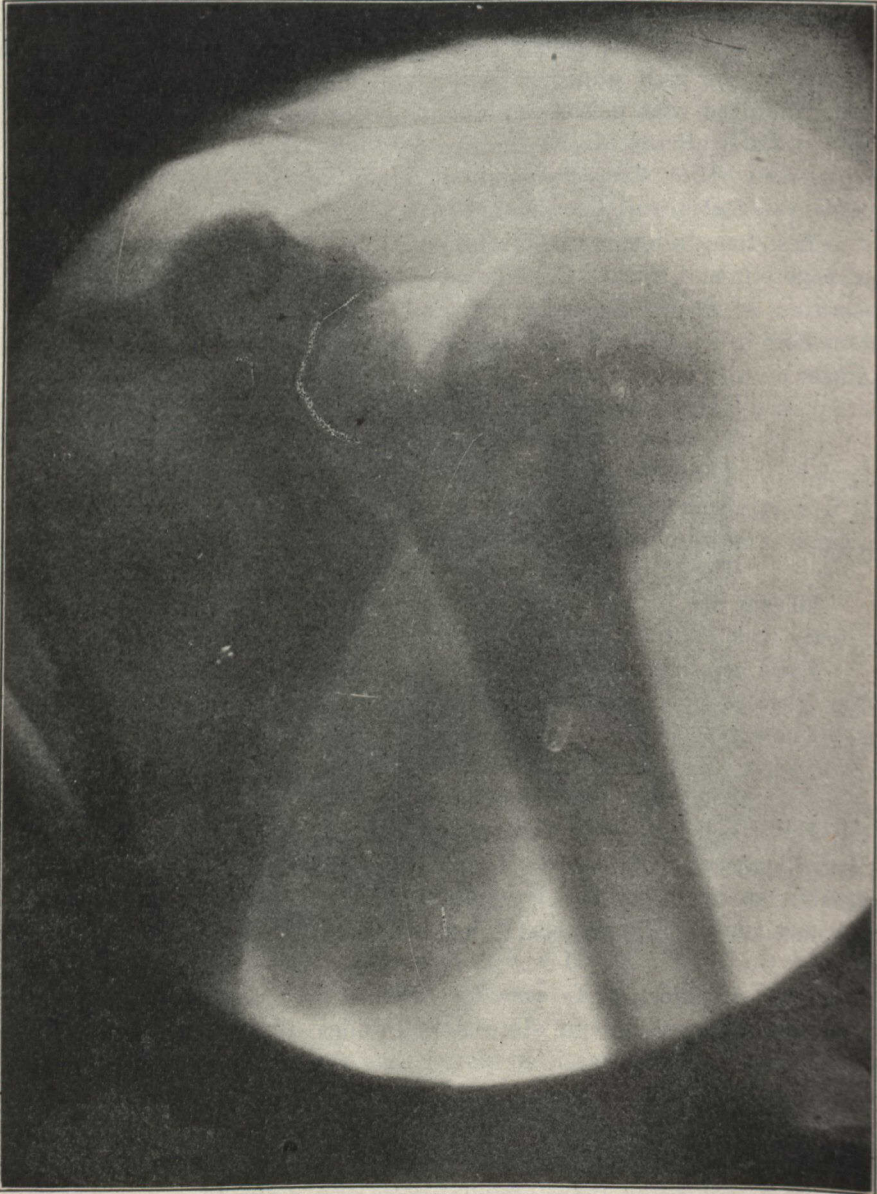
"Heaven doth with us as we with torches do,
Not light us for ourselves alone,"

Fully believing with Gladstone, that "physicians will become the future leaders of the nations," and that the she, faultily faultless, icily regular, splendidly null," irregular or defective or impersonal or barren may learn God's purpose in her existence:—"He for God only, and she for God in him."—However, I ask you, "Read not to criticize, but to accept, or reject, or to consider" this medley, for it is a study and may be of interest for our altars and firesides: ("pro aris et focis.")—as for you, brother, was it prepared that you may be a light to those who are in darkness?

NOTE.—Dr. Sprague is one of our oldest and most esteemed contributors, and is in his 69th year. In 1868, the year preceding his graduation, he gave his first paper to our pages.—*Ed. Lancet.*

FRACTURE OF THE ANATOMICAL NECK OF THE HUMEROUS
AND DISLOCATION OF THE HEAD BACKWARDS.

BY HUGH A. STEVENSON, M.D., C.M., LONDON, ONT.



THE report of a case of a rare injury to the shoulder joint and the results by operative procedure may prove interesting. This patient was thrown from a wagon and fell on his shoulder. There was an endeavor made to set the arm, but unsuccessfully. An X-ray picture was taken, which showed a fracture and dislocation. Under chloroform the arm could not be reduced. Two days after the accident the patient was operated on. The X-ray does not show the injury to the deltoid muscle. An incision was made along the front of the joint. The capsule opened in front. The loose head was forced into the glenoid cavity from behind and below the acromian process. Then the shaft was at-



tached with plates as in the X-ray picture. The point closed and the skin wound sutured. He made a perfect recovery and has complete use of his arm. The accident happened in June and the picture showing the bone plates was taken in November. One thing that is noticeable is the absence of callus.

NOTES ON THE DIFFERENTIATION OF CARDIAC ARRHYTHMIAS AND THEIR TREATMENT, WITH A NEW TIME-MARKER.

(Selected.)

BY THOMAS E. SATTERTHWAITE, M.D., NEW YORK, N.Y.

The subject of cardiac arrhythmias took on a new phase as soon as graphic methods were used for their differentiation. Indeed, the use of graphic instruments has revolutionized the matter of disclosing new data of great practical value. Most of these discoveries have been the work of the last ten years. As a single illustration of the lines of investigation and their clinical results, it may be mentioned that Friberger₁ recently undertook to examine the hearts of 321 unselected children between the ages of 5 and 14, taking graphic records of each child. Only about 37 per cent. had regular pulses. Of the remainder about 12 per cent. had great irregularity and about 50 per cent. a moderate amount. The variety of irregularity was that which Mackenzie has called "the youthful type," and was about equally common in the two sexes. The etiology was not clearly evident, but Friberger found that in advanced tuberculosis there was arrhythmia in about half of those examined. This is only one of the many fields in which graphic methods are helping the practising physician.

It has now been generally accepted that arrhythmias may be satisfactorily classified with reference to the five physiological attributes of heart muscle, demonstrated by Gaskell in 1882. These are, as is now well known: (1) Rhythmicity, *i.e.*, the faculty of rhythmically initiating a stimulus. (2) Irritability or excitability, *ie*, the capacity for receiving the stimulus. (3) Contractility, *i.e.*, the faculty of responding to a stimulus. (4) Conductivity, *i.e.*, the ability to convey a stimulus. (5) Tonicity, *i.e.*, the power to maintain cardiac tone.

Four distinct varieties of arrhythmias corresponding to the first four faculties or attributes can be demonstrated by graphic tracings.

1. Upsala Lack. Förhand. J.A.M.A., March 16, 1912.

To the first of the forms to be described I have given the name *pneumogastric arrhythmia*, because of its close relation to pneumogastric influences. It was described by Kussmaul years ago, and has been called vagus, fundamental, sinus, normal, or respiratory arrhythmia. The word sinus implies that it is a variety of the rhythm that originates in the sinus venosus, *i.e.*, it is the normal rhythm. This pneumogastric arrhythmia is a variation from the standard cycle within physiological bounds. Though the cardiac cycle varies in length, the systolic phase is little altered comparatively, while the diastolic is considerably lengthened, and this latter feature is the chief characteristic.

It may be seen in a tracing of the radial pulse immediately after the apneic period of the Cheyne-Stokes respiration of uremia. Kussmaul called it the *pulsus paradoxus*. It is the pulse following a deep inspiration; hence the term "respiratory." It can also be caused by the act of swallowing, which is largely regulated by the vagus or pneumogastric; hence the term pneumogastric arrhythmia. Apart from graphic tracings, this form of arrhythmia is recognized by the finger on the pulse. It can usually be inhibited by a single dose of atropine. 1-60 grain.

It is not well to attribute too much importance to an arrhythmia which is usually quite transient, functional in character, coming and going from slight causes. But exceptionally it may be of a more serious nature, as in tuberculosis, or after infective diseases, especially the eruptive fevers of children. It occurs sometimes in neurasthenia; also in overdosing by digitalis and probably other drugs which affect the cardiovascular mechanism. From whatever cause, it is a loss of the normal rhythm, the stimulus to which we believe originates, as I have said, in the sinus venosus.

In *extrasystolic arrhythmia* there are extra—that is, as it were, supernumerary—contractions, from stimuli that do not originate in the sinus, though in the main the regular or sinus rhythm is maintained. They are of two principal types: the *ventricular*, where the contraction originates in the ventricle, and the *auricular*, where it originates in the auricle. Take an example of what appears to happen in these cases. If for any cause the left ventricle fails to empty itself, the residual blood, acting as a stimulus, can make the ventricle put in an extra beat before the normal auricular stimulus has passed down to it. On the other hand, in dilatation of the auricle, as, for example, in advanced mitral stenosis, the incomplete expulsion of the blood into the ventricle may operate to produce a supplementary contraction, which would then be an auricular extrasystole. Strain of auricle or ventricle also might, and probably does, produce extra systoles. These have

been called "dwarf" systoles, from their small size; "premature" systoles, because the contraction is in advance of the normal period for the contraction, and "interpolated" systoles, because they are actually interposed between beats that are of the prevailing type at the time.

All extrasystoles are followed by a pulse period that is rather longer than the normal. In the ventricular form the length of the preceding pulse period added to that of the following pulse period is equal to the length of two normal pulse periods. In the auricular form the pulse period following the extrasystole is shorter than the corresponding compensatory pause in the ventricular form. Such systoles occur at regular or irregular intervals. They are illustrations of an abnormal irritability or excitability of the heart, and are most common in persons of a neurotic constitution. Sometimes these extrasystoles cannot be detected by the finger, but they are usually recognized upon auscultation, when the regular sequence of beats is occasionally interrupted by one or two short sounds followed by a brief pause.

When, in a radiogram (radial pulse tracing), it is noted that the length of the pulse period preceding the extrasystole, together with the pulse period following, constitutes a length of two ordinary pulse periods, this is taken to mean that the extrasystole is ventricular, and, according to Mackenzie, that the stimulus originated in the His bundle, on the distal side of the node. But the points of origin of the stimuli may be in other parts of the tissue intermediate between auricle and ventricle. These matters are still engaging the attention of physiologists, and have not been absolutely determined.

In the auricular extrasystole the stimulation is thought to arise in the primitive tissue of the auricle. These extrasystoles can be seen in jugular tracings. A characteristic of this auricular extrasystole is that in the arteriogram the compensatory pause following is shorter than in the ventricular extrasystole, as already stated.

Extrasystoles occur under the most varying conditions. Coffee, tea, tobacco, and gastrointestinal distention are examples of determining causes; under these circumstances their occurrence may not be of very serious importance, though when they happen in toxemia, in convalescence, or in the weak heart their presence adds to the gravity of the situation. They may occur in conjunction with other cardiac manifestations, when they constitute a further complication.

Not infrequently the extrasystole is appreciable by the patient, who may feel a sudden thud in the precordium, perhaps with a sense of faintness. It may even seem as if the heart were going to stop; and, as a matter of fact, it may actually do so. I have had such a case, where the heart did stop for several seconds—how many I do not know.

It may be remembered that a man named Nordini, an Austrian Pole, is said to have the power of stopping his heart for twenty seconds, and his statement has not, I think, been contradicted. But the extrasystoles are not always appreciable subjectively. To make them distinct the patient should be told to run round the room a few times and then hold his breath. The extrasystoles are intensified by hurried movements.

The really most important function of heart muscle is contractility. A striking example of its abnormal characteristics is seen in the *alternating pulse*, which consists of an alternation of large and small beats from extrasystolic arrhythmias. It may always be recognized and differentiated by graphic methods when other physical methods leave doubt as to the diagnosis. It is, however, a rarity.

Another example of abnormal contractility is seen in *auricular fibrillation*, formerly called *nodal rhythm* by Mackenzie, and one cause of the *permanently irregular pulse* of Hering. Here the cardiac cycles vary so much that there is no sequence of beats having the same length. This special characteristic was well shown in one of my cases of heart-block. The source of the difficulty is put at the auriculoventricular node, which governs auricular and ventricular contractions through the bundle of His.

In 1905 Cushny and Edmunds suggested that in some of these patients the cause might be auricular fibrillation, a condition in which component parts of the muscle wall of the auricle contract independently of one another, and in such a disorderly fashion that it might be said auricular contraction as a whole was at a standstill. But it was not until 1909 that researches by Lewis on the lower animals showed, by comparison of the arterial and venous pulse tracings and electrocardiograms, that this so-called nodal rhythm, or permanently irregular pulse, was to be attributed to auricular fibrillation.

In fibrillation there seems to arise in the auricle a continuous shower of stimuli which, falling on the node, excite it to send stimuli to the ventricle can be made to beat more slowly, the patient may lead a use-taking them up. At first the ventricular contraction is apt to be very rapid, and the patient may die rapidly of heart-failure. But if the ventricle can be made to beat more slowly, the patient may lead a useful and even vigorous life for some years. It is therefore very important to diminish the rate, and this is done in a remarkable manner by digitalis. The gravest sign is an increase in rate; say, from 100 to 150. My experience tallies with Lewis's view; for in the permanently irregular pulse, relief only comes from the continuous use of digitalis or strophanthus. Hering recognizes this fact. Mackenzie believes, how-

ever, that a good deal can be done for the patient. He finds, for example, that the irregularity is most often associated with rheumatic hearts, usually those of mitral stenosis, and with the fibroid heart of senility. In fact, as the deposit of fibroid tissue is common in both these varieties of cardiac disease, it seems possible that the fibroid deposit is the cause. In one case of mine there was a fibroid tumor of the uterus, but its removal did not improve the cardiac difficulty.

