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EDITORIAL

BOVINE TUBERCULOSIS.

Dr. J. G. Rutherford, Veterinary Director-General and Live Stock Commissioner, has prepared for the Government of Canada a very lucid report on the control of bovine tuberculosis.

He first states that tuberculosis is a widespread disease, affecting animals and man. He also states that it is contagious. It spreads from cow to cow in a herd until most of the animals are infected. This may not attract much attention from the farmer, as the appearance of the disease is so slow. This very feature had long obscured the contagious nature of the disease in man. We can recall a time, not so many years ago, when we were denounced for advocating this view. It is with us now to stay, and good has already come of this belief.

History goes to show that this is an ancient disease, and existed at very early dates. Where it originated or how is not known. The report states that 70 or 80 per cent. of some herds have been found diseased. This entails an enormous loss to the farmers, and must be estimated up in the millions of dollars.

There is the danger of infecting man. Milk is so extensively used as an article of diet, especially among children, that it is necessary to take the utmost care. Dr. Rutherford assumes that the disease can be communicated to man by diseased milk and meat.

The disease is spread among cattle in several ways, such as a diseased animal coughing and expectorating on the grass or other food, by shipping cattle in car boxes that have been infected, by feeding calves on diseased milk, etc.

The author of the report speaks very highly of the value of the tuberculin test. He claims that if this were generally used and diseased animals excluded from the herd much saving would ultimately be effected.

TUBERCULOSIS IN TORONTO.

There were 500 deaths from consumption last year in Toronto. This is enough to make one stop and think. It means that there are about four times as many infected, as the duration of life may be put down at about four years. Putting each life at the very low estimate of \$2,000, the loss would be \$1,000,000. To this must be added the loss due to sickness among 2,000 infected persons.

What is to be done? Wake up. Educate the people by every possible means. Every effort is made to control the spread of diphtheria, scarlet fever, smallpox, and rightly so, but in tuberculosis we have a disease that spreads from the sick to the well, and practically nothing is done. There must be a widespread campaign along the line of education. The people must be made to *feel* that the disease is "*catching*."

It will do no harm if the people become frightened somewhat. They may then work out their own salvation with "*fear*."

But the people must spend money. It is hard to make bricks without straw, but impossible without clay. If this disease is ever going to be chained like Prometheus, we must first get the chain. This will cost some money. Then the chain must be applied. This will cost more money. The chained giant, in the form of the infected persons, must be cared for, and this again will cost more money. But we must not become frightened. It is an investment that will bring back the capital annually.

There is no use going at this question in a small way. A man with a pick-axe could never cut a way through a great mountain; but a number of men with powerful machines might do the work in a short time. It takes a Titan to toss a mountain, and it will take a Titan to bind the tuberculosis giant.

ERYSIPELAS IN HOSPITALS.

This subject comes up from time to time. In our last issue we referred to it. We again contend that there is no good reason why such cases may not be admitted into the medical wards of a hospital.

Hospitals should be conducted for the sick of the community, and there are few more in need of proper care than a person who is ill with erysipelas. It would be well if separate accommodation could be furnished for such cases. When such cannot we agree with Dr. Hastings that they should be admitted to the medical wards.

ANTI-TYPHOID FEVER INOCULATION.

This method of preventing typhoid fever has been thoroughly tested in the Petawawa Camp, and has been found efficient. There was not a single case of typhoid fever in the camp last summer. It has been very extensively employed in the United States Army and Navy, with the best of results.

This is one more great step onward in the march of medical science. A regiment is sent to some foreign point. It is stationed for some months in a given place. Under former conditions typhoid fever would be almost certain to make its appearance among the men. We can recall what happened at Ladysmith a few years ago.

The pleasing feature of this method of prevention is that there appears to be no ill effects. It is an old saying and worthy of acceptance "that prevention is better than cure." It may be that the time will not be far distant when men going into lumber camps, nurses in charge of typhoid fever cases, and those exposed to the disease will undergo this preventive treatment.

FAITH HEALING.

It may be safely said that much of what we read in the public press about faith healing emanates from people with large sentiment and small reason. They talk much, but think little. Their ignorance is great regarding the problems of pathology; or, in other words, their knowledge is in inverse ratio to the importance and magnitude of the subject they undertake to discuss.

We do not wish for a single moment to be construed as calling in question genuine faith in the power of a Supreme Being, or that faith in such a Supreme Being may not influence the life of him who holds such a faith; or, in moments of trial, give him a courage of great value. This much might be granted of all forms of religious belief. We know that the Hindu will suffer cheerfully for his faith, and firmly believes that his god can do great things for him. So do the Indians of the Rocky Mountains. The Araucanos of South America would tell one the same story.

Along the centuries some believers in the Christian religion have been ever advancing the power of the church, or certain members thereof, to cure disease. Medical science has waited patiently for proof of these claims. There is no use blinking at this question. We must be frank.

It is not our province to argue the question whether or not God can cure cancer. It is our duty, however, to say that He does cure it through the well-thought-out methods of the surgeon. We say with Sir Mitchell Banks that we can cure cancers in almost every instance if we get them early enough and remove them carefully. God puts his approval upon this by granting the happy result to this method.

We know that when a man has a contraction of the pyloric opening and he is in very poor health as the result, God says, "I will grant my favor on the method devised by the surgeon of performing a gastro-enterostomy." We can recall the example of a very devout minister of the Gospel who underwent the operation, with the happiest result. He knew the limitations of prayer, and that it was, indeed, wrong to ask God to interfere with His own laws.

The ship at sea is overtaken by a terrible storm. Every man is at his post. The ship is wisely steered, the rigging is properly cared for, the engines are made the objects of the closest attention, and the result is that shipwreck is averted, and the lives on board are saved. The proper means are rewarded with success.

Why do not those people who talk so glibly about faith healing pray that the patient may be enabled to do without food? Just as well pray that the patient might do without quinine in his attack of ague.

The sooner the church leaves the healing of disease, medical and surgical, to the medical profession the better it will be for the church. Just the other day Rev. Canon Henson, of Westminster Abbey, took the sane and sound position that medical science had made its great strides since its complete emancipation from theological entanglements. He thought it incredible that there should be a return to "the old bondage."

He formulated his views in the following four propositions: (1) "Faith healing" appears to be coextensive and coeval with religion itself. It is nowise distinctive of Christianity. (2) "Faith healing" appears to have no necessary connection with moral excellence either in the "healers" or in those whom they "heal." It is throughout non-moral, and cannot, therefore, have any proper relation with Christianity. (3) "Faith healing" appears to be limited in its efficacy, which could hardly be the case if it were really the direct Divine response to human faith. Only some forms of disease are capable of being cured by "faith." (4) "Faith healing" appears to be identical in all but name with healing by means of suggestion, and therefore offers no real exception to the known procedures of nature.

When faith healing becomes a matter of commercialism, as it is

among the Christian Scientists, there can be no other language for it than that of contempt.

THE SENSORY PHRENIC NERVE.

Dr. Leonard J. Kidd, of London, Eng., has contributed to the *Review of Neurology and Psychiatry*, for November, 1911, a carefully-prepared paper on the phrenic nerve and its functions. We have read this paper with interest for two reasons.

The first of these is the very clear evidence which Dr. Kidd advances in support of the opinion that the phrenic nerve contains sensory, as well as motor, fibres. The article is well worthy of careful study on this point. Dr. Kidd gives a very full summary of the literature upon the subject of the phrenic nerve.

The second reason for our interest in Dr. Kidd's paper is a personal one. He gives very full credit to the work done on this subject by Dr. John Ferguson, of Toronto, who, in 1891, published in *Brain* the results of his clinical and experimental work on the phrenic nerve. Dr. Kidd gives credit to this article as being "the great discovery of sensory fibres in the phrenic nerve." We are glad to notice that after twenty years our investigations are bearing fruit; and we congratulate Dr. Kidd on what he had done on this same topic.

THE POLLUTION OF WATER COURSES.

There is no more important question for any country to consider than that of preserving its waterways and water courses free from every contamination as far as possible. On the purity of these the health of the people, to a large extent, depends. It has been settled that typhoid fever is almost exclusively a water-borne disease; and it has also been shown that for every case of typhoid fever caused by polluted water there are three other cases of intestinal trouble due to the bad water.

There are parts of Canada where the purity of the rivers and streams is of the utmost importance, as there are no lakes, and the people must depend upon the rivers. This is specially so in the interior of nearly all the provinces. As the timber is cleared away there is grave risk of these rivers running very low in summer, and the condition of the water becoming very bad.

The mortality rate from typhoid fever per 100,000 persons is as follows in different places:—Scotland, 6.2; Germany, 7.6; England, 11.2; Belgium, 16.8; Austria, 19.9; Hungary, 28.3; Italy, 35.2; Canada, 35.5; the United States, 46. Taking a number of points in Canada there are some important facts revealed:—Edmonton, 76; Montreal, 53.8; Saskatoon, 66.6; Sherbrooke, 78.4; Ottawa, 31.2; Niagara Falls, 24.3; Toronto, 25.7. In the United States it is worth while to note the rate in a number of cities:—Ashtabula, 80.2; Buffalo, 20.7; Detroit, 22.3; Duluth, 56.8; Niagara Falls, 98; Ogdensburg, 33.6; Sault Ste. Marie, 72.9; Toledo, 40.1; Chicago, 15.3. Chicago diverts its sewage from the lake.

These figures prove the close connection between the water supply and typhoid fever. It may be laid down as a very definite rule that a death rate of more than 20 per 100,000 shows a polluted water supply. If the conditions of river and lake pollution should ever come about as it now exists in the United States the death rate and sickness rate from polluted water in this country would double. This is a serious problem to face.

In Fort William a few years ago the water supply became very seriously infected, and the result was that there was a death rate of 946.9 per 100,000. But all over Canada there are from time to time instances of serious outbreaks of typhoid fever from polluted water.

This forces home the consideration of the proper treatment of sewage before it is allowed to escape into the rivers and lakes of the country.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE.

A short time ago a dinner was held at the School of Tropical Medicine in Liverpool to honor the return and work of Dr. Newstead on the sleeping disease in Nyasaland, and to wish Godspeed to Dr. Harold Seidelin on his departure on a yellow fever expedition to Yucatan, in Mexico.

It was stated that the trustees of the late Sir Alfred Jones had decided to assist the school in Liverpool and also to establish a laboratory on the West Coast of Africa, where diseases could be studied on the spot. It was stated that the Government should make an annual grant of £10,000 to the London and Liverpool schools for tropical diseases.

It was stated that there was no reason why with adequate help the West Coast of Africa could not be made healthy. With sufficient

money, it should not be many years before tropical diseases had been swept from the British possessions. Investigations showed that the fly responsible for the sleeping disease was spreading rapidly into new regions, and was threatening to be a real menace to trade.

Much good work had been done in finding out the breeding places of these insects. Certain types of vegetation prevailed in the regions where the fly breeds. By clearing up these areas there would be good ground to suppose that the fly would disappear. These researches promised to be of much importance, and should be followed up vigorously.

Sir Edward Durniny spoke in scathing terms of those who excited public opinion against experiment in medicine. He said that it was largely due to vivisection and judicious experiment that medicine had made its great advances.

ALCOHOLICS.

There has been a vast amount of idle talk about the treatment of alcoholics. There are those who would have us believe that alcoholism is a disease. It can become such. But in the first place it is a disease similar to gonorrhœa or illegitimate children being diseases by being preceded by wrong habits of life.

There are, no doubt, weaknesses of character that render it easier for one to fall into the drink habit than it would be for another. This does not do away, however, with the doctrine of the freedom of the will and responsibility by any means.

In by far the largest number of alcoholics the habit began by willingly indulging in drink, encouraged by bad example and bad companions. There must in all cases be the yielding agent—the person who is going to become a drunkard. The number who are born with such a nature that they must become drunkards are very few indeed. The drink habit is a disease when one makes it such. The cure proves this. Those who become *cured* secure this happy result largely by being *willing* to quit the habit, or by being kept from the habit long enough till the desire dies out—a desire *created* by former indulgencies.

We think these cases should be treated by being sent to some place where they can be usefully employed, rather than by being sent to a hospital.

ORIGINAL CONTRIBUTIONS.

RUPTURE OF INTESTINE.

REPORTED BY DR. S. M. HAY.

MR. K. FARMER, aged 56, large, muscular, healthy man, left inguinal hernia, for which he has been wearing an old truss for years. Accident occurred on May 2nd, 1911, at 3 p.m. Dr. Fred W. Routley, of Maple, saw him in half an hour after the accident. The patient said he was taking an old fence post out of the ground by having his arms around it and wiggling and pulling on it. The post was hardwood, 5 inches square and 5 feet long. When the post was almost removed the rotten end which had been in the ground broke off and the patient fell backwards on soft ground, with the post on top of him. He had very severe pain at once in the left abdomen and could not get up on account of this. His son helped him into the house and laid him on the floor. The pain was exceedingly severe for about fifteen minutes and then began to subside so that when Dr. Routley arrived 30 minutes after the accident the patient was quite comfortable, lying on the floor with his feet up on a sofa. On examination the doctor was unable to find any mark of injury over the abdomen. The truss was in proper position. There was no rigidity of the abdominal wall and tenderness only on deep pressure on the lower left part of the abdomen. There was no sign of the hernia being in trouble.

The patient was lifted on to the sofa and talked freely for 15 or 20 minutes and seemed to be without pain. The pain then began again and gradually increased in severity. Morphia was administered and Dr. McLean, of Woodbridge, called in consultation. Still no rigidity of the abdominal muscles, but the patient had a drawn expression of face and excruciating pain. The consultants agreed that there was some grave internal injury, but could not decide as to its nature. At 7 p.m. the patient had a haggard expression, rigidity of the abdominal muscles and pain all over the abdomen, but no tumor or circumscribed area of tenderness. Pulse very fast, but no rise of temperature. Pain still very severe in spite of opiate. Now gave plain water enema, but no bowel movement followed.

At 11 p.m. no special change, pulse slower, no rise in temperature.

At 4 a.m. severe suffering, with signs of collapse, pulse becoming weak and fast, no rise of temperature.

I was called in to operate and reached the patient about 9 a.m. and found him moribund. Did not operate.

I found the patient distended and rigid, with loss of liver dullness and in a state of extreme collapse. The nearest I could come to a diagnosis was rupture of some internal organ. The patient died about 4.30 p.m.

Post mortem, performed by Dr. Routley. No inflammation of peritoneum, just slight redness in spots. Found some fluid in the abdominal cavity. The small intestine was broken through on its free border about half way down to the mesenteric attachment. This was about eight feet from the caecum. The other abdominal contents were normal.

Although a great deal has been written in text books and medical journals, and although discussions have been free and frequent in our societies, still the general profession has been slow to learn the lesson that in many acute abdominal conditions early recognition and prompt action means life, and that delay means death. The late Lawson Tate once said, "Absolute accuracy of diagnosis is often far from being possible. Only the ignorant assert that it is, and only the fool waits for it. This does not mean that we should not exhaust every means to be accurate in diagnosis, but it does mean that if we have for example diagnosed positive intestinal obstruction we must not waste valuable time in trying to decide whether it be from volvulus, intussusception or adhesive bands, we must operate without delay.

Stanmore Bishop says, "An intense, sudden, tearing, rending pain in the abdomen, often severe enough to produce collapse, and usually associated with sharp vomiting is common to a comparatively small class of cases. These are:—

1. Rupture of ectopic pregnancy.
2. Rupture of pyosalpinx.
3. Rupture of appendical abscess.
4. Rupture of gastric ulcer.
5. Rupture of duodenal ulcer.
6. Rupture of gall bladder.

Note that these are all ruptures of important internal organs, permitting the escape of irritant fluids into a healthy peritoneal cavity. All of these conditions require immediate operation.

We must not criticize the attending physician too severely in these cases, for frequently the patient and his friends will not consider consultation or operation until impending death reveals to them the seriousness of the condition, all too late to have the advantages of surgical help.

After any of these cases the earlier the operation the better the results. I have operated on several cases of perforation of the stomach, and 18 hours after perforation is the longest time that has elapsed where operation was followed by recovery.

550 Palmerston Boulevard.

SHORT RESUME OF SPINAL ANALGESIA.

BY E. V. FREDERICK, M.R.C.S., ENG.

OWING to the extreme interest shown by the members of the Clinical Congress of Surgeons of North America in the demonstration of spinal analgesia by Dr. Wayne Babcock at the Samaritan Hospital, and since many have expressed their intention of trying this method a short resume of part of this work with a few cases of success and failure which are likely duplicates of what others will have will not be amiss at the time.

THE ANAESTHETIC.

Everyone is familiar with the history of Bier's heroic experiment on himself and assistant with cocaine and with the fact that its use was abandoned. Other derivatives then were developed, such as novocaine, tropocaine and stovaine. Barker, in England, and Babcock, in America, and many others have gone through a long experience with all these, and nearly all have come back and pinned their faith on stovaine. Therefore we may conclude that all new beginners in the art of spinal analgesia for the present may do the same.

THE MEDIA.

This I believe is the secret and keynote to all the successes, failures and dangers of spinal analgesia, and this is not due so much to the constituents of this media per se, but to the specific gravity of the solution produced.

The specific gravity of the spinal fluid is 1.007. The specific gravity of many early formulæ was not known or considered. The specific gravity of Barker's glucose stovaine was 1.023. That of Babcock's is estimated to be 1.005. One must remember the nature of the canal into which this fluid is injected, with its several curves and its altering position, with its fourth ventricle at one end containing the very important vital centres.

The danger to the surgeon in this work is spinal analgesia fever. He

is apt to become deliriously pleased with it and over-enthusiastic, and this enthusiasm carries him into a stage where it is not safe to be his patient. As an example, I saw recently a patient given a stovaine analgesia for the removal of a small breast tumor which could have been removed equally well, if not better, under the local analgesia of ethyl chloride. No one who is qualified to express an opinion disputes the fact that there is a field for both high, medium and low analgesia, and, roughly speaking, I would say the ratios for these are as 1 to 4 to 16.

Therefore let us conclude also that those who are about to commence the use of this analgesia must be fair to their patients and use it only in those cases for which it is the best or equally good and equally non-contraindicated anaesthetic.

In order to draw particular attention to the importance of the specific gravity and the positions of the patient after injection tables will be used for comparison:

FORMULA.

Barker's Solution.	Babcock Solution.
Stovaine, 5 p.c.	Stovaine, 4 p.c.
Glucose, 5 p.c.	Lactic, 1 p.c.
Distilled water to 100 p.c.	Alcohol, 10 p.c.
	Water to 100 p.c.

SPECIFIC GRAVITY.

1.023.	1.005.
Specific gravity of spinal fluid, 1.007.	

ADDRESS OF MAKERS.

Poulenc Freres, Paris.	Frank Morgan Co., Philadelphia.
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POSITION OF PATIENT AFTER INJECTION FOR PRODUCING PERINEAL ANALGESIA.

Head elevated and hips low, or sitting up.	Head low or partial Trendelenburg.
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POSITION OF PATIENT FOR ONE-SIDED ANALGESIA.

