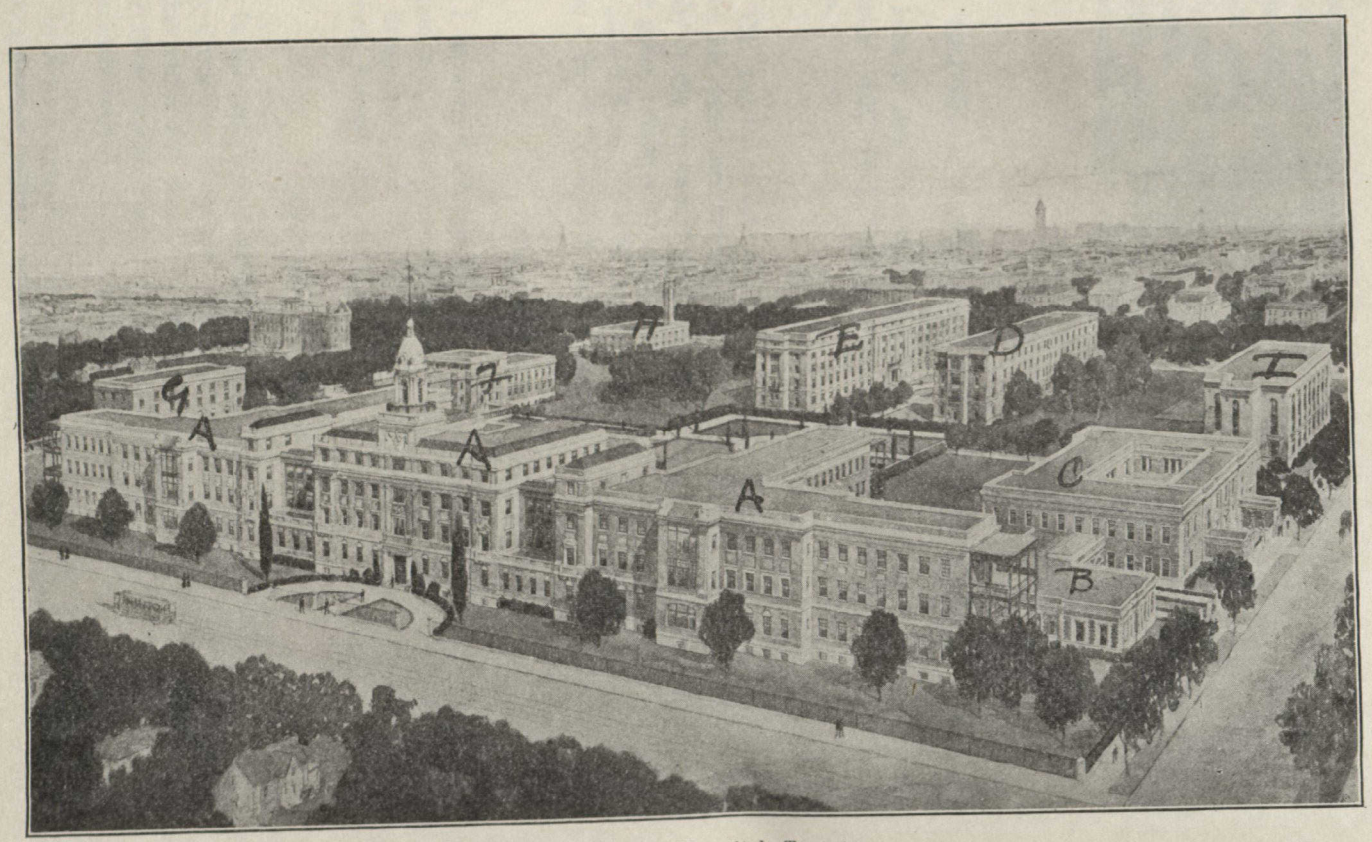

New General Hospital, Toronto.

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EDITORIAL.

THE DEATH OF KING EDWARD VII.

It is only saying what all know to be true that the late King was not only a very wise man but a very great King. His aspirations for his people were very lofty; and it may be at once assumed that he valued his regal office far more for the opportunities it brought him of doing good than from any glory to himself personally. His mighty Empire mourns his loss, but in the words of Emerson when one we love dies he ceases to be our companion and becomes our guide. May the memory of King Edward VII. long remain as a guide to those placed in positions of high trust!

His physicians, Sir Francis Laking, Sir James Reid, and Sir Douglas Powell, have issued the following statement:—

"His Majesty had for some years suffered from emphysema, with attendant bronchial catarrh, signs of which were permanently present at the bases of the lungs. On several occasions digestive disturbances had caused his medical attendants to realize that his Majesty no longer had the reserve constitutional power which had stood him in such splendid stead after his serious operation in 1902, and that any intercurrent catarrhal or bronchitic attack of a serious kind would at once call upon both heart and lungs for their fullest effort.

"It must be here said that those around him knew how earnestly concerned he was at the present strained position of political affairs, and this fact should not be lost sight of in an all-round consideration of the King's health.

"The first night in Paris his Majesty had a severe attack of acute indigestion with subsequent dyspnoea (shortness of breath). On his arrival at Biarritz this developed into a bronchitic attack, causing his physicians great anxiety. This passed off and his Majesty returned better in every way, but he contracted a chill at Sandringham while inspecting the gardens.

"On his return to London from May 3 the attacks of dyspnoea increased, although the King insisted upon attending to business of State as late as Thursday, May 5.

"On that day the attacks became more frequent and distressing, and with increasing cyanosis, gravely suggestive of threatened cardiac failure. With the King's permission the doctors issued the first bulletin on Thursday night, but not until it was seen by his Majesty, who somewhat modified its terms.

"From Friday morning his condition rapidly became worse. There were several dangerous attacks. and his Majesty only rallied with the use of powerful remedies. At three o'clock in the afternoon consciousness failed. The end came at 11.45 o'clock after a prolonged period of perfect calm."

It is further stated that the King had suffered from emphysema for some time. This, no doubt, had made serious inroads upon the strength of the heart. These distinguished physicians also state that there was nothing unusual in the case. This would set at rest the rumours about cancer of the throat.

On 12th May the associated press despatches contain a statement from Dr. James L. Holden, of Columbus, Ohio, to the effect that he had examined the King's throat last July and pronounced the condition to be one of cancer. He was called upon by the late King through the good offices of a certain lady who was on intimate terms with the King and Queen Alexandra.

Well, the King is dead and we leave our readers to put their own interpretation upon this statement. We have the announcement from the late King's physicians that there was nothing unusual in the case. They are professional men of very high standing and marked probity, and one would think they ought to know the real conditions.

Of the late King we can all say:

"His life was gentle, and the elements
So mixed in him that Nature might stand up
And say to all the world, 'This was a man.'"

And now we take farewell with the visible presence of King Edward VII., and place him in our affections with King Alfred, the great, and with his own most noble mother. Though no longer with us, what he has done remains and makes us prouder than ever of the Empire to which we belong and over which he ruled so wisely and well: for he was the noblest King of the greatest power the world has yet known. In the words of Shakespeare he was—

"A combination and a form indeed,
Where every god did seem to set his seal,
To give the world assurance of a man."

THE FOLLY OF EXAMINATIONS.

It might well be said that in Ontario we have lived in the perfection of a fool's castle in the matter of medical examinations. How do they do elsewhere?

In Great Britain the general medical council does not hold examinations, but lays down a standard for the various colleges to live up to. The general medical council has power to supervise the examination standards, and to appoint assessors if such should be deemed necessary.

In the Maritime Provinces, the council accepts qualifications of known reputability. The degrees of the University of Dalhousie are accepted. The plan works well.

In the Province of Quebec the medical council, or the medical governors for the general medical profession, accept the degrees of McGill and Laval universities. This does not mean that the medical council is an unimportant body. It does influence very much the trend of medical education.

In Manitoba where there is a university with an active medical college in connection with it, there is a sane and satisfactory way of doing things. The medical council for that "right little, tight little" province does not hold examinations, but has relegated this task to the university. The plan has given complete satisfaction. The council for Manitoba sees that the standard is maintained and that no one practises who cannot qualify.

In Saskatchewan, Alberta, and British Columbia there is no medical college, and the medical councils test the fitness of those who wish to locate in these provinces.

In Ontario we have a most cumbersome and expensive system. The student writes on his M.B. examination at the universities, and before the ink on the paper is dry he is undergoing another arduous examination on the same subjects, but by another set of examiners. Has this plan any redeeming features? We are quite sure that it has not; and there are a number of very solid arguments against it.

1. The student is often quite exhausted after his winter's study and the university examination. To immediately subject him to another lengthy examination is quite unfair to the student.

2. The money spent in paying the examiners of the medical council is money thrown away. The council might collect a fee and appoint censors. In this way it would maintain its income and keep up its standard. When it got its fees it would also keep them for some better purpose than paying a duplicate set of examiners. We think this whole affair an evidence of extreme folly.

3. No one desires the medical council to relax its hold on the high standard of medical education in Ontario. But all this can be secured without foolish waste of money, and the needless setting of two examinations. The council could at once deal with any university that attempted to lower the standard.

4. It is common talk among the students that to pass the examinations of the medical council they have to read up old books of twenty-five years ago, as they are likely to run up against an examiner who has his head full of old and antiquated methods. This is a serious state of affairs. We know of one instance where an examiner asked the candidates to describe a certain thing that does not exist.

Is this state of affairs to continue? We hope not. It must be held that the council has a right to say who shall or who shall not practise in Ontario. It does not follow that a student who has during April and May undergone his university examination, should immediately afterwards in May and June undergo the examinations of the medical council; and for no good purpose other than that of adhering to tradition. But—

> Outworn ideals are fading fast away,
> Beyond its buried past the world has ranged,
> New influences shape its trend to-day,
> But the council bides unchanged.

We offer our apologies to the poet for modifying the last line. We hope, however, that the medical council will see the fitness of the change.

Each member of the medical council should at once make public to his constituents the number of meetings of the council and its committees he had attended, what he received for such attendance, and what he drew for mileage, and what routes he took in travelling to Toronto. This information would enable the members of the medical profession to judge properly as to the value of the services of each representative. In every instance where a territorial representative cannot satisfy his constituents on these points during the past four years, he ought to be opposed vigorously if he seeks reelection.

THE ONTARIO MEDICAL COUNCIL.

We are receiving many letters congratulating THE CANADA LANCET on the stand it has taken with regard to the finances of the medical council. If any one will give but a very casual study of the announcement, it will be readily seen that the council has been living far beyond its income.

As one member of the council said in the debate on the finances this must lead to bankruptcy if persisted in.

The president, Dr. E. A. P. Hardy, has tried to justify the medical council. He states that the accounts are properly audited. Every one knows that an audit does not disclose details nor the propriety and wisdom of the expenditures. An audit only shows that the expenditures were authorized and that there are vouchers for them. What we must have are the details in order that the profession may be able to judge as to the rightness or wrongness of the outlays.

Dr. Hardy thinks that it would be a matter of much expense to supply a financial statement to each member of the profession. We do not agree with this at all. Each member is supplied with a copy of the announcement, and all that is necessary is to show in the treasurer's report where the money went. This would not involve any additional cost, as the announcement must be printed anyway. A few extra items would meet the demands.

If everything is just as it ought to be why is it so hard to find out the facts? We have tried to do so, and so has our contemporary, *The Canadian Journal of Medicine and Surgery*. The funds in the hands of the medical council belong to the members of the medical profession. They are the *real* shareholders, and it is their absolute right to receive the fullest information on every point of income and expenditure. We mistake not if they will not insist upon this.

The plea that it would cost a good deal to do this, was met so far as we are concerned, as we would have, free of cost, given the information to our readers. All we sought was the information. This request was refused. We were told that we might secure it by making use of our territorial representative. This is most undignified.

We have on more than one occasion contended that the medical council should receive the support of the medical profession. But there is no way that will meet this position so well as free criticism when such is called for. The medical council has called forth this criticism and must hear the consequences of its own acts.

THE HOSPITALS, REFUGES AND ORPHANAGES.