According to Lewis, auricular fibrillation constitutes at least 50 per cent. of all irregularities, the disturbances of cardiac rhythm having its origin in the auricle, and being due to temporary or permanent inco-ordination of the musculature of this chamber. In a study of 106 cases he has reached the following conclusions, which differ somewhat from those of Mackenzie: The rate of the pulse may be reduced as low as 30, or increased as high as 200, but this in itself has little significance, because many beats of the heart may not reach the radial artery. The high rates, however, between 110 and 150, are the most common, and with these the irregularity is greatest. According to Lewis, the diagnosis rests on these points: 1. The absence of the normal auricular contraction, as seen by the absence of the wave in the tracing. 2. The presence of a ventricular beat having its origin in an impulse received from the auricle. 3. Special oscillations in the curve, which have been shown to be due to the continual contraction of the various parts of the auricle quite without system or co-ordination. 4. Constancy of this picture from patient to patient in respect to the three first points.

Fibrillation is responsible for most of the disturbances of the ventricular system. Indeed, in the vast majority of instances a sphygmogram showing that no two successive heart beats are of the same length implies the diagnosis of auricular fibrillation. To Cushny, Mackenzie, Wenckebach, Rothberger, Winterberg, and Lewis the credit of the discovery is due. Janowski has known such a case to last five and a half years, Mackenzie ten years, I eleven and a half years.

Of the existence of auricular fibrillation there seems to be no doubt, but we are still lacking in an agreement as to the criteria necessary for its detection.

In affections of conductivity the normal stimulus, which starts in the sinus venosus, passes from the primitive tissue of the auricle over the bridge to His to the ventricle, may be delayed in its course, may not cross at all, or may be arrested beyond the bridge. Any one of these several conditions will produce *heart-block*, a term invented by Gaskell in 1882 to indicate arrest or blocking of the impulse normally conducted from auricle to ventricle.

The *pulsus infrequens*, improperly called the slow pulse, is rather certain to indicate a loss of conductivity. When, as happens in such cases, a pulse is found where only about 26 to 40 beats can be recognized at the wrist, an inspection of the jugular will usually show that the auricular contractions are really twice or even more times as frequent. This inspection should always be made, when, if the head is turned to the left, the beating of the vein can be seen in a good light, and the diagnosis made without the aid of graphic methods.

In health the a-c intervals show in tracings the time occupied by the passage of the blood from the auricle to the carotid, which is usually one-fifth of a second, though it may be two-fifths, and persist at that rate for years. In complete heart-block the a-c interval varies so much that the auricle may be said to beat quite independently of the ventricle. Where there is complete heart-block, the a-c intervals may be seen to vary so that no two have the same length. Manges₂ has recently given the history of a patient with incomplete and subsequently complete heart-block, in whom the auricular rate, as shown by graphic tracings, was 280 to the minute, the ventricular ranging from 40 to 70, which rate, however, was raised to 120 on two occasions by the use of atropine.

Among the most frequent causes of loss of conductivity are syphilis, fibrosis, and neoplasms. Since the cause of auricular fibrillation is the same as that of heart-block, though usually in the substance of the ventricle, the one may pass over into the other. The condition may also be due, and in several of my cases has been, to hemorrhage at the base of the brain, when pressure is brought to bear on the nucleus of the pneumogastric. Stimulation of the peripheral branches of the pneumogastric may also produce heart-block; likewise, aconitine, epinephrin, muscarine, physostigmine, and asphyxia. In a case of acute heart-block, recently reported to me by Waitzfelder, of New York City, the condition was evidently due to overdosing by digitalis.

According to Mackenzie, the stimulus may go through and the pulse be as high as 70, and then fail to go through, leaving the pulse at 30. Such cases should encourage us to use appropriate remedies to restore the heart's action. Certainly if there is the slightest suspicion of advanced syphilis, antisyphilitic remedies should be pushed to the limit.

It is important to know that a diagnosis in heart-block can be made without the use of graphic methods. At present we recognize four forms of this disturbed conductivity:

1. *Acute* heart-block, due usually to the misuse of drugs.
2. *Partial* heart-block, where the stimulus is occasionally carried through, as shown by an alteration between the normal rate and the slow rate.

2. Medical Record, April 8, 1911.

3. *Complete* heart-block, where the auricle and ventricle contract independently.

4. The *Adams-Stokes syndrome*, where loss of conductivity is associated with syncopal attacks. The syncopal attacks are often attributed to cerebral anemia, induced by the slow action or temporary suspension of ventricular systole.

As for Gaskell's fifth attribute of cardiac muscle tonicity, it may be said that the loss of it is exemplified in the dilated heart.

Treatment.—In the matter of treatment, in (1) disturbed rhythmicity, the first type of irregularity discussed, it is quite evident that, as a rule, this condition does not justify our sounding notes of alarm. In other words, it is physiological, as, for example, in the so-called youthful type of irregularity. Consequently no treatment is required.

In (2) extrasystole there may be a neurotic basis, or the condition may result from the pressure of gas produced by gastrointestinal fermentation. Again, it may be a reflex from the gastrointestinal tract, as in indicanuria. In the one case, sedatives, such as camphor or the bromides, are useful; in the latter, remedies that regulate gastric or intestinal digestion, such as pepsin, pancreatin, bismuth, sodium bicarbonate, etc. If the extrasystoles are due to the excessive use of coffee, tea, or tobacco, the therapeutic indications are evident.

In (3) auricular fibrillation there is no remedy so satisfactory as digitalis or its congeners, of which strophanthus is next best. Only the most reliable active principles of these drugs should be used, because if given in suitable doses they are effective without causing any of the unpleasant effects usually associated with these drugs in other forms. The intelligent use of baths and resistance exercises is also very valuable.

In (4) heart-block, if it be acute and caused by digitalis, the use of the drug should, of course, be suspended at once. If syphilis exists, antisyphilitic remedies should be used according to our established rules, and in sufficient quantities. Atropine, 1-60 grain, is available as a test to determine whether the heart-block is due to a lesion of the pneumogastric; it will usually increase the rapidity of the ventricular contractions, when these are below the normal, but it exerts no curative effects.

It is evident that graphic methods are useful not only in diagnosis with reference to treatment, but also as a register of actual facts. Certainly no large medical institution should be without a good polygraph.—*Monthly Cyclopaedia and Med. Bulletin*, March, 1913.

CURRENT MEDICAL LITERATURE

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MEDICINE.

Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

FRAUD IN THE SALE OF DISINFECTANTS.

Most absurd substances are constantly being sold to the public as germ-killers. Clever salesmen, misleading advertisements, and false labeling are responsible for the sale of a great variety of substances and devices, from aromatic oils to ozone machines, under the claim that their vapors or gases will kill dangerous bacteria in the air which we breathe. The public will continue to waste its money until legislation makes it unsafe for any manufacturer of disinfectants to sell his goods under misrepresentation.

A few general principles, if kept in mind, will save much money to the purchasers of disinfectants:

1. Soap, hot water, mechanical cleansing, and the boiling of infected articles are important factors in keeping homes safe from disease. Disinfectants may be used in addition to these means, but not in their place.

2. No substance known will kill the bacteria in air, in the presence of living human beings, without injury to the latter. Therefore, claims that vapors or gases (ozone, etc.) will do this, are fraudulent.

3. Deodorants, if efficient, remove or conceal bad odors. Their function is purely aesthetic. They are generally used to conceal conditions which demand soap and water or fresh air. Deodorants may or may not have germicidal powers in addition.

4. Oils which will not mix readily with water are not adaptable to the common uses of disinfectants.

5. Purchasers of disinfectants should confine themselves as far as possible to simple unpatented substances and those few proprietary disinfectants whose strengths, in comparison with the strength of carbolic acid (phenol), are plainly stated on the label. The statement should be made numerically in terms of the "Hygienic Laboratory Phenol Coefficient." This coefficient is determined in accordance with rules laid down by the Hygienic Laboratory of the United States Public Health Service.

An example of the way the helpless public is being imposed upon has just come to the notice of the Laboratory. A sample of an oil, for which claims of germicidal power beyond that of any known substance

were made, was examined for the State Board of Control. Apparently the manufacturers were not aware that disinfectants were being tested before they were purchased for State institutions. The label gave the information that a constant dripping of this oil into the bowls of closets or urinals would disinfect them and would also diffuse a pleasant odor which would kill contagious germs in the air, such as those of tuberculosis "and all kinds of fever."

Examination of the oil showed that dried typhoid bacilli could be soaked in it for at least sixteen hours and would remain alive. A water extract was made by shaking some of the oil with an equal part of distilled water for one hour. Typhoid germs were put into the resulting water-extract and were still alive at the end of fifty hours, a little over two days. It is apparent that the oil has no value whatsoever as a disinfectant.

The principle that the public is to be protected against fraud where the individual is unable to judge for himself, has been established by the food and drug laws. Similar protection should be given by national and state legislation against fraud in the sale of disinfectants.—From the *Bulletin of the California State Board of Health*.

SOME NEW ASPECTS OF PITUITARY DISEASE.

The progress that has been made during the past two years in the experimental anatomy, physiology, and pathology of the pituitary gland has stimulated clinical observations in this field to such an extent that the various symptoms and symptom complexes set forth by Cushing and his coworkers are recognized with increasing frequency and accuracy, new and interesting observations being thus added to the previous experimental work. In a recent number of the *American Journal of the Medical Sciences*, Cushing presents a short summary, embodying the more recent views as to the classification of the various clinical syndromes typical of hypophyseal disease, and instances a few cases characterized by mixed syndromes. These cases demonstrate quite clearly how disturbances of the anterior and posterior lobe functions (either hypo or hyper) may be associated in the same individual.

The posterior lobe, as has been shown, is probably the portion of the gland which gives rise to an external secretion which is discharged through the infundibular stalk into the cerebrospinal fluid. The anterior lobe, on the other hand, is the internal secretory portion of the gland and discharges its secretion into "the large sinusoidal blood channels which traverse it."

Among the causes of posterior lobe hypo-function are: Experimental ablation of the lobe, obstruction of the infundibular stalk, tumors or any other pathological lesion which interferes with the discharge of its secretion. On the other hand hyperfunction of the pars posterior is attributed to functional disturbances and feeding with gland extracts.

Disease of the pars anterior seems also to be capable of causing hypo- and hyper-function, Frölich's syndrome being a type of the former, while acromegaly is a type of the latter. In both of these syndromes there may be associated changes in function of the posterior lobe, heightened activity being often found with acromegaly and lowered activity with Frölich's type (*dystrophia adiposogenitalis*). Still other groups of cases show a hyposecretion of one lobe in combination with a hypersecretion of the other. Other instances are given, fewer in number, when a primary hypofunction of one lobe (whether due to immediate or distant cause) may be followed by hyperactivity of the other lobe and vice versa.

Clinically the type of symptoms in the various disturbances of each lobe of the gland may be summarized as follows: (1) Hyperactivity of the anterior lobe gives rise to skeletal overgrowth—possibly to hypertrichosis and certain cutaneous manifestations—in brief, acromegaly. (2) Hypoactivity of the anterior lobe is evidenced by preadolescent failure of development in the osseous system and secondary sexual characteristics, etc. (3) Hyperactivity of the posterior lobe causes lowered nutrition and a decrease in carbohydrate tolerance, moist skin, etc. (4) Hypoactivity of the posterior lobe leads to adiposity—higher carbohydrate tolerance, polyuria, polydipsia—in short, the opposite symptoms to the above.

Every clinician is probably familiar with one or another of these syndromes, but their association with one or another group of pituitary symptoms, either as a whole or in part, has not received sufficient attention and it is for that reason that Cushing's recent work is of interest particularly to clinicians.

Treatment of individual or combined syndromes, as evidenced by pituitary disease, has so far been limited to administration of extracts of the gland and surgical interference. Both of these methods are in their infancy and have met with success only in a limited and selected number of cases. The report of a larger number of cases and increased research are eagerly awaited.—*Medical Record*.

TREATMENT OF SLEEPLESSNESS.

In dealing with the treatment of sleeplessness E. Meyer points out that a number of patients consult their medical advisers on account of "sleeplessness"; but on closer investigation it appears that the symptom which leads them to seek treatment is a limitation of the duration of sleep and the fact that they are unrefreshed in the morning (*Deut. med. Woch.*, September 12th, 1912). Simple disturbances of sleep practically do not occur unless associated with some body disturbance, either past or present. In a few cases the disturbance is periodic and is a kind of psychotic affection. It should be the duty of the practitioner to discover the other symptoms with which the sleep disturbance is connected. It is quite a common thing for nervous children to sleep badly. The exciting causes may be some extraordinary excitement, bodily exertion, or tiring and emotional causes. The treatment of severe cases of this kind should be directed to strengthening the nervous system and regulating the hygienic conditions of life. Psychic influences from the parents and the doctor do much good, but care must be exercised that neither severe, unkind treatment nor exaggerated mildness are employed. Narcotics are very rarely needed. The possibility of worms must be borne in mind in these cases. The disturbance in adults may be secondary to affections of the lungs, heart, or skin, or there may be a painful nervous disease, such as neuralgia, neuritis, tabes, or cerebral syphilis. At times organic diseases of the nervous system are manifested only by disturbances of sleep at first. It is not uncommon for a general paralytic to come to the medical practitioner on account of this symptom. The next category of cases belong to the poisonings. Chronic alcoholism, nicotine poisoning, intoxication with tea or coffee and the like may be responsible for the disturbance, and the author also points out that sleeplessness may arise in the course of morphinism. The disturbances of sleep in marked mental disturbances are well known. In functional neuroses—such as hysteria, neurasthenia, etc.—sleeplessness is not infrequently met with. The type of the disturbance in these cases is very definite. Finally, he mentions the sleeplessness of the climacteric. The treatment of the symptoms must consist first of all in the treatment of the primary condition causing it. In the second place, much good can be done by paying attention to the hygiene of sleep and of the bedroom. By small means the physician may be able to remove the symptom altogether in nervous patients. Next, hydrotherapeutic means may be adopted. Wet compresses, packs, partial baths, etc., are useful. Baths often work well in the sleeplessness of the climacteric. Hypnosis is often an excellent soporific, but as a rule the practitioner is not experienced in this. Electro-therapeutic measures may do good.