Lying on side to be anaesthized.	Side up to be anaesthetized.
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FOR ANALGESIA TO COSTAL MARGIN.

Dorsal spines lower than sacrum.	Sitting up for a few minutes.
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From this one can realize the danger of a solution of uncertain specific gravity. If, for instance, one should use a heavy solution, believing it to be light, and put the patient in the Trendelenburg position in order

to have the light solution anaesthetize the pelvis, one would then instead anaesthetize all nerves in the upper part of the body by which one then gets into the danger zone, for at once the respiratory muscles are paralyzed and respiration can only go on through the action of the diaphragm innervated by the vagus alone or assisted by artificial respiration until the motor functions are re-established, which may be an hour.

THE USE OF MORPHINE AS AN AUXILIARY.

Until I had seen the work of Dr. Babcock I had believed that I was alone in the use of morphine or morphine and hyoscine as a preliminary and auxiliary to spinal analgesia.

Many patients object to knowing anything about their operation and to all such it is a benefit to induce sleep by morphine and hyoscine. Doubtless other hypnotics would answer well, such as chloretone, as used by Dr. Ferguson, of Chicago, before giving either.

I think morphine alone preferable since a number of patients among my failures to whom both morphine and hyoscine had been given said they could feel the pain plainly, but were absolutely powerless to move or cry out, which effect was attributed at the time to hyoscine.

EXAMPLES OF SEVERAL CASES, SHOWING THE VALUE OF STOVAINE ANALGESIA.

U. S. 56, pool-room manager.

HISTORY OF TUBERCULAR KNEE OF TWENTY YEARS' DURATION.

When seen suppuration in knee was extensive and amputation in thigh was considered the only thing possible. Owing to extreme asthenia a general anaesthetic was thought by his physician not to be considered.

Sufficient morphine was given to produce ordinary sleep and Barker's heavy solution used. Patient was kept in partially elevated position, shoulders on one pillow, head on two.

Pulse 96 at commencement, 100 at finish. No sign of shock during or after operation. Patient still alive after two years.

PARALLEL CASES, SHOWING DIFFERENT METHODS OF USE OF BARKER'S AND BABCOCK'S SOLUTION.

Barker's Solution.
Woman aged 60.

Babcock's Solution.
Woman aged 50.

DIAGNOSIS.

Carcinoma of cervix, myocarditis. Prolapsus uteri, torn perineum,
anal fissure, myocarditis.

PRELIMINARY TREATMENT.

Morphine, $\frac{1}{4}$. Morphine, $\frac{3}{8}$; atropin, 1-100.

AMOUNT INJECTED.

1 cc 5 p.c. sol. 1 cc 4 p.c. sol.

POSITION.

Patient lying on side. Patient sitting up.
Hips elevated 2 in.
Shoulders elevated 4 in.
Head elevated 6 in.

OPERATING POSITION.

Lithotomy position. Patient on back.
Same elevation of parts.
Partial Trendelenburg.

OPERATION.

Vaginal hysterectomy. Curettage, Perineorrhaphy.
Dilatation Sphincter Ani.
Alexander's operation.

AFTER POSITION.

Patient kept with head up. Patient kept with head low.

CAUSES OF FAILURE.

1. Old or weak solutions. Even solutions from most reputable makers may be useless.
2. Any cause which would interfere with making an ordinary lumbar puncture, as:
 - (a) Spinal rheumatoid arthritis.
 - (b) Spinal deformities in lumbar region.
 - (c) Very nervous patients who will not bend the back.
 - (d) Errors in locating proper position or direction, thus striking the bone, or failure to completely puncture the thick interosseous membrane.
 - (e) Striking bloodvessel and getting a clot of blood in needle.

CONTRA-INDICATIONS.

1. Any case where a minor anaesthetic will suffice.
2. Haemophilia.
3. Patient with maniacal or neurotic tendencies, since mania seems an occasional after result.

4. The higher the operation the less desirable is this anaesthetic.
5. For medico-legal reasons any case having as a possibility the development of paralysis of extremity.
6. Cases with acute streptococcic infection.
7. Any case requiring tonic uterine contraction.

SPECIFIC INDICATIONS.

Any case having contra-indications against a general anaesthetic, such as myocarditis, acute or chronic nephritis, or where a patient can only stand a short anaesthetic where an operation of an hour and a half is necessary. Where extreme muscular relaxation is desired, but where deep enough anaesthesia from a general anaesthetic is contra-indicated, as, for example, rectal operations on weak tubercular patients.

DETAILS OF TECHINIC.

Position of patient—Sitting up, back bent, or on side, with knees drawn up towards chin.

Point of injection—As close to tip of spine of first or second lumbar vertebra as possible.

Direction—Straight in at right angles to patient's body in middle line. Insert needle 1 inch, withdraw trocar, push needle steadily in until it meets a tougher structure, then give a slight twisting movement until needle goes through obstruction and fluid drops freely. Without this last sign do not inject stovaine, as it will be a failure. If the needle strikes the bone draw it back and point it slightly downward. Then when about $\frac{1}{2}$ cc. of spinal fluid has dropped inject about 1cc of stovaine solution, having previously carefully exhausted all air from syringe.

Now arrange patient in position necessary to make fluid ascend or descend to part of spinal canal from which the sensory nerves come supplying the seat of operation. The great advantage of the fluid of low specific gravity is that if anaesthetic is not sufficient the patient may be placed in Trendelburg position if necessary and the most indicated general anaesthetic given. With the heavier solution personally I would postpone the operation at least two hours.

I am not adding reference, since the short resume is outline of work as learned from personal clinics of Drs. Barker and Babcock and my own personal experience.

492 George Street, Peterboro, Ont.

AN APPEAL TO YOUNG MEN IN MEDICINE.

JOHN HUNTER, M.B., TORONTO.

THE casual glance through any volume of history suffices to attract attention to a number of names. If we wish to know why these appear we have but to read a little more attentively, and we find a reason, viz., that each is associated with some achievement.

If the names of any of these "immortals" be held up as examples for our inspiration, how apt we are to encircle them with a "halo of glory" so transcendent as to be altogether unapproachable from our standpoint. We summarily dismiss the thought of even trying to achieve any such distinction. Had we been the contemporaries of these men, and had known their frailties and limitations as we know those of our own, and of our fellows, we would in all probability have seen as little to appreciate then as we see now.

It is not necessary to have any more than the average amount of physical or intellectual endowments to achieve quite a high place in a vocation. We see all around us men of very mediocre attainments amassing fortunes, acquiring political distinction, reaching social pre-eminence, while others, far more richly endowed, lay far behind in the race.

In the solution of the problems involved in high achievements, many factors have to be considered, but all has not been said when we enumerate a long list of fortuitous circumstances. Power of intellect, birth, riches, social position, may contribute something, but all of these are far surpassed by the concentration of our energy on a definite purpose. The most prodigal spendthrift of material things may be quite frugal, when compared with the reckless waste in time, and in energy of the ordinary man. Who can look back over even a single day without some amazement at the character of some of the things that engaged his attention for longer or shorter periods? If we extend the time back into the weeks, months, and years that make up "the span of life" the loss in time and in energy is incalculable.

The past few decades have witnessed many marvelous evolutions, and one of these is in hospital construction. In every city, and in nearly all of our larger towns there are well-equipped hospitals, or new ones being constructed. Each one of these makes a very strong appeal to every young physician in its neighborhood. There is clinical material coming to these hospitals almost daily, which, if properly "worked up,"

would confer a boon on humanity, bring honor and distinction to those doing the work, and enduring fame to the hospitals. The history of medicine is a glorious record of the unfaltering devotion of medical men in every age, and in every country to research work. These men acquired knowledge and experience in the hospital clinic and laboratory that blessed mankind, honored the workers, enriched medical literature, and advanced the science and art of medicine.

Coming to our own time it can be truly stated that at no other period in the history of Canada have young physicians had greater opportunities, or equal facilities for acquiring knowledge and for putting it to a more practical and beneficent use. Our hospitals not only accommodate a large number of patients, but they are well equipped with the appliances needed by the student in his work. It will certainly reflect discredit on the younger generation of Canadian physicians if the work done in our hospitals is not of the highest character. One of the greatest pleasures in traveling abroad is found in visiting hospitals made famous by the character, personality, and work of individual physicians and surgeons. The traditions of many of our old hospitals furnish the most interesting chapters in the history of medicine. Who amongst our young Canadians, physicians and surgeons are going to make some of our hospitals famous in ages to come?

What has been said in the preceding paragraphs naturally leads up to the questions: (1) How can the young physicians make the best use of their hospital opportunities? (2) How can they make their work most effective in aiding the hospital's reputation? The writer believes that the editors of our medical journals and the professors in our medical colleges could render medical students and the young graduates a great service by discussing these questions. Much time is wasted during the first few years of practice for want of a definite purpose in life.

The purport of this article can be best attained by giving a few general admonitions, leaving the fuller discussion of the above questions to our editors and professors. The inspirations that should govern the life and work of the young physician are simply those controlling every upright man, viz., the Christian virtues. Without integrity and nobility of character, he is bound to meet disaster sooner or later. If the honesty of his purpose be not beyond suspicion he is fatally handicapped in his work. He must be a gentleman "sans reproche." In order to deserve honor, as well as win fame for his hospital, he must be prepared to make great sacrifices. He will have to spend hours in the wards and in the laboratory every day while his confreres are busy

building up a practice. He has to deliberately make a selection of work for which he is physically, intellectually, and in temperament best fitted. This does not imply that he is to be nothing more than a specialist in the narrow acceptance of this term. While an authority in his chosen field, he must have a clear conception of the effects of both normal and morbid conditions elsewhere in the body, e.g., the removal of the ovaries for conditions solely due to hyperthyroidism is an unpardonable blunder. He must be richly endowed with that scientific spirit, which is the talisman of the pioneer in every forward movement. He is not to be a mere collator of other men's knowledge, for there are yet many great problems in medicine awaiting solution. He must strive to "blaze a path" a little further on for the army of general practitioners. He should try to do for Canada what Lister, Pasteur, Koch, and a host of others have done for their age and country.

The reader, if a young man, may say, "It is all very well to tell us what our duties are, but what about those of the older men in regard to helping and encouraging us?" The first duty of the more aged members of the hospital staff is to make themselves useless as members of it. The founder and head of one of the greatest industrial establishments in the world was asked, "What is really the great mission of your life?" His reply was, "To make myself absolutely useless. Were I to die to-night the stock would not depreciate, nor a wheel cease running, for I have trained others who are far more capable of managing this business than ever I have been." If old men have one mission in life more noble than another, it is to be a help in preparing young men to do better work than they were ever able to do. It is a most lamentable commentary on any vocation if it can be truthfully said that in regard to the attainment of a broader outlook, the acquisition of new knowledge, or in the adoption of better methods, the majority of its members cease to make any progress after reaching mid-life. The work of each day being but the spiritless repetition of that of yesterday, and of the days that are gone. Close association with younger men, and being interested in their work, prevent any such stagnation.

One of the most inspiring features in the political life of our country are the efforts that have been made during the past few years to eradicate the abuses of the patronage system. It is in the choice of young men to fill hospital appointments that the senior members of the staff can do very effective work. If these positions be made a reward for merit, the attaining of them would be a splendid incentive for good work among our young graduates. Another inducement might legiti-

mately be held out, that is some remuneration for the time spent in research work. There could be no valid objection offered to making an appeal to the public for such a fund, for all work that has for its purpose the eradication of disease and the relief of suffering is in the interests of humanity and therefore deserving of public recognition.

In conclusion, it may be said that the unsolved problems in medicine are legion, the call for more knowledge is imperative, the misery and loss caused by disease cannot be estimated, the opportunities for doing research work are practically unlimited, and the facilities for doing it are at hand. Under such auspicious circumstances is it beyond the range of possibility that the medical historian of the next century may have to write that the one thing lacking in the propagation of medical science in the first decades of this century was a supply of the right type of men? Young men who have chosen medicine as your vocation "it is up to you" to answer this question, and to respond to the appeal being made by your profession, your age, and your country.

REPORT OF A CASE OF ACUTE APPENDICITIS

Illustrating the Value of a Differential Leucocyte Count.

BY J. P. KENNEDY, M.D., SURGEON TO THE WINGHAM GENERAL HOSPITAL.

IN an address delivered at Rush Medical College Commencement June 15, 1910, Dr. W. J. Mayo, among other things, gave this advice to the graduating class: "Write papers; they will do you much good, although at first they may not benefit anyone else." For a number of years I have been writing occasional papers, and have found it very true that they have been a benefit to myself, at least, because, in order to write a paper, one has to institute a wider range of reading and investigation than he otherwise might do. It has been a stimulus, too, for closer observation of my cases, as well as an inducement to visit clinics, laboratories and hospital wards where I could see things for myself. It is now well recognized that the leucocyte count in itself is of little or no value in surgical diseases, as far as diagnosis or prognosis is concerned, but it is generally believed that the differential count may be of the greatest value, particularly the disproportion between the increase in percentage of the polymorphonuclears and the actual increase in the leucocyte count itself. Gibson, of New York City, who devised a "standard chart" for the visible expression of this disproportion, says, in the An-

nals of Surgery, 1906, page 485, in speaking of the relative disproportion between the differential and total counts, "bodily resistance is more clearly defined by this disproportion than by any other means at our command, and that of all methods of blood examination this is the most valuable, both from the standpoint of diagnosis and prognosis." Dr. H. W. Hewitt, in an article in the Annals of Surgery for December, 1911, on "The Value of the Leucocyte Count in Acute Surgical Diseases," among other things, concludes as follows: "That in acute inflammatory surgical diseases repeated counts at frequent intervals should be made, and if the polymorphonuclear percentage rises while the total number of leucocytes remain stationary or falls, immediate operation should be insisted upon." He also says "no definite percentage of polymorphonuclears can be taken to positively indicate infection. If we have a percentage of between 75 and 80 of polymorphonuclear cells infection is probable; if we have a percentage of between 80 and 85 infection is usually found; if we have a percentage above 85 infection is almost invariably encountered." He further says, "no one will deny that repeated counts are of much greater value in diagnosis than one isolated count." Emphasizing this point, Gibson says: "The importance of a disproportionate increase of polymorphonuclear cells, particularly if progressive, cannot be overestimated and those wilfully disregarding such evidence are perhaps not exhausting all resources available for diagnosis." Herbert French, of Guy's Hospital, says: "If the polymorphonuclear count is high without a marked leucocyte count it means that the pus is under great pressure." The case I am about to report bears out these conclusions.

Mr. G., aged 33, traveller, presented himself at my office about 2.40 p.m. on Nov. 28, 1911, with the following history:

Five weeks ago, he said, he was taken sick with severe abdominal pains. His family physician, Dr. Archer, at Port Perry, who was called in, diagnosed his condition as appendicitis. He recovered in the course of a week, and had been well ever since, until the forenoon of the day he consulted me, when he was seized with nausea and was unable to eat any dinner. He took the afternoon train from Lucknow, intending to go home, but while on the train between Lucknow and Wingham, a distance of ten miles, was attacked with severe pain across the abdomen, and upon reaching Wingham, he came to my office, asking for medicine to relieve this pain, so that he could catch a later train and go on to Toronto that night. He was a tall, rather muddy-complexioned young man, with an anxious facial appearance and exceedingly nervous and apprehen-

sive about his condition. Upon examination I found his temperature normal, his pulse 62. He had not vomited, but was nauseated. A physical examination of the abdomen showed tenderness just below the naval, in the hypogastric region, and also a little to the right of McBurney's point, in the right inguinal region. There was no tenderness in the upper or left side of the abdomen, and even the walls of the lower right quadrant were not especially rigid at this time. At 3 p.m. my assistant made a blood count, which showed a leucocytosis of 16,000, the differential count showing the polynuclears to be 72 per cent. I diagnosed appendicitis and advised Mr. G. to enter the hospital here, where we could keep him under observation for a few hours to determine whether his condition would improve or not. He, however, asked me if I could not relieve his pain, as he was anxious to go on to Toronto. I told him that it was easy to relieve his pain, but that did not mean his cure, and I thought is very ill-advised to undertake such a journey in his present condition. After a short explanation of the dangers of appendicitis, he told me that he was quite ready to do anything I advised. I accordingly sent him to the hospital, where upon entering at 4 p.m. he had a temperature of 96 2-5 and a pulse of 65. Before taking him to the hospital, however, and having satisfied myself with my diagnosis, I gave him a quarter of a grain of morphine. At 7 p.m. his temperature was 99 4-5, pulse 82, and blood count showed a leucocytosis of 17,290, the differential count showing polynuclears to be 89 per cent., certainly a very rapid and alarming increase in the polynuclears. At this time he was not complaining unduly of pain, being still under the effects of the opiate, but upon abdominal examination there was increased tenderness over the region of the appendix and the muscles of the right lower quadrant were becoming quite rigid. I now examined his heart and chest and found that he had a marked systolic murmur at the base of the heart. At 9 p.m. I saw him again, his temperature now being 100 3-5 and pulse 84. As there had been a considerable increase in the percentage of polynuclears, this increase exceeding the corresponding increase in the leucocyte count, his temperature continually rising and the rigidity in the right quadrant of the abdomen becoming more marked all the time I advised immediate operation. This he at once agreed to, and, accordingly, without any preparatory treatment, he was anaesthetised with ether by my assistant, Dr. M. C. Calder. The abdomen being prepared by benzine and iodine, according to the Mayo method, after etherization, I opened the abdomen, using a low McBurney incision, and found the omentum presenting. Without the slightest difficulty I pulled out a large, angry, thickened and inflamed appendix, which was apparently

almost ready to rupture. Although the omentum presented in the wound it had formed no adhesions to ward off danger. The appendix was amputated in the usual way, the stump being inverted by means of the Gould reversed mattress stitch and the incision was closed in the usual manner, using horsehair for the skin. After operation, upon taking the clamp off the end of the amputated appendix, the pus poured out. He made a splendid recovery, with the exception of a small hematoma, which formed under the skin and delayed its union for a few days. Here was a case sick less than twelve hours, and yet the "pathology of the living," in this case, leads me to believe if this man had not been operated upon at once that within a very few hours there would have been rupture of the appendix, septic peritonitis, and probably death.

I have frequently seen clinical symptoms just as marked and in fact more so, and yet recovery take place without operative procedure. If the clinical symptoms had not been reinforced by the blood examination his determination to proceed on his journey would undoubtedly have overbalanced my insistence on immediate operation, and in all probability have led to his death. Accepting the findings of well-known laboratory workers, I considered the rapid disproportionate increase of the polymorphonuclear cells from 72 per cent. to 89 per cent. in a few hours, over the slight increase in the leucocyte count of the gravest significance, and acted accordingly.

The pathological examination was made by Professor McKenzie, of Chicago. He states that the case was one of "acute, exudative, fibropurulent appendicitis." Having given Dr. McKenzie the history of this case, he also makes the following observation on it:

"The differential count, as you have described it, undoubtedly indicates a rapid destructive process, actively stimulating the formation of protective substances. But when we know that the formation of protective substances may cease at any time I do not see why operation should not be insisted on and a favorable prognosis given. From all present knowledge on immunity and infection the prognosis should be favorable when operation is allowed."