The fortieth annual report of these institutions for Ontario has come to hand. The information is both useful and important.

There are now 71 hospitals, 34 refuges, 32 orphanges, 3 homes for incurables, 2 convalescent homes, 2 Magdalen asylums, and 28 county houses of refuge.

The number of patients in the hospitals at the first of October, 1908, was 3,097; the number admitted during the year to 30 September, 1909, was 43,113; the number of births was 2,578. During the year there were 2,963 deaths, a percentage of 6.07. The total number of days of patients in the hospitals was 1,069,534. The provincial grant to hospitals was $149,853.18; the amount received from all sources was $1,288,180.47. The subscriptions and donations amounted to $167,947.48. The total expenditures on hospitals amounted to $1,594,751.27, of which $314,947.51 was on capital account. The average daily cost for the province was $1.23.

This indicates much generosity on the part of the public. New hospitals have been opened at Welland, Almonte, Port Arthur, Fort William, and Ingersoll.

The government grant of 20 cents a day is paid on all patients in hospital that are not ten years old. In hospitals over ten years old the grant is paid only for those from whom they do not receive more than 70 cents a day. The grant is not paid for a longer period than 120 days.

In the case of sanatoria for consumptives the government makes a grant of $4,000 on their erection and equipment. The grant for maintenance is $3 per week where the sanatoria do not receive more than $4.90 per week from the patients. During the five years 1900-1905 these grants amounted to $20,438.60, and from 1905 to 1910 they were $98,973.05.

Very good work is being done for consumptives. During the year 1,051 patients were admitted to the hospitals for such cases. This work is going on well in Toronto, Hamilton, London, Ottawa, Kingston, St. Catharines, etc. Dr. Bruce Smith urges that suitable buildings be erected in the counties. These buildings may be frame with good verandahs. There is a notable decrease in the number of deaths from tuberculosis. This is due to a considerable extent to the diffusion of knowledge on the nature of the disease and its method of spread.

The report goes on to urge that there should be some sort of an organization in every city to aid in the work of charity, but more particularly to check fraud on these funds. It is a very bad thing to pauperize the public. These local organizations should have:—

1. An executive committee composed of some of the best and most influential people in the place.

2. It must have an executive head with business ability, patience and intense love for the work.

3. It must consist on care of our neglected children by parents and guardians.

4. It must have a large number of friendly visitors who can and will spend a part of their daily lives for the personal benefit of those who need them.

5. It in some way must come closer to the people and not be content to deal with only those who apply for assistance.

THE NATIONAL SANITARIUM ASSOCIATION.

The report for the past year of the National Sanitarium Association is a very satisfactory one. The institutions mentioned in this report are the Muskoka Cottage Sanatorium and the Free Hospital for Consumptives.

The trustees state that patients from every province in the Dominion have been treated in these institutions. In no year in the history of the association have so many important things been done.

The average number of patients in the Muskoka Free Hospital for Consumptives was 80. The additional building has raised the accommodation to 140 beds. In this way the time is now extended for patients from four months to six months, and sometimes longer if it is thought special benefit may be derived from the prolonged stay. There have been additions made to the Muskoka Cottage Sanatorium.

It is stated that the Christmas sale of stamps netted $6,000.

The medical report is an interesting one. It refers to the greatly increased interest that is now taken in measures looking towards prevention. There is now a good laboratory in connection with the institution. The medical report also mentions that a larger number of advanced cases have been admitted.

The number treated in the cottage sanatoriums was 227, made up of 48 from the previous year, and 179 new cases. The medical treatment gives some statistics on the results of treatment. These, on the whole, are rather creditable. The following figures are interesting. Apparently cured, 9.15 per cent.; disease arrested, 2.958 per cent.: much improved, 45.77 per cent.; stationary, 5.63 per cent.; failed, 4.93 per cent.: died, 4.93 per cent.

In the Muskoka Free Hospital for Consumptives there remained from the previous year 50. During the year there were admitted 284, making a total of 334 treated in this portion of the association's work.

The pathologist, Dr. Alfred H. Caulfield, gives some remarks on the investigations of the year.

The total income from all sources was $49,641.96, and the total expenditures amounted to $52,606.84, causing a deficit of $2,964.88.

THE TEACHING OF OBSTETRICS.

As this must ever form a most important portion of the professional duties of every general practitioner, it is of the utmost importance that every doctor before entering upon his life's work should receive a thorough training in this branch of the curriculum.

We give in another portion of this issue the report of the committee appointed by the American Obstetrical and Gynaecological Societies. It contains some interesting information. The committee was composed of gentlemen well calculated to deal with this subject.

INEBRIATE HOME NEEDED IN TORONTO.

Every large city has its due quota of drunkards. There must be found some fairly satisfactory way of dealing with these cases.

The present state of affairs in Toronto could not be much worse than they are. We have looked into their subject in a number of Canadian cities and find that the method of dealing with the inebriate is satisfactory.

Controller Spence of Toronto has reported on this matter to the city council. What he says is worth careful study by all the cities of Canada.

"That the committee recommends the appointing of a deputation to wait upon the Provincial Government and ask for such co-operation as will secure the establishment, maintenance and operation of a hospital for inebriates, and the commitment thereto of habitual drunkards; that an earnest appeal be made to the Government for the provision of sufficient and adequate asylum accommodation for all insane persons whose insanity demands public restraint and treatment. The holding of a conference with the representatives of charitable institutions now receiving grants from the city, with a view to ascertaining what provision could be made for the care of such persons as are now committed to jail on the charge of vagrancy, who are not deserving of imprisonment for some other reason.

"It would be difficult to devise a more irrational or ineffective method of dealing with inebriates than is the standard Police Court system of 'a dollar and costs or thirty days.' That treatment never benefited an offender to whom it was applied. Its failure to restrain or prevent drunkenness is sufficiently shown in the fact that the drunk and disorderly arrest in the City of Toronto have steadily increased from 3,493 in the year 1899, to 9,247 in the year 1909. During the criminal year ending 1909 there were 2,208 commitments to Toronto jail for the offence of drunkenness. The city paid for the doing of more harm than good to a

lot of women and men who overcrowded the jail, numbering, as they did, nearly half of all the prisoners sent to that institution."

The report then goes on to state that if the present jail was improved in ventilation and the rooms rearranged and better lighted, it would meat the needs of the city for many years. It would be necessary, however, to find accommodation elsewhere for drunkards, the insane criminal, and the indigent.

RABIES.

In the *Southern California Practitioner,* March, there is an article by Young on Rabies in which among other things he calls attention to the fact that cases have followed bites by skunks. In 1875, Janeway reported ten cases on the Kansas frontier due to bites by this animal and the writer reports five cases of rabies developing among eighteen cases of bites by skunks in Arizona from May '07 to May '09; the majority of these reported cases were treated by Pasteur treatment, but there were five deaths.

The fact that this animal is almost universal in North America, that it is usually inoffensive apart from the odor and that so many cases are traceable to it makes it important that all cases in which it bites should be treated as possible cases of rabies.

A VERY GRAVE ERROR.

The experience of many of the best men of the profession, not only of the United States, but abroad, has established the clinical value of antikamnia tablets. Among those who have paid high tributes to their value and who occupy positions of great eminence, may be mentioned Dr. J. Acheson Wilkin and Dr. R. J. Blackham, practitioners of London. They have found these tablets of value in the neuralgias and nervous headaches resulting from over-work and prolonged mental strain, paroxysmal attacks of sciatica, brow-ague, painful menstruation, la grippe and allied conditions. Indeed, the practitioner who has such cases as the latter come under his observation, and who attempts their relief by opiates and stronger drugs, when such an efficient and harmless an agent can be used, commits a grave error.

Experience goes to prove that two antikamnia tablets in an ounce of sherry wine, taken every two to four hours, will carry the patient through these painful periods with great satisfaction.—*Medical Reprints,* London, Eng.

ORIGINAL CONTRIBUTIONS.

MALARIA.

By B. J. HASELWOOD, Bowmanville.

MALARIA is a specific infectious disease caused by the plasmodium amalaria characterized in its common forms by periodic paroxysms, consisting of chill, fever and sweating stages, and by its response to quinine.

As I have not access to a reference library, that part of my paper covering the purely scientific side of the subject, you will not find very exhaustive. For the clinical aspect of the subject I have drawn from a series of about 3,000 cases of malaria fever that have come under my care, while practicing in the southeastern part of the State of Kansas.

Historically the disease is one of the most ancient known to medical men. Hippocrates, the father of medicine, divided malaria into Quotidian and Tertian and Celsus distinguished the pernicious forms. There is evidence, which all but proves that the ancient Egyptians were familiar with the disease.

Morton, 1692, was the first to associate the disease with conditions arising from low lands and swampy districts. In 1880 Laveran, while stationed in Algeria discovered the specific parasite in the blood, but it remained for Ross in 1897 to demonstrate the means of transmission of the parasite, namely, by the mosquito. His observations were soon confirmed by Grassi and others, and we then had full proof of the method of transmission of the disease.

Laveran described three forms of the parasite, which later investigators have classed as, the crescentic form of the Estivo Autumnal, the flagellated form of the same parasite, the third being degenerate forms of the preceding. Richard in 1882 described the inter-corpuscular hyaline parasite and the segmenting bodies. It remained for Golgi, in 1885 and 1886, to describe the specific forms of the parasite found in Quartan and Tertian Ague. He also first proved that the malarial paroxysm coincided with the segmentation and sporulation of the parasite.

When segmentation occurs every 48 hours we have Tertian Ague; when it occurs every 72 hours we have the Quartan form.

The Malaria parasites are classified as Sporozoa belonging to the subclass Haemo-sporidia. There are three varieties, the Tertian, Quartan and Aestivo-autumnal, the last class being sub-divided into quotidian and Tertian.

The life history of the parasite is somewhat complicated, as we have man, the mosquito and the parasite involved, and of the three varieties of

parasites each has three distinct cycles, the human asexual cycle, the mosquito sexual cycle and the cycle of reproduction by inter-corpuscular conjugation. The last cycle giving an explanation of relapses, latency and chronicity in malaria.

When the infected mosquito bites man it injects into his blood, elongated organisms called sporozoits. These parasites endowed with the power of amæboid movement, immediately attack the red blood cells and penetrate them, and there feeding upon the cells pass through the asexual cycle of their existence, reproducing themselves by a process of segmentation and sporulation. Usually but one parasite attacks a cell, but there may occasionally be several.

The parasite upon its entrance into the cell begins to grow and to acquire pigments, at first in small amounts but later in considerable quantities. This pigment is obtained from the haemoglobin of the disintegrating red blood cell. Gradually this pigment which shows active movement, due to protoplasmic currents within the parasite, becomes collected near the centre of it which by this time has filled the red cell and swollen it to twice its normal size. How fine dividing lines may be noted extending from the centre of the organism to the periphery. These lines to the number of 12 and 24 divide the plasmodium into as many small ovoid cells, each with a fragment of the original neucleus. The red corpuscle now ruptures and liberates this new generation of sporozoits into the blood stream where they, in their turn, attack fresh corpuscles and thus repeat the cycle once more. The liberated pigment is taken up by the liver. The repetition of this process in a given number of hours gives us periodicity in malaria.

In examining the blood of malarial patients it will be seen that a certain number of the full grown parasites do not segment and sporulate. It is in these forms when taken up by the mosquito commence the sexual life cycle of the organism.

If a mosquito of the species Anopheles obtains blood from a malarial patient containing only spores, these soon perish, but if the blood contains mature gametes of both sexes they go on to the formation of sporozoits by sexual conjugation in the mid-gut of the mosquito. The male cell, if we may call it such, when it reaches the intestine of the mosquito throws out flagella which lash around until they free themselves from the main cell. These flagella are, in reality, spermatazoa. These cells processes conjugate with the female cell and the result is a sporont. This sporont becomes motile, penetrates the intestinal wall and lying between the basement membrane of the intestinal epithelium and the muscular coat becomes spherical in shape and forms a cyst. Within the cyst are developed spherical bodies called sporoblasts. The 7th day these sporoblasts have formed delicate filaments and are called sporozoites. The cyst now rup-

tures and the sporozoites make their way to the salivary tubules of the mosquito there to remain till transmitted to man when bitten by the mosquito.