In discussing drugs, he refers first to the various valerian preparations, and such drugs as asperin, pyromidon, and bromides. Before giving hypnotics or narcotics, the physician should remember that he is merely dealing with a symptom; at times, however, it is impossible to get on without them. Morphine should never be used for sleeplessness; chloral hydrate had better also be avoided on account of its action on the heart. Paraldehyde in doses of from 3 to 5 grams, amyl hydrate, isopral, and veronal are mentioned, and it is said that trional and sulphonal are not given as they used to be, on account of the production of hæmato-porphyrinuria. The author further mentions medilan, hedonal, hypnal, hypnoval, malonal, veronacetin, and luminal, but does not discuss the risks attending their use, though he utters a warning against inducing a habit. He commends Bürgi's suggestion, to give the dose in two parts, and also to combine two drugs which act in a different manner.

THE TREATMENT OF HYPERIDROSIS.

Dr. H. G. Wertheimer recommends the following treatment in *The New York Medical Journal*.

General. As in all other conditions casual treatment is the primary object. It is not within the domain of the dermatologist to prescribe general treatment, excepting at times for the neurasthenic and anemic patients, such remedies as tonics, hematines, hydrotherapy, etc.

Internally, hyperidrotics may be used, such as atropine or agaricin (five to ten milligrammes in pill form, twice daily), never in larger doses, since the drugs must be used for some time.

Local. The sweat glands, as well as the blood-vessels, must be influenced, and this is accomplished by astringents and antihyperidrotics.

1. Astringents. These include the organic acids, acetic, salicylic, tannic; and the inorganic acids, nitric, sulphuric, boric.

2. Antihyperidrotics. Of these formaldehyde solution, unguentum diachylon of Hebra, alum, and bismuth subgallate are frequently employed.

Chromic acid. A concentrated solution is applied by painting on lightly for three or four days. This causes a superficial slough, followed in three or four days by small scales, and complete exfoliation in five to eight days. It may be necessary to repeat this procedure. It should also be remembered that this drug stains yellow or brown.

Salicylic acid or tannic acid is used in the strength of five per cent. in starch, forty parts, and talc., sixty parts. These are very good, but not as rapid as the chromic acid treatment, taking eight to fourteen

days for a cure. After thorough washing and drying of the feet, the powder is applied inside the shoes and stockings. It is essential to have frequent change of both shoes and stockings. The latter should be either silk or woolen, but never cotton. Here we may also mention the correction of flatfoot, when necessary.

Alum acts hygroscopically and also by its acid properties, alum being the double salt of potassium and aluminum sulphate. It is applied in the same way as the salicylic powder.

The diachylon ointment of Hebra is of especial value in the presence of eczema, being spread thickly on linen, applied, and then bandaged. These applications are changed daily and in eight to fourteen days a cure may be expected.

Oppenheim, of Vienna, is trying a new treatment. In order to prevent the acid formation, and thereby dermatitis or eczema, he uses alkaline powders:

℞ Sodium bicarbonate	1.0
Magnesium oxide	2.0
Amylum	10.0

M. ft. pulv.

This is dusted into the stockings in the usual manner. It does not prevent hyperidrosis.

When eczema is not present, the following formula may be used:

℞ Formaldehyde solution	5.0 to 10.0
Alcohol	100.0
Glycerin	2.0

M. S.: To be applied twice daily.

For the treatment of cheiropompholyx, Brandweiner, of Vienna, recommends, after washing with warm water, the application of:

℞ Salicylic acid	6.0
Alcohol	200.0

M.

This is permitted to dry on the parts which are then powdered with

℞ Salicylic acid	5.0
Talc	25.0
Zinc oxide	25.00

M.

Bismuth subgallate is a very good and efficient powder. It is simple in its use, being employed in all the dermatological clinics in Vienna, in full strength or with talc. or starch.

Where the vasomotors are at fault, hot foot baths, as hot as the patient can tolerate, act as an antihyperidrotic by contracting the vessels. Following the bath the parts should be thoroughly dried and either the formaldehyde solution or the salicylic or tannic powders are applied.

Freund, röntgenologist to the Finger clinic, recommends the X-ray for hyperidrosis; but only after continued repetition of the treatments are the glands destroyed and the hyperidrosis cured.

ARTIFICIAL PNEUMOTHORAX ITS INDICATIONS AND CONTRAINDICATIONS.

Dr. S. Adolphus Knopp read this paper. He defined artificial pneumothorax as an operation which consisted in filling the affected side of the tuberculous chest with sterilized atmospheric air or some gas, oxygen or nitrogen, for therapeutic purposes. Experience had shown that by collapsing and compressing the affected lung the production and absorption of toxins resulting from mixed infection were greatly diminished. When the affected lung was put at rest there was, concomitant with the diminution and total disappearance of the mixed infection, a constitutional improvement. The gas which had been found preferable for this purpose was nitrogen. Dr. Knopf said that his personal experience with this method was still limited, but what he had seen, heard, and done himself, together with the perusal of the literature at his disposal, enabled him to make the following statement concerning the indications for the production of artificial pneumothorax: 1. Artificial pneumothorax was indicated in all such cases as had not improved under ordinary hygienic, dietetic, climatic, and symptomatic treatment, such cases, as a rule, being moderately or far advanced. 2. It was indicated in these earlier cases in which there was no improvement because of mixed infection, or lack of recuperating powers, or when for inexplicable causes the condition remained stationary or the progress was particularly slow. 3. It was indicated in all rapidly progressing cases, whether treated in institutions or at home, and in no matter what climate. 4. It was indicated for all patients of the moderately or far advanced type who were discontented and felt that not enough was being done for them. 5. It was indicated in uncontrollable hemorrhage or chronic sanguine expectoration. Dr. Knopf stated emphatically that bilateral involvement, if one lung was considerably and the other one much less involved, was not a contraindication to the production of artificial pneumothorax. Where the disease had existed for any length of time it was seldom limited to one side. All the cases which he had seen operated upon or had operated upon himself had had bilateral lesions, and, so far as the immediate symptomatic improvement was concerned, every one of them showed gratifying results. Casts and albuminuria were not necessarily a con-

traindication, but one must be guided by the general condition of the patient. Some authorities considered a basal lesion of the less affected side as a contraindication, but, in the opinion of Dr. Lapham, who had perhaps had a larger experience with this method than any other physician in the United States, this condition was not an absolute contraindication, and the production of artificial pneumothorax was permissible because of the relief which it gave the patient. The contraindications to the production of artificial pneumothorax were (1) an extensive involvement of both lungs, (2) so much cavitation that there was danger of the needle entering a cavity, (3) myocarditis, other serious cardiac complications, or serious renal complications, (4) any pulmonary tuberculosis complicated by a constitutional disease which in itself was sufficient to inhibit all possible chances of recovery, (5) when the patient was too apprehensive and strongly objected to the performance of the operation. That artificial pneumothorax was a valuable adjuvant in the treatment of pulmonary tuberculosis was now an established fact, yet in view of the possibility of an accident every practitioner should protect himself by procuring the written consent of the patient, parent, or guardian, before resorting to this operation. There were various accidents which might occur, such as air, embolism, cardiac or pleuritic shock resulting in failure of respiration, spasm of the glottis, aphonia, and inability to cough. Hemorrhage or subsequent neuritis might also occur as the result of injury to a blood vessel or nerve. Pleurisy with effusion had been reported in a number of cases from artificial pneumothorax. Emphysema was also an occasional complication. Weiss had reported a case of fatal pneumonia in the other lung notwithstanding that the nitrogen was withdrawn. Dr. Knopf believed that the technique of the operation could be improved. He stated that up to a year ago he had been very skeptical about the immediate as well as the ulterior results of artificial pneumothorax, but what he had learned during the past months concerning this procedure had convinced him that artificial pneumothorax would often help when all other means had failed; however, he was not such an enthusiast as to consider it a cure all. He felt that gratitude was due the pioneers in this field for having given them a means of lessening the sufferings of tuberculosis invalids, rendering them comfortable and free from many of the distressing symptoms, and in not a few instances bringing about an arrest of the disease.—*Medical Record*.

FACTORS IN PROGRESSIVE PARALYSIS.

Accepting the syphilitic origin of progressive paralysis, Krasser discusses the relationship of the various symptoms to the organs that

may be affected ("Wiener klin. Rundschau," 1913, Nos. 3, 4, 5). He recognizes the following chief groups:—

(1) Excitation of the autonomous nervous system, giving rise to all kinds of neurasthenic troubles, and disturbances of the digestive tract as a prodromal stage.

(2) Disturbances of the adrenals as a result of progressive degeneration with, in the main, bulbar, basal, and tabetic manifestations.

(3) Phenomena due to increase in antagonism of the spinal cord when the cortex degenerates.

(4) Disturbances of the cortex and the cord.

(5) Symptoms due to metasyphilitic disturbance in other parts of the body.

To the third group belong the epileptiform attacks and the dryness of the skin; the absence or diminution of secretion from the sweat glands is a well-known effect of adrenalin. The so-called aseptic fever of paralytics is probably connected with this. At all events, the great diversity in the symptoms of the disease may be ascribed to the greater or lesser infection of the adrenals, and also to the part of the organ—cortex or medulla—that is attacked.

THE VALUE OF STARCH-TREATED FOODS IN THE DIETOTHERAPY OF DIABETES-MELLITUS.

"No subject in medicine has, for the past one hundred and fifty years, been given more thought, from a scientific and experimental standpoint, than diabetes, and yet no subject, as to the true pathology and etiology of which, we possess proportionately less accurate information." This is the introductory paragraph of a valuable contribution on the above subject appearing in the March issue of the *Medical Summary*, of Philadelphia, by George Mosse Norton, M.D., who, after considering the pathology, etiology, symptomatology, and prognosis of diabetes-mellitus, says:

"Dieto-therapy offers the greatest and most rational promise of relief or cure, and is by far the sheet anchor in the treatment of diabetes, and is more efficient than any drug or combination of drugs, and no permanent results have ever been obtained without strict dietetic supervision. Unfortunately, pharmacology has not provided any drug which acts directly upon the excitability of the sugar-forming process of the liver. All authorities agree that the diabetic wastes away and starves to death—from consuming his own tissues—through the impaired condition of the 'glycogenic function' of the liver."

He affirms that heretofore the difficulty in the successful management of diabetes has been that the patient could not assimilate foods containing carbohydrates in the form of starch as it appears in the ordinary food products, and by eliminating the starch from the products their value as a sustaining food is completely destroyed.

He also emphasizes the fact: "All the working cells of the body use sugar as their foodstuff and immediate source of energy, which, if not supplied from the food (starch) ingested, must be taken out of the tissues, and in the patient suffering from diabetes the waste from the body is more than the intake of food into the system."

The author's experience coincides with Von Noorden and other eminent authorities that the best food for the diabetic is the food containing the greatest amount of carbohydrates which they can tolerate, because in the carbohydrates is contained the greatest proportion of calories, or heat units, which go to make up the energy of life.

Dr. Norton states that while he realized that Van Noorden's deductions were correct, yet while entertaining little hope that a starchy food which a diabetic could ingest with impunity would ever be perfected, it was by a mere "coincidence" that his attention was brought to such a food. A prominent New York physician was consulted by one of Dr. Norton's diabetic patients, and was placed on a new starch-treated product known as the Jireh Diabetic Foods.

The doctor, in commenting on the case, says: "When his patient returned after three months—all the while eating the starch-treated foods, he was amazed, but agreeably surprised at the remarkable improvement, which continued after the lapse of a year. Health, strength and weight gradually increased on these foods, together with eggs and other suitable diet, and the sugar slowly disappeared from the urine, only traces now being present."

The author refers to the increased death rate from diabetes and avers that "before the present process of refining, bolting and bleaching flour became common, there were few cases of diabetes in either men or women, but of late years from the constant ingestion of insoluble starchy foods, this disease has increased with leaps and bounds. He points out the amazing fact that the rapid increase in the death rate from diabetes has kept pace with the "patent roller" process of manufacturing flour."

The doctor in describing the process of treating the starch, says: "Each starch granule in cereal food products is inclosed in a tough envelope that the process of grinding does not break. To render these easy of digestion, without the formation of sugar in the diabetic, is the secret of these starch-treated foods."

“The starch granules are thoroughly broken up by diathermous fermentation, produced by the addition of certain digestive enzymes to the flour, which, after thorough trituration, is subjected to a certain degree of heat applied for a specified period of time, by especially constructed machinery—designed for this particular purpose.”

“The above treatment applied to a whole-wheat-stone-ground-flour, followed by the scientific application of heat, causes a commingling of the carbo-hydrate and nitrogen molecules of the starch granules of the wheat berry, resulting in a very slight fermentation leading to division and expansion, after ingestion, and to final disintegration in the small intestine.”