The Hospital World, an international journal, has just come to hand. The first number is got up in attractive form. Dr. W. A. Young, Toronto, is the managing editor.

CURRENT MEDICAL LITERATURE

MEDICINE

UNDER THE CHARGE OF A. J. MACKENZIE, B.A., M.B., TORONTO.

HEMOPHILIA.

Sahli (*Deutsch. Arch. f. klin. Med.*, Vol. XCIX., Nos. 5, 6). Studies of a considerable number of cases of hemophilia, observed during the last seven years, have led Sahli to the following conclusions: The total number of white blood corpuscles is usually diminished in hemophilia, but, as a rule, a moderate lymphocytosis is present. The most striking peculiarity of the blood is the high percentage of eosinophilous cells and mast-cells; the blood platelets, too, are increased in number. The coagulability of the blood is much diminished. It can, however, be markedly increased by the addition of normal blood serum or of washed red blood corpuscles. These observations speak for the theory that hemophilia is a disease of the cellular elements of the blood. In all probability the latter contains sufficient fibrin-ferment, but too little thrombokinase. Therapeutically, Sahli advises the repeated withdrawal of small quantities of blood and the injection of fresh, normal, human blood serum. The former stimulates the bone-marrow to the formation of fresh blood corpuscles, the latter causes the production of increased amounts of the deficient thrombokinase. Sahli's results with this method have been very encouraging.—*Interstate Medical Journal*.

D'ARSONVALIZATION IN THE TREATMENT OF HYPERTENSION AND ARTERIOSCLEROSIS.

William Benham Snow, New York, defines d'arsonvalization as the use of certain apparatus devised by D'Arsonval, consisting of solenoids or wire spirals, connected with the outer coats of two condensers, the inner coats of which are connected with a source of electrical energy of high voltage. There are two methods, autocondensation and auto-conduction. The author describes the apparatus necessary for both methods of administration. He has employed the D'Arsonval current in a large number of cases; acting on the muscular coat of the arteries, it promptly causes a fall of blood pressure of from 10 to 70 mm., except

in the most advanced cases of arteriosclerosis. In aged persons in whom there is no effect on the sclerosed vessels there is a favorable effect due to changes in the general metabolism. In other cardiovascular conditions relief is given to a laboring heart. The author classifies cases of arteriosclerosis as follows: (1) Cases in the aged in which the arteries do not relax, but in which benefit results from improvement in metabolism. (2) Cases of failing compensation in old and weak subjects, in which relief is given by this treatment. (3) Cases of advanced arteriosclerosis with cardiac hypertrophy, in which the blood pressure may be reduced from 250 to 150 in from six weeks to two months. (4) Cases of advanced arteriosclerosis in mature adults. (5) Cases of hypertension in early life, between the ages of 25 and 45 years, in which hypertension in athletes who have developed hypertension and hypertrophy. (7) Cases of compensatory hypertrophy. The author presents the histories of six cases. He believes that d'arsonvalization is the most practical method of reducing hypertension, producing no depression of the heart and being contraindicated only in cases of compensatory hypertrophy. Systematic, routine treatment delays arteriosclerosis.—*Medical Record*, December 16, 1911.

GASTRIC ULCER.

W. J. Mallory, Washington, D. C. (*Journal A. M. A.*, November 4), says that the chief indication in the treatment of gastric ulcer is rest and protection for the affected part, but this is complicated with an already reduced condition from indigestion and hemorrhage and consequent necessity of active nourishment as far as possible. He points out the necessity of individual treatment in these cases; principles rather than rules must govern. In case of recent hemorrhage absolute quiet in bed and the minimum of food by the mouth or its prohibition and treatment by enemas at the beginning if food is not tolerated by the stomach. Later the diet should consist of milk, porridges, eggs, etc. The diet should be soft and of good caloric value. Einhorn's method of duodenal alimentation by a soft rubber tube passed through the stomach into the duodenum is mentioned. Raw meat, he thinks, is unsuitable; milk, cream, unsalted butter and olive oil should be used as much as possible on account of their high nutritive value and liquid form and acid reducing tendency. Salt should be used very little in the food, as it adds to the secretion of hydrochloric acid. The medical treatment is

to be directed toward reducing the acidity, relieving pain and pyloric spasm, and, as constipation is present usually, it should be considered. Alkalies reduce the acidity and should be given in full doses before meals and repeated if pain occurs. For direct effect on the ulcer bismuth subnitrate and nitrate of silver still hold an important place in the treatment. External local applications are generally recommended, cold in case of hemorrhage and during acute exacerbations and hot in chronic cases. The German specialists recommend balneologic treatment, sending patients to watering places or using the waters themselves for home treatments. The general constitutional condition is also to be looked after. He gives a table of results of treatment as given by different observers and says they are only uniform in one respect—in that they indicate that at present the medical treatment of ulcer of the stomach is far from satisfactory. Until the pathogenesis of the condition is made clear and a treatment based on etiology is possible our chief hope for better results must rest on earlier diagnosis, and here he says that this will be attained when we depend less on objective symptoms and use more generally the tests for occult blood in the feces.

BACILLUS COLI INFECTION OF THE URINARY TRACT.

Reginald M. Rawls, New York, states that in a certain proportion of healthy adults the *Bacillus coli* is taken up by the lymphatics and blood-vessels of the intestines and carried to the kidneys. The number and virulence of these germs depend on the amount of intestinal disturbance and the strain of bacilli. The greatest predisposing causes of *Bacillus coli* infection of the kidney are interference with the flow of the urine, back pressure, and a lack of free secretion. The early symptoms are not characteristic and may be mistaken for those of a mild cystitis, although the real seat of infection is higher up in the urinary tract and of more serious pathological import. The symptoms are those of a typical malarial seizure: chills with a continued fever, pain and tenderness referred to the kidney and bladder, and abdominal distension. There may be uncontrollable vomiting. An ordinary urinary examination is not sufficient to detect the bacilli, a bacteriological examination being necessary. These symptoms simulate several other general conditions. There is a tendency to spontaneous recovery and the prognosis is good. Treatment consists of rest in bed, with an unirritating diet, free catharsis, alkalies for the urine, and the use of autogenous vaccines and sera. *Medical Record*, October 7, 1911.

THE COMPLICATIONS OF DIABETES

Diabetes (Dr. E. Monin, in *La Dosimétrie*, Sept., 1911) is such an occult disease that at times it does not show itself except when it is complicated (with some other trouble), as with furuncle, anthrax, gangrene, facial neuralgia, sciatica, ocular affection, dermatosis, alveolar periostitis, anaphrodisia, balanitis, and numerous other conditions. On such occasion the question both of diet and treatment becomes very uncertain, and therefore it is of the greatest interest for the clinician to establish as early a diagnosis as is possible. Feeling of fatigue, paresis, insomnia, cramps in the legs, looseness of the teeth in an arthritic or obese person past forty should direct the attention to the composition of the urine, especially if there be any hereditary taint.

Glycosuria presents a most uncertain basis for forming a prognosis and estimating the gravity of the diabetic trouble. Emaciation, loss of vital force and of the reflexes, the precarious condition of lungs, heart, and kidneys, or presence of acetone in the urine are indications of grave derangements. However, in youthful age and in the female sex we often meet conditions which obscure the prognosis. Pregnancy—fortunately very rare in diabetic women—is an aggravating condition for the mother, while often also causing the death of the fetus. Schottelius, who frequently observed diabetic coma in pregnant women, asserts it to be the duty of the physician to interrupt pregnancy in cases of diabetes. I do not share in this opinion, since the interference itself vouchsafes but very little satisfaction.

Hepatic insufficiency nearly always accompanies a somewhat prolonged case of diabetes. We should therefore suspect the existence of toxins which the liver may not be able to destroy, keeping watch over the ailments, which must always be perfectly fresh. Enlargement of the liver should be combated with granules of boldine, sodium salicylate, podophyllin, euonymin, and other appropriate remedies; these being administered when the patient complains of heaviness in the right hypochondrium and if, on palpation, the liver is painful. I also advise withholding of phosphoric acid in the treatment of diabetes, as it is apt to bring on congestion of the liver. Sodium phosphate and, above all, the hypophosphites, are to be preferred when cachexia necessitates the use of phosphorus, because these salts do not produce any notable derangement of the liver. Rudish has observed a number of times that small doses of atropine act favorably on the hepatic functions in diabetics, singularly facilitating the patient's tolerance of hydrocarbon foods.

Neuralgia and neuritis of diabetics affect the sciatic, the crural, and

the intercostal nerves, the brachial plexuses, and often the extreme terminals of nerves, principally of the sole of the foot. It is above all the rigorous regimen that will triumph over the violent syndromic pains, which at times are most exquisite in diabetes. We should be cautious in cases of diabetic alcoholics, which are quite frequent, and should strive to remove this source of the evil. As to medicaments, I obtained good results from solanine, santonin, and aconitine. In the treatment of the myalgias, arthralgias, and rheumatoid complaints of diabetics we must not neglect the use of sodium salicylate and of lithin (lithium salolophosphate), and so much the more since these medicaments serve so well to diminish the hyperglycemia. Let us remember, also, that uricemia and syphilis frequently complicate these various painful diabetic states, so as to constitute a hybrid disease which skilful selective treatment alone is capable of overcoming. I myself have seen in a diabetic patient lumbar myalgia of ten years' standing cured with one localized injection of calomel, and which the astounded patient called a veritable miracle. He probably was afflicted with innocently acquired syphilis.

Obese diabetics are subject to hypertension and arteriosclerosis, with or without angina pectoris. These vascular complications are treated the same as in non-diabetics. At the same time, the patients are to be cautioned against the dangers of a too generous diet, against the use of alcohol, tobacco, tea, and coffee. In case of albuminuria, I give strontium lactate (4 to 5 grams, in milk, per day; also granules of strychnine sulphate, quinine hydroferrocyanide, and iron arsenate, one of each three times a day. In the matter of diet, we should insist on fresh vegetables and milk, taken in small quantities at short intervals. Lumbar dry-cupping followed by friction with pilocarpine should not be neglected.

Fifty per cent. of diabetics die from tuberculosis, the bacillus of Koch proliferating marvelously in a saccharine culture-medium. The practitioner should not allow himself to be hypnotized by this grave complication. It is a mistake to discontinue the antidiabetic diet and treatment and give exclusive attention to the lungs, just because they are extremely sensitive to a rigorous combat against the case. We can not expect either to arrest or cause to retrograde this serious complication until we have obtained a noticeable amelioration of the general nutrition. Until then we have at our command the best agents against glycothisuria in our dosimetric granules of sulphhydral (calcium sulphide), helenin, strychnine, the arsenites, tannin, and many more. But prevention is better than cure. Let us, therefore, strive to protect our

diabetic patients against bacillary contagion, and above all recommend to them a life in the open air in the country, the best of all places for the combustion of the glycochemic sugar.

Diabetic coma is not an initial complication, but overtakes diabetics, long affected, after unusual fatigue, violent emotions or surgical operation. Neither insufficient alimentation nor a forced animal diet seem to obviate the development of this complication of diabetic coma. Prodromata of this state are a feeling of sadness, vertigo, backache, diminution of urine, odor of chloroform in the breath; these being quite constant signs. Then there appear, a sighing dyspnea but with absence of stethoscopic signs, nausea, vomiting, diarrhea, garrulous delirium, excitement. A more advanced condition is characterized by depression, apathy, somnolence, and, lastly, complete coma, loss of motion, of sensibility and consciousness, anuria, and progressive lowering of temperature. Death supervenes generally in the course of from one to four days; but there are cases where alternating improvement and relapses postpone the final end.

It is generally admitted that diabetic coma is due to an acid intoxication. The exclusive theories of acetonemia and diacetic and oxybutyric intoxication seem to be untenable inventions. There have occurred, however, some recoveries by alkalization of the blood by means of large doses of sodium bicarbonate (100 grams!) given by mouth, in enemas, and intravenously. We should begin, and continue, with smaller doses for some weeks. Coprostasis is combated with a saline laxative, which assists the alkaline cure and by the liberation of the carbonic-acid gas through the decomposition of the bicarbonate. The addition of lime water, oatmeal porridge, together with butter (recommended by Von Noorden), a wise limitation of albuminoids, staying in bed, inhalation of oxygen, brisk frictions, and other indicated measures will protect the patient against fatal relapses. In case of persistent gastric troubles we should not hesitate to wash out the stomach with alkalis. Lastly, there is one antidiabetic medicament in use which one should avoid as he would the pest, and this is antipyrin. I have many times seen it to bring on coma as a complication.

POST-NASAL CATARRH IN CHILDREN.

Eustace Smith (*Lancet*, October 28, 1911) states that of late years he has been in the habit of examining the fauces of all children who have

been brought to him suffering from loss of appetite, gastric derangements, spasmodic conditions of the air-tubes, and obstinate coughs. In a very large number of these cases he has found the patient to be suffering from a more or less intense post-nasal catarrh. This catarrh is often confined strictly to the naso-pharynx, and does not pass into the nasal passages. While thus limited it may give rise to none of the usual signs of "a cold" in the nose, such as snuffing, sneezing, and external discharge, or even to a throaty quality in the voice. It may therefore remain latent and escape notice for weeks, or even months, together unless the throat be inspected in a good light. Complete loss of appetite is one of the commonest consequences of persistent post-nasal catarrh. Active disturbances of the stomach, laryngismus stridulus, otitis, cervical adenitis, and general infections such as meningitis may all be secondary to post-nasal catarrh. The treatment of this condition consists chiefly in the use of local antiseptic and astringent applications by means of a throat-brush.—*Medical Record*.

LES DEUX SYNDROMES PANCREATIQUES CHEZ LES TUBERCULEUX

BY PROF. M. LOEPER, PARIS.

The part played by the pancreas (*Progrès Médical*, September 23rd, 1911) in nutrition is important as well as complex; its secretion seems to be twofold; the pancreatic juice and a substance of unknown nature which regulates the equilibrium of glucose in the system, as well as other processes of nutrition, which are less exactly defined. These two secretions seem to originate, the former in the glandular acinii and in Wirsung's canaliculi, and the latter in Langerhans' islets and in the circulatory system of the gland. Therefore two classes of symptoms will be the clinical result of pancreatic insufficiency: dyspeptic symptoms, caused by insufficient modification of fat, carbohydrates and proteids; and symptoms resulting of disorders of the nutrition, the most important of which are hyperglycæmia, glycosuria and perhaps also azoturia, lipuria and polyuria. As to hypersecretion of the pancreas there are very few data, and it is next to impossible to ascribe definite symptoms to this condition. In short, the pancreas must be considered as a most important gland, the secretions of which regulate the functions of the system, and this is especially true as regards consumptive patients.

Diarrhœa is the most frequent symptom of pancreatic insufficiency in consumptive patients, and very often it bears very little or no relation to consumption, so that it may be termed "dyspeptic diarrhœa." A careful chemical and microscopical examination shows an abnormal amount of food residues, fat, carbohydrates, muscular fibres, etc., and the data of coprology are then quite typical of pancreatic insufficiency. In some cases the amount of amylase in the blood is distinctly below the normal, and in some of the patients observed by Prof. Lœper it had fallen to 10 or even 8, instead of 17, which is the normal amount, according to Achard and Clerc. Sometimes there is no diarrhœa or no obvious sign of digestive disorders, but then an abnormal loss of weight out of proportion with the pulmonary lesions, or a slight glycosuria, lead to a diagnosis which is soon confirmed by the examination of the fœces.

Conversely hypersecretion of the pancreas has been not infrequently observed by Prof. Lœper at the beginning of consumption. Its symptoms are: good appetite, even bulimia, and, at the same time, distinct wasting and increase of amylase in the blood and urine; presence of a proteolytic urinary ferment, which very likely is trypsin sometimes, after the meals, some temporary glycosuria; there is also an increase of indican in the urine, although there is no diarrhœa, and an increase of sulfo-ethers, although there are no intestinal fermentations; Camidge's reaction is quite positive and in the fœces there is an abnormal amount of very active amylase. The microscopical examination detects no food residues, and clinically there is neither constipation nor diarrhœa.

Tuberculosis of the pancreas is not very commonly met with, but Prof. Lœper has examined lately 16 pancreas of patients who had died of consumption, and he gives most interesting information as regards morbid anatomy. Some of the pancreas which he has examined were normal, but most of them were congested, œdematous, infiltrated with lymphocytes, and with perilobular, intralobular and multicellular sclerosis; granular and especially fatty degeneration was frequent, the latter in about 50 per cent. In some of the pancreas examined there was evidence of hyperlastic reactions which were well marked, not only on the lobules, but also on the islets of Langerhans.

These microscopical and macroscopical post-mortem appearances have been confirmed by the results of experiments on animals, conducted with Dr. Gh. Esmonêt, and which Prof. Lœper records in detail.

As regards therapeutics, Prof. Lœper holds that his conclusions are of a great clinical importance, and he has been led to recommend what he terms the intensive pancreatinisation of consumptive patients;

this method has given him very satisfactory results in cases of consumption where sclerotic or degenerative atrophy of the pancreas has followed hypersecretion, since it is then necessary to stimulate the pancreatic secretion.

For further details on this question see *Loeper & Esmonet, la pancréatinisation intensive dans la tuberculose. Congrès Français de Médecine, Paris, 1910*, and *Bulletin Médical, October, 1910*.

GASTRIC NEUROSES.

C. L. Greene, St. Paul (*Journal A. M. A.*, December 23), says that the nervous dyspeptic has always been the joy of the quack and the *bête noire* of the honest doctor. No ailment is more protean in its manifestations, and on account of this and misconception of its causes, its victims have in the past been too generally overtreated, mistreated or neglected. In his opinion, the gastric neuroses depend not on one, but on three factors, usually seen in combination, which are in order of their importance: 1. *Asthenia universalis congenita*. By far the most frequent primary cause. 2. Chronic starvation. Almost always associated with asthenia, but adequate as a primary cause. 3. *Pure psychoneurosis*. Relatively rare. The congenital universal asthenia has been described in a masterly monograph by B. Stiller, of Budapest, who points out the almost invariable incidence of visceral ptoses and gastric atrophy, slender bones, tendency to constipation, etc., general depressions of vital functions, loss of weight under adverse conditions, poor resistance to acute ailments and major surgery, etc. Several typical cases are reported by Green, who insists on the thorough examination of the entire body as a preliminary to treatment, which should be based on the assumption that the patient is suffering from impaired nutrition affecting practically every organ and function of the body, while the mechanical displacements which would ordinarily remain unnoticed or seem unimportant become a serious matter. The mild cases can be treated as office patients, and in certain cases no structural abnormality exists. These congenital cases bear surgery badly, and operative measures are liable to do harm. The pain manifestations are so variable and multiple that they may lead to false diagnosis, but in most cases rational non-surgical treatment is sufficient to relieve. Simple procedures may give relief to mild cases, but all severe or persistent cases demand isolation, rest and hypernutrition, combined with helpful suggestion and minimal use of drugs.