The Malarial parasite in its multiplication in man, generation after generation tends to run itself out, or in other words tends to lose that potential power of reproduction of its species by segmentation and sporulation. If this power of reproduction were entirely lost in every case, providing the patient could withstand the disease over a given period, malaria would be a self limited disease of comparative short duration. We do get cases of malaria in which spontaneous recovery occurs and these recoveries must be due to the loss of potential of the malaria plasmodium.

But there is a power of rejuvenescence possessed by the plasmodium, which power is only exerted by the parasite when the life energy of the cells has run so low that fear of complete extermination exists. Rejuvenescence is brought about by means of inter-corpuscular conjugation of young hyaline forms of the parasite. This conjugation is asexual. To all appearances the conjugating cells are similar. Complete union of these parasites can only take place within the red cell, for there only is found the necessary nourishment. When inter-corpuscular union takes place the red cell bursts and the new organisms freed now becomes encysted and enters into a Zygote or resting stage. This stage may last over a great number of days or months until such a time as conditions are favorable for growth when the cyst bursts and liberates its contained sporozoite, thus precepilating a fresh attack of malaria.

In all probability these Zygotes or resting forms lie dormant in the spleen or bone marrow. While the malarial parasites are the direct cause of malaria, yet there are a number of contributing factors which indirectly aid in infection and play a most important part in the general etiology and prophylaxis of the disease.

It may be stated generally that the further you get away from the tropics the milder becomes the type of malaria. In the tropics malaria is prevalent the year round, while further north it is more prevalent during the summer months. As the Anopheline mosquito usually remains at rest during the day and goes abroad at night we will expect to find more infections occurring during the night than at any other period of the 24 hours, and this is found to be the case. More cases of malaria are found in the low lying districts, and it was a well known fact, long before the discovery of the mosquito as a carrier, that persons in the lower rooms of a house were more liable to malaria than those in the upper stories. These facts are readily explained when it is known that the mosquito is the source of infection.

A rainy season in a locality where malaria is endemic usually causes an increased number of cases of malaria.

In reviewing all these contributing causes of malaria it will be seen that whatever tends to favor the growth of, and multiplication of the mosquito tends to increase malaria. Other factors pertaining to the individual himself may have a marked bearing on precipitating a malarial attack. Exposure to the sun, over eating, deficient food, in fact, anything which may lower his powers of resistance may cause a malarial paroxysm, where the small number of the parasites would not otherwise have produced an attack. For it must not be thought that every individual infected with the plasmodium must of necessity have a malarial paroxysm.

Symptoms.—The different forms of acute malaria have so many points in common that it would be well to describe a typical malarial paroxysm, later giving the symptoms peculiar to each form.

The period of incubation may be stated to be between 9 and 12 days, during which time the parasites are passing through their cycles of existence, but are not present in sufficient numbers to produce symptoms.

During the latter part of this period we may have prodromata due to the poison produced at the last two or three sporulations, but the poison not being in sufficient quantity to produce a typical paroxysm. These prodromata are yawning, stretching, aching in loins and back, dull languid feelings, anorexia, inability to concentrate the mind and irritability of temper. These symptoms may be slight and only appear a few hours before the paroxysm when they are very markedly increased.

The paroxysm is divided into three stages, namely, the cold, the hot and the sweating.

The cold stage is ushered in by chilly feeling passing up and down the spine, gradually spreading all over the body. The skin and mucous membranes become pale. The skin takes on a goose flesh appearance. The patient now shivers, teeth chatter and he complains bitterly of the cold. He covers himself up and lies as quiet as possible, for moving the limbs only aggravates the sense of cold. The head begins to ache and the pain in the back becomes severe. One of the most marked symptoms is the feeling of tightness in the chest. It is more of a feeling of oppression than of real dyspnoea. He usually becomes nauseated and vomits. During this period which lasts from a few minutes to 2 or 3 hours, although feeling intensely cold the temperature is much above normal. Gradually the sense of cold disappears, hot flashes alternate with cold until the whole body feels hot. The patient throws off the covers, the skin is flushed and hot, the pulse is full and bounding, the headache is intense, the nausea and vomiting increases. The flesh feels sore to the touch, the temperature continues to rise reaching 103 to 105 degrees F. and delirium may develop. The tongue is heavily coated with a dark

brownish yellow fur, there is marked thirst, suddenly the temperature begins to fall, beads of perspiration appear upon the forehead and upper lip, then a general sweating breaks out, nausea disappears, headache and backache leave and the patient generally falls into a quiet little sleep, waking up feeling quite fit again. Thus, we have completed one of the most striking phenomenon in the whole category of disease.

Having described a typical paroxysm let us now give a brief description of some of the Atypical forms. It might almost be said that the variations from the typical are so marked and so frequent that the exceptions might almost be called the rule. In a great many paroxysms one or two of the stages may be wanting. The hot stage is the most constant, the cold stage the least so. The patient may have but a few of the prodromata such as yawning, aching and stretching, when the fever supervenes followed by sweating and a return to normal. An attack of this type is called a dumb chill.

In simple tertian we have a paroxysm every other day. It is the rule for the chill to occur at exactly the same hour of the day. Occasionally we find the chill occurring from two to four hours earlier, when the paroxysm is said to anticipate. Again the paroxysm may occur from 2 to 4 hours later, when the paroxysm is said to retard. In fully 50 per cent. of the cases of tertian ague we have a double infection. On two successive days we may have the patient infected resulting in a chill occurring every day, thus producing a quotidian type of the disease. These paroxysms may occur at the same hour each day or may occur at different hours. Thus we may have a morning chill to-day, and an afternoon chill to-morrow. We may not only note a difference in the severity of the paroxysms due to the different generators of parasites, but we may also find that one may be of the retarding variety, the other of the anticipating variety, so that we may have a very varied picture in double infections. Then, too, one generation may die out, the other remaining active in which case the condition will return to one of simple tertian.

In quartan malaria the paroxysm occurs every 72 hours, but we may have a double quartan in which case we will have a paroxysm on two successive days with a day of apyexia. In triple quartan a typical paroxysm will occur every day or a quotidian type of the fever will have developed.

The aestivo-autumnal infections may be of the tertian or quotidian variety. As this parasite produces the more severe forms of malaria we would naturally expect that the accompanying symptoms would be prolonged, and such is found to be the case, although the cold stage may be mild or absent. Still all of the other symptoms are more severe and the length of the paroxysm may be from 24 to 48 hours. The same variations in type as found in tertian and quartan are also found in the aestivo-

autumnal, but to a more marked degree. The temperature almost invariably falls to normal or below, but the patient usually feels much prostrated and not by any means free from pain.

In quotidian aestivo-autumnal we have a paroxysm every day with a short period of apyrexia. This fever runs a more regular course than the tertian. This quotidian form of the aestivo-autumnal is often mistaken for typhoid fever. The period of return to normal temperature being so short and the patient not feeling free from symptoms thinks he has had no period of apyrexia. Cases frequently occur in which the patient is infected with two or more varieties of the malarial plasmodium. When such cases occur we are said to have mixed infections. The tertian is most frequently found with the aestivo-autumnal. Thus, we have a condition with symptoms so inconstant and with so many modifications that it is next to impossible to describe it.

A few words about pernicious malaria. Pernicious malaria is but extremely acute malaria or fulminant malaria. It is but a more severe type of the same disease. A type extremely malignant, one in which the onset is sudden, the symptoms severe and in which a fatal termination rapidly supervenes if very active treatment be not carried out.

The most common variety of pernicious malaria is the comatose variety. In the severer forms the chill is followed by stupor. Coma and death may occur in a few hours from convulsions or collapse. In children especially, if the case is not promptly treated by hypodermics of quinine, death almost always occurs with the second paroxysm, and but few adults survive a third attack.

The next and most common form is the algid or abdominal type. It is practically a peritonitis with extreme shock and without inflammation. The causes of perniciousness in malaria are an extreme toxaemia, a massing of the parasites in the brain capillaries or those of the abdominal viscera, a susceptible patient, and a greater number of the parasites.

In a district where malaria is endenic and where almost everyone has had malaria at some time or other in his life. Malaria is a factor that must be reckoned with and kept constantly in mind when treating patients for other conditions or diseases. You will find it cropping up in connection with all classes of cases. Let one have but some lowering in the condition of the patients, general health, be it from accident, injury or disease, and if your patient has ever had malaria, you may be sure that he will have some return of this disease.

This, I think, due to one of two factors. First, a reinfection of a mild type so mild that in fact that under ordinary circumstances malarial paroxysm would not be precipitated, but the incidence of accident or disease has lowered the vitality of the patient to such an extent that conditions are favorable to the propagation of the malaria parasite, or secondly,

where malaria is endemic and the mortality is low you will find it the rule that patients will not continue treatment sufficiently long to completely eradicate the malaria. In these cases the malaria parasite is evidently in its resting or zygote state, waiting for a favorable opportunity to declare itself. In proof of the latter statement, I might say that I have known patients to have moved from malarial districts, and after a period of perfect health for over 3 years had a return of malaria following confinement or an accident.

In newly settled districts where malaria is endemic typhoid is very liable to become epidemic, due to the lack of proper sanitary arrangements and to bad water. Typhoid and malaria under these circumstances are very liable to take on a very severe form. There has been much confusing of typhoid with malaria. The aestivo-autumnal forms of malaria frequently taken on a typhoid type and are usually then called typho-malaria. There is no such a disease. But typhoid may be associated with malaria. The patient suffering from a double infection, although some writers claim that the coincidence of the two diseases is rare. To me it has seemed strange that they have not been found more frequently associated, especially in districts where the great majority have or have had malaria. To my mind I can see no valid reason why the diseases cannot occur together more frequently than recorded and I candidly believe that they do, although often unrecognized owing to the lack of proper laboratory examinations.

Clinically typhoid is very frequently diagnosed as malaria, as instance the cases of typhoid in the American Army during the Spanish-American war, of 20,738 cases of typhoid fever only 10,428 were diagnosed clinically.

During the summer and fall of 1901 I had the opportunity of observing several cases of typhoid fever associated with malaria, during that summer I had almost 1,000 cases of malaria mostly mild tertian infections, although I had 2 cases of pernicious malaria with 1 death.

In my practice I had 6 cases of typhoid associated with malaria and saw 3 others in consultation. I will give you a short history of 3 of the most interesting cases.

Case 1. Boy, J. H., age 8 years, taken ill with headache, general malaria, nose bleed and mild diarrhoea with offensive stools. He remained home from school for 3 or 4 days, on the 4th day from school he had a chill followed by a high fever. When I was called to see the child I found the boy dull and heavy, slight delirium, tenderness over abdomen, spleen enlarged, tongue heavily coated. I took a specimen of blood for examination and made 2 or 3 smears. I prescribed quinine in one gr. doses to be given every two hours. Microscopic examination showed tertian malaria, and widals test positive. This case ran a typical typhoid course. The

chills not returning. At the end of 3 weeks, the temperature in the evening was normal Two days later the boy had a typical malaria paroxysm. Parasites were again found in the blood. He was kept on quinine, iron and arsenic for 2 months, and although the convalescence was slow he made a good recovery. The peculiar feature of the case was that the malaria lay dormant until the typhoid fever had run its course.

Case 2. Man, age 19 years, Scotchman, coal miner, single. This young man had a typical attack of typhoid fever lasting 4 weeks. Widal test positive on 7th day. After having a normal temperature for 4 days he was seized with a violent chill followed by fever and sweat. As the temperature began to drop to normal his nose began to ooze blood, I used adrenalin without success and was forced to plug both anteriorly and posteriorly. Second day temperature normal, removed plug, but bleeding continued. Urine dark and evidently blood. Replugged nose. Examination of eyes showed hæmorrhages into sclera. Mouth showed sub-mucous hæmorrhages, skin petechial. Diarrhoea developed with tarry stools. Gradually the condition grew worse and the patient died on fourth day. Blood examination showed malarial parasites on the day of chill, but not after that. Treatment quinine, calcumm 1 locate, adrenalin and gelatine intravenously, nothing seemed of any avail. The family history for four generations did not show a hæmophilic. This was evidently a case of hæmorragic typhoid associated with malaria. To what extent the malaria was a factor in precipitating and aggravating the attack I am not prepared to say.