The author refers to the mineral constituents of the wheat berry as follows: “The wheat berry contains about 75% of starch, and in combination are certain other constituents, gluten, nitrogen, carbon, chlorine, calcium, phosphorus, sulphur, sodium, potassium, ferrum, magnesium, and fluoric acid. Nature placed the above named mineral or cereal salts into the wheat berry that the Biblical injunction might be fulfilled, that bread would really be the ‘staff of life,’ but to change the starch in flour from which the above cereal salts have been eliminated—by present-day method of milling—is impossible, and it is likewise impossible to render it soluble so that the dextrin and glucose can be appropriated and oxidized by the various ferments of the digestive tract.” Referring to the physiologic and therapeutic value of Jireh Products, the author summarizes as follows:

The foods are manufactured from a whole-wheat-stone-ground-starch-treated flour in which is retained all of the starch and cereal salts so necessary to sustain and build up the depleted system of a diabetic sufferer. The ingestion of these foods will assist in equalizing sugar production to sugar requirements—by enabling the defective function of the diabetic’s liver to fix the starch and store the sugar as “glycogen,” to be used, as force and energy, as in health.

In closing the author says: “There are ten reasons why foods made from starch treated flour are superior foods in the diabetic treatment of diabetes.

1. The wheat from which these food products are manufactured is selected from the choicest grade of wheat and ground on the “old-fashioned” Burr-millstone.
2. These foods are manufactured from an entire whole-wheat-stone-ground-flour, because the best part of the nutriment is under the shell where the phosphate of potash and other cereal salts—absolutely demanded by the body for its proper sustenance—are found.
3. The flour from which these foods are manufactured is subjected to a diathermous fermentation which produces certain changes in

- the carbo-hydrate or starch granules, but retains all the food value of the starch and cereal salts.
4. The change in the starch is slight, but sufficient to facilitate its rapid change into a form of sugar to sustain the body in a healthy condition.
 5. The foods are palatably delicious and satisfying as compared with the insipid and obnoxious devitalized gluten foods.
 6. They contain all the mineral constituents of the whole wheat berry so necessary to maintain the vitality of the human body.
 7. The starch is not changed into indigestible dextrine or glucose.
 8. No chemicals whatsoever are employed in the treatment of the starch.
 9. These starch-treated-food products are high in food value.
 10. They are physiologically correct."

SURGERY

UNDER THE CHARGE OF A. H. PERFECT, M.B., SURGEON TO THE
TORONTO WESTERN HOSPITAL

ESOPHAGEAL CARCINOMA TREATMENT OF.

The value of hydrogen dioxide in this affection, recently pointed out by Liebermeister, is confirmed by the author. Liebermeister showed by X-ray and pathological studies that absolute stenosis, anatomically speaking, is never present in cancer of the esophagus or cardia. There is almost always a channel permitting the passage of fluids, no matter what the degree of stenosis. Complete obstruction of this channel only occurs when it is occluded by food material not sufficiently divided before swallowing and by the products of decomposition of the necrotic tumor-mass. In these cases 1 dessertspoonful of 1 to 3 per cent. hydrogen peroxide solution is given every hour. In less than twenty-four hours the stenosis is overcome and in a few days the patients, who had previously been completely unable to swallow anything can eat purées and even solid food. The distressing subjective symptoms simultaneously disappear. The patients may even gain in weight and recuperate so much as to present a normal appearance. One of Liebermeister's patients gained $8\frac{1}{2}$ kilos (18 pounds). The author refers to a case in which $5\frac{1}{2}$ kilos were gained in four weeks. The patient then left the hospital, still taking the peroxide; but later he neglected its use for several weeks, with the result that he was obliged to return to the hospital. Upon resumption of the treatment for two

weeks, 6 kilos were gained. The same cycle of events was then repeated, the beneficial effect of the measure being thereby clearly shown. In scirrhus cancers the peroxide produces little or no effect, but in the other types it constitutes one of the best palliative measures now available.—S. Fradiss (*Progrès médical*, July 27, 1912).

TREATMENT OF SUPPURATIVE APPENDICITIS.

Dr. Robert T. Legg, in the *California State Journal of Medicine*, concludes as follows:—

“Caution must be observed in over-indulgence in the use of rectal salines in advanced cases of suppurative peritonitis following appendicitis, or the patient’s intestinal tract, either due to ileus or lack of absorption is likely to produce a reverse peristalsis, collapse and asphyxiation.

“Where large quantities of saline are introduced the tissues and vessels of the intestines become engorged and cyanotic, creating an artificial ascites, edema of lungs, etc., as I witnessed demonstrated by Sloan on dogs at Crile’s laboratory.

“Proctoclysis as recommended by Murphy instituted directly after operation in suppurative peritonitis following appendicitis or other etiological conditions is the crowning glory of post operative treatment; a surgical triumph which shall immortalize Murphy as a great American for all time to come. It is not advisable to be used, however, as a palliative measure in so-called medical treatment on account of the dangers I have already enumerated.

“The operative technic in treating these patients which I consider ideal is as follows: After sterilizing the operative field with half strength tincture of iodine, I advise the McBurney’s gridiron incision on account of its proximity to the appendix, and the lessened liability to ventral hernia later.

“A point in diagnosis that is valuable to note, is that when an edematous condition in the tissues is found when making the incision, it gives evidence of a pus pocket beneath.

“In incising the peritoneum as directed by Judd it is caught by two forceps, the finger should be pushed behind the folds to hold viscera back to prevent injury while the peritoneum is being opened.

“It is well to keep wound toilet covered with saline pads to prevent infection of the tissues which are to be sutured later.

“Search for the appendix and if it can easily be located, remove the same, inflicting the minimum amount of manipulation, and perform as quickly as possible.

“The diseased appendix should be removed whenever possible, so as to prevent it acting later as an infective agent, which would influence the formation of subphrenic abscess or other pus areas.

“As speed is essential for success, the simple ligation of the appendix with its mesentery at its base is quite sufficient. Lemberging the stump is not practicable as the indurated and lymph covered tissues are too friable.

“A split rubber tube reaching to stump allows ample drainage in small suppurative or localized pus cavities. If diffuse peritonitis is present an extra drainage tube should be inserted into the pelvis behind the bladder.

“The intra abdominal tension forces and liberates the purulent secretions towards the incision in the abdominal wall, facilitating drainage.

“The pads at incision are removed, tissues sponged with saline and then iodined. The wound is quickly sutured around drainage tubes, dressings applied and patient returned to bed and placed in the Fowler’s position.

“Proctoclysis should then be instituted for 48 hours and food withheld for the same length of time.

“For the tympanites I have used physostigmine with considerable success. The bowels are moved by castor oil on the third day.

- “1. Plea for early operation (no procrastination permissible).
- “2. In profound septic cases incision and drainage will suffice as operative means.
- “3. Proctoclysis only to be used in post operative treatment.
- “4. Ideal post operative treatment is Fowler’s position, padlock on mouth and Murphy’s proctoclysis.
- “5. Temperature is not a reliable guide.
- “6. The pulse rate is an important one not only in pre-operative diagnosis, but also in post-operative treatment and prognosis.”

TREATMENT FOR BURNS.

R. P. Stoops, in the *Therapeutic Gazette* for October, 1912, states that he has used the liquor cresolis compositus U.S. P. in over one hundred cases of burns, and believes its virtues should be more generally known. His procedure is as follows. The affected surface is first bathed with a one per cent. warm solution of the liquor cresolis in water until the débris have been removed and the parts are anesthetic. Blebs are next punctured and the serum expressed, and finally strips of gauze or, in the case of large burns, strips of paraffin paper, smeared with

an abundance of petrolatum containing one per cent. of the liquor cresolis applied to the burned area. Cotton and bandage are used as a covering. The dressing is allowed to remain four or five days, after which it is renewed according to indications.

The preparation is advantageous in that it causes no pain at its first application; that it does not coagulate albumin exuding from the tissues or contained in the blebs, and that, although discoloration of the urine must be watched for, as with picric acid, poisoning is much less likely to occur than where a saturated solution of the acid referred to is used. In a case of almost universal burns in a child it was found possible to relieve all suffering by smearing the outside of the underclothing with the petrolatum mixture, and having the patient wear the garments turned inside out.

SALVARSAN.

O. Kren (*Wien Klin. Woch*) says judging from the numerous tests of the salvarsan in the dermatological department of the Vienna University clinics it is to be considered as an extremely effective anti-syphilitic, whose application profoundly influences the course of syphilis. Its therapeutic worth is greatest when given in the primary stages. In these cases of fresh scleroses with negative Wassermann reaction, it is capable of inhibiting the eruption of secondary symptoms with few exceptions. A few of these cases have been under observation for over two years and have remained free from secondary symptoms. In scleroses where the serum reaction is positive, the absence of secondary symptoms is less frequently observed. Salvarsan acts very favorably in the third stage and in hereditary lues, less favorably in the secondary stages; in the latter the administration of small gradually increasing doses is especially to be recommended. Contraindications exist in cases with increased blood pressure, severe nerve affections, diseases of the ear, especially the middle ear. There is no particular danger in applying the remedy in cases not presenting these contraindications. Its neurotropic action is very small when compared with other arsenic preparations.—*N.Y. Medical Journal*.

TRAUMA IN THE PRODUCTION OF MAMMARY CANCER.

In those delightfully colloquial lectures which Dr. John B. Murphy of Chicago, addresses directly to those who attend his cliniques, or indirectly through the volumes of his *Surgical Clinics* to a wider audience

of practitioners, he compresses in short compass much shrewd and pithy information that is applicable not only to the particular cases under discussion, but also serves in place of more abstract papers on the subjects in general. His clinical methods of teaching are models of what clinical lectures ought to be. In the latest bi-monthly number (December, 1912), for example, he discusses an ordinary cancer of the breast, prefacing his operation by remarks on the general pathology, and accompanying it by explanatory remarks on the *rationale* of each step. There is much for agreement and not a little for disagreement in what he says. He considers that the relation of trauma to carcinoma of the breast is peculiar. He adheres to the belief that carcinoma in other situations is the sequence of repeated mild irritations, whereas sarcoma follows one moderately severe irritation or trauma, never a superlative trauma. Thus, carcinoma of the lip does not result from a severe blow to it, but occurs on account of a continuous mild irritation from a tooth. Sarcoma never occurs in a bone as a result of an injury severe enough to fracture the bone, but follows a trauma severe enough to cause pain. The case of the breast, on the other hand, is exceptional, for one single trauma of moderate severity produces a carcinoma after the lapse of six to thirty months. Few surgeons would be prepared to accept such wide generalizations; and though Leaf in this country obtained in 32 per cent. of cases a definite history of injury to the breast affected, yet the probability is that, since the mammae are so very liable to accidental blows in the ordinary course of events, female patients, noticing a lump in the glands, are apt to cast back their minds to some particular trauma that otherwise would have been forgotten. Murphy, too, performs a rather conservative operation on mammary cancer. He contents himself with removing the fascia over the pectoralis major, leaving the muscles, intact, as a rule, basing his procedure on the original report of Bryant, who had seen only one case of recurrent carcinoma in the pectoral muscles in an experience extending over forty years. Many a pathologist who had experience of *post-mortem* examinations of cases dying from recurrent breast cancer when such operative procedure was usual would not be prepared to agree with this, nor with the statement that the sites of metastases are the femur, the bodies of the vertebrae, the liver, and the brain in order of frequency. If operative measures were based on Bryant's statement, the rather gloomy outlook to which Murphy candidly confesses might be more justifiable. The whole lecture teems with points forcibly and arrestingly put by the author, and productive, it may be, of thought and criticism in others, but certainly far from mere sterile platitudes.—*British Medical Journal*.

NOTIFICATION OF VENEREAL DISEASE.

The N.Y. City Health Department has ordered superintendents of institutions and has requested private practitioners to give notification of all cases of venereal disease with the source of infection, if possible. The Medical Association of Greater New York City has adopted resolutions condemning this action, the assertion being made that the Health Department contemplates the establishment of free dispensaries for treating cases and has been prevented only by the failure to secure an appropriation of \$50,000. The opposition is based both on the possible infringement on private practice and the general principle of privileged communications by patients.

CANCER PASTE.

The Cancer Paste has recently been revived and has been given a respectable status. A. Zeller, *Munch. Med. Woch.*, Aug. 20 and 27, 1912, reports 57 authentic cases, 44 cured, 3 dead, 10 still under treatment. After cleansing the surface with benzine, a paste containing arsenic and cinnabar is thickly applied, covered with collodion or a regular aseptic dressing and renewed every week or two. One-half gram each of sodium and potassium silicate, are administered t. i. d. and are continued for a year after apparent cure. (Note—As local treatment of cancer of this fashion is limited to external growths, easily diagnosed promptly, it seems best to adhere to extirpation except in neglected, inoperable cases. At the same time, the results of chemic and radiant treatment are suggestive for the future. The administration of soluble glasses in so large dose and for so long a time, leads to speculation as to the possible results of combination with lime.)—*Buffalo Medical Journal*.

THE DIAGNOSIS OF CHRONIC APPENDICITIS.

L. Dreyer (*Muench. Med. Woch.*, August 20th, 1912), finds that the diagnosis of chronic appendicitis or of appendicitis during an interval between acute attacks is often very difficult. In order to assist the diagnosis in doubtful cases he has employed inflation of the rectum. Air is pumped in through the anus. At first no special pain is complained of, but as soon as the air reached the caecum the patient complains of the same kind of pain as that experienced during an acute

attack. The pain is frequently referred to the umbilical region. In inflating the bowel of patients not suffering from chronic appendicitis no complaints of pain were made. The author cites some typical cases in which this method assisted materially in forming the diagnosis, which was in each case confirmed by operation.

THIERSCH'S SKIN GRAFTS IN VARICOSE ULCERS.

Petges (*Gaz. hebdom. des sci. med.*, 1912, xxxiii) warmly recommends the above treatment, which he successfully employed in a case of extensive varicose ulceration of the leg in a man 59 years of age. The ulcers were first cauterized by silver nitrate, and after a week of this treatment were treated by iodine vapour produced by a special apparatus, and after three days the ulcers were ready for skin grafting. In a week the grafts had become firmly adherent, and the ulcers, which had existed for years, were healed in a month after commencement of treatment.