SURGERY

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

OLIVE OIL IN POST-OPERATIVE NAUSEA.

Clarence Reginald Hyde, Brooklyn, in *New York State Journal of Medicine*, October, 1911, states that the use of olive oil to lessen and even control post-operative nausea has not merited the attention of surgeons that its success warrants. For over a year Hyde has employed it after ether anesthesia in over 100 cases, with excellent results.

The technic is as follows: Just as the patient is beginning to return to consciousness (that is, roll the head from side to side, slowly open the eyes, and moan), two ounces of ordinary olive oil are administered by the mouth from a cup. The patient must be sufficiently out of the ether to understand the command to drink the oil, which is then swallowed without any difficulty. It is of interest to note that after regaining consciousness, the patient does not even recollect taking the oil. Usually within five minutes after the oil has been given there is free and copious vomiting, which in the large majority of cases, concludes the gastric disturbance. The vomited material consists of large amounts of ether-saturated mucus, free oil, and occasionally some bile. The nurse who gives the oil should be instructed to have at hand a basin and towels, and to remain by the bedside of the patient, as the vomiting which is initiated very soon after the ingestion of the oil is explosive and projectile in character. Rarely does a second vomiting attack occur, and within a short time the patient is resting comfortably, so far as the stomach is concerned, and free from nausea or retching. If the oil is not vomited, as sometimes happens, the same effect is obtained: the patient does not vomit. The absolute success of the method depends on the correct time of administration. The oil must be given when the patient is semi-conscious and can understand the command "to drink." If given before this particular time, the patient cannot swallow. If given after the return to the conscious state, when the patient is then nauseated or vomiting, the oil will be refused, as the sufferer is too stomach sick, and will be made more so by the sight and odor of the oil.—*American Journal of Surgery*, Nov., 1911.

GONOCOCCAL ARTHRITIS.

Stockman, in the *B. M. J.*, Dec. 2nd, discusses the previous work on the vaccine treatment of this complication and reports nine cases of his own observation. These were carefully selected as being free from other complications. In all the gonococcus was isolated from the urethra, vagina, or the joint. In most the vaccines used were homologous—*i.e.*, prepared from the patient's own organism. The treatment was by vaccine alone at first in each case, but as there was in most no improvement after a reasonable time, ordinary local treatment was resorted to, with immediate and distinct improvement. In only one of his cases was there any improvement under the vaccine. He frequently observed severe reaction after the injections and was therefore unable to give such large doses as some others have used. From his own results, along with those of most others, he concludes that the use of dead gonococci has no influence in gonococcal arthritis. This clinical determination is borne out by several other observations upon the nature of the gonococcal infection. It produces no immunity to subsequent attacks. The constitutional symptoms are due to a toxine which has also been shown to be capable of causing a purulent discharge when injected into the urethra. This recurs with repeated injections, there being no immunity produced. He closes his paper with the suggestion that the reaction to injection may be of diagnostic value. But he says that the reaction varies so much with the patient and probably also with the vaccine that it is impossible to determine what a sufficient dose for diagnosis is. Hence the value of the method is seriously impaired.—*N. Y. Med. Jour.*, Dec. 16th.

POSTOPERATIVE CYSTITIS.

Jacobson and Keller, in the *J. A. M. A.*, Dec. 16th, state that cystitis following surgical operations is not always a cystitis due to catheterization. For the production of a cystitis it is necessary to have a bacterial infection plus retention, trauma, and congestion. The colon bacillus is the organism most frequently found in cystitis following surgical operations. According to Baisch, the reason of the presence of colon bacilli in the vestibule and lower part of the urethra is the propinquity of the rectum in bedridden patients. Postoperative urinary retention may be due to a variety of causes. Their cystoscopic examinations showed that swelling and œdema about the internal urethral orifice was a very frequent cause. Trauma and congestion as predis-

posing factors to cystitis occur in all operations in which a separation of the bladder from its attachments is necessary. Cystoscopic examinations after such operations often reveal anatomical malposition of the base, distortion of the trigonum, and displacement of the ureteral orifices. Whenever extensive dissection or separation of the bladder is a part of the operation, an accurate reposition and covering of its raw surfaces with peritonæum, becomes necessary. Such operations also require the most rigid asepsis in their aftercare, should catheterization be required. The use of a solution of two per cent. boric acid in sterile glycerin injected through the urethra, into the bladder, has proved itself of sufficient value to warrant its routine employment in all cases of post-operative urinary retention before resorting to catheterization.

THE OPERATIVE TREATMENT OF FRACTURES.

Ernest Magruder, at the conclusion of an article on this subject in the *N. Y. Med. Jour.*, Dec. 23rd, gives the following summary:—

To summarize: Operation is indicated in the closed fracture of wide displacement and when correct apposition is otherwise impossible, provided hospital facilities can be obtained.

Operation is indicated in articular fractures when ankylosis threatens, and the best results are obtained after exact coaptation and suturing of the fragments. Massage, followed by early passive motion, gradually made active, should be the practice.

When operation is indicated at all the earliest operation is the best.

The operative treatment of open fractures is that which most nearly reduces them to the type of the closed fracture, except as to drainage.

Gunshot fractures should be treated like fractures of the open type in contact with street dust. That is to say, in addition to the usual treatment we should administer, as a wise precautionary measure, antitetanic serum.

In all cases the most exact coaptation and retention of the fragments gives the most gratifying results.

The ideal suture is one strong enough to hold until union begins and then admits of its own absorption. The nearest approach to this is the sixty-day chromic catgut, which is unsafe and unsatisfactory in the presence of tension. The most trustworthy metal suture is the tinned steeled annealed wire. Wiring is the best operative method of treatment.

Because of the dangers of an osteomyelitis the medullary canal should not be invaded if it can be avoided.

JOINT TUBERCULOSIS.

Leonard W. Ely, M.D., Orthopædist to the Children's Hospital, Denver, Col., in his new work on *Joint Tuberculosis*, advances this important generalization, which has great clinical significance: When red marrow is found in bone the bone is subject to tuberculous infection; and when it is not found then the bone is immune to a purely tuberculous infection, and the further important application of this knowledge is that any procedure that causes epiphyses of long bone to lose its cancellous structure and to become compact bone, that is a change of the red or cellular or lymphoid marrow to yellow marrow will cause the disappearance of the disease at this spot. And another fact made clear by Ely that a tuberculous abscess until secondary infection takes place may at any time be absorbed spontaneously and disappear, and, as all know, that when secondary infection occurs spontaneous disappearance is impossible.

If his deductions are correct the whole problem of the occurrence of tuberculosis in the joints and in some other tissues is quite simple. He suggests that the lymphocytes and certain other similar cells are not nature's defensive organism, but the natural food of the tubercle bacillus. When the bacilli thrown out from the blood into the various tissues find cells suitable for their growth they live, when they do not find these cells they die. In other words, the relation of the tubercle bacillus to the lymphocyte is the same as that of the gonococcus to the polymorpho-nuclear leucocyte or of the malarial plasmodium to the red cells. This explains the statement of the selection of the red marrow of bones as the selective site for tuberculosis, as the bacilli can find no food in the yellow marrow.—William A. Edwards, in September *Southern California Practitioner*.

POLIOMYELITIS.

S. Flexner and P. F. Clark, New York (*Journal A. M. A.*, November 18), enumerate the situations in which the virus of poliomyelitis has been detected outside the central nervous system, including the intervertebral ganglia of affected human beings and monkeys. The only place where it occurs with any constancy, however, is in the nasopharyngeal mucosa. The portal of entry of the virus in human beings has still to be ascertained, and they relate the experiments from which they conclude that it exists in the tonsils and pharynx of human beings who succumb to poliomyelitis as constantly as in monkeys after any intra-

cerebral inoculation. It has not been found in the blood of human beings, though it has in that of monkeys at the height of the acute disease, when large quantities are withdrawn and injected intravenously into a healthy monkey. They have repeated the inoculations of human blood taken at the height of the disease in large quantities into monkeys without results. The cerebrospinal fluid is devoid of demonstrable virus at the onset in human beings and in monkeys, though it has been detected in that of monkeys before the onset of paralysis and during the incubation period. Cerebrospinal fluid obtained from two human cases of poliomyelitis during the preparalytic stage of the disease were inoculated into the brain of monkeys without effect. This does not prove that it may not be present at a still earlier period, but it shows that, if present, then it tends quickly in human beings as in monkeys to leave the fluid and become established in the nervous tissue. Flexner and Clark have succeeded in implanting on monkeys all the ten strains of human virus with which they have experimented. In order to do this in all cases it was necessary to inoculate emulsions of human spinal cord and preferably to make double inoculations into the brain and peritoneal cavity. In making subsequent transfers of the virus emulsions should also be employed until it becomes adapted to the monkey, when filtrates may be substituted. The adaptation is accomplished more readily and quickly with some strains of virus than with others. The human strains of the virus infect monkeys less readily than do the modified or monkey strains and the experimental disease produced by them is less severe and fatal, but after becoming adapted to the monkey the paralytic disease appears in more severe form, the degree of infectivity rising so that minute doses of a filtrate are capable of producing constant infection. It is not improbable, they say, that the artificially evolved monkey strains of the virus may have lost in some degree the power to infect human beings.

SALVARSAN.

The results of eight months' experience with salvarsan at the New York Skin and Cancer Hospital are given by Howard Fox and W. B. Trimble, New York (*Journal A. M. A.*, November 18). They analyze 100 selected cases and give a tabulated synopsis of their observations. Their conclusions are summed up as follows: "1. Salvarsan is a powerful symptomatic remedy for the treatment of syphilis. 2. It acts with greatest rapidity on lesions of the mucous membranes. 3. It is of de-

cided value in obstinate palmar and plantar syphilids. 4. The permanence of its action cannot be determined until a number of years have elapsed. 5. Salvarsan should be used in conjunction with mercury and cannot entirely replace this valuable remedy, except in a few selected cases. 6. The effect of salvarsan on the Wassermann reaction is less favorable than on the clinical manifestations of syphilis. 7. Its effect on the Wassermann reaction is, in general, analogous to that of mercury. 8. The intramuscular and intravenous methods of administration are probably of equal efficiency. 8. The intravenous method is the one of choice where rapidity of action and the comfort of the patient are factors to be considered."

TETANUS PROPHYLAXIS.

O. Berghausen and C. E. Howard, Cincinnati (*Journal A. M. A.*, January 13), reproduce the instructions given to interns and nurses in the Cincinnati Hospital as regards the treatment of punctured, lacerated and penetrating wounds, especially these from giant crackers and blank cartridges. They include thorough cleansing and removal of foreign matter, cleansing the wound with 5 per cent. phenol-hydrochloric acid solution, enlarging the opening if necessary and using a general anesthetic if called for, then packing the wound lightly with gauze soaked in the phenol-hydrochloric acid solution, dressing the wound and changing the dressing daily. Immediately after the first dressing 1,500 units of antitetanic serum are given subcutaneously. This treatment has been found sufficient, but special care must be taken to remove all foreign bodies, especially in case of blank-cartridge wounds. They quote from Sir D. Semple as to the existence of tetanus spores sometimes in the tissues of persons apparently in good health, which are liable to be called into action by local suppuration or the conditions of great fatigue or exposure to cold. Such spore carriers are in great danger of tetanus whenever the site of the spores becomes a medium at all favorable for the growth of the germ. He advises the use of anti-tetanus toxin as a valuable prophylactic when using quinine hypodermatically. Serum reactions were noticed in several cases and for their prevention atropin sulphate (gr. 1-100 to 1-120 three times a day; less in children) was given subcutaneously, especially when numerous injections of serum were made in developed tetanus. Amelioration or prevention of the reactions was thus obtained. The authors give a list of the wounds and of the number of cases of each, ninety-six in all,

in which the serum was used as a prophylactic, and a list of cases in which it was not used, with the results. In these last cases the serum was employed only after the disease had developed, and one of the two patients who recovered received as much as 50,000 units in one case. They remark that, although cases with a short incubation period offer the least hope, they are not necessarily fatal. One patient was seen two days after the symptoms of tetanus had developed, yet these mostly disappeared after one week's careful treatment. The subcutaneous administration of phenol, 2 per cent. solution, causes the early appearance of albumin in the urine and a possible damage to the kidneys must be considered. In the future, the authors say, they will follow such injections by the rectal administration of a hypertonic neutral salt solution to limit, if possible, this damage.

SENSIBILITY OF THE PERITONEUM AND VISCERA.

J. F. Mitchell, Washington, D. C. (*Journal A. M. A.*, August 26), discusses the sensibilities of the peritoneum and abdominal viscera. It was Lennander, he says, who in 1901 first called attention forcibly to the fact that there is a distinct and constant contrast in the parietal and visceral peritoneum. The parietal peritoneum is extremely sensitive to pain, but not to heat or cold, while the abdominal viscera possess no sense of pain; in other words, the visceral peritoneum and abdominal organs, innervated only by the vagus or sympathetic nerve, are not sensitive to pain, and painful abdominal sensations are transmitted only by the phrenic, the lower six intercostals and the lumbar and sacral nerves which supply the parietal peritoneum. For the mesentery, his findings are not absolute, though he considers it also insensitive. Pain in the abdominal organs is felt through irritation of the parietal peritoneum, mechanical, chemical or infectious. Surgeons have largely accepted Lennander's view, while some others have opposed them. Mitchell reviews the investigations on this subject, including his own observations, and reports several cases observed by him which are, he says, represented in the records by numerous similar cases which seem to offer evidence of a definite contrast in the sensibility of the parietal and visceral peritoneum in the unopened abdomen of man. It has been his custom for the last few years to write down the findings before operation and make also a written prediction as to what to be expected on opening the abdomen. A comparison of these predictions with the operative findings has given him interesting results supporting his views.

Many referred pains are explainable by the relation of the involved organs to the parietal peritoneum. Two cases in which he had opened the abdomen in men without the use of any anesthetic and observed the same contrast between parietal and visceral peritoneum, as when cocaine was used, were reported by him in *The Journal A. M. A.*, 1907, xlix., 198. Without denying the use of animal experimentation, he insists that its results cannot outweigh the mass of surgical evidence on this particular point. While agreeing with Nystroem that there are some weak points in Lennander's hypotheses, they appear to give a more reasonable explanation of abdominal pain than does the theory depending on an imaginary pain-carrying power of the sympathetic nerve.

HEMORRHOID TECHNIC.

The essentials of hemorrhoidal operations, according to A. B. Cooke, Nashville, Tenn. (*Journal A. M. A.*, August 12), are: 1. Complete hemostasis. 2. Immediate closure of the operative wounds. 3. Preservation of the function of the parts. 4. Permanency of cure. 5. Due consideration of the factors of safety, simplicity of technic, time required for recovery, and the amount of postoperative pain. The older methods are open to criticism, the ligature method failing in the second requisite, and the clamp and cautery failing as regards the fifth. Of more recent methods, the Whitehead operation conforms only to two of the requisites, the second and fourth, and its modification by means of the use of Earl's clamp, while an improvement also involves the danger of interference with function of the part. Pennington's enucleation operation has many features to commend it, but it fails as regards avoidance of hemorrhage and is not a simple procedure in the operation itself or in its after care. Cooke offers as the method which he thinks meets all the indications the following clamp and suture method used by himself: "A narrow clamp with tapering blades is applied to the base of the hemorrhoid to be removed in a direction parallel with the long axis of the intestine and so that its smaller, or free, extremity engages the upper, or proximal, portion of the tumor. By depressing the handle of the clamp the end of the blades where suturing is to begin is brought into full view. A No. 1 or No. 2 plain sterilized catgut suture threaded on a round, half-curved needle is now passed beneath the tip of the clamp and securely tied on the sound mucosa above the base of the tumor. This is the most important step of the operation as, if properly

executed, the blood-supply of the tumor that is being dealt with is at once effectively controlled. With scalpel or scissors the portion of the tumor outside the grasp of the clamp is amputated and a continuous suture inserted over the clamp blades, as in the Earl operation. The clamp is then gently loosened and withdrawn and the suture carefully and uniformly tightened and secured at the skin margin. Each pile tumor in turn is treated in a similar manner. If one or more of the growths is of the externo-internal variety, the clamp should be so adjusted as to include as much of the anal margin as may be indicated at each application. In order to avoid the possibility of the tissues slipping from the grasp of the clamp, it is best to amputate the overlying portion of the tumor by degrees, following the knife or scissors closely with the sutures. As a rule the sutures should be placed from 1-6 to 1-8 of an inch apart, though when the first one is properly placed, the danger of hemorrhage is largely eliminated and approximation of the edges of the mucosa is the chief purpose of the remainder." The only dressing needed is a well-lubricated strip of gauze in the rectum and an external compress and pad and a T-bandage. He does not claim priority or originality, but has not seen it described, and the only new feature he calls attention to is the clamp, which is only a modification of the original Earl's clamp. The method is closely allied to the clamp and cautery operation, but the suture is used instead of the cautery for hemostasis and closure of the wound.

OPHTHALMOLOGY.

UNDER THE CHARGE OF F. C. TREBILCOCK, M.D., C.M., OPHTHALMOLOGIST TO
THE TORONTO WESTERN HOSPITAL.

RETROBULAR OPTIC NEURITIS.

Samuel Horton Brown, Philadelphia, Pa., states that retrobulbar optic neuritis is not easily diagnosed even by the specialist, and many cases of this condition come under the care of the optician when they need the utmost care of the specialist in ophthalmology to prevent total or partial blindness. The disease begins with the appearance of a stationary black spot in the field of vision, which often influences the discrimination of colors. Thus after the age of forty the engineer may become color-blind, and be unable to distinguish the colors of signals. It

is hard to make the patient understand this and to impress the general practitioner with the importance of expert care in cases of this kind. The condition may be acute or chronic. If acute blindness may occur in both eyes in a few days to a week. A case of refraction that cannot be improved by glasses should be very carefully examined. The fundus does not show any changes, but the perimeter will make an immediate diagnosis possible, since the field of vision is somewhere limited. This condition is known as central amblyopia, and its pathology is unknown. Intoxications from alcohol and tobacco are a strong causative factor. It is a toxic neuritis. Prolonged eyestrain also is a causative factor in some cases. Quinine, lead, iodoform, chloral, and bisulphide of carbon may all cause it. Bartenders, engineers, firemen, and commercial travellers are especially liable to this affection. Chronic alcoholism is a frequent cause.—*Medical Record*, January 6, 1912.

PERFORATING WOUNDS OF THE CORNEA WITH HERNIA OF THE IRIS.

Perforating wounds of the cornea are not rare in general practice and will often cause a good deal of anxiety to the physician; for, in addition to the risk to sight, there is the spectre of sympathetic inflammation before him always. We shall refer in this review only to those cases where there is no foreign body left in the eye.

Such a wound is generally followed by a loss of aqueous, which carries with it a part of the iris, either against, into, or through the wound. It is this tag of iris which makes the problem in practice. It goes without saying that if it does not protrude noticeably, we ought to attempt its replacement by using either a mydriatic (atropine) or a myotic (eserin) as the occasion requires, using the one which will most likely pull the tag back for us. But this method is only effective in the first few hours, and often fails entirely even then.