Case 3. Boy, aged 14, had typical typhoid, widal positive. At the end of the 2nd week had chill followed by stupor, convulsion, and paralysis of left side. Took blood smear and administered quinine hypodermically. Gradually the patient rallied but did not regain consciousness completely for 10 days, during which time the temperature gradually fell to normal. The convalescence was very slow. Left sided paralysis persisted and 2 years after had not improved. The blood examination for parasites was positive.

Prophylaxis. As the cycle of the disease is from man to mosquito and from mosquito to man again, it can be readily seen that whatever measures will break this chain will stamp out the disease, and if those necessary prophylactic measures could only be carried out over a sufficiently long period of time the disease would be entirely stamped out.

The three steps necessary must, therefore, be the destruction of the parasite in the human being, the extermination of the disease carrying mosquitoes and the prevention of the access of the mosquitoes to man. In trying to rid ourselves of the disease carrying mosquitoes it will be necessary to use every means possible to rid ourselves of stagnant water for it

is the chief breeding place of mosquitoes. This may be accomplished by draining, filling in pools, ridding ourselves of the stagnant rain water that is so often found in barrels and cisterns in malarial districts. When we cannot get rid of pools of stagnant water by these means we must endeavor to destroy the larvae by means of oil. The mosquito in the house may be destroyed by disinfectants of which sulphur is the best. When we have done all this, then screen the doors and windows and have netting for the beds, and thus prevent the mosquito from getting access to the house and individual. The measures directed towards the destruction of the parasite in man should be prompt, thorough and long continued treatment of all cases of malaria with quinine and the administration of quinine to all other individuals in sufficient quantities to prevent infection or should infection occur the parasites will be destroyed before they develop sufficiently to cause the disease. All latent cases should be hunted up and proper treatment carried out.

Treatment. Quinine is a specific in malaria. All cases of malaria will respond to quinine if it be properly administered. Although quinine will kill the plasmodium of malaria, it will not restore damaged tissues. In some cerebral cases the disease though cured, has left its mark in the shape of a permanent monoplegia, paraplegia, or hemiplegia. The method of administration of quinine will vary a great deal, much depending on the type of the disease and the promptness with which we wish to charge the blood with quinine. Quinine may be given by the mouth, per rectum or hypodermically. When quinine is given by the mouth it is very essential that solution and absorption take place, therefore, it is inadvisable to give the drug in pill form. It should be administered in capsule or in solution.

In treating a typical malarial paroxysm during the cold stage I used warm coverings, heat to the body and for nausea and vomiting creosote in minimum doses repeated every hour. The creosote I dissolved in glycerine and hot water. During the height of the fever I gave a powder of phenacetin gr. v, soda bicarb. gr. v, and caffein citras gr. ii repeated every two hours. This, as a rule, was well retained and helped to reduce the temperature and relieve the headache. When the temperature had reached normal I gave calomel gr. ii, and podophyllin gr. ½, followed by saline in 4 hours. Quinine I administered in the form of 3 gr. capsules, beginning 12 hours before the next expected chill. I gave 1 capsule every 2 hours till 5 were taken. The following day 3 gr. capsules were taken. Quinine was now discontinued until the 7th day, counting from the chili when 10 gr. would be given. This dose I would repeat on the 14th, 21st and 28th days, dating from the day of the chill. This was done to prevent a relapse which was most likely to occur on those days. In cases of double infection I usually administered 15 grs. at one dose when the sweating stage had passed.

In aestivo-autumnal quotidian I gave from 10 to 15 grs. at 1 dose, this being administered each day when the temperature was lowest.

In pregnant women with malaria I administered Dover's powder with quinine with the result that in a period of over 5 years I did not have one case of abortion or premature labor, due to malaria or quinine.

In closing let me say that malaria where endemic is the bugbear of the surgeon and gynæcologist as well as the physician. The doctor must almost look upon every case coming under his care as one of malaria with some other disease or condition as a complication.

ETHYL CHLORIDE AS A GENERAL ANAESTHETIC.

By W. WEBSTER, M.D., C.M., Anaesthetist to the Winnipeg General Hospital; Lecturer on Anaesthetics in the Manitoba Medical College; Lecturer on Practical Pharmacology in the Manitoba Medical College.

ON being requested to read a paper before this society I thought that a consideration of the subject mentioned in the title might not be without interest to the members.

To the end of 1909, including the administrations at the Winnipeg General Hospital by myself and the house staff and my own outside cases, we have had 3,315 cases of ethyl chloride anaesthesia. Of these, 2,620 were administered before ether, chloroform or A. C. E. mixture, and 695 were given for short operations at which no other anaesthetic was used. The majority of these cases have occurred during the last two years, a little diffidence, which is quite natural in the case of the use of a new anaesthetic, having previously been shown regarding its use by some of those engaged in operative work. The operations for which this anaesthetic has been used alone are those of tonsillotomy, the removal of adenoids, or these operations combined, opening abscesses, removing finger or toe nails, extraction of teeth, resection of ribs for empyema, iridectomy, injection of tubercular hip joints, reduction of fractures, dislocations, etc., which shows that it has a large field of usefulness. The quantity used in most cases is 5 c.c., but in some rather prolonged cases amounted to 15 c.c. or even 20 c.c.

In this series of cases we have met with no fatalities, though on three occasions it has been necessary to resort to artificial respiration for a few moments. The cases in which artificial respiration has been required were all operations for the removal of tonsils and adenoids, and in at least one instance a blood clot had formed over the larynx and was not wiped away with sufficient promptitude. Some of the cases, notably the empyema cases, have been in such extremely bad condition that one would have hesitated to use ether or chloroform. I am aware, however,

that our series of cases is too few to enable us to draw any important deductions as to the relative safety of this anaesthetic, and for this I shall be obliged to refer to the statistics of other writers.

The advantages over less volatile anaesthetics are well marked in the rapid induction and recovery periods, by which a great saving of time is effected on the part of the anaesthetist and operator especially when a number of short operations have to be performed consecutively. The comfort to the patient of losing consciousness in a period which is estimated in seconds, instead of minutes, as required by less volatile anaesthetics, together with the less disagreeable and irritating odour of the drug are also points of which we must not lose sight.

This anaesthetic has been used at all ages from children of 24 hours to adults of over 80 years of age.

The method of administration varies. That described as the closed system, in which rebreathing takes place into a bag inhaler being the one finally adopted, and which is that generally used in Great Britain. On the continent of Europe and in some hospitals in Great Britain and the United States a more open method is used, the drug being sprayed on a mask covered by a number of layers of gauze, variously mentioned by different anaesthetists as 4 to 12, until the patient loses consciousness. This, and the more or less open methods, have the disadvantage of prolonging the induction period until it becomes a matter of two to four minutes, and thus one of the advantages of the anaesthetic is neutralized. The exponents of this method, however, claim that a greater safety is obtained, as the various stages of anaesthesia can be better followed than when a rapid induction compresses the different stages into fifty or sixty seconds or less, making it almost impossible to differentiate them. It is very problematical whether there is anything practical to be derived from this slow method of induction, while it seems reasonable to suppose that the patient gets, on the whole, a larger dose of the drug, which is certainly a disadvantage, as being more likely to promote vomiting and other disagreeable after effects.

The dose used to induce anaesthesia is usually 3 c.c. for children and 5 c.c. for adults, when given in a closed inhaler. This dose gives an anaesthesia varying from 50 second to 2½ minutes; but even after this there is often an analgesic condition of the patient which permits of the operation being continued, sometimes for as long as five minutes. Where a longer anaesthesia is desirable, further doses may be given—or a more or less continuous spray kept up; in this way operations of an hour or more in duration have been performed. It is very questionable, however, whether this anaesthetic has any advantage over such a safe anaesthetic as ether, in prolonged operations. From my own experience I prefer ether when the operation is of sufficient duration to necessitate the use of

more than 5 or 10 c.c. of the drug. Its chief utility appears to me to be in obtaining anaesthesia before the use of such anaesthetics as ether or chloroform, and for short operations. In this way it fills a gap in the armamentarium of the anaesthetist between the light and brief anaesthesia of nitrous oxide, and the deep narcosis of chloroform or ether.

Owing, I presume, to the bright flush which usually spreads over the face of patients under this anaesthetic, numerous writers mention that the blood pressure is raised. This is certainly a fallacy, Cole, (*a*) Embley, (*b*) and myself (*c*) having shewn in numerous experiments that the blood pressure invariably falls with an anaesthetic dose, though there is sometimes a very slight preliminary rise for a few seconds before the fall commences; with a more dilute vapour it is unchanged. Embley (*d*) also showed that, like chloroform and in contrast with ether, it produces a paralytic effect on heart muscle; the quantity of ethyl chloride vapour, however, required to produce this effect was nineteen times as great as that of chloroform vapour.

The rate of heart beat is at first decreased and the excursion lessened, but as the blood pressure rises on elimination of the drug, the heart beats become more rapid. Embley (*e*) showed that by vertical rotation of an animal with the head up, under deep ethyl chloride anaesthesia, the blood pressure was lowered considerably, though much less than with chloroform; the paralysis of the vasomotor mechanism being apparently much less profound than with a corresponding depth of chloroform anaesthesia. This is of considerable practical importance, as some operators prefer the sitting to the recumbent position for operations about the mouth, and in many English hospitals this anaesthetic is constantly used for such operations with the patient in the sitting posture. I have administered it a number of times in this position without any troublesome effects though, on general principles, I always prefer the recumbent position when using a general anaesthetic. When the sitting position is used, the head should be erect on the spine and not thrown back with the trachea on the stretch, as this interferes with free respiration; besides which the blood, salvia, etc., gravitate towards the back of the mouth and are swallowed or inhaled, in the former case of giving rise to vomiting, and in the latter, to laryngeal spasm. If, on the other hand, the head is tilted too far forward, the chin may press on the trachea and so cause respiratory embarassment.

Safety is undoubtedly the first consideration in the use of any anaesthetic, and though ethyl chloride was first used in 1846 it did not come into general use until the last decade. A committee of the British

(*a*) Proc. Physiol. Soc., June 14, 1903. (Jour. of Physiol., Vol. XXIX, p. 25.)
(*b*) Proc. Royal Soc., B., Vol. LXXVIII, 1906.
(*c*) Bio-Chemical Jour., Vol. I., Numbers 6 and 7.
(*d*) Op. cit.
(*e*) Op. cit.

Medical Association reported unfavorably upon its employment as recently as 1880. Since its revival, however, in 1896, it has gradually advanced into favor till it now occupies a position of considerable prominence in the anaesthetic world.

The death rate has been variously estimated, but is usually placed at 1 to 10,000. McCardie records 12,000 cases with four deaths, an average of 1 to 3,000, which he collected in the Birmingham district. Luke (*f*) cites a list of 24 fatalities occurring between 1900 and 1906, and a considerable number have since been reported. This anaesthetic therefore occupies a position between chloroform and ether in point of safety, and it is only courting disaster to act on the assumption that it is almost absolutely safe, as some have stated. It is certainly far less safe than nitrous oxide, but has so many advantages over this anaesthetic, such as portability, being less disagreeable to inhale, and longer duration of anaesthesia, that these, for certain operations, far outweight its disadvantages.

A large number of inhalers, more or less complicated and useful, have been invented for the administration of ethyl chloride. On the whole I have found Ormsby's ether inhaler as efficient as any; while being perfectly simple there is nothing to get out of adjustment as in the more complicated ones. A capsule containing the drug is broken, the contents being allowed to spray into the bag of the inhaler; the sponge is put into place, and the inhaler applied closely to the face. Unless this is done quickly, so volatile is the anaesthetic that a portion is lost, sufficient often not remaining to induce anaesthesia. Or, the capsule may be dropped into the bag of the inhaler and broken there with the hand outside the bag.