HEMORRHOIDS, TREATMENT OF.

Discussing the local treatment, the author asserts that where there is not much inflammation, nor incarceration, nor abundant hemorrhage the best ointment is that of Lutz:—

℞ Cerati,
 Olei amygdalæ expressi,
 Zinci oxidi, of each, ʒiiss (10 Gm.).
 Balsami Peruviani, gtt, iij.—M.

A piece of this the size of a hazelnut should be introduced as high as possible through the anus morning and evening, and especially before stool. Even in the presence of very painful fissures, this will give excellent results.

Where there is much hemorrhage, ointments containing extract of krameria, along with hyoseyamus, belladonna, and perhaps cocaine and extract of opium, may be used; or, the following, originally recommended by Unna, may be ordered:—

℞ Chrysarobini, gr. xij (0.8 G.m.).
 Iodoformi, gr. v. (0.3 Gm.).
 Extracti belladonnæ fol., gr. x (0.6 G.m.).
 Petrolati, ʒss (15 G.m.).—M.

This is very strong, and had best be used weaker, that is, with ℥j (30 G.m.) of petrolatum. Hot water or antipyrin in powder or 2 per cent. solution is equally effective and less irritating than the proceeding.

Where there is intense itching, an alum and camphor ointment is advised by Gilbert:—

℞ Aluminis, gr. xv (1 Gm.).
Camphoræ, gr. xij (0.75 Gm.).
Adipis benzoinati, ℥j (30 Gm.).—M.

If there be much moisture, however, powders are usually more effective than ointments. A 10 per cent. bismuth subsalicylate powder relieves itching well. If there is much congestion and irritation, zinc oxide may be added:—

℞ Bismuthi subsalicylatis,
Zinc oxidi, of each, gr. lxxxv (5 Gm.).
Talc, ℥iij (90 Gm.).—M.

The various suppositories commonly employed in constipation, and even simple soap or glycerin suppositories, should be avoided in persons having a tendency to hemorrhoids.

In voluminous, readily prolapsing or bleeding hemorrhoids, an injection of olive oil should be taken every evening, to clearing the lower bowel, before retiring. A moist, tepid compress will also greatly assist reduction. Lukewarm or somewhat warmer baths, persistently employed, afford the best means of reducing prolapsing and inflamed hemorrhoids.—A. F. Plieque (*Bulletin Médical*, June 1, 1912).

ANAL FISSURE.

Treatment. Conservative measures advocated in painful fissure. In examining for it have patient bear down, or blow in some orthoform. In treatment: 1. Apply thigenol on cotton on end of probe, which is then withdrawn, leaving cotton in position. 2. Patient to drink tumberful of hot water an hour before breakfast, and another, either hot or cold, in evening. 3. To insure softness of motions: Tincture of cochineal and peppermint oil, of each, ℥x (0.6 c.c.); syrup of glycerin, ℥j (4 c.c.); soft paraffin, ℥j (31 Gm.). If this objectionable, add 20 grains (1.3 Gm.) of powdered cocoa, or 10 to 20 grains of powdered agar. Dose of the mixture, 1 teaspoonful 4 times daily. 4. Where constipation previously present: Some aperient, such as confection of senna, ℥ss-j (2-4 c.c.), to be given in addition. 5. After bowels act:

Patient to wash parts and apply some bland ointment, *e.g.*, one of eucalyptus. 6. Where violent sphincteric spasm and pain, dilate under gas, and, if sentinel pile present, remove with forceps.—Bldwin.

TREATMENT OF ERYSIPELAS IN INFANTS.

Dr. E. M. Gill (in *Medical Record*) writes thus:—

“It has been known for some time that the micro-organism of erysipelas is a streptococcus. This microorganism was first obtained in pure culture by Fehleisen’s experimentation have demonstrated that Fehleisen’s erysipelas coccus is identical with the *Streptococcus pyogenes*, and neither can be distinguished from the other.

“Suppuration or abscess occurs in erysipelas, usually when the streptococci are present in large numbers in the tissues outside of the lymph channels, or when there is a mixed infection with the staphylococcus.

“My first paper on the use of vaccines in the treatment of bacterial infections in children was published in the *Medical Record* of August 6, 1910. In this paper (among other infections) I reported in detail and gave temperature charts of two cases of erysipelas in infants which were cured by injections of streptococcus vaccine. Since then eight more cases treated by vaccines have been added to my list.

“The ages of these infants were 17, 12, 11, 8, 8, 7, 5, $\frac{3}{4}$, 5 months and one 8 days respectively. All the cases so treated with the exception of one were cured. Seven cases were treated with streptococcus vaccine alone. One case with combined vaccine (streptococci 50,000,000 staphylococci 500,000,000, colon bacilli 200,000,000) and two cases with Schaefer’s mixed infection phylacogen.”

ADDRESS IN SURGERY; THE THYROID AND HYPERTHYROIDISM.

Dr. Stuart McGuire, of Richmond, said that when a patient with exophthalmic goitre came to a surgeon, the case ought to be kept under observation and carefully studied for some days before deciding on the character of the operation best suited to the individual and the safest time to perform. In the hands of experts, the mortality of operations for hyperthyroidism was now from two to five per cent., and eighty-five per cent. of those who recovered might be said to be symptomatic cures.

It was neither honest nor expedient to make light of the operation nor to belittle its difficulties and dangers.

The figures quoted were from the statistics of master surgeons and by no means represented the results of the average operator. After a successful operation for hyperthyroidism the improvement in the patient was immediate and marked. No operation in surgery produced such quick and brilliant results. Tremor disappeared, the pulse fell to normal, the eyes became less and less wild, and restlessness and irritability were replaced by quiet and composure. The wound, as a rule, healed rapidly, and the patient was able to leave the hospital in from ten to fourteen days. Because the patient was well from the operation and because the acute symptoms were relieved, was no ground for immediate return to the ordinary activities of life. Crile very properly stated that it required approximately the same time to recover from exophthalmic goitre as from a nervous breakdown from other causes. A successful operation should be followed by an adequate period of rest.—*New York Medical Journal*.

CERVICAL MYOMA.

In "Surgery, Gynecology and Obstetrics" for December, 1912, Rabinovitz has collected 133 cases of cervical myoma, representing most of the available material recorded in the literature for the past twenty-six years. An analysis of the material thus gathered leads to the following deductions:

(1) The aetiology of cervical as well as of corporeal myoma is, in all probability, a perverted ovarian secretion, which may be termed a "myomhormone." It occurs either in multiparae becoming relatively sterile, or in the primarily sterile, or in the celibates, in all of whom the sexual energy, while still active, apparently finds an abnormal expression in the tumour development.

(2) The period of life most propitious for the growth of myomata is between the ages of thirty and forty-five. During this period procreative power is on its downward course, but other sexual manifestations, such as libido and menstruation, are still fairly active. This disturbance in the sexual gland indicates a change in metabolism, which suppresses fecundation, but is capable of calling forth a homologous or a heterologous tissue change and the formation of a tumor.

(3) Cervical myomata affect the posterior lip more frequently than the anterior lip.

(4) Cervical myoma is more often the cause of sterility than corporeal myoma.

(5) Abortion occurs less frequently in cervical myoma than in myoma of the body of the uterus.

(6) Dystocia is much graver and the results more serious in cervical myoma than in uterine myoma.

(7) Bladder and rectal disturbances, and neuralgic pains from pressure upon the sacral plexus, manifest themselves at an earlier period in cases of the cervical myoma than in the uterine.

(8) The diagnosis of cervical myoma offers greater difficulties than are presented by uterine myoma.

(9) The treatment of cervical myoma is radical removal, choosing the vaginal route for the intravaginal variety and the abdominal approach for the superavaginal growths.—*Universal Med. Record.*

OBSTETRICS AND DISEASES OF CHILDREN

ON THE USE OF THE POSTERIOR LOBE OF THE HYPOPHYSIS AS AN OXYTOCIC AGENT.

Pouillot and Vayssières were amongst the first in France to draw attention to the importance of the extract of the posterior lobe of the pituitary gland as an oxytocic agent. Previous to them, Parisot and Spire had, however, tried the hypophyseal medication at the Lying-in-Hospital, Nancy, but they used either an extract of the total gland or a powder of the same, and as they themselves recognized, the results obtained, in spite of the large doses used, were far from being identical with the numerous successes obtained in Germany and in England.

More recently Lequeux has reported a case of angular pregnancy in which, in the absence of any contractions, he was able, by means of one injection of pituitrin repeated two days in succession, to "sensibilize" the uterus and to determine the confinement on the third day. He had, it is true, to have recourse to artificial delivery, and noted a complete retention of the placenta in the right horn, due to hour-glass contraction of the uterus; as a matter of fact, he attributes this retention to the angular pregnancy rather than to pituitrin. This case confirms the conclusions of Fries and Schiffmann, who state that "if, with women who are at the expulsion stage, one or two injections suffice to conclude the confinement, the provocation of labor toward the end of pregnancy requires successive injections, the number of which

decreases in proportion as the pregnancy approaches its end."

Quite recently Hauch and Meyer, of Copenhagen (*Archives Mensuelles d'Obstétrique et de Gynécologie*, 1912, No. 10), have published an extremely interesting article on pituitrin, which offers the opportunity of condensing the rational indications of this preparation in obstetrics.

Pituitrin has the property of stimulating the muscular system of the pregnant uterus. Injected during labor, it aptly increases both the intensity and the frequency of the contractions. Its action is sometimes characterized at the outset by one or two contractions of a spasmodic nature, which might last several minutes and which are immediately followed by rhythmic contractions.

Pituitrin develops its action even during the narcosis.

Indications.—Pituitrin is indicated:

1. In cases of *primary and secondary atony*. The rapid action of pituitrin is subject to the uterus being in the state of excitability which characterizes it at the end of the pregnancy, or else to contractions, however feeble, having already taken place. In cases of full-term pregnancy in consequence of insufficient sensibilization, the uterus is in a state of complete atony (before or after rupture of the membranes), and pituitrin alone is able to provoke labor. In this case it is necessary to make several injections at intervals of from three to twelve hours. The action of pituitrin will be the more intense as the pains—at the moment of the first injection—are at a more advanced stage. It sometimes fails with primiparæ of a certain age.

2. *To accelerate labor* in cases of: (a) Functional weakness of the uterine musculature caused by excessive distention due to the presence of twins or to hydramnios. (b) Slight pelvic angustia. (c) Albuminuria. (d) In the interests of the mother: after intrauterine interventions (dilatation, combined rotation); in cases of fever in the course of the labor; in cases of declared or imminent eclampsia. (e) In the interests of the child: when the heart-beats of the fetus are irregular or accelerated; when there is a danger of intrauterine asphyxia.

3. In cases of *placenta previa*, after rupture of the membranes, rotation, or dilatation.

4. In cases of *prolonged pregnancy* resulting from the absence of contractions.

6. *Indications of convenience*: to hasten the delivery with the simple view of shortening the pains.

7. *As an aid*: (1) With a view to stimulating the progress of the abortion, whether already commenced or incomplete. (2) To provoke premature confinement. In this case pituitrin should only be adminis-

tered after mechanical dilatation has been previously applied (bag or laminaria).

Pituitrin is not indicated with a view to provoking abortion previous to the fourth month.

8. In cases of *postpartum hemorrhage*. Fries and Fischer recommend the injection of pituitrin previous to the expulsion of the fetus; this as a prophylactic measure against postpartum hemorrhage.

Pituitrin surpasses ergotin, both from the point of view of intensity and of the duration of the contraction produced. Moreover, pituitrin develops its action in cases of profuse hemorrhage due to atony, even in those cases in which ergot has failed.

9. In cases of *Caesarian section*, with a view to preventing hemorrhage and to hastening the expulsion of the placenta.

Advantages.—These are:

1. *Absence of undesirable after-effects.* Pituitrin sometimes provokes a slackening of the fetal heart-beats, which is, however, of no consequence; but no incident on the part of the mother, and no phenomena of intoxication or accumulation.

2. *Favorable secondary effects:* Prompt expulsion of the placenta; minimum or no hemorrhage; stimulating action on the bladder and the intestine; finally, pituitrin renders possible in numerous cases the avoidance of intrauterine interventions, thereby lessening the risks of infection.

Dose and Mode of Use.—Pituitrin is generally administered hypodermically or intramuscularly; the average dose is 0.5 Cc., which can be repeated three or four times a day, as required.

The intravenous injection provokes, so to say, immediate contractions, accompanied by the desire to pass water and to evacuate the bowels, by vertigo, dizziness, often also by nausea or vomiting, finally by perspiration. In consequence of these drawbacks, the intravenous administration of pituitrin has not become general in obstetrics.

Contraindications.—These are: Nephritis, great pelvis angustia, myocarditis, arteriosclerosis, danger of rupture of the uterus.—*Presse Médicale*, No. 4, 1913.

FURTHER CONTRIBUTIONS TO OUR KNOWLEDGE OF THE PERNICIOUS VOMITING OF PREGNANCY.

Williams, in the *Glasgow Medical Journal* for December, 1912, reaches these conclusions:

1. The underlying factor in all cases of vomiting of pregnancy is probably an imperfect reaction on the part of the mother to the growing ovum.

2. In most cases this is only a predisposing cause, while a reflex or neurotic influence is the exciting factor, and cure usually follows its removal.

Williams still holds to the classification of reflex, neurotic, and toxemic vomiting. Of these the neurotic is the most and the reflex the least frequent type, while the toxemic is the most serious.

4. Pronounced toxemic vomiting is accompanied by characteristic lesions and profound changes in metabolism.

5. The significance of a high ammonia coefficient is not specific. It may be a manifestation of toxemic vomiting, of starvation following neurotic vomiting, or of an acidosis due to various causes.