If the iris protrude it will be seen as a blackish mass at one angle of the irregular pupil. What shall we do with it? If we wait for developments the tag will soon lose its color, and its presence be only known by the small transparent hernial sac.

Quoting from a review of a paper by Percival, of Newcastle-on-Tyne, in the *Ophthalmoscope* of Aug., 1911: "Speaking of the difficult question of iris prolapse, Percival says that if seen within two hours, the use of atropin or eserine (according to the position of the prolapse),

aided by the repositor, will usually cause replacement; but replacement is hopeless twelve hours after the injury. According to the text-books the prolapse should be excised. With this the author does not agree. Excision will remove the tag, but will leave the lips of the corneal wound separated by the intruded iris stump and a ready path is thus opened for infection. His counsel is to leave the prolapse alone."

As he says, his teaching is contrary to that of the majority of the text-books, and it does not appeal to us. The lips of the corneal wound remain separated by the iris-stump quite as much if it be left as if it be excised, and it is our experience that the eye quiets down rapidly after the excision. This has happened so often in cases which have been treated expectantly for some days that we are strong in our opinion for excision.

A paper by Park Lewis, of Buffalo (*Buffalo Med. Jour.*, Sept., 1911), instances a case such as every ophthalmologist frequently sees, where excision of the iritic prolapse after a wound caused by a knife-blade was followed by immediate and happiest results.

ONE PHASE OF SQUINT.

In the paper by Park Lewis, of Buffalo, referred to above, he takes pains to emphasize the importance of looking early after the eyes of cross-eyed children. Frequently in ophthalmological practice one is impressed with the carelessness of the profession in this regard; for the physician is often credited by the parents of such children with making light of the matter, remarking that the "child will grow out of it." Let it never be forgotten that a squinting (crossed) eye always deteriorates as a seeing organ, and ultimately becomes more or less blind, except in those rare cases where the squint alternates. Even if in time the eyes do become straight, so that the squint is "cured," it may be at the expense of the sight of the eye.

Occasionally great distress may follow in the wake of such carelessness or ignorance, and I shall briefly outline a case in our practice this summer. A man of 26 years, married just eleven months, had charge of a travelling crane in one of the large machine shops in Toronto. One of the workers on the floor tossed a small piece of steel at him in fun. The missile struck his right eye, cutting through the cornea it injured the lens; the iris protruded through the wound. The tag projecting was excised, and the eye quieted down very satisfactorily, leaving an ovoid pupil and a cataractous lens; vision nil.

It was now discovered for the first time that the sight of the other eye was very defective, and by the friends this was charged to the injury. Questioning drew forth the history of a convergent squint during childhood, which was at first thought of no account, but was after some years cured by looking through a card with a small hole in it (sic). The eye is a very long-sighted one, but otherwise perfectly normal; the evidence all points to the case being one of that large class where the squint is associated with a high degree of long-sight, if not wholly dependent upon it; and the defective vision the result of the disuse of the eye between the ages of 3 and 9 years.

The present economic condition of the patient is pitiable; his right eye blind through a bit of horse-play on the part of a fellow-workman; his left eye so defective that he can only see at two meters words which he ought to read at twenty-four meters, and cannot read ordinary print at all, a condition chargeable either to ignorance or carelessness on the part of his parents and their physician.

Such sad cases are fortunately rare in practice, but one such should be enough to make every physician wake up when he sees a squinting child among his clientele.

We expect to report this case more fully when a longer time has elapsed since the injury.

TRACHOMA.

M. Victor Safford, Boston, Mass., states that there are twenty-five bacteria that have been identified as causes of inflammatory affections of the conjunctiva or cornea. The cause of trachoma has not yet been determined. The same bacteria do not always produce the same clinical picture, and different bacteria give rise to the same symptoms. Exaggeration of the normal ridges of the conjunctiva may give rise to an appearance of granulations. Follicular conjunctivitis from swelling of the lymphoid follicles and spring catarrh, especially in persons who have adenoids, may all simulate trachoma. These affections do not destroy the conjunctiva even if often repeated. Trachoma does destroy it and leaves cicatricial tissue. Formation of vegetations with general disturbance and swelling also simulates trachoma. In trachoma there is an encapsulation of the swollen lymph follicles in new connective tissue; new blood-vessels form, and when degeneration ensues and the contents are discharged a cicatricial spot is left. After a time the many spots of cicatricial tissue contract and the lids turn in, irritating the

cornea and causing blindness. In the beginning trachoma is clinically indistinguishable from other forms of conjunctivitis. Only when cicatricial tissues have been formed can a positive diagnosis be made. Severity of the process is increased by mixed infection. There can be no doubt of the contagiousness of trachoma to any one who has watched its course in families or hospitals. Besides being carried by the hands and direct means of transmission it is also communicated by coughing and sneezing. In the administering of the immigration stations of the United States every care is taken that the immigrant be protected against inaccurate diagnosis. True trachoma when found is a reason for exclusion from this country. The suspect may be detained for weeks to make the diagnosis certain.—*Medical Record*, November 11, 1911.

OBSTETRICS AND DISEASES OF CHILDREN

THE BLOOD-PRESSURE IN DIPHTHERIA.

J. D. Rolleston gives the following summary, at the conclusion of his article on this subject, in the October number of the *British Journal of Children's Diseases*:

SUMMARY.

(1) In a series of 179 cases of diphtheria the blood-pressure was found to be subnormal in 63 patients, or 35.1 per cent., the extent and duration of the depression having, as a rule, a direct relation to the severity of the faucial attack.

(2) In the great majority the highest readings were found in the first and the lowest in the second week of disease. The normal tension was usually re-established by the seventh week.

(3) In a large proportion of convalescent cases either the readings in the recumbent and erect positions were the same, or the recumbent was higher than the vertical record until convalescence was firmly established.

(4) In laryngeal cases disproportionately high readings were obtained, especially when the dyspnoea was sufficiently severe to require operation. Relief of the obstruction by tracheotomy was followed by an immediate and steep fall of blood-pressure (20 to 40 mm.).

(5) The blood-pressure showed little tendency to be affected by the early serum phenomena, but during the late febrile syndrome it was raised in 40 per cent.

(6) Albuminuria was accompanied either by a fall or by no change in the blood-pressure, except in a case of uræmia, in which there was hypertension.

(7) In early paralysis the blood-pressure tended to fall. In late paralysis, even when extensive, it was usually not affected.

(8) Sphygmomanometry in diphtheria, as in other acute diseases, though of considerable theoretical interest, has little practical significance.

(9) Adrenalin therapy in diphtheria may favorably influence the other symptoms of supra-renal insufficiency without affecting the blood-pressure.

NASAL OINTMENT IN WHOOPING COUGH.

Berliner (*Journal de Medecine de Paris*, July 15th, 1911) advises the introduction, in whooping cough, into each nostril of the patient, the following ointment:

Quinine sulph. 1 to 2.5 grammes
Lard 10 to 15 "

The child should be placed on its back that the ointment may penetrate well into the posterior nares.

TOXEMIAS OF PREGNANCY.

S. H. Blodgett, Boston, Mass., speaks of two types of toxemia in pregnancy: the one of uremic nature and the other indicating imperfect pancreatic action. Uremic poisoning may develop slowly or rapidly. In slow poisoning there is greater danger to the child; in rapid poisoning there is greater danger to the mother. If nitrogenous food is not decreased in slow poisoning the excretion of urea gradually decreases. One should therefore limit the amount of nitrogenous food. If these cases are recognized early enough one need not order a strictly milk diet, but a large amount of liquid should be given. The amount of physical exercise should be limited, as exercise will often precipitate an attack of convulsions. The fetal heart beats should be watched carefully and if they weaken labor should be induced. In the rapid form of toxemia headaches, pains along the nerves and in the epigastrium, and loss of appetite come on suddenly, with scanty urine of high specific gravity. Labor should be induced at once. Pancreatic toxemia is characterized

by nausea and vomiting, with diacetic acid and acetone in the urine. There is soreness on deep pressure over the head of the pancreas. The treatment is bicarbonate of soda given in daily doses of from 20 to 60 grains, with hot or cold water.—*Medical Record*, January 13, 1912.

SOME OBSERVATIONS ON THE URINE IN PREGNANCY.

Groat (*Am. Jour. Obsts.* Dec., 1911), thinks we ought to recognize the mixture of the natural with the pathological, which is ever possible in pregnancy. The investigations of Williams and others have firmly established the value of urinary examinations during pregnancy to determine the extent of toxæmia, especially with reference to the nitrogen partition. The toxæmias suggest a poison of protein nature and warrant the following proposition: 1. These conditions being peculiar to pregnancy the fetus or the placenta or both are the direct or indirect causes. They act directly by evolved toxins, or by ferments. 2. Internal secretion from the fetus or placenta seems to call out the necessary metabolic and tissue changes for the development of the fetus and maternal organs in pregnancy. 3. Indirectly the symptoms of toxæmia may be due to perversion of the function of the liver, directly or indirectly, through other glands and organs, by means of their internal secretions, the toxins being disintegration products of protein or autolytic ferments activated by the presence of abnormal amounts of natural ferments or activating bodies. The urine examination of pregnant women should include tests for albumin and sugar, and microscopical search for casts and formed elements. The total nitrogen and the ammonia nitrogen should be frequently estimated. Urinary changes in toxæmia are decrease in the quantity and in the solids, increase in the percentage of ammonia and amido acid, nitrogen, albumin, and casts being possible in the later stages of pregnancy. In addition, there may be high blood pressure, vomiting, melancholia, somnolence, etc. All these symptoms indicate that somewhere in the complex processes of the body there is interference with the normal protein metabolism, and that the partition of the nitrogen excretion in the urine is of great clinical value when properly estimated and properly interpreted.—*N. Y. Med. Jour.*, Dec. 23rd.

INFANTS IN INSTITUTIONS.

T. S. Southworth, New York (*Journal A. M. A.*, October 28), calls attention to the needs of proper care against the causes of the high mortality existing in such establishments. The factors which enter into

the large mortality in foundling asylums and institutions are as follows: "1. Delay in transmission of the infants to the institution, with resulting disturbance of vital functions and of digestion. 2. Questionable initial care on entering the institution. 3. No wet-nurses, or too few, for premature and delicate babies. 4. Bottle-feeding from birth, or sudden weaning on reception in the institution. 5. Inadequate facilities (milk laboratories or diet kitchens) for preparing bottle-feedings. 6. Routine artificial feeding, with but slight individualization. 7. Insufficient nursing force, which precludes the normal personal attention to each infant. 8. Large wards with ready extension of infections and contagious principles. 9. Overcrowding, with lack of air-space and of proper ventilation. 10. Insufficient provision for outdoor airings. 11. Inadequate facilities for the application of quarantine, in its broadest sense, to all sources of infection in infancy," Each of these is taken up and discussed, and he specially mentions the two factors that are most lacking in the majority of institutions, breast milk and motherly care in a home. For many infants brought to these places temporary wet-nursing should be provided. Breast milk is purchaseable, he says, and institutions which care for prospective mothers should very properly exact an agreement that they will nurse another baby besides their own as a partial return for the care they receive. Others can be found who are glad to accept the shelter of the hospital and earn something for the future in this way. He specially speaks of the large wards in these institutions and overcrowding as particularly dangerous. It is impossible to ventilate or screen from infection properly children in these overcrowded large wards, and newly constructed institutions should provide for smaller wards of four to six beds in their place, each with its own toilet and bathing-room and a smaller isolation apartment for suspected cases. It should also have its own section of veranda for airing and its own semi-permanent nurse or nurses. In this way the conditions will more nearly approximate the home.

THE ONSET OF LABOR.

The factors causing the onset of labor are so obscure that the theories which explain them are numberless. In this tentative way science advances. Recently, a sequence of interesting facts has led to fruitful experiment. Of two female twins united "Siamese" fashion, one became pregnant; the other showed the secondary signs of pregnancy. On this analogy, two white rats were joined together, one pregnant, the other not. When the rats were joined together long prior to the onset of labor, the unimpregnated rat usually lived; if shortly before

it invariably died. It was as if the first rat had been gradually inured to a toxin, and the second poisoned before it could fabricate the antidote. Stated technically, it would seem that an antigen, increasing in quantity as labor approaches, is liberated in the blood, and induces the gradual formation of an anti-body. A German inquirer, Von der Heide, ventured to experiment on these facts. He injected foetal serum into pregnant women approaching confinement. In four cases out of twelve labor pains ensued and continued to delivery; in three other cases the pains were transient. In patients whose labor pains were growing weak foetal serum caused their renewal, preceding or accompanied by a slight rise of pulse-rate and temperature. If instead of foetal serum, that of a pregnant woman was injected, nothing resulted, possibly because the foetal substances were dilute. Von der Heide's reading of these experiments is that during pregnancy there is a gradual liberation of foetal products (antigens) into the maternal circulation, and that this is accompanied by the formation of their anti-bodies. Towards the end of pregnancy an excessive amount of antigen enters the mother's blood, and the reaction between this and the anti-bodies previously formed in it sets free substances which induce labor. It is very possible that vomiting, urticaria and albuminuria of pregnancy, and, perhaps, too, eclampsia, are explicable in this way. At the least, surer foundations for hypothesis have been laid.—*Med. Press and Circ.*, Nov. 1st.

RETENTION AND SEPARATION OF THE PLACENTA.

Dempwolff, Rodemachern in Lorraine (*Volkmann's Samml.*, Nos. 618, 619, 1911), draws special attention to the value of Strassmann's sign as an indication of the time at which the placenta should be removed. By carefully watching for this sign the practitioner will avoid much trouble made on many hundreds of cases. Dempwolff set himself to verify them by clinical experiments of his own. In most of the cases the result was method; on account of the danger of sepsis internal examination was restricted to a few selected cases. Full details, with observations every "adherent" placentas at his confinements. Strassmann maintains that when the umbilical cord has been properly tied the arteries contract, while the vein remains tensely filled with blood. A wave of fluctuation can easily be made to travel from the fundus to the ligatured end of the cord. The lightest tap on the fundus is sufficient, and firmer pressure increases the tension down the cord to such a degree as to cause it to rotate spirally if the end be left hanging free. A similar condition is produced by injection of the vein.

This tense condition of the vein continues so long as the placenta is

in close relation to the uterus, and while this is maintained there is a connection between the blood-pressure in the mother's circulation and in the placenta, as the two blood-streams are in close opposition, being merely separated by the epithelium of the chorionic villi. According to Dempwolff, this phenomenon of fluctuation disappears gradually *pari passu* with the separation of the placenta. Strassmann's observations were controlled by the possibility of expressing the placenta by Credé's in the third stage of labor, and will reduce the number of retained, and five minutes, are given of twelve cases. The minimum light pressure required must vary with the fatness and thickness of the abdominal walls, with the amount of separation of the recti, and so on, so that a standard or initial pressure must be made by the observers for each case. It is to be noted that cases vary so much that no standard time can be assumed, but the phenomenon is a constant one—that is to say, if the fluctuation cannot be obtained after the birth of the child, then the placenta is already separated. In this Dempwolff differs from Strassmann, who says it may be only partially separated. He is of opinion that normally the placenta does not begin to separate with the expulsive pains of the second stage, but becomes loosened only in the third stage. The length of time taken in various classes of cases is discussed; for example, separation takes place early in cases of twins, hydramnios, and of precipitate labor. Dempwolff states that expulsion of the placenta by Credé's method should not be employed till half an hour after the disappearance of the phenomenon.—*Glasgow Med. Journal*, Sept.

HYOSCINE-MORPHINE ANESTHESIA IN OBSTETRIC MEDICINE.

Giuseppi, in the *Practitioner* for July, 1911, in discussing this subject, reaches the following conclusions:

1. That the object of hyoscine-morphine anesthesia is not to produce complete unconsciousness, but to produce twilight sleep, from which the patient can be roused at any moment, without her retaining any recollection of what has happened in the meantime.

2. That in hyoscine-morphine anesthesia we have an efficient means of controlling pain, and one that is practically safe, when ordinary precautions are taken.

3. That there is danger to the child, unless the fetal heart is carefully auscultated at frequent intervals.

4. That the course of labor is but slightly modified.

5. That the administration and repetition of the injections must be gauged by the amount of suffering.

6. That morphine should never be repeated, but only hyoscine.
7. That the solutions for injection must be freshly prepared for each patient.
8. That the best dose is hyoscine hydro-bromide gr. 1-100, morphine sulphate gr. $\frac{1}{4}$.

THE TREATMENT OF MISCARRIAGE.

Young and Williams, in the *Boston Medical and Surgical Journal* of June 22, 1911, give us the following views:

1. Spontaneous emptying of the uterus takes place in but about 13.2 per cent. of all miscarriages.
2. The likelihood of a miscarriage to complete itself increases with the duration of pregnancy.
3. When it becomes necessary to use artificial means to complete the miscarriage, the finger followed by the curette in later miscarriages, and of the curette alone in the earlier months of pregnancy, has given uniformly satisfactory results at the Boston City Hospital.
4. Experience has shown that where the cervix is extremely rigid it is better to introduce the curette and break up the fetus and placenta and remove them piecemeal than to attempt to dilate the cervix sufficiently to introduce the finger.
5. Packing the vagina and lower segment of the uterus is an unsatisfactory and often unsuccessful method of emptying the uterus. No success whatever was obtained in treating incomplete miscarriages in this way.
6. Packing is, however, of great value in two classes of cases: First, in exsanguinated patients, to stop the hemorrhage and give the woman a chance to recover somewhat from the loss of blood before emptying the uterus. Second, when the cervix is very rigid, a tight cervical pack for twenty-four hours will soften it so that dilatation may be attempted with safety.
7. The results of artificial methods are as good, but not better than where nature has succeeded in emptying the uterus.
8. Artificial methods are necessary in a majority of cases, however, simply because nature has failed.
9. In infected cases the essential thing is to get rid of the infectious material by emptying the uterus, the particular method employed making little difference.
10. The later in pregnancy miscarriage occurs the smaller the liability to become infected, but the greater the likelihood of developing grave septic complications if infection takes place.

11. The mortality is practically the same at all periods of pregnancy.

12. Induced abortions have a greater mortality than accidental. The mortality of patients admitted to the hospital after criminal abortions was 10 per cent.

TREATMENT OF INTUSSUSCEPTION BY TAXIS AND SUCCUSSION.

J. Zahorsky (*Arch. Pediatrics*, May, 1911, 380) has employed the following treatment of intussusception with success in three cases. The procedure is held to be simple and harmless. Surgical means may be instituted if it fails. The little patient is anesthetized with chloroform or ether by an assistant. The abdomen is bared, and a small pillow should be placed under the hips. The tumor is grasped through the abdominal wall and firmly compressed for a few moments in order to reduce the swelling to some extent, since it is the hyperemia and edema that prevents reduction. Then the thighs are flexed on the abdomen, the knees or legs grasped, and with a rapid up and down movement the lower part of the trunk is vigorously shaken for several seconds. Then the tumor is grasped again and compressed, and while pushed against any part of the posterior abdominal wall the fingers push, or strip, the intussusciens out of the intussusceptum. The fingers at the same time should make a trembling motion which assists in the reduction. After a few moments of taxis the succussion is again resumed. The efforts of taxis and succussion follow each other alternately. The succussion method may be assisted by the presence of some water in the transverse colon, which should be injected if reduction does not occur promptly. Sometimes, on account of the mobility of the mass, it is impossible to use taxis effectively and reliance must be placed entirely on the succussion or shaking.