Most ethyl chloride inhalers are intended to be applied to the face before the capsule is broken. This enables one to obtain regular breathing and to secure the patient's confidence; but the breaking of the capsule in the confined space it then occupies makes an explosive sound sufficient to startle the patient, especially if of a very nervous temperament, and in fact has proved so disagreeable that personally I have abandoned this method, in spite of its obvious advantages.

Camus and Nicloux (*g*) have recently published the result of their research on "Chloride of Ethyl in the Blood during Anaesthesia." They found that a mixture of about 20 per cent. of the gas with air sufficed to keep an animal under the influence and that, unlike ether or chloroform, the quantity of ethyl chloride contained in the blood varied very considerably without apparently causing the death of the animal experimented upon. In numerous examinations of blood from anaesthetised

(*f*) Guide to Anaesthetics, 1906.
(*g*) Jour de Physiologie et de pathologie générale, Paris, 1903, p. 76.

animals they found the quantity to vary from 30 to 75 milligr. of ethyl chloride per 100 c.c. of blood, but in anaesthesias of short duration sometimes the quantity reached 200 milligr. per 100 c.c. of blood. They therefore state that the fatal dose cannot be established as it can for chloroform.

The elimination they found very rapid, especially in the first five minutes, after cessation of the anaesthetic. At the end of ten minutes the blood is practically free from the drug. This is doubtless the main reason why the after effects are not so severe as with chloroform or ether. They vary, however, with different patients, with the quantity of the drug used, and the amount of rebreathing. With short administrations, vomiting occurred about once in seven or eight cases. Sometimes there is headache; this is more apt to occur when the patient is allowed to move soon after the return of consciousness, than if kept in the recumbent posture for half an hour after the operation. Another important point is to have the patient prepared as for any general anaesthetic, with the stomach empty, etc., although this is not so imperative as in the case of ether and chloroform anaesthesia.

If the administration is conducted by means of a closed inhaler, the breathing quickly becomes deeper and more rapid, this affords a valuable guide to the stage of anaesthesia. A little later vibratory movements of the larynx are felt by the finger under the chin, which in a few moments deepen until the characteristic laryngeal stertor is established. About the same time that the breathing deepens the patient's color improves, the face becoming flushed. In a few cases a light perspiration breaks out over the face, but in my experience this is the exception, though some writers seemed to have observed it frequently. The eye-balls are now fixed, generally in a position of convergent squint, and turned either upwards or downwards. The pupils are widely dilated and do not react to light.

When the operation is not upon the mouth it can be commenced immediately on the first sign of stertor, before the patient is as deeply anaesthetized as is described above, the inhaler being left applied to the face for a short time longer in order to lengthen the period of available anaesthesia. I have never seen any reflex act occur when a skin incision or puncture was made at this stage. This permits of a longer time for operative procedures than when the inhaler has to be removed before the surgeon can commence his work.

In about one-third of the cases one meets, there is pronounced masseteric spasm, even under deep anaesthesia. This is of no consequence if the nasal passages are clear, and in fact has never given me any trouble except when the operation necessitated the opening of the mouth. In these cases, with adults and older children I make a practice of inserting

a closed gag before the induction of anaesthesia. In younger children, who would be alarmed at this procedure, I first anaesthetise and then use a boxwood wedge to open the teeth, when necessary, before inserting the gag.

In conclusion, I would reiterate the necessity for the closest watchfulness during the administration of this anaesthetic. The anaesthetist must use the same care as with chloroform or ether, or if possible more, the action is so rapid that over-stepping of the boundary line of safety is a matter of seconds only and must be recognized quickly so that restorative measures may be immediately commenced. Owing to the volatility of this drug, however, its elimination from the organism is quickly obtained by artificial respiration and the patient can be rescued from a condition which, if it were induced by chloroform or ether, would almost certainly be fatal.

INTERNATIONAL COMMISSION ON CONTROL OF TUBERCULOSIS AMONG DOMESTIC ANIMALS.

By M. H. REYNOLDS, Secretary.

IT seems desirable that the public should be given opportunity to know what this Commission is doing inasmuch as the Commission represents indirectly the Canadian and United States governments, and involves live stock sanitary control work of all of the individual states.

The last session held at Detroit was devoted largely to reports. There were present representatives of Canadian and American breeders, Canadian and United States Departments of Agriculture, American and Canadian veterinarians. The following reported: Committee on Education and Legislation; Committee on Location of Tuberculosis in cattle; Committee on Dissemination of Tuberculosis; and the Committee on Disposition of Tuberculous cattle. The Committee on Education and Legislation made a partial report presenting a critical study of experience of certain states in their efforts to deal with this problem. The purpose of this was to present full information for the Commission concerning mistakes, and failures, and comparative success of communities that have undertaken serious work with tuberculosis.

The committee on Location of Tuberculosis in Cattle presented their report under such headings as "Provision for Notification;" "Location by Tuberculin Test;" "Location of Infected Herds Through Meat Inspection Service;" "Most Important Sources of Animal Tuberculosis."

The committee on Dissemination of Bovine Tuberculosis presented its study under such headings as "Introduction of Disease into the Herd;" "Dissemination by Feeding to Calves;" "Dissemination by Contact at

Shows;" "Dissemination by Placing Healthy Animals, in Contaminated Stables;" "Dissemination by Transportation of Healthy Animals in Infected Cars;" "Dissemination by Pasture Exposure." The discussion on this report gave considerable attention to the problem of tracing back from the killing floor to the infected farm with a view to detecting the diseased herds and concentrating control work as much as possible on diseased herds.

The committee on disposition of Tubercular Cattle reported concerning the necessity of accepting tuberculin for diagnosis as a fundamental; the necessity of voluntary co-operation; and the superiority of voluntary co-operation to measures of compulsion. This committee considered the feasibility of the Bang and Ostertag methods of dealing with tubercular herds under American conditions. It also made recommendations concerning the relation of indemnity to final disposition of carcass; the principle of carcass salvage; the obligatory disposal of all clinical cases; and a study of the conditions which should determine the disposition of reacting cattle.

A very considerable amount of discussion on this report was given to the question of remuneration for owners and particularly as to whether this should be regarded as a temporary or as a permanent provision in tuberculosis control work. A number of members held that it must necessarily be considered as a useful preliminary and temporary measure.

Careful consideration was given to the possibility of making either the Ostertag or Bang method of dealing with tuberculosis in the herd, or a combination of the two, feasible in America and Canada for grade herds. This is along the line of finding some method more economical than slaughter for as many herds as possible.

The next meeting of this International Commission will be held in Ottawa.

INTRODUCTION TO A DISCUSSION OF THE EFFECTS OF MODERATE DOSES OF ALCOHOL.*

By WILLIAM L. REID, M.D., F.R.F.P.S.G.

FOR a long time past no one has denied that large doses of intoxicating drinks are harmful to the human body, but the majority of people still believe, or act as if they believed, that small doses of alcohol may be taken regularly with impunity, if not with actual advantage to the consumer. If this be true, good and well, so far as they are concerned, and the question of their becoming total abstainers resolves itself into whether or not they believe that their temperate use of intoxicants may

* Given at a meeting of the Glasgow Branch of the British Medical Temperance Association, 22nd February, 1910.—*Glasgow Medical Journal.*

not lead others to try to use them temperately—others, with whom, as we well know, the temperate use is a physical impossibility.

But if it could be proved that even small doses of intoxicants are useless and actually hurtful, the argument in favour of total abstinence would be powerfully reinforced. For, surely, no man, at least no Christian man, would himself be willing to use a food or drink which does no good and may do serious harm, or would be willing to recommend or supply such to his neighbour.

In opening the discussion to-night, I intend to submit evidence that what we, in times past, considered innocuous doses of alcohol are really harmful and should be avoided if we are to retain the best health and strength possible in the artificial and strenuous life most of us are compelled to lead.

First, we must define our terms. By alcohol, I mean any intoxicating beverage containing that substance. By moderate doses, I mean such as are taken regularly by thousands of our fellow-citizens, and which produce no apparent sign of intoxication to the ordinary observer.

Perhaps the most striking evidence of the detrimental effect of small doses of alcohol are the results of careful experiments carried out by Professor Kraepelin, of Munich. So delicate were the instruments used in these investigations that time could be measured by them to the one-thousandth of a second. He showed that even the small dose of alcohol contained in a glass of beer caused appreciable mental disturbance. "On the average, the keys were released more rapidly than before the alcohol was taken, but the wrong key was much more frequently released than under normal circumstances. Speed was obtained at the cost of correct judgment." For the very same reason, at sales in the country, the auctioneer used to see that the whisky bottle was sent freely round to "refresh" the probable bidders.

Kürz and Kraepelin found that after giving 3 oz. of alcohol to an individual for twelve successive days the power of accurate mental work was reduced by 25 to 40 per cent.: not a small dose of alcohol, but not a small mischievous result. Professor Aschaffenburg, in referring to these experiments, pointed out that a man who takes his usual bottle of light wine or his whisky and soda to dinner every day, although he would be indignant at the suggestion, is never really sober from one week's end to another—that is to say, exact experiment would show that he is never mentally so acute and capable as he would be without the alcohol. Professor Aschaffenburg made some careful experiments on typesetters, working in their usual surroundings, and showed that under the influence of a little more than an ounce of alcohol in the shape of Greek wine, their power of accurate work was reduced by 10 per cent., although the

men themselves were unaware of the fact, or, at least, did not connect it with the real cause.

Again, if we could accurately compare the health of persons who take small quantities of intoxicants with that of those who in like circumstances take none, the result would be an unanswerable argument for or against the moderate use of alcohol. There are in the United Kingdom large bodies of men who have for many years past been members of friendly societies to which they pay a weekly subscription, and, in return, are supported by them in sickness. Most of these societies are composed of men who are not abstainers, but they must be temperate, else they are not admitted to membership. A few such societies demand that their members be total abstainers. Every such friendly society must make an annual return of its intromissions to Government. Here, then, is an opportunity of comparing in large numbers temperate men with total abstainers. They are all working men, engaged in the same kind of occupations, living in the same localities, eating the same food, and drinking the same water. The only essential difference is that the one set takes moderate doses of alcohol, the other takes none. The Government returns show that the members of non-abstaining societies have an average of nineteen days of sickness per annum, while those of abstaining societies, such as the Rechabites, have less than fourteen days. In the case of the Glasgow District of Rechabites, with 25,776 members, the average annual sickness for 1907-1908 was nine days. Is it possible to escape the conclusion that the moderate use of alcoholic beverages resulted in more sickness, and so was injurious?

Whatever causes ill-health may be expected to cause premature death. Have we any means of comparing the length of life of the abstainer and non-abstainer? Certain life assurance companies have found it to their advantage to keep the figures relating to abstaining members separate from their general business. Obviously the directors will not insure men who take anything more than the most moderate quantity of alcohol, experience having taught them that this would involve serious loss. Let us take the results in the case of one of the oldest of such companies, the United Kingdom Temperance and General Provident Institution. In its annual report for 1906, it is stated that "in the general section during the quinquennium our mortality has been 88 per cent. of the expected, whilst in our temperance section it has been only 72 per cent. of the expected." For the year 1906, the expected claims in the general section were £126,000, the actual payment was £103,000. In the temperance section the expected claims were £131,000, the actual payment, only £70,000. In the light of these figures, do you wonder that such societies offer large bonuses to their abstaining members, or that some, such as the Scottish Temperance Life Assurance Company, gladly take them at 10 per cent.

less premium than that paid by the average applicant! It is to be further noted that in connection with the United Kingdom Institution the actual claims in the general section were decidedly less than the expected, proving that the directors were very careful about the kind of life insured. But the actual claims in the temperance section were lower still, and, to a striking extent, proving that the life of the total abstainer is, on the average, *better* than the temperate *best*. Of course, it is easy to point to abstainers who die young, and to men who are not even temperate who die old; but these exceptions do not invalidate the ordinary rule, and certainly keen business men, such as the directors of insurance companies, are no likely to act on unproven data.