6. It should be regarded merely as a danger-signal, while the differentiation between the various types is possible only after careful clinical observation. If improvement does not promptly follow appropriate treatment, the existence of toxemic vomiting should be assumed and abortion promptly induced.

7. In the absence of genital lesions, a low ammonia coefficient indicates neurotic vomiting, which can be cured by suggestion and dietetic treatment, no matter how ill the patient may appear.

8. In primiparous women vaginal hysterotomy is the most conservative method of emptying the uterus. Nitrous oxide gas or ether should be used in preference to chloroform for anesthesia.—*Therapeutic Gazette.*

PERSONAL AND NEWS ITEMS

Ontario.

The Board of Health for Brantford has ordered a new smallpox hospital. The present hospital is situated within Mount Hope Cemetery.

Three members of Niagara Falls Board of Health, Mr. T. E. Watson, Mr. M. Wimberton, and Dr. F. W. E. Wilson, a short time ago resigned. This arose from the interference on the part of the aldermen with the local Health Board. An order was issued to erect a smallpox quarantine hospital at a cost of not more than \$4,000. An order for the vaccination of the community was issued.

After pleading guilty to the illegal practice of medicine, Mrs. Emma Stevenson was fined \$40 in police court at Millbrook. She was fined \$25 on each of four similar charges to which she pleaded guilty.

The Children's Aid Society of Windsor and Essex county has received a contribution of \$2,000 from the Elizabeth Wright estate toward the erection of a children's shelter.

Lord Stratheona has sent a cheque for \$2,000 to be added to the fund now being raised by the lady graduates for the erection of a woman's residence in connection with Queen's University

Some time ago a charge was lodged against Dr. James Anderson, of Hamilton, by Dr. Hunt, of the same city. The case was tried recently before Mr. Justice Middleton. The jury acquitted Dr. Anderson, and Justice Middleton remarked that the action should never have been brought into court. Dr. Anderson's many friends will be pleased to learn of his vindication.

Dr. Harris Logan has been appointed medical officer of health for Niagara Falls. He vigorously enforced the vaccination order, and in other respects actively coped with the disease.

The Toronto City Clerk reported that the cost of printing the monthly reports of the Board of Health was \$232.75, while the cost of printing the bulletins was \$1,600 for last year.

Four Roman Catholic Benevolent Societies are beneficiaries under the will of the late Miss Catherine Brophy, of Toronto, who died on March 12. The House of Providence gets \$200, the Sunnyside Orphanage \$200, Sisters of the Precious Blood \$50, St. Vincent de Paul Society \$50.

The Toronto Board of Trade Saturday asked Mr. Justice Latchford to direct the disposal of a \$15,000 balance left out of the \$60,000 raised for the Northern Ontario relief fund. The money was raised after the big fire on July 12, 1911. It is suggested by the Board of Trade that \$5,000 be divided among the hospitals at Hollinger mines, Pottsville and Golden City, and that \$10,000 be given the hospital at Cochrane.

In the smallpox epidemic at Niagara Falls, the Provincial Board of Health took a firm stand and notified the council that if vaccination was not enforced, the city would at once be quarantined. As the result of this action the council and the local Board of Health arranged for general vaccination which was commenced on 5th April. The new medical health officer, Dr. Logan, showing a firm hand with all who objected, and stating that he would institute proceedings against them. Vaccination was unpopular, but soon became general.

Her Majesty, the Queen, will open the Queen Mary Hospital at Weston, Ontario, early in June, and to do this she will press a button in Buckingham Palace, which will throw open the doors of the \$100,000 hospital, erected by the National Sanitarium for children afflicted with tuberculosis.

Hon. Dr. Roche has returned to Ottawa after his operation for gallstones at Rochester, Minn. He is reported as being now in excellent health.

Dr. G. P. McDonagh, of Toronto, has been visiting the South Sea Islands.

Dr. Wm. Oldright, of Toronto, has spent most of the winter in the West Indies, and will be home in May.

Dr. J. O. Orr, manager of Toronto's Exhibition, has been visiting Gibraltar, Monaco, Genoa, Naples, etc. He is looking after good things for the Exhibition.

Drs. J. A. and Lorne Robertson are sailing around the Mediterranean.

Dr. M. J. Haffey announces that he will follow the practice of diseases of the eye, ear, nose and throat at 152 Carlton St., Toronto.

Drs. H. K. Bates, W. M. Ecclestone and A. S. Lawson have been added to the staff of inspectors of the children in the public schools of Toronto.

The report of the Medical Officer of Health for Toronto shows that there were 82 cases of diphtheria treated at the Isolation Hospital during March, also 119 cases of scarlet fever, 6 cases of diphtheria and scarlet fever mixed, and 11 cases of smallpox at the Swiss Cottage Hospital. Three patients died in the Isolation Hospital.

Two railway men have carried smallpox from the Niagara district to St. Thomas.

In Toronto for March there were 574 deaths. There were 115 deaths from pneumonia or broncho-pneumonia, thirteen from tubercular meningitis, three from cerebrospinal meningitis, and 146 under two years of age.

Dr. R. E. Davis, of Ivy, Ont., has located at Hornings Mills.

Dr. G. N. McDonagh, Toronto, is taking a trip to New Zealand and Australia.

Dr. Edward Ryan, of Kingston, is mentioned as Senator in succession to Hon. Dr. Sullivan.

The officers of the Kingston Medical Society for the year are:— President, Dr. W. G. Anglin; vice-president, Dr. R. J. Gardiner; secretary, Dr. W. T. Connell; treasurer, Dr. G. W. Mylks.

The new wing of the Berlin Hospital was opened on the 11th April by Lieut.-Governor J. M. Gibson.

Ottawa is offering \$5,000 a year as salary for a suitable medical health officer.

Mr. and Mrs. Cornelius Bermingham have agreed to donate another cottage to the Sir Oliver Mowat Hospital at Kingston.

Dr. Dawson has been appointed medical superintendent of the Ottawa Isolation and Hopewell Hospitals, at a salary of \$1,800 a year.

A General Hospital is to be built at Cochrane.

A grant of \$10,000 has been made to the hospital by the Council of Renfrew.

An addition will be made to the hospital at Oshawa at a cost of \$20,000.

The annual meeting of the Ontario Health Officers' Association will be held in Toronto on 29th May. A good program has been arranged.

Quebec.

Prof. J. G. Adami, of Montreal, has joined the editorial staff of the *Buffalo Medical Journal*. This old and esteemed journal is to be congratulated on so able an addition to the number of those who will contribute to its pages.

Dr. H. B. Yates, of Montreal, started some time ago for a trip around the world.

The Montreal General Hospital held its annual meeting a short time ago. The age limit for all medical and surgical attendants on the outdoor departments was fixed at 62 years.

Last year the Victorian Order of Nurses made 97,955 visits in Montreal. There are 61 nurses in Montreal and 232 in Canada belonging to the order.

The Montreal General Hospital last year treated 4,575 patients. The daily cost was \$2.12. There was a deficit of \$34,371.

The new wing for the Lachine General Hospital is almost completed. The income was \$6,085 and the expenses \$5,596.

Last year the Notre Dame Hospital, Montreal, treated 2,293 patients.

The Sanitarium at Ste. Agathe is doing good work. It is maintained by a society of some 300 persons, whose contributions amount to over \$32,000.

Western Provinces.

Mr. Frederick Engen has endowed the Saskatchewan University to the extent of \$100,000 by a donation of \$5,000 a year. Mr. Engen in his gift specified that it should be used for original research, and President Murray states it shall be used for the scientific side of political economy. Another gift is that of Allan Bowerman, who will erect a large bronze statue to the late King Edward VII., in the role of Edward the Peacemaker.

Dr. McKay, of Saskatoon, will travel for a year studying health topics. He is medical health officer for Saskatoon.

An effort is being made to raise \$50,000 for an addition to the St. Paul Hospital, of Vancouver.

The Royal Columbian Hospital at New Westminster cared for 525 patients last year. A call is made for \$30,000 for better equipment. The government has given \$100,000 and the city \$130,000 for the erection of the hospital.

The Medicine Hat Medical Association has elected the following officers:—President, Dr. C. F. Smith; Vice-President, Dr. F. W. Grishaw; Sec.-Treas., Dr. H. Orr; Ex. Com., Drs. Boyd and Thomas.

The two medical societies in Winnipeg have united. The officers are: J. R. Jones, president; J. A. Gunn, vice-president; S. A. Smith, secretary; Geo. Stephens, treasurer; J. H. Halpenny, J. Lehman, R. F. Rorke.

It is proposed to establish a Provincial Medical Library for Saskatchewan, under the control of the College of Physicians and Surgeons. The books would be kept in Regina, and loaned throughout the province.

Regina has voted \$125,000 for hospital extension.

North Battleford is to have a hospital that will cost \$30,000.

The Royal Alexandra and Southside hospitals of Edmonton, have amalgamated.

The Alberta Government has granted \$150,000 to the Victoria Public Hospital.

The City Council of Prince Rupert has made a grant of \$10,000 to the hospital there.

The new hospital in South Edmonton will cost \$100,000. It is to be of steel and brick construction.

The medical inspection of public school children is taking a prominent place in Vancouver. During the year 47,760 children were inspected, and 6,879 were carefully examined.

The per diem cost of patients in the Vancouver General Hospital was \$1.98. The trustees are having a hard time financing the institution.

The Royal Inland Hospital, B.C., had a deficit of \$3,326 last year. The daily cost was \$2.07.

The new hospital at Mount Coquitlam, B.C., is nearing completion. It is a handsome building with accommodation for 650 patients. The institution has about 1,000 acres.

There has been some delay in arriving at a working basis for the management of hospitals matters in Calgary. There has been considerable feeling in favor of a hospital system owned and controlled by the city. In the meantime there is great lack of accommodation.

The trustees of High River Hospital have been making an appeal

for assistance. If money is not forthcoming they may have to close down the hospital.

Maritime Provinces.

Helen L. Jordan, of Boston, widow of James C. Jordan, has given to the Government of New Brunswick a hospital for tuberculosis patients in the incipient stage of the disease. Mr. Jordan built a country residence of a palatial character in a romantic and picturesque situation on a high bluff along the Bolet River, 20 miles from Moncton, N.B., and Mrs. Jordan in presenting the estate for the purpose named is carrying out the wishes of her husband. The property consists of about 800 acres. The Provincial Government has appointed a commission to manage the hospital.

In the Provincial Legislature of Prince Edward Island, Hon. Charles Dalton, father of the Island's black fox industry, announced that he would give \$20,000 towards the establishment of a sanitarium on the Island and \$1,000 a year for ten years for maintenance.

Nova Scotia is making good progress in health affairs. The province is being divided into five districts over which medical health officers shall have charge. There will be a sanatorium in each district, the government paying half the cost, and the municipalities the other half.

The Halifax General Hospital has had its facilities for good work improved by the addition to it of a well equipped laboratory.

The Nova Scotia Asylum last year cared for 639 patients. There were 181 admissions, and 147 discharged. There were 41 deaths. The cost of maintenance was \$101,790.

In Sydney there has been a good deal of discussion over hospital affairs. For a number of years the Dominion Steel Company has maintained a hospital, which has been used by the public. Recently the municipality has voted over \$70,000 for a hospital of its own.

The Chipman Memorial Hospital at St. Stephen, N.B., treated last year 480 patients.

Medical inspection of school children at Glace Bay is now being advocated.

From Abroad.

Sir William Osler, Regius Professor of Medicine at Oxford, is on a visit to Canada and the United States.

A graduate nurse is wanted for the position of superintendent of the hospital at Madura, South India. The hospital has 50 beds and on

the staff are two American physicians. The number of maternity cases is about 150 a year; and there were last year 769 operations. Madura is a city of 135,000 in the Maduras Presidency. It is hoped at an early date to erect a woman's hospital at a cost of \$55,000. The salary is \$500 a year and room. Board will be about \$13 a month. An allowance will be made for vacation expenses and a language teacher. Information may be obtained from W. B. Smith, 600 Lexington Ave, New York City.

A typhoid fever carrier has been discovered at Colmar in Alsace. The person is in perfect health, but has given the disease to a number of others. On examination, she was found to carry in her system innumerable bacilli.

Dr. Algernon Bristow, one of the surgeons to Long Island Hospital, New York, pricked his finger on the fourteenth of March, while operating on a case of appendicitis. He was seized with a severe attack of septic inflammation and died in a few days. He was in his 42nd year, and was a native of England.

It is reported that the last illness of J. P. Morgan cost \$500,000. His rooms at the hotel in Rome cost \$500 a day. It is nearly as expensive for some people to die to-day as it is for them to live. His special hotel bill was \$100,000.

As a memorial to the late Lord Lister, and as a means of perpetuating his memory in a way that it is hoped will prove both interesting and instructive to every member of the medical profession for all time to come, one of the wards in the Royal Infirmary, Glasgow, in which he worked out and first put into practice the principles of antiseptic surgery, is to be reserved and utilized in the following way: One part of the ward is to be refurnished as it was in his time with such objects as it may be possible to acquire; while the other part is to be made into a museum for the exhibition of anything associated with his life and work. It is, therefore, asked that any who may have letters, pamphlets, books, or other objects of direct personal association with Lister and his work will either present or loan them to the museum. Professor John H. Teacher, M.D., curator of the Museum, will be pleased to receive any objects addressed to him at the Royal Infirmary, Glasgow, Scotland. The names of all donors or senders of objects are to be affixed to the exhibits.

Announcement is made that Mrs. Elizabeth Milbank Anderson has given \$650,000 to the New York Association for Improving the Condition of the Poor, for the establishment of a department of social welfare to conduct experimental laboratories for the purpose of demonstrating the practicability of preventive and constructive measures, in order that they may be adopted by the municipality and other civic

and social agencies. This fund will be known as the Milbank Memorial Gift.