THE PERPENDICULAR PELVIS.

F. H. Martin, Chicago (*Journal A. M. A.*, July 29), finds from his studies that in the approximately normal female pelvis the upper plane "has an inclination of between 55 degrees and 60 degrees with the horizon, and the lower plane an inclination of from 5 degrees to 10 degrees with the horizon, each plane looking upward and forward." Variations from this normal plane occur in two directions, both of which, if exaggerated, indicate important departures from health and strength, one

variation being the exaggerated backward pelvis causing abnormal lordosis, the other being the lesser dipping of the pelvis, or perpendicular type, to which he specially refers. This perpendicular pelvis is one of the peculiarities of skeleton defects noted by him in a previous paper and continued observation has only strengthened his belief in its importance as pointing to coincidental visceral and muscular irregularities. As regards the peritoneum, he says the most striking point in these defective individuals is its looseness and darker color, and another noticeable peculiarity is a tendency to furnish pseudomesentery attachments for the various ligaments and other structures. The uterus is definitely abnormal in these cases, the sulcus between it and the bladder is deep and wide, its fundus becomes more posterior, its broad ligaments are loose and thin, and the posterior surfaces of the pelvic deflection are attached back of the axis of the pelvis instead of in front. Inspection of the Douglas cul-de-sac shows two distinct folds of peritoneum passing around a detached lower bowel, covering exaggerated sacro-uterine ligaments which have usually been unduly stretched. The bladder appears like a more or less pedunculated sac covered with a blue, crinkly, loose peritoneum. The urachus, ordinarily obliterated in the well-developed woman, is relatively conspicuous. The round ligaments present definite abnormalities, are thin and rudimentary. The sacro-uterine ligament is practically *nil* in the well-developed women, but in these cases it may be conspicuous beneath loose folds of peritoneum. A general laxity of the pelvic ligaments, even those binding the bones together, and other defects of development are mentioned. There is a persistent mesentery in some of these cases to the rectum, and the external inspection of the pelvic floor shows notable difference from the normal. The vulvar opening is more posterior and patent and the anus appears more as a projecting point on a protruding sac. Martin finds the explanation of these conditions in developmental defects; a failure of the human muscles of the pelvis to become properly developed from the tail muscles of the lower vertebrate. There is also lack of firm and adequate development of the voluntary muscles of the lower abdomen, external pelvis, and thighs, tending to produce a projecting lower abdomen. The defective skeleton is connected with soft and defective ligaments and the defective muscles, which may be lacking in whole fasciculi, are held together with defective layers of fascia and are terminated with defective tendons. The connective tissue and the fat deposits are defective and the skin over all is loose, discolored and coarse. The condition can be recognized by general inspection, while the internal defects are easily demonstrated in routine abdominal work. The Trendelenburg position and observa-

tion of the pelvis reveal the unattached rectum and the deep cul-de-sac of Douglas. The article is fully illustrated.

CHORIOEPITHELIOMA MALIGNUM.

Wm. H. Dukeman, Los Angeles, Cal., presents the history of a case of chorioepithelioma malignum that he treated successfully, so far as could be judged two months after the operation, until which time there had been no relapse. This tumor is a spongy growth that develops in the body of the uterus following abortion or labor. Fatal metastases develop in other parts of the body. The growth consists of blood spaces surrounded by a cellular wall of clear cells of the chorium and syncytial masses enter the syncytial cells of the chorium and syncytial masses enter the blood-vessels and cause the metastases. In some cases it begins following a hydatid mole. The etiology is obscure. It occurs five to seven weeks after labor and from several weeks to five years after a hydatid mole. The prominent symptom is profuse hemorrhage, followed by foul discharges from broken-down tissues. The only possible treatment is early operation, with removal of a part or the whole of the uterus.—*Medical Record*, September 23, 1911.

SURGICAL TREATMENT OF PUERPERAL INFECTION.

After reviewing our present knowledge of the various factors causing puerperal infections and the results of surgical treatment of the condition, P. Findley, Omaha (*Interstate Medical Journal*, November), comes to the following conclusions: 1. As yet we possess no reliable clinical or bacteriological guides in the early management of puerperal sepsis. 2. Early operative interference may do much good, but untimely or faulty measures produce much harm. 3. Retained placental tissue should be removed before the onset of septic infection. In virulent streptococic infection it is better to encourage the spontaneous expulsion of placental remains with ergot, failing in which, mechanical means are called for. For this purpose the fingers are to be preferred to any curette. If for some reason the infected placenta cannot be removed, hysterectomy is to be considered. 4. Puerperal ulcers should not be curetted. 5. Hysterectomy to accomplish anything must be performed while the infection is confined to the uterus. 6. The timely ligation of veins may forestall a general infection. 7. Pus accumulations within the appendages, the parametrium, or the pelvic peritoneal cavity are seldom highly virulent. In such cases drainage is usually best accomplished per vaginam.

PERSONAL AND NEWS ITEMS

ONTARIO.

Dr. N. B. Taylor, of Toronto, has obtained the diplomas of M.R.C.S., England, and L.R.C.P., London.

Dr. A. T. Moorhead, of Toronto, has passed the final examinations for the diploma of F.R.C.S., England.

Dr. C. B. Oliver, who practised for many years in Merlin, Kent County, has located in Toronto.

Dr. W. A. Scoñlon has removed from Algonquin to Palmerston, where he has taken charge of the vaccine farm, which was formerly under the charge of the late Dr. Stewart.

Dr. M. B. Whyte has been appointed to the charge of the Isolation Hospital, Toronto, at a salary of \$1,800 a year.

Dr. C. K. Clarke, dean of the Faculty of Medicine, expressed the hope that the Ontario Medical Council would revise its course so that medical students would not be so harrassed by the multitude of unnecessary examinations. The idea that the university wished the abolition of the Council had no foundation, as all recognized the need for a Council of some description.

In order to relieve the congestion at the Queen Street Asylum, which has led to feeble-minded and insane people being lodged in the jail, the Ontario Government has decided to acquire temporary quarters as near the asylum as possible. The building has not yet been secured, but it is proposed to get one capable of accommodating one hundred persons or more.

Some good work is being done in Toronto by the Free Dispensary for Tuberculosis. Nurses visit the homes of those who have the disease and give useful information.

The new Pathological Building for the University of Toronto has been opened. This building is on the grounds of the new General Hospital.

At the annual meeting of the South Ontario and West Durham Medical Association, held on 8th January, the following officers were elected:—Hon. President, Dr. J. T. Fotheringham, Toronto; President, Dr. D. Farncomb, Newcastle; Vice-President, Dr. Beith, Bowmanville; Secretary-Treasurer, Dr. J. F. Finigan, Oshawa; Executive Committee, Dr. R. Bett, Oshawa; Dr. Proctor, Whitby; Dr. McCullough, Orono. It is the intention of the association during the present year to hold several

meetings in the various towns, when papers will be given by some of Canada's most distinguished practitioners.

Alderman Rowland, of Toronto, moved "that this Council instruct the Medical Health Officer to confer with Dr. Bruce Smith and make arrangements for an inspection of city hospitals in an endeavor to make arrangements for admission to same of erysipelas patients."

Dr. A. S. Moorehead, of Toronto, has won a signal honor in London, Eng., having been awarded the final fellowship of the Royal College of Surgeons. Dr. Moorehead, who is 30 years of age, graduated from Toronto University in 1906 and was a medalist in his final year. He is the son of Mr. Thomas Moorehead, and was born in Uxbridge, and received his secondary education in Markham High School. He has been connected with the staffs of Toronto General Hospital, Buffalo hospitals, and St. Mark's Hospital, London, Eng.

Dr. E. H. Young, of Rockwood Hospital, has received notification of his appointment as assistant superintendent in succession to Dr. W. C. Barber, who recently resigned. Dr. Young is a graduate of Toronto University. He was with Dr. C. K. Clarke in Toronto Hospital for a year, and in February, 1908, was appointed a physician in Rockwood, where he has been ever since. Dr. Young is lecturer on mental diseases in Queen's Medical College.

Dr. and Mrs. Harley Smith announce the engagement of their elder daughter, Muriel Frances, to Mr. Richard J. Hamilton, B.A., of the University of Toronto.

Miss Beatrice, daughter of Dr. and Mrs. Sprague, of Toronto, was recently married to Capt. Arthur B. Wilkie, of the Royal Sussex Regiment, son of Mr. D. R. Wilkie.

A break in the Sarnia intake pipe was believed to have caused the epidemic of typhoid fever there during the past few weeks.

Dr. Fred J. Conboy has been elected chairman of the Board of Education for Toronto for 1912.

There was a fire in the amusement hall of the London Asylum on 2nd January. The fire at one time threatened to be a repetition of the fatal fire in the Hamilton Asylum. The London Asylum was built in 1869, and was the second largest in the province.

In a printed bulletin issued from the City Medical Health Department, Toronto, Dr. Hastings advocates a large number of county hospitals for advanced cases of tuberculosis, and sanatoria and farms for incipient and incurable cases. He urges co-operation between the various municipal and county institutions and the Department of Conservation at Ottawa.

QUEBEC.

Dr. Lophthorn Smith, of Montreal, has been quite ill for some time. He has been undergoing sanatorium rest and treatment.

Dr. George E. Armstrong, of Montreal, was operated on by Dr. W. J. Mayo in Rochester, Minn., a short time ago. So far as known he is making a good recovery. Dr. Armstrong was suffering from some abdominal trouble.

A baker who was making and distributing bread at Matave, Que., was discovered to have smallpox. There was great excitement in the place. The health authorities have taken active steps to prevent the spread of disease.

Dr. Laurie, Mrs. Erskine and Wallace Ewing, of Montreal, were held responsible by a coroner's jury recently for the death of Miss Emily Thomasson, the seventeen-year-old girl whose anti-mortem statement before Judge Leet was followed by the arrest of three people.

A very enticing offer has been received by Dr. George Adami, professor of pathology and director of the pathological museum of McGill University, from the Northwestern University, Evanston, Ill. Dr. Adami will not accept the offer. He has been with McGill for twenty years.

There are at least 150 municipalities of the Province of Quebec where smallpox cases prevail. In the County of Terrebonne it is very bad and many municipalities have complained to the board that they considered themselves threatened by the carelessness of the medical authorities of other towns. Complaints have been especially numerous against St. Janvier, where, it is alleged, the Council did not do anything effective to restrain the epidemic.

FROM ABROAD.

Miss Viola Schram was awarded a verdict for \$6,000 damages for breach of promise against Dr. Frederick B. Ashton, 2881 Woodward Avenue, Detroit, by a jury in Judge Hally's court. The evidence adduced showed that Dr. Ashton, after paying attention to Miss Schram for nearly ten years, threw her over, and married Miss Marguerite Gailey, a Belleville, Ont., girl.

Sophia Jex Blake, M.D., a leading doctor of Edinburgh dispensary and dean of Edinburgh School of Medicine for Women, died yesterday. She was born in 1840 and traveled on the Continent and in America to

study the education of girls. She founded the London School of Medicine for Women and also founded the Edinburgh School of Medicine for Women, which the University of Edinburgh recognized for graduation in 1894.

Sir Charles Tupper, M.D., the distinguished Canadian politician, has been ill in England for some time. He is now over 90 years of age. He was president of the first meeting of the Canadian Medical Association.

Antityphoid vaccination for naval officers, the rule in the United States Army and Navy, as a supplementary preventive measure against typhoid fever in the ranks of the navy and the marine corps, the compulsory inoculation of all the officers and enlisted men of these branches of the service under forty-five years of age, has been ordered by the secretary of the navy.

On January 2nd a statement was issued jointly by the National Association for the Study and Prevention of Tuberculosis and the State Charities Aid Association, which showed that during the year 1911 New York State spent \$3,550,000 in the campaign against tuberculosis, leading all States in the Union in the amount of money devoted to the work. More than \$14,500,000 was spent in antituberculosis work during 1911 in the whole country, of which \$11,800,000 was used in the erection of sanatoria and hospitals, and \$850,000 by dispensaries for the examination and treatment of tuberculosis patients.

The American Journal of Clinical Medicine comes to hand in excellent form. This is the nineteenth annual progress number, and does much credit to the publishers.

Dr. Edward Johnson, bacteriologist and chemist for the United States Government, was on trial for cruelty to animals for clipping the ears of a goat. The court dismissed the case.

The accounts submitted at the annual meeting of the Metropolitan Hospital Sunday Fund on December 21st showed that the collection for the year ended October 31st amounted to £67,015 14s 8d, of which sum £37,061 (or £3,717 less than in 1910) had been collected in places of worship.

Surgeon-General A. T. Sloggett, C.B., C.M.G., has been selected for the post of Principal Medical Officer, Headquarters Staff of the Army in India, in succession to Surgeon-General Sir Francis Woollaston Trevor, who retires at an early date.

The coming year will witness many changes in Hungarian medical practice, one of the most important arising from the decision taken by a number of provincial medical unions to put an end to contract

practice as it exists at present in the country. The reason for this measure is that contract practice is usually underpaid, and consequently is a gross abuse of the doctor's time. In the majority of cases the family doctor is only engaged on the understanding that his fees are to be commuted for a certain yearly sum, a system which naturally involves considerable financial loss; and, moreover, he is at the beck and call of his patients, and is liable to be called up at midnight for a trifling ailment which would certainly never require his attendance if his night visit had to be paid for at the usual rate of double fees.

The late Mr. John Roderick, a well-known auctioneer in Birmingham, has left the following legacies to local charities: To the General Hospital £50,000, to the Queen's Hospital £10,000, to the Blue Coat School £10,000, to the Birmingham General Dispensary £1,000, and to the Skin and Urinary Hospital £1,000. The value of the estate is estimated at present at £362,022, and the residue, after a number of other legacies have been paid, has been left as to half to the General Hospital, as to a quarter to the Queen's Hospital, and as to a quarter to the Birmingham General Dispensary.

A Japanese-Chinese School of Medicine has recently been opened at Mukden. It has accommodation for one hundred students. The education given is free, and the teachers consist of sixteen Japanese and Chinese doctors.

It is understood that a bequest made a good many years ago by Mr. Robert Irvine is about to take effect, and that a sum of £30,000 will shortly be available for the purpose of founding a Professorship of Bacteriology in the University of Edinburgh.

Dr. E. F. Trevelyan, physician to the Leeds Hospital, died on 11th December, at the age of 52. He took a very keen interest in the prevention of tuberculosis and other efforts for the general health of the people.

It is announced that Dr. Ewald Hering, professor of physiology at the University of Leipzig, Germany, has been elected a Knight of the Bavarian Maximilian Order of Art and Science.

Professor Waldeyer, of the University of Berlin, has been elected president of the international committee of the International Congress of Medicine, in place of the late Dr. Frederick William Pavy, LL.D., F.R.C.P., F.R.S.

Dr. Charles H. Mayo, of Rochester, Minn., who was operated on at the Presbyterian Hospital on Dec. 17 for appendicitis, and a week later for an acute attack of cholecystitis, by Dr. Joseph H. Blake, is now reported to be progressing satisfactorily toward recovery. His brother, Dr. William J. Mayo, who was hastily summoned from Minnesota when

the gall-bladder trouble developed, reached his bedside on the morning of Dec. 24; the day after the second operation.

Dr. Joseph Edward Janvrin, of New York, a well-known gynaecologist, died on 21st December, 1911, a few days after an operation for appendicitis. He was in his 71st year.

In a recent number of the *Churchman* attention is called to the fact that Prof. Morris Jastrow, of the University of Pennsylvania, in his "Aspects of Religious Belief and Practice in Babylonia and Assyria," gives in one place a translation of an incantation ritual which has obvious analogues in its spirit to "Science and Health," and might be regarded by some as superior to that work in style and dramatic effectiveness. "Away, away, far away, far away!" the primitive sufferer from the "claim" of disease is to exclaim. "For shame, for shame, fly away, fly away! Round about face, away, far away! Out of my body, away! Out of my body, for shame! Out of my body, fly away! Out of my body, face away! Out of my body, go away! Into my body do not return! To my body do not approach. My body do not oppress!"

The will of the late Thomas N. Miller, of Pittsburg, Pa., which was filed for probate in that city on Dec. 19, names as residuary legatee the Woman's Hospital of Pittsburg, which will thereby probably receive about \$2,000,000 as an endowment. The hospital was founded by Mr. Miller's wife.

By the terms of the will of Abraham Abraham, who died in Brooklyn recently, the Jewish Hospital will receive \$50,000 and the Brooklyn Federation of Jewish Charities \$25,000.

S. H. WESTMAN, M.D.

The death of Dr. Samuel H. Westman occurred after an attack of acute nephritis at his residence, 341 Bloor Street west, on 29th December, 1911.

Dr. Westman was the son of Mr. J. H. Westman, of Toronto. Graduating from Toronto Medical School in 1896, he entered the Toronto General Hospital as house surgeon for one year, and then joined the staff of the Women's Hospital of New York, with which he remained nearly two years. After practising in Toronto for a few years, he went to England and Germany for further study, and obtained the diplomas of one of the M.R.C.S., Eng., and L.R.C.P., London. Returning to Toronto, he was appointed one of the surgeons of the Toronto General Hospital and the Hospital for Sick Children, and was a member of the University of Toronto faculty.

Dr. Westman was also prominent in military and Masonic circles, being assistant surgeon of the Royal Grenadiers, with the rank of captain, and a member for years of Zetland Lodge, A. F. and A. M. He married in 1901 Ethel May, the only daughter of Mr. John Pugsley, of this city, who, with two sons, survives.

JAMES W. ALWAY, M.D.

Dr. Alway was well known in the Niagara district. He graduated from Victoria University in 1863. His home was in Grimsby.

T. G. BRERETON, M.D.

Dr. Brereton died at his home in Bethany 10th December, 1911. He was educated in Trinity Medical College, from which he graduated in 1881.

BOOK REVIEWS

CASE HISTORIES.

Case Histories in Medicine, illustrating Diagnosis, Prognosis and Treatment of Disease, by Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard Medical School. Second Edition, Revised and Enlarged. Boston: W. M. Leonard, Publisher, 1911.

This is an excellent work of its kind; and its kind is a good one. There is no better way of teaching medicine than by actual cases. Under the heading of general diseases and the various systems there are recorded a series of cases, of which the diagnosis, prognosis and treatment are fully set out. There are records of 100 cases that have been watched throughout their sickness. We can cordially recommend the book. It is both interesting and instructive.

CANCER RESEARCH FUND

Fourth Scientific Report on the Investigation of the Imperial Cancer Research Fund. Under the direction of the Royal College of Surgeons of England, by Dr. E. F. Bashford, General Superintendent of Research and Director of the Laboratory. Published by the authority of the Executive Committee. London: Printed and published by Taylor and Francis, Red Lion Court, Fleet Street, E.C., 1911. Price, 7s 6d.