For many years past it has been a matter of common knowledge that alcoholics die readily from infectious diseases and after operations not usually fatal, and in circumstances generally where the constitutional powers are put on the strain. It remained for recent observers to give the scientific explanation of these facts. In a lecture delivered in London in 1906, Metchnikoff remarked on the fact that almost all the failures to check the development of hydrophobia were found to occur in alcoholic patients, and he traced this to the alcohol having had a paralysing effect on the white blood corpuscles, whose function it is to destroy any infective microbes which have gained access to the body. Professor Sims Woodhead states that the experiments of Delarde and Laitinen have shown that "it is almost impossible to confer immunity against rabies, tetanus, and anthrax on alcoholised animals." In a lecture delivered in London in July last, Professor Laitinen showed that this held true not only in the lower animals, but also in human beings. During the past three years he has experimented on 223 persons of all classes and ages, and the results have been such as to warrant him in saying, "It seems clear, therefore, that alcohol, even in comparatively small doses, exercises a prejudicial effect on the protective mechanism of the human body."

A few years ago a committee of fifty scientists was appointed in America to consider dispassionately the liquor problem in that country. After years of investigation and many careful experiments, they issued a report in two volumes. The following is an extract from that report:— "In all those vocations of life where keen senses, sharp attention, the ready and immediate action of clear judgment, or great concentration of the mind are called for, alcohol in any form or amount is injurious."

Dr. T. S. Clouston, late of Morningside Asylum, Edinburgh, says that the nerve cells of the brain are not fully developed until 25 years of age, and that no person should taste alcohol before that age. Dr. Eben. Duncan, of this city, says no one should take alcohol until middle age.

Dr. Buchner, Professor of Medicine in Munich University, said, "Alcohol kills the largest number of victims by ambush, as it were, in that it undermines the power of resistance to sickness, so that the apparently quite temperate drinker succumbs to a lung inflammation or an infectious disease which the sound normal body easily overcomes. But what the physician most fears in alcohol is chiefly the injuries to the nervous system and the intellectual powers."

Many people seem to believe that if a man never gets drunk from alcohol he is unlikely to suffer injury from it. This belief ought not to exist nowadays, because it is not held by the great majority of medical practitioners. Dr. W. A. Parker, of Gartloch Asylum, who addressed us in November last on "Alcohol in Relation to Insanity," said, "drunkenness and alcoholism were, in fact, quite independent phenomena." Dr. Clouston says, "I think it is an under-estimate that for one man or woman who goes so far as to become actually insane through alcohol, there are a hundred who take lesser but still serious brain damage which shows itself in all sorts of vices, laziness, immorality, and crime."

Such testimony might be largely multiplied if time permitted. Let me mention one more argument against taking moderate doses of alcohol as a beverage, and it is one which has always impressed me deeply. It is this: I believe that no man or woman ever began to take moderate quantities of alcohol intending to fill a drunkard's grave. Dr. Basil Price, the vice-president of Livingstone College, stated that, from data he had collected, he believed that 10 per cent. of those who began life as moderate drinkers became drunkards; and it has been reckoned from the Registrar-General's returns that 60,000 persons die directly or indirectly from alcohol in Great Britain every year. To be on safe ground, let us say 10,000. Is this not an awful sacrifice of life from a preventable cause? Some say that excess in food kills more people than excess in drink. But gluttony is the abuse of a *good* thing which *must* be used to sustain life, while even moderate drinking is the use of a *dangerous* thing which is not required to sustain life, and *need not* be used at all. Thus the question arises for each individual, Am I one who may, without risk, use alcohol moderately? Is it only the dull, foolish, ignorant, selfish, or vicious man who becomes a drunkard? Far from it. Our clergymen, lawyers, doctors, our poets, painters, musicians, even our gentle and devoted mothers and wives become engulfed and perish in this quicksand, to an extent of which the general public are largely unaware.

I have no doubt but that, founding on the change of belief with regard to alcohol during the last fifty years, and especially in the medical attitude towards it in recent years, that fifty years hence our people will be astonished that we so long allowed a powerful and particularly insidious drug to be sold in our streets, just as we did tea, coffee, or bread,

and that we did not, at least, give the people the power to say whether or not they wished it to be so sold in the districts in which they resided.

I am not a total abstainer from alcohol, except as a beverage, and I count moderation or temperance in the use of a dangerous drug to be the employment of it *only* when it is needed, and thus I use chloroform, opium, *and* alcohol.

In conclusion, it seems to me a sensible deduction that if alcohol is not necessary for the maintenance of my life and health, and if it can be reasonably shown that its use, even in moderate quantities, will reduce my capacity for accurate work, that it has done dire harm to others and may do so to me, it seems sensible to conclude that I ought to avoid its use myself and persuade all those whom I can influence that this is the safer and saner course.

ETHER AN ANTIDOTE OF COCAINE AND STOVAINE POISONING.

Engstadt, *Jour. A. M. A.*, has found that ether was a good antidote of cocaine and stovaine poisoning. It should be administered as ordinarily given to produce surgical narcosis. Ether stimulates the vasomotor system, is a tonic to the heart muscles, stimulates the action of the respiratory centres and of the brain and of the pneumogastric nerve, and increases the pulmonary circulation in the first stages. While cocaine inhibits the action of the heart, especially on the right side, it has also a marked inhibitory action on the respiratory centres of the brain. Death may occur from feeble respiratory movements of the so-called Cheyne-Stokes type, or asphyxia. Ether stimulates the heart and the respiratory system almost instantly. The pulse becomes fuller at once and of normal tension. The marked mental excitement is allayed as the patient goes under the influence of the ether and the effect of the poison rapidly disappears. The individual regains consciousness as soon as the effect of the small amount of ether has disappeared. To get the best results, the anæsthetic is administered only to the degree of mild surgical narcosis, or, at times, even less than this. A mask should be employed and the ether given by the drop method. This is all important. Given by the old method, the ether would only add to the danger of asphyxia by excluding air from the venous blood engorged lungs.—*New York Med. Jour.*, 26 March.

CURRENT MEDICAL LITERATURE.

MEDICINE.

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

THE EFFECT OF ATROPIN ON THE EXCRETION OF SUGAR IN DIABETES MELLITUS IN CHILDREN AND ADULTS.

Of the drugs which are safely and advisedly used in the treatment of diabetes for specific effects, sodium bicarbonate for the alkalies and codeia for the opiates have stood as prototypes. Rudisch (*Jama,* LIII, page 1336) reports some marked examples of the effect of atropin on excretion of sugar in three cases of diabetes in children nine, eleven, and fourteen years old respectively. The author states that "it is often possible to suppress sugar secretion solely by atropin without reducing the carbohydrates." The sulphate and the methylbromide of atropin are in greatest favor. The latter is said to have the advantage of being less toxic and the disadvantage of being expensive. The sulphate is given to children in the dose of one-hundred fiftieth grain ter in die. The author has given one-tenth grain daily to children and one-sixth grain to adults without harmful results. When atropin is withheld the percentage of sugar rapidly increases, to fall again when resumed.

Doctor Jacobi has probably had the largest experience with the use of belladonna. In pertussis the dose for the child is that number of drops which produces the physiologic effect. In this disease the remedy has been used for indefinite periods of time without any apparent harmful effects. This would seem to argue in favor of at least further trial of atropia in diabetes mellitus. Drugs should always be given guardedly in this disease. The liability of habit is not great with atropia.—*The Physician and Surgeon.*

CLINICAL OBSERVATIONS ON THE EFFECTS OF CERTAIN DRUGS IN DIABETES MELLITUS.

Hall (*Quarterly Journal of Medicine,* July, 1909, page 417) reports results of clinical experiments on the effects of codeia, opium, secretin, and aspirin in diabetes mellitus. The author's results seem to favor opium rather than codeia. The general results with the drug were more uniformly successful. He observed no tendency to craving after the withdrawal of the opiates. The dose must often be carried quite high, as much as twelve grains of codeia and of opium daily. Secretin was prepared from the upper three or four feet of fresh small intestine of the

pig. The maximum dose of nine drams daily was given. Practically no noteworthy effects were produced. Aspirin produced no definite effect. The effect of these subtances was tested on the liquid intake, the urine output, the sugar output, and the body weight. The number of cases, eight, is small, yet they have a certain value in showing how unreliable some of these drugs may be in individual cases, and the importance of not relying upon general statements so frequently heralded of the effects of certain drugs in the cure of this malady.—*The Physician and Surgeon.*

HEREDITARY TETANY.

Only about ten examples of this rare condition have been recorded; a new case is contributed by O. Ascenzi (*Riv. Sperim. di Freniatria,* Rome, 1909, xxxv, p. 40). In most instances the disease has been hereditary; in a few it has only been familial. The patient, a washer-woman, aged 43, with no family history of importance, had had febrile attacks with tetany from infancy till she was 12 or 15; at 29 she married, and at 33, after the birth of her second child, the attacks of tetany returned in her hands and arms, and returned annually for three or four months —January to April. The attacks were aggravated by her employment, which also produced pruritus and formication in the forearms; they were not influenced by menstruation, but grew so much worse while she was suckling her third child that she had to wean it. In the attack the hand assumed the typical obstetric position, and there was painful paraesthesia in the hands and forearms with spasms; occasionally spasms occurred in the feet also. Sometimes oesophageal spasms, vertigo, squint, aphonia, dyspnoea, or phosphenes were noted; fever, gastro-intestinal upsets, skin eruptions or sweatings, disturbances of the bladder, never occurred. The spasms would last two to three minutes, recurring for four to five hours, usually in the mornings. The right hand was more severely affected than the left; the spasms were lessened by movement and massage, which increased the pain, and the attacks were shortened by immersion in hot water. Consciousness was never lost. From May to December the patient's health was good. On examination, in February, the patient's reflexes were normal, as were the pupils and sensation to touch, heat, pain, and vibration, and the special senses. A light blow in front of the ear caused a contraction of the facial muscles, but ceased to do so after a few repetitions. The signs of Erb, Chvostek (junior and senior), and Trousseau were all present, but were absent when the patient was examined in December in good health. Of her four children, the first, aged 12, developed slowly, but is now normal; the second died at 16 months in a typical status epilepticus; the third, aged 8, developed slowly,

and had laryngospasm and squints; the fourth died of tetany at 3 after several weeks' illness. A close association between tetany and epilepsy has often been noted before, particularly in goitre or after removal of the thyroid, both in man and animals. The thyroid gland appeared normal in the author's patient and in her two living children. Transmission of this hereditary tetany appears to be always through the mother; it is probably of toxic origin. The electric excitability (both faradic and galvanic) of the muscles of Ascenzi's patient was increased during the occurrence of the spasms, and was higher on the more severely affected side. When she was well it was normal, and equal on the two sides. The author quotes the literature, and gives brief accounts of the cases already recorded elsewhere.

THE CAMMIDGE REACTION IN EXPERIMENTAL LESIONS OF THE PANCREAS.

John Speese, M.D., and Edward H. Goodman, M.D. (*American Journal of the Medical Sciences*, July, 1909), have now studied seventeen dogs—six for acute pancreatitis caused by injection of oil into the pancreatic duct, four for the effects following ligation, two for the effects following extirpation of the tail of the pancreas, three for the effects following crushing of the tail of the pancreas, and in two dogs a total extirpation was performed. As a result of their investigations the authors conclude that (1) the Cammidge reaction is a constant feature in hæmorrhagic pancreatitis, in mechanical injuries of the gland (crushing of the tail, partial extirpation), and in total extirpation; (2) in certain cases of the subacute type of pancreatitis the reaction is inconstant; (3) the nature of the phenyl-hydrazin compound is not definitely established; if pentose, it is apparently not derived from the pentose-yielding material of the pancreas; (4) a positive reaction is indicative of altered carbohydrate metabolism, due to disturbance of the internal secretion of the pancreas.—*Glasgow Medical Journal.*

SEVENTY-FIVE CASES OF TRIFACIAL NEURALGIA TREATED BY DEEP INJECTIONS OF ALCOHOL.