When Dr. Friedmann was shown a copy of the *Medical Record*, in which Dr. Karl von Ruck, of Asheville, N.C., raised the doubt that Dr. Friedmann's tubercle bacilli derived from the turtle might not always remain nontoxic, or avirulent. This is what Dr. Friedmann said in reply: "My culture contains live bacilli which are nonvirulent and which will remain nonvirulent. Once nonvirulent, always nonvirulent. There is nothing to make them virulent. You can't make an apple out of a pear, can you?"—*Med. Record*.

J. G. Mumford notes that Ambrose Paré never dreamed of claiming that he had invented the ligature. This was used by Galen and by many others in ancient times to control hemorrhage from wounds; but strangely enough the thought of controlling hemorrhage from amputation wounds seems to have occurred to none before the time of Paré.

The Mary Putnam Jacobi fellowship of \$800 is open to all women graduates, selection being made by examination of credentials and deciding as to who is most apt to prove most worthy of assistance in post-graduate studies, to be pursued in New York City. The award will be made June 1, 1913, to cover the year beginning October 1, 1913. Applications should be made to Dr. Emily Lewi, 35 Mt. Morris Park, West, New York City.

Dr. Paul M. Pilcher, who has edited the *Long Island Medical Journal* during the first six years of its existence, retires to the associate staff. The February issue appeared under the editorial control of Dr. Henry Goodwin Webster, to whom we wish the same degree of success that has attended Dr. Pilcher's administration.

Sir George Turner, M.D., of England, became a martyr to science and humanity, while serving in the Leprosy Hospital in Pretoria, and has retired to his home in Devonshire, awaiting the end of this infection. It is well to remember cases of this sort.

The Phipps psychiatric clinic in connection with Johns Hopkins University was formally opened on 16th April. Dr. Adolf Meyer is chief in charge.

On account of the increase of work entailed upon the Local Government Board for Scotland by the Insurance Act, the Treasury has sanctioned the appointment of an additional medical inspector. The salary offered is £500, rising to £800. The new officer will be required to have special experience in tuberculosis, but must also have a general experience of public health work. The board is in course of considering applications for the appointment.

Sir James Barr is the centre of activity in matters of eugenics in Liverpool. Under his chairmanship Major Darwin recently delivered a very outspoken address on the subject of large families and small. The lecture was attended by many members of the medical profession. The eugenical idea is making steady progress, and there is a strong body of medical opinion in favor of legislation to prevent reproduction in the most obvious cases of unfitness.

Considerable progress is being made in the founding of hospitals in India. The Maharajah of Mysore takes very great interest in the development of these institutions, and in June, 1897, the Maharani-Regent, the mother of the present ruler, laid the foundation stone of the Victoria Hospital, and in December, 1910, the Maharajah laid the foundation stone of the Minto Ophthalmic Hospital. Much of the credit of this is due to the senior surgeon, Colonel Smyth, who used his influence to get a special hospital for treatment of diseases of the eye. Colonel Smyth had studied recent improvements in hospital arrangements in England, and reproduced many of these in the designs of the new hospital.

Dr. Henry Benjamin Hinton, a surgeon-major in the British army, living in Adelaide, Australia, was born on 7th March, 1813, is still living and enjoying good health. He has been on the pension list for over forty years. He served in the army during a number of wars in India.

Sunday, March 16th, was observed in the churches in Edinburgh as a Livingstone Memorial Sunday. There has been conducted in that city since 1874, a dispensary as a memorial to the great medical missionary.

Colonel W. C. Gorgas, of the Isthmian Canal Commission, Panama, has accepted the task of organizing a sanitary system for the port of Guayaquil, Ecuador, which has been known hitherto as the pest-hole of the Pacific.

Dr. Prince A. Morrow, of New York, died on 7th March. He was born at Mount Vernon, Ky., in 1846. He was a noted authority on venereal diseases, and edited for ten years the *Journal of cutaneous and Genitourinary Diseases*. For a number of years past he gave much time and thought to the prevention of venereal affections, through the Society of Sanitary and Moral Prophylaxis.

The chief quarantine officer and director of health for the Philippine Islands reported on January 8th that the total number of cases of plague reported in the islands from the beginning of the outbreak in June, 1912, to December 25, 1912, was 58. Of these cases 50 occurred in Manila and 8 in Iloilo, the last case in Iloilo being reported on Sep-

tember 16th and at Manila on December 25th, since which time no case of plague has been reported in the Philippine Islands.

According to the *Buffalo Medical Journal*, the death rate among physicians in the United States and Canada is 15.6 per 1,000.

Dr. William J. Robinson, the editor of the *Critic and Guide*, was recently tendered a banquet, at which 200 of his friends were present. His work in denouncing unethical preparations, in support of eugenics, and better social conditions, were much praised. Dr. A. Jacobi, the president of the A. M. A., presided.

The actual cause of Queen Elizabeth's death is unknown, as no autopsy was performed. From the rather meagre, lay clinical history of her case, however, it seems likely that she died of anile bronchopneumonia, though she may well, of course, have had some deep-seated organic malignant disease. Surely not the least characteristic or heroic aspect of her career was the stubborn fight which the indomitable queen made against her unwelcome malady.—*Boston Med. and Surg. Journal*.

With the knowledge of his clinical history as it has been given, it seems fair to conclude that James I. probably died in uremic coma from chronic cardio-renal disease. The items about his abundance of brains, and the admiration excited thereby, seem peculiarly amusing. Perhaps, taken in conjunction with the known facts about his habits of life, they may be held to justify the statement of his tutor, George Buchanan, that King James I. was "the most learned fool in Europe."—*Boston Med. and Surg. Journal*.

The American Proctological Society will meet in Minneapolis, Minn., on June 16 and 17, 1913. An excellent program is in preparation, and a good attendance is expected.

Henry Kimpton, of London, has issued a catalogue of rare books. Those interested in some of the old writers should write for one, or, if in London, should call on Mr. Kimpton.

The last thing regarding tobacco is that it prevents cholera. It is claimed that tobacco smoke kills the bacilli in a few minutes.

The 69th meeting of the American Medico-Psychological Association meets at Niagara Falls on June 16th.

An observation has been made that a certain small fish consumes the larvæ of malaria. It is proposed to introduce these into the waters of South Africa.

OBITUARY

NORMAN KEATCHIE MacLEOD, M.D.

Norman Keatchie MacLeod, M.D., son of Chas. and Ellen MacLeod, of 26 Crescent road, Toronto, Ont., and himself for several years a resident of Toronto, died 4th of April after ten days' illness of pneumonia at the Buffalo residence of his brother, Dr. James A. MacLeod, No. 448 Delaware avenue.

He was born at Brantford, Ont., April 30, 1879. Dr. MacLeod was a graduate of the University of Toronto in the class of 1903. Besides his education in Toronto, Dr. MacLeod held degrees from the Melbourne University, of Melbourne, Australia. In the University of Toronto he was awarded his M.D., and B.S. degrees. Deceased was also a graduate of the Royal College of England, London, England.

 JAMES WALLACE.

Dr. Wallace, of Alena, Ontario, died at his home on 12th April. He was in his seventy-ninth year, and practised there for fifty years.

 EDWARD ADRIAN WILSON, B.A., M.B., CANTAB.

Dr. Edward Adrian Wilson, who in March, 1912, died at the post of duty with his comrades of the British National Antarctic Expedition, was born at Cheltenham, England, in 1872, the son of a physician. He was educated at Cheltenham College, whence in 1891 he entered Caius College, Cambridge. Here he won distinction as a scholar in natural science, receiving the degree of B.A. in 1894. He then entered St. George's Hospital Medical School, obtaining the degree of M.B., in 1900. In 1898, however, he had been found to have pulmonary tuberculosis; and though he apparently recovered under a careful regimen, it seemed wisest that he should relinquish his intention of engaging in the urban practice of his profession, and should pursue an outdoor life.

Accordingly in 1901, Wilson joined Captain Scott's first Antarctic expedition as surgeon and naturalist on the *Discovery*. His sterling manliness, great endurance, and high scientific ability caused him to be selected to accompany Scott and Shackleton on the final sledging-trip, which reached the farthest point south that had then been attained. From this expedition he brought back data of great value, particularly

in his water-color sketches of Antarctic fauna and flora. On his return to London in 1904 he spent much time arranging and describing his collections in the British Natural History Museum, and in lecturing and publishing reports on topics connected with his observations and discoveries. In 1905 also he served on the departmental inquiry into the diseases of grouse, and in this important work evinced his habitual thoroughness and scientific acumen.

When Scott's second Antarctic expedition sailed in 1910, Wilson was again selected as surgeon and head of the scientific staff. On this expedition he made a special study of the development of the penguin chick, of the embryology of seals, and of the identification of certain varieties of whales. In the pursuit of these investigations he encountered incredible hardships, which he endured with fortitude, and through which he succeeded in securing valuable material which has been preserved for the enrichment of science. In November, 1911, he was one of sixteen selected to constitute the South Polar party, and was one of the four who accompanied Scott on the final successful dash to the pole. He died with his comrades on the return journey, as fearlessly and gallantly as he had lived.

Dr. Wilson was a man of ascetic purity of life, simple, honorable, straightforward, of intense energy, loyalty, and persistence, with a singularly charming and genial personality, an artist as well as a man of science. It is matter for gratitude that such a man should have shared in Scott's final sacrifice, not only as a representative of our profession, but as a fine type of the high fitness and nobility of character bred in the intellectual pursuits of science. To the widow and father who survive him, to his native town, to his college, his hospital, his nation, and to the world, his memory will be more precious than it is sad; for he lived and died with his peers, an earnest Christian gentleman and hero, justifying the highest ideals by which human achievement is measured.—*Boston Med. and Surg. Journal.*

JOHN S. BILLINGS, M.D.

FORMERLY LIBRARIAN OF THE SURGEON-GENERAL'S OFFICE, WASHINGTON,
AND FOUNDER OF THE "INDEX MEDICUS."

With the death of Dr. John Billings on March 11th there has passed away a striking figure in the profession whose name will always be associated with three great achievements—the Surgeon-General's Library, Washington, the *Index Catalogue*, and the New York Public Lib-

rary. Few men have had such a capacity for work, and he died, as he would have wished, in harness.

He was born in 1839, and graduated from the Medical College of Ohio in 1860; after a session as demonstrator of anatomy he joined the Northern army and served throughout the civil war, as the conclusion of which he was Medical Inspector of the army of the Potomac. He then became attached to the Surgeon-General's Office in Washington. After determining to utilize the enormous clinical and statistical material of the war, a serious difficulty arose in the absence of the necessary work of reference. Surgeon-General Hammond had already started a library in connection with his office, and this formed the beginning of the now famous collection. Dr. Billings was put in charge of the few hundred volumes and given a free hand. With a large annual appropriation, Europe was ransacked for books and files of journals, and the library grew with extraordinary rapidity. In connection with this work Dr. Billings paid several visits to this country and laid the foundation of his warm friendship with many distinguished members of the profession, particularly Sir Henry Acland, Dr. Ord, and Mr. Pridgin Teal. In this bibliographical work the late Dr. Windsor of Manchester acted as his friend and adviser. In the last report, October, 1912, the library is said to contain 178,741 bound volumes and 317,740 pamphlets. The collection is extraordinarily rich in old fifteenth and sixteenth century works, and particularly in the journal literature of the world. Owing to the liberality and freedom with which successive Surgeons-General have allowed its treasures to be utilized, the library has had an important influence upon the medical profession in the United States.

In 1876, as the library began to grow, the question of a printed catalogue was discussed, and a specimen fasciculus was distributed for purposes of criticism. The work progressed slowly, but in 1880 Volume I. of an *Index Catalogue* was printed, containing nearly a thousand pages. As the subject and author catalogue it was immediately recognized that such a publication would be of the greatest help, but few at the time thought that a work on so vast a scale could be kept up. The literature of every subject was given with extraordinary fullness, though representing only the material available in the library; thus in Volume I. under Aneurysm, there were some 70 pages of references. Year by year the work progressed, and the first series of sixteen volumes was completed in 1895. Dr. Billings had a happy faculty for choosing able assistants, and he early had the good fortune to associate with him Dr. Robert Fletcher, whose death was noticed in the *Journal* a couple of months ago. The first volume of the second series was published in 1896, and Volume XVII. of Series II. has just been issued. The re-

markable growth of medical literature is well illustrated by comparing the reference on Syphilis in Vol. XIV. of the first series and in Vol. XVII. of the second; in the one there were 109 pages, and in the other 207.

It was always a marvel to Dr. Billings's friends how year by year he kept up the publication of the *Index Catalogue*, but he used laughingly to say that it was only a matter of organization; he read every page of the proofs, and the singular accuracy which characterizes the work is due to Dr. Fletcher and himself. As an outgrowth of this library work the *Index Medicus* of the current medical literature was started by Dr. Billings, and continued, after his retirement, by Dr. Fletcher.

Early in his career Dr. Billings became interested in public health and in hospital organization, and was in charge of the preparation of the vital statistics for both the tenth and eleventh census of the United States. Of the Johns Hopkins Hospital Trust Dr. Billings was appointed adviser, drew up the plans for the hospital, and was active in getting it organized. An important interview I had with his illustrates the man and his methods. Early in the spring of 1889 he came to my rooms, Walnut Street, Philadelphia. We had heard a great deal about the Johns Hopkins Hospital, and knowing that he was virtually in charge, it at once flashed across my mind that he had come in connection with it. Without sitting down, he asked me abruptly, "Will you take charge of the Medical Department of the Johns Hopkins Hospital?" Without a moment's hesitation I answered, "Yes." "See Welch about the details; we are to open very soon. I am very busy to-day; good morning"; and he was off, having been in my room not more than a couple of minutes. In the early days of the hospital Dr. Billings's counsel was always sought, and the growth of the school was a matter of pride to him. For years he lectured on the history of medicine. In 1891 he accepted the professorship of hygiene at the University of Pennsylvania, and became director of its new laboratory of hygiene. In 1896 he became director of the New York Public Library under the Astor, Lenox and Tilden foundations, and the crowning work of his life has been to consolidate these collections, and to see them housed in the magnificent building that was opened two years ago. The extent of the library may be gathered from the fact that it has more than 2,000,000 volumes and upwards of fifty branch libraries, with a staff of 1,002 persons.