This volume contains 223 pages. It is well illustrated. The paper is superior and typography clear. These features render the report attractive, and show that no expense was spared on its production. Of far more importance, however, than its make-up are the contents of the volume. There are three papers. The first is by Dr. M. Haoland, on Spontaneous Tumors in Mice; the second by Dr. J. A. Murray, on Cancerous Ancestry and the Incidence of Cancer in Mice; and the third, by Dr. E. F. Bashford, on the Behaviour of Tumor-cells during Propagation. One of the important statements is that "malignant new growths arise from local causes in a circumscribed area, and that the relation of each malignant new growth to the affected animal is an individual one." There is important "evidence advanced of the existence of hereditary predisposition to the development of spontaneous cancer." Another statement of note is that tumor cells derived from a single primary growth are shown to be liable during extended propagation to variations such as are met with, either singly or in combination, in other primary growths." In this report very careful consideration is given to the relationships between benign and malignant new growths, and of both to normal tissue. Evidence is brought forward to show that cancer is common to all races of man and throughout the vertebrate world. It is also shown that cancer can only be conveyed from one animal to another of the same species by implanting the living cells. This proves that there is not a common causal parasite. The fact that cancer is found in all vertebrates shows that it is not due to the results of civilization, and is, therefore, a disease that has long existed among animals. Attention is given to the fact that a transplanted cancer grows in the host as it did in the animal from which it was taken. This proves that animals afford a common soil. It is well proven that the application of certain irritants to parts of the body causes cancer that does not appear when such irritants are absent, as in some trades and customs. A great deal of attention is paid to the results of the experimental study of cancer in mice. A very interesting phase of the cancer study is that in the experimental production of the disease in mice it is much easier to transfer the growth to the mamma of a mouse if its grandmother and mother had also been victims of the disease. A careful study of

this report goes to show that inch by inch the ground is being contested with this disease, and that the time may not be far off when it will yield up its full secrets, as to origin, spread and treatment.

INTERNATIONAL CLINICS.

A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Poediatrics, Obstetrics, Gynaecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners. Edited by Henry W. Cottell, A.M., M.D. Vol. IV., twenty-first series, 1911. Philadelphia and London: J. B. Lippincott Company.

There are many articles of much interest and value. These articles make a useful volume. One that may be mentioned is on Edward Jenner. It recalls the facts in connection with the discovery of vaccination, and gives many statements regarding the life of a remarkable man. We can very highly recommend the book.

COMMISSION OF CONSERVATION.

Water Powers of Canada, by Leo G. Denis, B.Sc., E.E., and Arthur V. White, C.E. Honorable Clifford Sifton, Chairman; James White, Secretary. Ottawa: The Mortimer Co., Ltd., 1911.

The various reports that have appeared from the Commission of Conservation have given out some very valuable information for the guidance of public opinion. Much good will come from this work of the Government. There is much work to be done in the matter of the preservation of health, life, timbers, and other resources. It is to be hoped that these valuable reports will receive full consideration at the hands of the people.

VETERINARY-GENERAL'S REPORT.

Department of Agriculture of Canada. Report of the Veterinary-General and Live Stock Commissioner, by J. G. Rutherford, C.M.G., for the year ending 31st March, 1911. Ottawa: C. H. Parmalee, Printer to the King's Most Excellent Majesty, 1911.

This report deals very fully with the diseases of live stock. It takes up the various contagious diseases and their prevention. This is a useful sort of report and should be given a very general distribution. Much good will eventually come from the spread of this sort of information.

SWAMP FEVER IN HORSES.

North Dakota Agricultural Experiment Station. Department of Veterinary Science Report, by L. Vanes, E. D. Harris, and A. F. Schalk. Bulletin No. 94. Fargo, N.D., September, 1911.

The conclusions of the authors are that this disease may be conveyed by giving a healthy horse the blood of an infected by the mouth or hypodermically. The infection is also found in the urine. Though they cannot determine the actual organism, the infection is due to some ultra microscopic organism.

 REPRINTS RECEIVED.

The following from Louis Faugeres Bishop, A.M., M.D., New York:
Fibrillation of the Auricle.

Arteriosclerosis, Cardiosclerosis, and Intestinal Putrefaction.

Adams-Stokes Disease, with Complete Heart Block, Showing a Conspicuous Lesion in the Path of the Auricular-Ventricular Bundle.

From Lewis H. Adler, Jr., M.D., of Philadelphia:

Operative Treatment of Internal Haemorrhoids.

Rectal Diseases: A Report of Three Cases.

Syphilis and the Ano-Rectal Surgeon.

Polypoid Growths and Rectal Polypi.

Specialism with Reference to Proctology.

Some of the Methods to be Pursued in the Diagnosis of Diseases of the Rectum and Anus.

From the Ottawa Government Printing Bureau:

International Commission on the Control of Bovine Tuberculosis.

Leonard J. Kidd, M.D., London, Eng.:

The Sensory Phrenic and Its Organs.

 MISCELLANEOUS

 XVIIITH INTERNATIONAL MEDICAL CONGRESS.

The XVIIth International Congress of Medicine will be held in London from August 6th to August 12th, 1913, inclusive, under the patronage of His Most Gracious Majesty George V., King and Emperor, and Presidency of Sir Thomas Barlow. Dr. W. P. Herringham, whose

visit to this country many will recall with pleasure, is the Honorary General Secretary of the Congress. Through his courtesy we are able to publish in this issue the rules and regulations of the Congress.

RULES OF CONGRESS.

Art. 1.—The Seventeenth International Congress of Medicine will be held under the august patronage of His Most Gracious Majesty George V., King and Emperor.

Art. 2.—The Congress will be opened on the 6th August, and will close on the 12th of August, 1913.

At the time of Congress, the Central Bureau will be located in the Royal Albert Hall, Kensington Gore, W., and will be opened for the inscription of members on Tuesday, 5th August, at 10 a.m.

Art. 3.—The object of the Congress is exclusively scientific.

Art. 4.—The members of the Congress will be:

(a) Qualified members of the medical profession who have made formal application and have paid the subscription hereinafter fixed.

(b) Scientific men who have been nominated by a National Committee or by the Executive Committee and have paid the same subscription.

Art. 5.—The subscription is:

£1 sterling; 25 kroner (Austria); 25 francs; 20 marks; 15 rupees; 20 kroner (Norway); 5 dollars (United States or Canada).

The wives and daughters of members of Congress desiring to profit by the advantages accorded them must pay half the subscription fee.

Subscriptions should be sent by postal order or cheque payable to:

The Treasurers,

XVIIth International Congress of Medicine,

13 Hinde St., London, W.,

and the section in which each member wishes to be inscribed must be indicated.

In the case of any country in which there is no system of international postage exchange the services of a banker must be employed. No one can be enrolled as member of Congress before the receipt of his subscription.

An applicant when sending his subscription should enclose his visiting card indicating his medical qualifications and titles and his full postal address. Any change of address must be immediately notified.

Cards of membership will be sent out from the central office of the Congress within eight days following the receipt of the subscription.

Art. 6.—Members of Congress will receive the volume of the transactions recording the proceedings at the general sessions, as well as the transactions of the section in which they have been inscribed.

Art. 7.—The sections of the Congress are twenty-two in number, besides which three sub-sections are established, namely:

I. Anatomy and Embryology; II. Physiology; III. General Pathology and Pathological Anatomy; IIIa. (Sub-section) Chemical Pathology; IV. Bacteriology and Immunity; V. Therapeutics (Pharmacology, Physiotherapy, Balneology); VI. Medicine; VII. Surgery; VIIa. (Sub-section) Orthopædics; VIIb. (Sub-section) Anæsthetics; VIII. Obstetrics and Gynæcology; IX. Ophthalmology; X. Diseases of Children; XI. Ueuro pathology; XII. Psychiatry; XIII. Dermatology and Syphilography; XIV. Urology; XV. Rhinology and Laryngology; XVI. Otology; XVII. Stomatology; XVIII. Hygiene and Preventive Medicine; XIX. Forensic Medicine; XX. Naval and Military Medicine; XXI. Tropical Medicine; XXII. Radiology.

Art. 8.—The organization of the Congress is in the hands of the Organizing and Executive Committees.

Art. 9.—There will be two general meetings of the Congress, the inaugural meeting and the closing meeting. At these meetings the speakers will be the Government delegates who have been invited by the Organizing Committee or designated as such, and these alone. At the closing meeting the President will announce the city in which the next Congress will be held. This will be determined by the Permanent Commission, which will sit during the Congress.

Art. 10.—The scientific work of the Congress will consist in: (a) general sessions; (b) sectional sessions; (c) combined sessions of two or more sections.

Art. 11.—The number of general sessions and the number of speakers will be fixed by the Executive Committee. There will be no debates in the general sessions.

Art. 12.—The sessions of the sections will be occupied in formal discussions on the reports (*rappports*), also by the reading and discussion of papers on subjects chosen by individual members of Congress. The work of the sections is dealt with in separate regulations.

Art. 13.—Two or more sections may hold combined sessions.

Art. 14.—Members of Congress may take part in the proceedings

of sections other than that in which they have been inscribed.

Art. 15.—The speeches delivered at the opening and closing general meetings, as well as the reports opening formal discussions, will be published in full. As to communications on subjects selected by individual members, only those papers will be published which the authors have personally presented to the Congress, and the Executive Committee, after consultation with the Sectional Committees, has decided to publish.

Art. 16.—The manuscripts of speeches delivered at the general meetings must be sent to the General Secretary. The manuscripts of remarks made in discussions and papers read by individual members at the sectional sessions must be delivered immediately (see Art. 14 of the Sectional Rules) to the Secretary of the section concerned.

Art. 17.—The Central Office of the Congress will use the English, French and German languages for international business. In the general meetings Italian may be used as well as these languages.

Art. 18.—All correspondence should be addressed to the offices of the Congress, as follows:

The Hon. Gen. Secretary,

XVIIth International Congress of Medicine,

13 Hinde Street, London, W.

On the envelopes of letters relative to the scientific work of the sections the section to which they refer should be specified.

Art. 19.—Information concerning the reductions in fares granted by railway companies, hotel and boarding accommodations, excursions, etc., will be published before the 30th April, 1913.

RULES OF SECTIONS.

Art. 1.—The sections will meet at 9.30 a.m. and at 3 p.m.

Art. 2.—The first session of each section will be opened on Wednesday, 6th of August, at 3 p.m.

Art. 3.—The President of the section will be responsible for the conduct of the discussions, for the application of the rules, and for the punctual accomplishment of the work of the Secretaries. If the President is prevented from being present at any session of his section his place will be taken by one of the Vice-Presidents or by a member of the Council of the section.

Art. 4.—There will be no Honorary Presidents of sections.

Art. 5.—The sessions will be conducted according to the Parliamentary regulations in general usage.

Art. 6.—The sessions will include discussions on the reports and the reading and discussion of papers on subjects selected by individual members.

Art. 7.—Reports (*rappports*). In each section the morning session will be reserved for the discussion of important questions which have been previously selected by the Council of the section. Each discussion will be introduced by one or two reporters chosen by the Council of the section with due regard to the international character of the Congress. The definite programme of the discussions will be published on September 30th, 1912. The manuscripts of the reports must be typewritten, and must be sent to the Central Office of the Congress by February 28th, 1913, at the latest. The reports of each section will be printed and distributed three months before the opening of the Congress to all members of the section who have then been enrolled. (See Rules of Congress, Articles 4 and 5.)

The reports will not be read *in extenso* at the session. Each reporter will, however, be allowed a maximum of fifteen minutes for an opening *resumé*, and ten minutes for a reply at the end of the discussion. Other speakers taking part in the discussion will be allowed a maximum of ten minutes only for their remarks.

Art. 8.—Members of Congress who desire to take part in the discussion of any report may enter their names before the Congress by giving written notice to the General Secretary. During the session they must communicate directly with the Secretary of the section.

Art. 9.—Speakers will be called upon by the President according to the order of their inscription on the agenda.

Art. 10.—Independent papers. The afternoon sessions will be devoted to the reading and discussion of independent papers. The titles of such papers ought to be announced to the Central Office of the Congress by the 30th of April, 1913. The Council of the section has the right of selection from among the papers offered, and of declining any that they do not consider desirable. The Council of the section will arrange the order in which the selected papers shall be read. Any papers offered after the 30th April, 1913, will only be placed upon the agenda after the discussion of those which have been announced before this date and have been chosen by the Council of the section. No paper will be accepted unless the text has been received by the Secretaries of the section before the 1st of July, 1913.

A maximum of fifteen minutes will be allowed for the reading of a paper, and five minutes for each speaker who takes part in the discussion. The author of the paper will be allowed five minutes for a reply.

Art. 11.—Speakers will receive two intimations from the President as to their time limit; notice will be given two minutes before, and at the moment of expiry of the period allowed.

Art. 12.—For certain communications of particular importance and general interest, the President may, with the consent of the section, prolong by five or ten minutes the periods already indicated.

Art. 13.—If a speaker wanders from the subject under discussion or indulges in personalities the President may call upon him to sit down. If several members ask to speak upon a paper, and the hour is late, the President may on his own authority, or upon the proposition of a member, defer further discussion upon that paper to the end of the session, if time permit.

Art. 14.—The text of the remarks in the course of discussions will only be inserted in the transactions of the Congress if the speaker sends it in writing, condensed into twenty lines of print, to the Secretary of the section before the end of the session. (Block note-sheets will be placed for this purpose at the disposal of members by the Secretaries.)

Those who omit to conform to this regulation will lose the right to have their remarks published in the transactions.

Art. 15.—The Executive Committee reserves to itself the right to abridge the report of any discussion, and to omit any remarks of a personal character.

Art. 16.—Private resolutions can only be proposed after previous notice given to the President, and when the business on the agenda has already been disposed of. For the proposal of any special resolution a maximum period of five minutes only will be allowed.

The President will authorize only such resolutions as come within the limits of the work of the section.

Art. 17.—No vote may be taken, nor any resolutions passed, upon questions of science or theory, but only on such questions as possess a practical or administrative character. On such questions the sense of the meeting will be taken by the majority standing or remaining seated.

The President will transmit such resolutions as shall be passed, through the General Secretary, to the Permanent Commission of the Congress. The Commission will decide whether the resolutions in question ought, or ought not, to be put to the vote at the closing meeting of the Congress.

Art. 18.—The Secretaries of each section will send an account of its transactions for the daily journal. This account will mention in chronological order the subject of the reports and discussions, the papers read, the names of the speakers, and any resolutions submitted to the section.

THE PUBLIC AND THE MEDICAL PROFESSION.

James Ewing, New York, states that the Academy of Medicine, since its foundation in 1847, has had three aims: the unification of the regular profession, the elevation of its standard and the promotion of medical science. Yet the public do not understand the position of the profession and believe that it acts from self-interest. This is mainly because the lay mind is not able to grasp the intricacies of medical science. The public do not understand the necessity of high medical education if they are to trust their lives to the physician in times of serious disease. They do not assist the profession by aiding in obtaining legislation needed to prevent disease. The doors of practice are opened to uneducated practitioners. The physical conditions which surround the interests of medical science in this country are unpropitious. It is impossible for a true scientist to earn a salary that will enable him to live in comfort. The union of hospitals, laboratories, and medical teaching has not yet been obtained. Although the profession has yet much to learn about the cure of disease, it has been able to do much in its prevention.—*Medical Record*, December 16, 1911.

NEW RULE FOR MEDICAL STUDENTS WRITING AT THE COUNCIL.

Considerable consternation is felt among the medical students of the university over the new examination regulations as set forth in the annual announcement of the Ontario Medical Council, just published.

Up till the present time the senior med. has written on his council immediately following his university examinations. Not frequently the results disclosed the fact that the students had been "starred" on his university exams, while he had passed his council. Under these conditions he was permitted to write off his "supps" in the fall and if successful he received his degree and was licensed to practice.

The innovation that the med. undergraduates object to is the rule that requires the student to produce his university graduate's parchment before he is permitted to write on the council. One "star" will by this new rule require a senior to lose a year before he is pronounced a full-fledged M.D., instead of two or three summer months, as heretofore. It looks as if senior meds will harbor as many "stakes" as freshmen school.

THE TREATMENT OF OBESITY.

Sir,—The *British Medical Journal* has rendered excellent service to the community in analyzing and exposing the worthlessness of the numerous quack remedies so freely advertised in the press. To account for the large expenditure of money in puffing certain preparations guaranteed to reduce obesity, there must be a large number of people in this country who are, or believe they are, too rotund. It is time the public were taught that the employment of drugs for the purpose of getting rid of adipose tissue is not free from danger.

The following brief notes of a case under my care are, I think, worth recording: The patient, a man a little over 40 years of age, was in his time a well-known athlete. Having become a *bon vivant*, and not taking much exercise, he became corpulent—not excessively so, but sufficiently to give him what he called a “bow window” of some prominence. He had recourse to the belauded patent medicines whose names caught his eye daily, and commenced to take them *all* in large quantities, with no other result than a serious impairment of his digestive functions, necessitating medical treatment. On being relieved of his gastric trouble the question of reducing his superfluous fat was discussed. He had some gouty symptoms, but no cardiac or renal mischief and no glycosuria. The treatment was commenced with von Noorden’s dietary as given in Nothnagel’s *Handbuch*, but after a fortnight he kicked against this regimen as being too exacting. I then wrote out for him the following simple dietetic formula:

For breakfast weak tea sweetened with saccharin, two boiled eggs, starchless and sugarless bread (palatable loaves and biscuits of this quality were obtained from Callard & Co., Regent Street W.), with butter.

For lunch 6 ozs. of minced lean beef, green vegetables, no potatoes or sweets, a little fruit, with a tumblerful of hot water and the prescribed bread.

Afternoon tea to be taken with a starchless biscuit.

Dinner to be the same as lunch, with a tablespoonful of whisky to a tumblerful of Apollinaris water.

At bedtime a tumblerful of hot water.

He was also told to take walking exercise daily to the point of fatigue. A moderate amount of tobacco was consumed. A full dose of sodium sulphate was given twice a week as an aperient. This course of treatment was continued for a little over three months, by which time the patient had got rid of his redundant adipose tissue, was in good

health and condition, and weighed 11 st. (This he called his fighting weight). Although carbohydrates are not now considered inadmissible in obesity, as they are believed to be converted into carbon dioxide and water, I was sufficiently conservative to eliminate them largely from my patient's food.

There is very little doubt that most men eat more than is requisite for the bodily sustenance, or that this over-eating, together with want of sufficient muscular exercise, are responsible for a vast amount of disorders of the system. An aphorism of a once famous surgeon—George Cheyne—may here be recalled:

Every wise man after 50 ought to lessen at least the quantity of his aliment, and if he would continue free of great and dangerous distempers and preserve his senses and faculties clear to the last he ought every seven years to go on abating gradually and sensibly, and at last descend out of life as he ascended into it; even into the child's diet.

I am, etc.,

WATKIN W. JONES.