H. T. Patrick, M.D. (*Journal of the American Medical Association*, 11th December, 1909), has employed this method of treatment for about three years, and in this article states his experience of it. The cases treated were not cases of migraine, but of classical *tic douloureux*. Some of them were very severe, most of the patients were quite disabled by

the disease, a considerable number had undergone cutting operations, some were very old and feeble, and in no instance did Dr. Patrick decline to administer the treatment on account of the severity of the case or of organic complications. A brief report is given of each case, and the opinion is stated that of all the methods of treatment available for trifacial neuralgia this is the simplest, least hazardous, and best.—*Glasgow Medical Journal.*

SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., and A. H. PERFECT, M.D., C.M., Surgeons to the Toronto Western Hospital.

SURGICAL TREATMENT OF FISSURE IN ANO.

The quickest and surest way of curing a fissure in ano is to give a general anesthetic and stretch the sphincter thoroughly. The distinctive part of the procedure is to stretch the sphincter by gradual dilatation with the fingers, first inserting one finger, then a second, until at least four are admitted into the bowel. The rest of the dilatation is accomplished by pressing in opposite directions with the thumbs or by having an assistant insert two of his fingers between those of the operator. The success of the procedure depends upon the care exercised in keeping the sphincter from tearing, which might produce irreparable harm. After divulsion the fissure may be curetted. The patient's bowels are not moved until the third or fourth day. Local applications of four per cent. nitrate of silver later on are painless and very beneficial.—*Macalpine, Post Graduate.*

FRACTURES OF THE NECK OF THE FEMUR.

Fractures of the neck of the femur in old people sometimes cause no other symptoms than disability. The mildness of the trauma and the freedom from much pain should not deceive one.—*Amer. Jour. of Surg.*

DRAINAGE OF WOUNDS.

R. W. Knox, Houston, Texas, believes that the plain, moist dressing is of great value in lessening the danger of infection in dirty wounds. He applies it by means of thick cotton or flannel cloths, the size of towels, moistening in hot boracic acid solution and kept hot by frequent changing and the use of hot water bags. Almost continuous irrigation may be used with these dressings in place. This dressing secures drainage, and

prevents or relieves infection. Pain is relieved, and devitalized tissue is thrown off without sacrificing any living tissues.—*Ex.*

THE RELATION OF APPENDICITIS TO GYNECOLOGICAL AND PELVIC DISEASES.

Samuel Wyllis Bandler, of New York, concludes that appendicitis in the form of inflammation of the mucous membrane does not result from diseases of the uterus or adnexa. As the appendix is a peritoneally covered organ appendicitis may be a part of a peritonitis which originates from the adnexa. Severe appendix inflammations causing a peritonitis must involve the uterus and adnexa, but do not cause hydrosalpynx. Mild attacks of appendicitis may involve the adnexa without marked adhesions, but with infection of the Graafian follicles. Differential diagnosis as to the original source of the infection is often impossible except by operation.—*Ex.*

HEMORRHOIDS.

In hemorrhoids inject equal parts of thuja and water, about 30 drops to each tumor, once a week for three weeks. Professor Howe claimed this treatment had never failed to cure in his experience.—*Ex.*

SMALL STAB WOUNDS.

Small stab wounds (one half cm. long) in the course of a developing cellulitis of an arm or leg, followed by the application of a Martin bandage above for five to eight hours a day (Bier treatment), will relieve the patient more quickly than large incisions with drainage.—*Amer. Jour. of Surg.*

BURNS AND SCALDS.

Except for those which are very deep or severe, the following is recommended by Moran:

R. Acidi carbolici, 1.
Balsam. peru, 5.
Ol. ricini, 94.

This is poured on gauze or cotton and applied to wound. It should be renewed daily.—*St. Louis Med. Rev.*

GYNÆCOLOGY AND ABDOMINAL SURGERY.

Under the charge of S. M. HAY, M.D., C.M., Gynæcologist to the Toronto Western Hospital, and Consulting Surgeon, Toronto Orthopedic Hospital.

APPENDICOSTOMY IN THE TREATMENT OF COLITIS.

Wallis (*British Medical Journal*, Oct. 30, 1909), reports seven cases of colitis treated by appendicostomy. The first case was one of hemorrhagic colitis occurring in a gas stoker thirty-eight years old. He was flatulent, had abdominal pain, and passed blood and mucus. These symptoms were cured by rest in bed, diet, intestinal antiseptics, and buttermilk. Four months later there was a return of symptoms, the proctoscope showing no lesions within reach. Through the appendicostomy opening the colon was irrigated daily with seven pints of saline solution. Cure was prompt, and the appendicostomy opening was allowed to close.

The second case, a woman forty-five years old, suffered from slight abdominal pain, loss of flesh, and a mucosanguineous diarrhea for six months. There was a marked condition of pyorrhea alveolaris. The upper rectum and sigmoid were ulcerated, and from the discharge taken through the sigmoidoscope the streptococcus longus was isolated. The condition of the gums was treated, and the patient was put upon lactobacilline. An appendicostomy was performed, the patient being washed through with several pints of sodium bicarbonate solution daily. The cure was prompt.

The third patient was thirty years old, and gave a history of ulcerative colitis over some years unbettered by diet and copious enemata. Lactobacilline and flushing of the colon being without effect, appendicostomy was performed and the colon was washed out with five to six pints of warm bicarbonate of soda solution daily. After some months the appendicostomy wound was allowed to close. Thereafter there was a moderate relapse.

The fourth case was a boy eighteen years old, suffering from severe hemorrhagic colitis. This patient began to pass blood fourteen days before he was admitted to the hospital, five or six drachms or even ounces being evacuated with each bowel movement, the latter occurring five or six times a day. The upper part of the rectum and sigmoid were ulcerated. The midline abdominal section enabled the surgeon to determine that the colon was thickened from the sigmoid to the cecum and that there were many enlarged glands in the mesocolon. Appendicostomy was performed and the midline wound sewed up. The large bowel was washed through with five to six pints of saline and finally with some antiseptic solution. The opening was closed in a few weeks, the patient making a complete and rapid convalescence.

The fifth case had suffered from diarrhea for several months, and this was always associated with the passage of blood. There were from twelve to fourteen motions in the twenty-four hours at times. There was some tenderness and retraction of the abdomen. The temperature was persistently high, 101 deg. to 102 deg. The man was emaciated, and a large amount of the food he took passed undigested. Appendicostomy was accompanied by temporary betterment. The patient perished six weeks later, doubtless due to ulceration of the small intestine.

The sixth case, a lady thirty years old, had suffered from chronic membranous colitis for many years. The amount of mucus passed was often enormous. There was a fair degree of abdominal pain, occasional rises of temperature, and that mental concentration upon symptoms usual in these cases. The appendicostomy was followed by prompt and marked improvement both in the colonic symptoms and general condition. Success in this case was regarded as only qualified.

The seventh patient, also a case now membranous colitis occurring in a woman thirty-five years old, experienced speedy relief.—*Therapeutic Gazette.*

TREATMENT OF CHRONIC DUODENAL ULCER.

According to Dr. G. B. A. Moynihan the treatment of a chronic duodenal ulcer should always be surgical (*Lancet,* Jan. 1, 1910). It is only when attacks recur that a diagnosis of chronic duodenal ulcer can confidently be made. Thus in a first or even second attack, medical treatment may be tried.

The surgical treatment of duodenal ulcer may be carried out by (1) excision of the ulcer and restoration of the duodenal canal; (2) excision of a cylinder of the duodenum by closure of the distal end and union of the pyloric cut end with the side of the second portion of the duodenum; (3) partial resection of the duodenum, followed by closure of both cut ends, and gastro-enterostomy; and (4) gastro-enterostomy.

As the cases are seen now the performance of gastro-enterostomy is almost always necessary. The conditions of the ulcer are such that a restoration of the duodenum to its normal state is impossible, and all that can safely be done is to afford a new outlet from the stomach. It is now the author's invariable practice to infold the ulcer, in precisely the same manner as if a perforation had occurred. This allows the ulcer to heal more speedily, as it ensures that almost no food passes through the pylorus.—*Medical Reviews of Reviews.*

OBSTETRICS AND DISEASES OF CHILDREN.

Under the charge of D. J. EVANS, M.D., C.M., Lecturer on Obstetrics, Medical Faculty McGill University, Montreal.

FIBROID TUMORS, COMPLICATING PREGNANCY AND THE PUERPERIUM.

Krusen, *Am. Jour. Obs.*, refers to the following dangers and degenerative processes attending this complication. 1. The growths usually enlarge during pregnancy, by œdema or otherwise. 2. If pedunculated the pedicles may become twisted and the growth gangrenous. 3. The tumor may affect the position of the child. 4. The tumor may cause placenta prævia with all its dangers. 5. It may cause post partum hæmorrhage. 6. Preexisting adhesions to the fibroid uterus may cause impaction in the pelvic cavity and abortion. 7. Tubal pregnancy has been caused by pressure of a tumor upon a tube. 8. Abortion with hæmorrhage and septicæmia are common consequences. 9. It may cause prolapse of the umbilical cord, or 10, spontaneous thinning and rupture of the uterus. 11. It may cause degeneration of the cardiac muscle and of the renal and hepatic epithelium, or it may cause cardiac dilatation. 12. It often causes annoying pressure symptoms, especially from venous engorgement.—*New York Medical Journal.*

INTESTINAL OBSTRUCTION CAUSED BY GRAVID UTERUS.

Ekehorn (*Upsala Läkareförenings Förhandlingar,* Bd. xiv, Nos. 7 and 8) reports a case of intestinal obstruction caused by a gravid uterus. The patient, aged 40, was expecting her delivery in three weeks. On examination it could be distinctly made out that the transverse colon had been pressed down between the abdominal wall and the uterus, lying below the latter. In this way traction was made on the bowel, causing an exaggeration of the left flexure. At the operation, which consisted in simply lifting up the bowel, all the intestines, except the descending colon, were found very distended. The patient recovered, and was in due course delivered of a living child.—*Brit. Med. Jour.*

HEMATOMA OF THE VULVA.

Neumann (*Zentralblatt fuer Gynaekologie,* Number XLIII, 1909) reports two rather interesting cases of hematoma of the vulva in women with varicose veins of the lower extremities. In the first case it was claimed that the midwife had lacerated the external genitalia during the

removal of the placenta. When four hours later Neumann was summoned he had to administer morphin for the relief of the pain. The right labia was the seat of a swelling the size of an orange and of a dark red color. The greater portion of the tumor lay at the entrance of the vagina, the remainder being within that orifice. The treatment consisted in absolute rest and the application of a lead wash. Four days later the tumor burst spontaneously. The sac was emptied of clots and the patient made a good recovery.

In the second case, the patient, a secundipara experienced a burning sensation in the abdomen accompanied by pain. Examination showed the left labia very edematous, and the seat of a tumor the size of an orange which extended up into the vagina. The same treatment was employed as in the first case and the patient was doing well with diminution in the pain and the size of the tumor, when the latter became infected from the insertion of a gauze tampon by the husband. An abscess formed which only healed after evacuation and long continued irrigation.

There probably was some connection between the varicose veins and the vulval tumors. Probably in the first case the hematoma was not caused by the midwife, but resulted from the rupture of varicose veins of the vagina as the head of the child passed through the birth canal.—*The Physician and Surgeon.*

COLLARGOLUM IN SEPTICÆMIA AND PYÆMIA.