In the foundation of the Carnegie Institution in Washington Dr. Billings took an active share, and for years he was chairman of its board.

Dr. Billings was the author of many works on vital and social statistics, on bibliography and on hygiene. Honorary degrees were conferred on him by Edinburgh, Oxford, Dublin, Munich, Harvard, Yale, and other universities. His two strong qualities were a capacity for work and for organization. He worked easily, without fuss or effort, but incessantly. He had an equable temperament and took the accidents and worries of life in a philosophic spirit. Of late years he was often in the hands of surgeons, on several occasions for very serious operations, which he bore with his characteristic equanimity. He leaves a son, Dr. John S. Billings, whose work in connection with the Public Health Department of the City of New York is well known; one of his daughters married Dr. W. W. Ord, of Salisbury. — *Sir W. Osler in British Medical Journal.*

EGERTON HART.

Word has been received that Dr. Egerton Hart has died in China of typhoid fever. He was physician to the Royal Family. He went to China twenty years ago from Toronto.

JAMES BARCLAY.

Dr. Barclay died at Cowansville, Que., 24th February, in his 39th year. He was a graduate of McGill in 1897. He held a number of important offices, such as demonstrator of obstetrics in McGill, and medical officer of immigration at Montreal. He is survived by his widow.

G. A. PETTIGREW.

Dr. Pettigrew, of Peterborough, died 4th March at the age of 68. He had long been a resident of that city.

BOOK REVIEWS

Transactions of the American Association of Genito-Urinary Surgeons. Twenty-sixth Annual Meeting held at the Bellevue-Stratford Hotel, Philadelphia, June 7th and 8th, 1912, Vol. vii. Published for the Association by Frederick H. Hitchcock, 105 West Fortieth Street, New York.

The present volume is full of good articles, dealing with genito-urinary surgery. Those who contributed papers to the meeting of 1912 are among the best known of America's surgeons, and what they have to say carries weight. There is scarcely a phase of this department of

surgery which does not find an expression in this volume. The authors of these articles are to be congratulated on their excellency, and the association on the good work it has been able to accomplish so far. Of late years this branch of surgery has made great progress, and much can now be done for the victims of genito-urinary diseases that would have been impossible a few years ago. The American Association of Genito-urinary Surgeons stands for what is sound and progressive. The daughters married Dr. W. W. Ord, of Salisbury.—Sir William Osler in *British Medical Journal*.

KEEN'S SURGERY.

Keen's Surgery, Volume VI.: The Volume with the newest Surgery. By 81 eminent surgeons. Edited by W. W. Keen, M.D., LL.D., Hon. F.R.C.S. (Eng. and Edin.), Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia. Octavo of 1177 pages, with 519 illustrations, 22 in colors. Philadelphia and London: W. B. Saunders Company, 1913. Entire work, consisting of six volumes, per volume: Cloth, \$7.00 net; half morocco, \$8.00 net. Canadian agents, the J. F. Hartz Company, Toronto.

This volume completes Keen's Surgery. On previous occasions we have had the pleasure of reviewing the former volumes. The main object of this volume is to bring the five volumes already published up to date, and to introduce such new matter as has appeared since their publication. This has been done by the contributors to this volume. Those who have the other volumes, should secure this one. As an independent work on surgery, this volume will prove very valuable.

APPENDICITIS.

Its History, Anatomy, Clinical Aetiology, Pathology, Symptomatology, Diagnosis, Prognosis, Treatment, Technic of Operation, Complications and Sequels. By Wm. B. Deaver, M.D., Sc.D., LL.D., Professor of the Practice of Surgery, University of Pennsylvania, Surgeon-in-Chief to the German Hospital, Visiting Surgeon to the Hospital of the University of Pennsylvania, Philadelphia. Fourth edition, thoroughly revised, containing fourteen illustrations. Philadelphia: P. Blakiston's Son and Company, 1012 Walnut Street. 1913. Price, \$4.00.

Of recent years there have been marked activity in the production of books and articles on this subject. Dr. Deaver has been known for a number of years as an authority on surgery in general, and on abdominal surgery in particular. The present volume is an excellent presentation of our knowledge on appendicitis. It also gives Dr. Deaver's own methods. The volume will prove a distinct addition to any medical library. The publishers have done credit to their old and well-known house, in the form of this book.

GERMAN-ENGLISH DICTIONARY.

Lang's German-English Dictionary of Terms used in Medicine and the Allied Sciences. Second edition. Edited and revised by Milton K. Meyers, M.D., Neurologist to the Jewish Hospital Dispensary, and to St. Agnes Hospital Dispensary, Philadelphia, etc. Philadelphia: P. Blakiston' Son and Company, 1012 Walnut Street. 1913. Price, \$5.00 net.

There are now many physicians who read German, and to such this book will prove most valuable. We have given close attention to its pages and can recommend it with the utmost confidence. The type is very clear and of modern form. The paper and binding are excellent. The author, editor and publishers are to be congratulated upon the result of their united efforts.

THE DRUG BILL.

How to Cut the Drug Bill. By A. Herbert Hart, M.S., M.D. London: John Bale, Sons and Danielsson, Oxford House, 83 Great Titchfield Street, Oxford Street. 1913. Price, 2s. 6d.

This neat little book of 122 pages will prove of unique interest to those who carry a supply of drugs, and do some dispensing. It points out in what way economy can be combined with efficiency. The book deals with apparatus, acids, disinfectants, invalid foods, etc., etc. There is a good deal of useful information on the composition of the leading mineral waters and many of the trade preparations on the market. The book will prove useful to a large number of readers.

THE SCHOOL DENTIST'S SOCIETY.

Affiliated to the Child Study Society and the National League for Physical Education and Improvement. Its Objects and Aims. Second edition, published for the School Dentists' Society, by W. Michael and Son, Watford. Eng. Price, 1s.

This little book goes into the importance of the care of the teeth, the steps that are being taken to induce attention to this subject in schools, and the status of dental education in many countries. For those who are engaged in public school hygiene this little book is a very timely one.

MISCELLANEOUS MEDICAL NEWS

THE GLASGOW LISTER WARD AND MUSEUM.

As a memorial to the late Lord Lister, and as a means of perpetuating his memory in a way that it is hoped will prove both interesting

VITAL STATISTICS OF TORONTO FOR MARCH.

The vital statistics for March, 1913 shows that the death rate in Toronto was lower than in the corresponding month last year, and lower than in February of this year.

There were more births and more marriages in March, 1913 than in March, 1912.

Diphtheria and tuberculosis still maintains the record for deaths during the month as in March last year, while smallpox did not carry off one victim by death.

Scarlet fever death rate declined by one in comparison with last year; while typhoid fever claims 2 victims during the month and measles 4.

	March 1913	March 1912	Feb. 1913
Births	1073	966	916
Marriages	340	301	277
Deaths	546	594	580

	March 1913	March 1912	Feb. 1913
Smallpox	0	0	0
Scarlet fever	3	4	5
Diphtheria	10	13	11
Measles	4	3	8
Whooping cough	1	2	5
Typhoid fever	2	3	2
Tuberculosis	29	25	26
Infant paralysis	0	1	0
Spinal meningitis	1	0	0

VACCINATION APHORISMS.

1. It is the vaccinated persons whose vaccination has "lapsed," rather than the unvaccinated, who really spread smallpox.

2. Infantile vaccination alone, however efficiently enforced, will never save a country from smallpox.

3. Smallpox does *not* "spread like wildfire" in an unvaccinated community where modern methods of prevention are efficiently carried out.

4. There is no fact more firmly established in the whole field of science than that variola and vaccinia confer reciprocal immunity.

5. Modern methods of smallpox prevention are superseding infantile vaccination just as the latter superseded smallpox inoculation.

6. It seems probable that, in spite of increasing neglect of vaccination, smallpox (in this country) will ere long become virtually extinct.

7. A system of infantile vaccination which is not followed by re-vaccination is only a half-measure. Half-measures often do as much harm as good.

8. The effect of vaccination in masking smallpox, and thereby thwarting modern preventive measures, is a serious drawback, which has not yet been sufficiently considered.

9. As a *dernier ressort*, unvaccinated communities can always fall back upon universal vaccination, should the need for it ever really arise.

10. It is the hostility to vaccination (engendered by compulsion), rather than the neglect of it, which constitutes the real danger to unvaccinated communities.

11. The injuries to health caused by vaccination have not been so carefully recorded as they might have been. The debit side of the balance sheet has not always been filled in.

12. Vaccination, as a scientific operation for conferring complete but temporary immunity against smallpox, was never in a stronger position than it is in to-day. It is justly regarded as one of the most striking discoveries in the history of medicine.

Vaccination, as a State system for the compulsory inoculation of infants, is no longer really necessary; it is largely discredited with that section of the community which it is specially intended to serve, and it is becoming obsolete.—I am, etc.,

C. KILLICK MILLARD, M.D., D.Sc.,
 Medical Officer of Health
 —*British Medical Journal*.

FOURTH INTERNATIONAL CONGRESS ON SCHOOL HYGIENE.

His Royal Highness the Duke of Connaught, Governor-General of Canada, has accepted the invitation extended to him to attend the fourth International Congress on School Hygiene, which will be held in Buffalo from August 25 to 30.

It is expected that 3,000 of the world's most famous scientists and educators from all parts of the globe, with at least 5,000 from all parts of the globe, with at least 5,000 from all parts of the United States, Canada, Mexico and South America, will attend the sessions of the congress.

Dr. Charles W. Eliot, President emeritus of the Harvard University, is President of the entire congress. The vice-patrons are the

Lieutenant-Governors of the various States of this country and the Provinces of Canada.

Sir James Grant, M.D., K.C.M.G., of Ottawa, is President of the Canadian delegation. The Vice-Presidents are the Ministers in charge of education in the various Provinces and the Presidents of the universities and colleges in Canada.

The objects of the congress are to bring together men and women interested in the health of school children, to organize a program of papers and discussions covering the field of school hygiene, and to assemble a scientific and commercial exhibit of practical and educational value to school people.

Delegates will attend from all the leading nations, from every college and university of note in this country, and from various other educational, scientific, medical and hygienic institutions and organizations. The Congress is further open to all persons interested in school hygiene. Membership may be secured on the payment of a five dollar fee. Applications should be sent to Dr. Thomas A. Storey, College of the City of New York, New York City.

It is greatly desired to secure large membership of the Congress, and to this end, may we not count upon you in spreading the news of the Congress and in calling attention to the benefits following the presence of all those actively engaged in promoting the welfare of the child, the school, and the community?

The man of to-morrow depends upon the child of to-day, and the child of to-day, roughly speaking, spends half his waking hours under the influence of school conditions. Are you interested in making these conditions what they ought to be? If you are, give this Congress publicity. That is one way in which you can help.

NOMINATING COMMITTEE, ACADEMY OF MEDICINE, TORONTO.

At the regular meeting of the Toronto Academy of Medicine on 1st April, the following fellows were elected as the nominating committee to select the list of officers and councillors for the coming year. The names are: Drs. W. H. B. Atkins, J. A. Amyot, H. B. Anderson, H. A. Bruce, Graham Chambers, J. H. Elliott, J. Ferguson, J. T. Fotheringham, H. J. Hamilton, E. E. King, H. C. Parsons, N. A. Powell, G. Silverthorn, Harley Smith, D. J. G. Wishart, and W. A. Young. At a meeting of the committee the following were nominated:—President, H. J. Hamilton; Vice-President, H. B. Anderson; Hon. Sec., W. Harley

Smith; Treasurer, W. A. Young; for the Council, Drs. W. H. B. Aikins, J. Ferguson, N. A. Powell, H. A. Bruce, E. E. King, Graham Chambers, J. H. Elliott.

IMPORTANT TO DOCTORS.

This will be an interesting summer in Britain. The meeting of the British Medical Association at Brighton, from July 21 to 25, and that of the International Medical Congress in London from August 6 to 12, will add greatly to the usual pleasure of a visit to the Old Land.

Those who intend going would do well to communicate with the Editor of the CANADA LANCET before going, as special inducements in the rates for steamship accommodation can be offered, covering first-class service in every way.

Information will be furnished to those who purpose taking in these two great conventions, or for any other reason wish to visit Britain this summer. The information will cover dates of sailing, rates, route, and other items of interest.

MEDICAL PREPARATIONS, ETC

THE SEQUELAE OF LA GRIPPE.

Among all of the various acute and exhausting illnesses that afflict mankind, there is none that so generally results in distinct prostration as epidemic influenza, or la grippe. Even the grippal infections which are uncomplicated or unaccompanied by serious organic changes are more than apt to leave the patient in a thoroughly devitalized condition after the acute febrile symptoms have subsided. It is for this reason that the treatment of la grippe convalescence is of special importance. The anemic, debilitated, depressed patient requires a systemic "booster" that will not only stimulate but revivify and reconstruct. It is distinctly wise, in such cases, to commence vigorous tonic treatment as early as possible, preferably by means of Pepto-Mangan (Gude), the hemic builder and general reconstituent. This standard hematinic increases the vital elements of the circulating blood and, by increasing the appetite and improving the absorptive and assimilative functions, quickly restores both hemic and general vitality.