London, S.W., Nov. 24th.

TORONTO'S VITAL STATISTICS.

Toronto suffered less from deaths due to typhoid fever last year than in the previous year, notwithstanding the break in the intake pipe and the high carnival held by the bacteria and colon bacillus in the early part of 1911. There were eighty deaths from typhoid fever recorded at the City Clerk's office last year, whereas in the previous year the typhoid victims numbered 154. Fifty-two persons died from measles in the past twelve months, as compared with forty-seven in 1910.

Tuberculosis is the recorded cause of 300 deaths in Toronto last year. In 1910 there were 270 deaths from tuberculosis, as reported to the City Clerk. Diphtheria was the next deadliest disease in this city last year, 129 persons having been taken by it. This was much better than in 1910, however, as 150 cases of diphtheria that year were fatal. Scarlet fever claimed 114 victims in 1911, as against 87 in 1910.

There were 994 more births registered at the City Clerk's office last year than in 1910, the total for the past year being 10,005, as against 9,011 for the previous year. The increase in marriages was still larger, 1,019, the total for 1911 being 5,312, as against 4,293 for 1910. Last year's record of deaths was 6,328. This was 869 in excess of the total number of deaths for 1910, which was 5,439.

The births registered in December totalled 770, or 60 less than in

November. Marriages also fell off last month, as compared with the number in the previous month, the figures being 408 for December, and 541 for November. The deaths last month, 524, exceeded the deaths in November by 34.

THE AIR IN PUBLIC SCHOOLS OF TORONTO.

Dr. Nasmith, city bacteriologist, has reported his analysis of air in six schools, each of which has a different system of ventilation. His conclusions are:

(1) That the sense of smell of a normal person coming from the outside is as accurate an indication of the purity and impurity of the air as a chemical or bacteriological analysis. (a) That when a room was marked "stuffy" the carbonic acid was high and the bacterial count also great. (b) That when a room was marked "fresh" the bacterial count and carbonic acid content was low. (2) That the windows were the most valuable means of ventilation. (3) That the class-rooms should be flushed with fresh air by throwing all the windows wide open for at least half an hour before 9 o'clock, at noon, and after 4 o'clock, and at least ten minutes at recess. (4) That those conclusions have been frequently confirmed since by others in other cities.

CANADIAN MEDICAL EXCHANGE.

The Canadian Medical Exchange, for the purchase and sale of medical practices, 75 Yonge Street, corner of King, conducted by Dr. W. E. Hamill, Medical Broker, advises us that no time during the past 15 years has he had such a choice list of practices and openings to present to prospective purchasers as at the present time, and he feels assured that any physician desiring a practice can secure a short cut thereto by making his wants known to him, when full information free will be furnished. Full particulars both to vendors and vendees will be given upon application.

ILLEGITIMATE BIRTHS AND MORALITY.

The Pacific Medical Journal for November cites figures recently published by *The New York World*, showing the large percentage of illegitimate births in Berlin and other great European cities.

According to a contributor to *The World*, London shows an il-

legitimacy rate of only 40 to the 1,000 births, as given in the *Encyclopædia Britannica* and the *Statesman's Year-Book*, while the rate in Berlin for 1909 is set down as 250 in 1,000. European countries show a wide variation, Ireland having 26 illegitimate births to the 1,000, and Austria 141.

The *Encyclopædia Americana's* figures bear out the statement made by *The World* as to the percentage of illegitimacy being as high in other continental cities as in Berlin, but credits Berlin with a lower rate than is shown by the latest figures—assuming that those presented by *The World* are the latest. Paris, with 268 illegitimate births to the 1,000, compares unfavorably with Berlin in the *Americana's* table, which gives the German metropolis credit for only 154 to the 1,000, as against 149 in Vienna, 439 in Prague, 439 in Munich, 396 in Stockholm, 300 in Moscow, 729 in Copenhagen, and 236 in St. Petersburg. Smaller continental cities are credited with better conditions. The rate is 132 in Frankfort and in Turin, 129 in Antwerp, 99 in The Hague, 70 in Rotterdam, 101 in Palermo, and 86 in Naples. The smaller French cities are not in the list, but presumably they would reflect a higher state of public morals than Paris.

The table of figures for countries gives France 82 illegitimate births to the 1,000; Germany, 94; Belgium, 98; Denmark, 100; Lower Austria, 260; Upper Austria, 210; Italy, 75; Prussia, 82; Sweden, 148; Norway, 79; Portugal, 140; Spain, 54; Greece, 16; Holland, 32; and Switzerland, 48.—*Am. Jour. Clinical Med.*, Jan., 1912.

OPIUM AND ABSINTHE REGULATIONS.

The Pure Food and Drug Board of the United States Department of Agriculture formulated on Dec. 14 a series of regulations defining the legitimate medical uses of opium, morphine and cocaine, and providing that dealers in this country must make account for every ounce of these drugs imported. The board has also framed an ordinance forbidding the importation of absinthe, as a substance dangerous to the public and to the individual health. The manufacture of absinthe has already been forbidden in Switzerland and Belgium, and its sale is rigidly regulated in Paris. These ordinances await approval by the Secretary of Agriculture.

TOBACCO.

Tobacco is the most widely used narcotic in the world. The annual crop is estimated at 3,000,000 tons. United States devotes about 600,000

acres to its cultivation. The Government's revenue from tobacco for the year 1909 was \$57,889,351—an increase over the preceding twelve months of \$6,002,173. The greatest increase of any one product was in cigarettes, this amounting to 1,766,583,714. *The Literary Digest* of August 27, 1910, gives the number of cigarettes on which revenue was collected as 7,874,300,329. The number of cigars manufactured is still greater, being 8,139,030,144. Chewing tobacco takes third place, and there are nearly 32,000,000 pounds of snuff consumed in this country each year.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The thirty-ninth annual meeting of the American Public Health Association was held at Havana, Cuba, during the week ending Dec. 11. Among the representatives present from Massachusetts were Dr. Mark W. Richardson, secretary of the State Board of Health, and Dr. Samuel H. Durgin, chairman of the Board of Health of Boston. One of the principal topics of discussion was that of infantile paralysis, and important data were contributed by Dr. Richardson relative to the investigation of recent epidemics of the disease. The newly-elected president of the association is Dr. R. M. Simpson, of Winnipeg, Canada.

MEDIAEVAL PUNISHMENTS FOR FOOD AND DRUG ADULTERATIONS.

A recent work on "The Romance of the Grocer's Trade" describes some interesting mediæval English pure food controversies. In 1395 a grocer was apprehended for selling as ginger powder a "damnable mixture" made of the roots of "rape, radish and old setewale," and was punished by being set in the pillory, while the aforesaid mixture was burned under his nose. A cheesemonger who sold "measlie bacon" was compelled for this offence to ride about the streets of London with his face to the horse's tail and a fitch of the bacon hung round his neck. At the time of the Wars of the Roses, the King's wardens rode out of London twice each year to "the divers feyres, cytyes and townys, to supervise, garble, search, examine, and prove all sorts of drugs, spices and merchandise, to the purpose and intent that none of our subjects be deprived of benefit in buying any of the aforesaid, nor be in any wise hurt in their bodily health." Evidently the adulteration of foods and drugs was at least as common in those days as now, and the effort at their detection as vigorous, if not as persistent or successful. If our

punishments could be as condign and picturesque as those of the Middle Ages, they might prove more efficacious than fines as deterrents from repetition of the offence. A category of wholesome chastisements was abolished with the pillory, the stocks and the ducking-stool.—*Boston Med. and Surg. Jour.*, Dec. 21, 1911.

THE NATIONAL MEDICAL UNION.

On Dec. 15th a union with the above title was formed at Manchester, England, to fight the National Insurance Bill. It is not quite clear whether this is a union in the accepted sense of the word or whether it means simply an amalgamation. It is certain that the 2,000 members are greatly dissatisfied with the action, or rather inaction, of the British Medical Association's Council in relation to the bill. Upon Dr. Sackville Martin's statement that the late medical secretary of the B. M. A. had been appointed an insurance commissioner, there were cries of "Shame" and "Traitor," and when Sir James Barr, president-elect of the B. M. A., rose to propose a vote of thanks to the chairman and attempted to defend the B. M. A. he was told to sit down.

Dr. W. Coates summed up the grievances of the profession when he said that the independence of the medical profession had been challenged; their livelihood was at stake; their utility was in danger, and not only were the doctors in danger, but the whole of suffering humanity was in danger also. It was determined to maintain the union so long as any danger to the profession existed.

SPECIAL WESTERN NUMBER.

In furthering the plan of producing special issues of the *American Journal of Surgery*, composed of contributions by surgeons residing within a certain geographical area, yet of international reputation, there will be issued in the early part of 1912 a special Western number of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Grave's Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exophthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstructions, by E. O. Smith, Cincinnati, Ohio.

Subject not announced, H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatment of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Deformans, by Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy, with Special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well-known surgeons are of such a nature as to make this number particularly interesting.

SYNOPSIS OF THE REPORT OF THE REGISTRAR-GENERAL OF ONTARIO, 1910.

What the frivolous call "the hatches, matches and dispatches record" for the Province of Ontario for 1910, which has been compiled by the Registrar-General's Department, contains some interesting figures with regard to the vital statistics of the province. The report is in the hands of the printers, and will not be ready for the public for some weeks yet.

During the year there were 55,871 births, 24,036 marriages, and 33,539 deaths, or 24.9, 10.7, and 14 per 1,000 of the estimated population respectively for the county municipalities of the province (including cities and towns).

For the 18 cities the figures are: Births, 18,767, or 32.2 per 1,000; marriages, 11,793, or 20.2 per 1,000; and deaths, 12,303, or 21.1 per 1,000.

The towns of 5,000 population and over are 15 in number, and their statistics are as follows: Births, 2,918; ratio, 21.6; marriages, 1,405; ratio, 10.4; deaths, 1,109; ratio, 14.7.

Of the 33,539 deaths there were 706 from typhoid fever; 2,287 from tuberculosis in all forms, as against 2,380 in 1909. Cancer was the cause of death in 1,077 cases; 222 died from diabetes; 327 from anaemia; 355 meningitis; 923 apoplexy; 2,240 organic heart trouble; 464 broncho-pneumonia; 1,458 pneumonia.

Diarrhoea among infants under two years of age was fatal in 1,374 cases, while 2,455 died when under four months of age, owing to weakness from birth or ignorance on the part of the mothers with regard to the care of children.

In 284 cases women lost their lives in child-birth.

Of the 1,626 deaths from affections produced by external causes 91 persons took their lives by various methods, hanging being the favorite; 26.3 per cent. of this number selecting this means of exit from a weary world. Ninety-five persons were poisoned accidentally; 43 were burned to death; 112 died from burns received; 33 died from gas poisoning; 266 were drowned; 64 shot accidentally; 209 killed by motor cars, landslides, steam and electric railways, etc.; 13 were frozen to death; 8 died from effects of heat—sunstroke; 11 killed by lightning; 18 by electric shock; 17 homicides took place, and the balance, 645, died from various accidental causes.

Old age was the cause of death of 3,429 persons.

Two thousand, two hundred and seven were stillborn.

With regard to mortality among infants, it is found that among those under five years of age 6,649 died under one year of age; 917 one year old; 424 two years old; 321 three years old; and 247 four years old.

March was the favorite month for births, there being 5,033 in that month. Of the children born throughout the year 28,664 were males and 27,207 were females. There were 370 pairs of twins, 264 boys and 376 girls. Triplets surprised the happy father in five cases, nine boys and six girls.

June continues to hold favor with the bride. Of the 24,036 marriages, 3,555 were celebrated in the happy month, September and December following in the order named, with 2,653 and 2,304 respectively.

There are two periods in a woman's life when friends are vastly interested in her age—when she marries and when she dies.

The report goes rather deeply into some of these figures, and, while all the secrets are not disclosed, yet there is some interesting information in its pages.

With regard to the age at which persons marry, it is of interest to learn that, so far as Ontario is concerned, men do not marry, to any great extent at a later date than women, although it is popularly thought

otherwise. Last year 8,168 grooms, or about one-third of the total number of men, married between the ages of 20 and 24, while 47 per cent., or nearly one-half the women who entered the bonds of matrimony were between those ages. With both sexes the next greater number were in the 25-29 group, and then come the 30-34 for the grooms and 15-19 for the brides.

Under the age of 20, 453 men were married, one taking a bride in the 30-34 group, one selecting a lady whose age comes in the 35-39 class; one married a lady of the discreet age of 70, while two grooms showed a predelection for the same maturity of their brides.

Fifteen women between the ages of 15 and 19 married men between 40-44; two became brides of men between 45-49; one married a man over 55; two men over 60, and one a man over 70, as did also a lady of 25-29.

Cupid drives his bolt athwart denomination and conventions. Just at the present time the question of mixed marriages is holding a certain amount of public attention, but many of the good people who discuss the matter of persons of different faiths marrying will be surprised to learn to what an extent such marriages are contracted in Ontario. It appears that in one year alone Methodists married Roman Catholics; Jews married Gentiles, while in many cases May wedded December.

Out of the total of 7,351 Roman Catholics no less than 1,509 married out of their denomination. Of the grooms 665 married non-Catholic brides, and 844 professed Catholic girls became brides of non-Catholic grooms. Of these marriages, the larger number were between Catholics and Anglicans; then came Methodists, Presbyterians, Baptists, Lutherans, in the order named, but, rather strangely, no marriage between a Roman Catholic and a member of the Salvation Army is recorded, yet two married Jewesses, and five brides threw in their fate with as many Jews.

In addition to this, two Jews married Anglicans, two Presbyterians, six Methodists, two Baptists, one a Congregationalist. The Jewish ladies did not show such a variety of taste, but exhibited a strong Anglican leaning, for, of the seven who married out of their faith five married Anglicans and two Roman Catholic husbands.

MEDICAL PREPARATIONS, ETC.

MODERN MARTIAL THERAPY

Amid the veritable swarm of new medicinal agents of all varieties that have been introduced to the therapist during the last twenty years, and in spite of the great advances in general medicine during the same period, there has not as yet been proposed any remedy which can successfully compete with iron in the treatment of anemic and generally devitalized conditions. This metallic element, in one form or another, is still the sheet anchor in such cases, and when intelligently administered in proper form and dosage can be depended upon to bring about marked improvement, provided serious incurable organic disease is not the operative cause of the existing blood impoverishment. The form in which to administer iron is, however, very important. The old, irritant, astringent martial medication has had its day, and properly so. Probably the most generally acceptable of all iron products is Pepto-Mangan (Gude), an organic combination of iron and manganese with assimilable peptones. This preparation is palatable, readily tolerable, promptly absorbable, non-irritant, and still distinctly potent as a blood builder and general tonic and reconstructive.

IMPORTANT NEW PREPARATIONS OF PARKE, DAVIS & CO.

General practitioners will be interested in the announcement by Parke, Davis & Co. of two new products of their chemical laboratories. Proposote and Stearoson are the names chosen to designate the preparations in question.

Proposote is creosote in combination with phenyl-propionic acid. It is a straw-colored, oily liquid, neutral in reaction, nearly odorless, and having a slightly bitter taste suggestive of creosote. It is insoluble in water, but is slowly decomposed by alkaline liquids. The indications for it are the same as those for creosote. Tubercular cough following pneumonia, the cough of pulmonary tuberculosis, acute and chronic bronchitis, purulent bronchitis, abscess of the lung, asthma, and bronchitis, complicated with Bright's disease are among the pathological conditions benefited by its administration. Being insoluble in acid media, it passes through the stomach unaltered by the gastric juice, to be slowly broken up by the alkaline fluids of the small intestine, hence may be

given in gradually increasing doses until the desired effect is obtained. During prolonged administration, as is well known, creosote disturbs digestion, impairs the appetite, and often causes nausea and vomiting. Proposote is free from this objection.

Stearosan is santalol combined with stearic acid. It is an odorless, tasteless, light-yellow, oily liquid that is insoluble in water and dilute acids, but is slowly broken up by alkaline fluids. The pathological conditions in which it may be employed with advantage are precisely those in which santal oil has long been used—chronic gonorrhoea, cystitis, urethritis, vaginitis, pulmonary disorders, such as chronic bronchitis, bronchorrhoea, etc. It possesses therapeutic properties fully equal to those of santal oil, over which it has the important advantage of being practically without irritating effect upon the stomach. The explanation of the latter fact is that the preparation is not attacked by the acid gastric juice, but passes into the small intestine, where it is broken up or emulsified by the alkaline fluid and absorbed without difficulty. The distressing eructations and loss of appetite attendant upon the administration of santal oil do not occur when stearosane is given.

Both proposote and stearosane were thoroughly tested clinically before being offered to the medical profession, and practitioners may be assured of their therapeutic efficacy in all cases in which they are indicated. They are supplied in 10-minim elastic gelatin capsules, boxes of 12, 24 and 100, and may be obtained through retail druggists generally.

MODERN DIAGNOSTIC METHODS.

This little brochure has been prepared and issued by the proprietors of Fellow's Compound Syrup of Hypophosphites. The material found in this booklet is taken from the best works on medical diagnosis, and sets forth the essentials of diagnosis in a very succinct form. Such important topics as stools examination, sputum examination, transudates and exudates, the opsonic index, the Widal reaction, the Wassermann reaction, tuberculin reactions, and leucocytosis are given a place. It is a most useful little booklet.

PREVALENT DISEASES.

Each change of season brings with it its diseases seemingly peculiar to the time.

Summer with its intestinal disorders, sunburn, insect bites, ivy poisoning, etc.

Fall presents for the attention of the physician its typhoid cases and winter and early spring its regular quota of pneumonic, bronchial, throat and other chest conditions.

At this season, when pneumonia and bronchitis demand the call of the physician, literature presenting the experience of fellow practitioners, in the successful handling of these cases, would seem most apropos.

The bloodless phlebotomist for January reflects the experience of many physicians upon this timely subject.

Dr. Charles Buck, of Cincinnati, presents his experience in handling cases of pneumonia, also relates some facts in the treatment of lumbago, which might also be considered as an affliction prominently manifesting itself at this season.

"Broncho-Pneumonia," with supportive as well as local treatment in all its details, is the subject of the paper of F. A. Kautz, also of Cincinnati.

Dr. E. Clinton Murray, of Houston, Texas, relates his experience and treatment in a case of pneumonia in an 18-months-old baby, and Dr. J. C. Klippinger, of Independence, Kansas, presents a "Different Technique in Pneumonia," which is decidedly original. In abstract his method is to apply the local dressing in a manner which gives the intercostal muscles a chance to functionate without restriction from bandages. This symposium is closed with a paper from Dr. W. A. Radue, of Union Hill, N.J., upon "Acute Pleurisy and a Successful Abortive Treatment."

Besides the papers referred to, upon the subject of chest and throat diseases, much additional information is given. The one in particular we would have you note is the "Rational Influence of Hot Applications," by that well-known therapist, Dr. Finley Ellingwood, of Chicago, Ill.

A postal card addressed to the Bloodless Phlebotomist, No. 57 Laight Street, New York, will bring you a copy of the January issue.