Dr. H. Albrecht, First Assistant to Professor J. A. Amann at the Second Gynecological Clinic, Munich, Germany, in a paper read before the Munich Gynecological Society, and published in the *Muenchener Medizinische Wochenschrift,* critically reviews the therapeutics significance of collargolum at the hands of forty-five cases, which have been treated at the clinic in the past eighteen months and are representative of a great variety of septic infections. Of the four modes of administration—by inunction, per rectum, intravenously and per os—the author recommends only the gradual intravenous injection of 1 to 2 c.c. of 5-10 per cent. suspensions. He considers collargolum a valuable therapeutic agent in cases of septicemia and pyemia of medium gravity, in severe resorptive fevers, accompanied by obstinate and enduring toxanemia, more particularly in all such cases, where in spite of local treatment and apparent localisation of the infective process, unchanged high temperature and pulse indicate the presence of a deep-going tissue involvement and a progressive surcharge of the blood with toxins. In these cases the reaction is so prompt and distinctive, that it is impossible to underrate the efficiency of collargolum. According to the author, collargolum

should be given a trial in all cases of puerperal infection, because it is impossible to diagnose the gravity of the infection at the beginning, and also on account of the prompt reduction of temperature and improvement of the general condition which it brings about. In very severe bacteriemiæ, in purulent peritonitis, parametritis exsudativa and in virulent localised suppurations, collargol did not prove of value. The author emphasizes the usefulness of local administrations of collargolum in acute cystitis and in pyelitis, as well as the now unquestionably proved innocuousness of the product. He does not ascribe antibacterial action to collargolum and questions its leukocytogenetic properties but believes that its efficiency is due to a catalytic action, consisting of ready absorption, accelerated oxydation and consequent decreased virulency of the toxins.

Professor Doederlein, *Proc. of the Munich Gynecol. Soc.*, in the discussion of the above paper stated that collargolum therapy is unquestionably frequently of value and warned against the therapeutic nihilism which actuated some of the exaggeratedly adverse opinions.

Dr. A. Abrams in his textbook on "Diagnostic Therapeutics" (New York, 1910, Rebman Co.) refers to collargol in the following manner: Collargol is an allotropic form of silver, which is soluble in water and the secretions of the body. It is chiefly used externally as a salve (unguentum Credé) and has a remarkable influence in many infectious diseases. In many instances it may be necessary in the diagnosis to determine the part played by the infection in a given symptomatic picture, and for this purpose collargol is indicated. The efficiency of this, like many other drugs, is accentuated by intravenous injection. By the latter route, the dose varies from ½ to 5-6 of a grain. Collargol, if effective in septicemia, causes the temperature to fall (within 6 hours), with improvement of the subjective symptoms.—*Buffalo Medical Journal.*

OPHTHALMOLOGY AND OTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., L.R.C.S., Edin., Professor of Ophthalmology and Otology Medical Faculty, University of Toronto, and F. C. TREBILCOCK, M.D., C.M., Ophthalmologist, Toronto Western Hospital.

OCULAR PALSIES IN TABES.

W. C. Posey, Philadelphia, (*Journal A. M. A.*, April 16), remarks on the importance of eye examination in tabes and particularly notices the palsies of eye muscles so frequently observed. These, while resembling the palsies from other causes, possess certain characteristics peculiar to themselves. The first is their transient tendency in the early stages of the disease, a character also marked, though less prominently, in the later

stages. A history of diplopia can often be elicited from patients who are loth to believe that it has any connection with the later symptoms. In addition to the transient tendency, there is the marked disposition to recurrence. The palsy may last only a few hours or even persist for years and the return of the muscle to its normal action even after long periods should be recognized as a possibility in tabetics and tend to discourage operation in such cases. Their tendency to occur early in the disease has been noted by most observers though they may occur at any stage. According to statistics given by Uhthoff and others, palsy of the eye muscles in tabes in adults is more common than optic atrophy which is seen, according to Uhthoff's figures, in from 18 to 20 per cent. of all cases. They are not so common in the initial stages, however, as the Argyll-Robertson pupil or as lancinating pains or loss of reflexes. Rarely, muscles other than ocular may be palsied at the same time, such as those of the palate and vocal cords. It is worth remembering here that that form of tabes beginning with optic atrophy is often for a long time combined with loss in power of the roots of the thoracic nerve when all other symptoms are absent. Posey finds from his experience that inequalities in the size of the pupil and disturbances of its reaction are found in the early stages of cerebral syphilis, often associated with optic neuritis, while palsies of the extraocular muscles as a rule belong to the later stages. Contrary to the rule in tabes, they develop more gradually and persist longer instead of showing a tendency to early disappearance and frequent recurrence. Conjugate deviations and ophthalmopyegia externa are caused almost exclusively by syphilis. Uhthoff has suggested that a non-tabetic ophthalmoplegia can readily be differentiated from one of true tabes by the presence of an unaffected pupil. We must remember, however, that a true syphilitic ocular palsy may coexist with tabes. In fact, tabes often cannot be distinguished clinically from nervous syphilis. Posey thinks that there there is good evidence that tabes is not directly the result of syphilitic virus, but results from parasyphilis from some toxic substance produced in the body. The pathogenesis of ocular palsies in tabes is still in doubt but the common view is probably that they are either pathologic occurrences superimposed on the general disease or that they are part of the latter, *i.e.*, that they are syphilitic ocular palsies occurring in tabes or they are simply a manifestation of the general motor disturbances observed in that disease. Fraenkel's view is that in their earlier stages they are simply due to loss of tonus which is mediated through the disease of the sensory neuron, while later on, when, owing to the long duration or severity of the process in the sensory neuron the motor neuron has undergone secondary changes, palsies are more lasting, more extensive, and their immediate cause is found to exist anatomically in degeneration of the nucleus, nerve trunk, or muscle.

A NOTE UPON PHLYCTENULAR AFFECTIONS OF THE EYE.

Sydney Stephenson, M.B., Ophthalmic Surgeon, and J. A. Jamieson, M.B., Resident Medical Officer, the Queen's Hospital for Children, London, Eng., contribute the following to the *Brit. Med. Jour.*: The view that phlyctenular affections of the conjunctiva and cornea are tuberculous is an old one. The earlier writers spoke of the affection as "strumous" or "scrofulous ophthalmia," a name which indicates clearly enough the view held by them with regard to the origin of the disease. But with the more or less general abandonment of the vocable "strumous," which marked the era following the discovery of the specific micro-organism of tuberculosis by Koch in 1882, there came a corresponding giving up of the word as applied to those affections of the eye. The suggestion made many years before by the famous Glasgow oculist, William Mackenzie, that for "strumous" the word "phlyctenular" should be substituted, was very generally adopted, except perhaps in Germany, where the disease is usually spoken of as "eczematous" conjunctivitis or keratitis, as the case may be.

The pendulum has now swung in the opposite direction. The tuberculous or para-tuberculous origin of phlyctenular disease, after having been under a cloud for a good many years, is again to the fore. Nobody asserts that the phlyctenule itself is of tuberculous histological structure, or that it contains the tubercle bacillus. Nevertheless, it is now widely believed that, practically speaking, the characteristic lesion occurs only in those who are the subjects of tuberculosis, latent or otherwise.

The main facts that have led to this change of opinion are:

1. The frequency with which a family history of tubercle can be obtained from the subjects of phlyctenular disease.

2. The frequent coexistence, along with phlyctenular disease, of other manifestations of tuberculosis—as, for example, enlarged glands or joints, otorrhoea with or without mastoid disease, phthisis pulmonalis, dactylitis, and scrofulodermia.

3. The fact, as shown by the experimental work of J. B. Nias and Leslie Paton, that the blood of patients suffering from phlyctenular disease behaves in a manner which is typical of a definite tuberculous infection. As the result of examination of the blood in upwards of fifty patients with phlyctenular disease, these authors claim that their observations of the opsonic index gor far to support the hypothesis that phlyctenular ulcers are due to the escape of attenuated or dead bacilli from some distant ocus, identified or otherwise, of tuberculous disease.

4. The positive result obtained in phlyctenular cases by employing the Koch, Wolff-Eisner-Calmette, von Pirquet, or other specific test for tubercle (Stephenson, Derby, Weekers, etc.).

The observations with von Pirquet's test recently made by us at the Queen's Hospital for Children, London, confirm the view that phlyctenular disease is a tuberculous manifestation, or, at least, that it occurs in tuberculous subjects. During the last few months we have employed the von Pirquet vaccination in 20 cases in children, whose ages have ranged from 2 to 12 years. The series has included five males and fifteen females. Practically every kind of phlyctenular disease was experimented on, varying from recent conjunctival or corneal eruptions to long-standing scars upon the cornea, which had almost certainly resulted from former attacks of phlyctenular inflammation. The cutaneous reaction, of course, varied much as regards intensity, but the important point was that a positive result was obtained in every instance. In two cases, however, the inoculation was made more than once before a positive result was produced.

It should be added, finally, that a notable proportion of our cases, estimated at 50 per cent., presented more or less obvious signs of tubercle, medical or surgical, while an even larger proportion, estimated at 75 per cent., gave a family history of tubercle.

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., C.M., Fellow of the Laryngological and Rhinological Society of Britain; Assistant Laryngologist and Rhinologist, Toronto General Hospital.

INFLAMMATORY AND SUPPURATIVE CONDITIONS OF THE RETROPHARYNX OF INFANTS.

E. Mather Sill, M.D., in this article, calls attention to a morbid condition of the naso-pharynx of infants and very young children which is often overlooked—retro-pharyngeal lymphadenitis. This condition is not found after the child is three years of age for the reason that the retropharyngeal glands atrophy before that period and disappear. The differtial diagnosis between Pott's disease of the cervical vertebrae and abscessed retropharyngeal glands is made by first taking into account whether the little patient is over or under three years of age and whether the abscess is centrally or laterally situated in relationship to the midaxis of the vertebral column. Again, quite frequently, a large abscess of the retropharyngeal glands will simulate by its pressure effects in the trachea the symptoms of diphtheritic croup. Sill points out in this relation the necessity of inspecting and palpating the posterior pharyngeal wall in all cases in children under three years of age where stenosis of the air passages is the most prominent symptom. In making a digital examination and in the manipulations necessary for the proper evacuation of the

abscess, Sill lays proper emphasis on the fact that no gags should ever be inserted in the mouth, since the forced stretching of the jaws apart throws the abscess against the trachea with resulting cyanosis and danger of rupturing the abscess, which might cause sudden death from aspiration of pus into the larynx.—*St. Louis Medical Review.*

SCLEROMA OF THE UPPER RESPIRATORY TRACT.

Guntzer (*The Laryngoscope*, June, 1909) has correlated all the collected facts regarding scleroma of the upper respiratory tract which came to his notice during an extended search bearing upon the subject. His conclusions are:

(1) Scleroma is an infectious disease, whose onset has occurred even in infancy, but usually begins in adolescence, and does not show itself only in adult life, as some believe.

(2) The so-called Frisch bacillus plays an important role in the causation of scleroma, being found in the exudate and in the tissue proper, and the author's work, proving that a vaccine prepared from the Frisch bacillus can create at last a local immunity, is a further favorable point for the etiogenesis of the Frisch bacillus in this disease.

(3) The Frisch bacillus has a lively and lasting motility when examined in the hanging drop, and it grows smaller and thinner as the age of the culture increases, as observed by the writer. From the agglutination test, also applied here for the first time with the Frisch bacillus, no conclusion can be drawn. Further tests on patients whose immunity has not been influenced by inoculations might prove valuable.

(4) In the biologic experiments, the time factor has been overlooked, and in the future, in so chronic an affection as scleroma, a long time for observation must be allowed.

(5) The writer believes that a parasite or insect may be the means of transmission for this disease, and when discovered will supply the missing link for the infectious etiology of scleroma.

(6) Even allowing its contagion to be mild, at some time the immigration or health authorities in the United States may have to adopt some means to limit the increase in the scleroma cases.

(7) The examination of a small piece of tissue leads to fallacy in histo-pathologic diagnosis; therefore examine as large a piece as possible.

(8) A deformed contour of the external nose is only found in a small percentage of cases.

(9) Metastasis does rarely occur in scleroma.

(10) The diagnosis of scleroma, at least in the early stages, is not easily made, and the clinical course must be taken into consideration along with the bacteriology and histopathology in order to arrive at a correct diagnosis.

(11) Scleroma does not render a patient immune to other infections; but other infections may favorably antagonize the scleromal process.

(12) At this time the x-ray treatment holds out the best prospects of a positive cure for scleroma. The vaccine treatment has at least caused a local immunity, and may be a means of possible cure if used for a long time, and, as to frequency and quantity, in proper dosage. With no criteria to guide the author's original work in this disease, these points in the vaccine treatment still need to be worked out. Surgery has only an elective place in the treatment of scleroma, and is useful only as an auxiliary.—*The Physician and Surgeon.*

AMERICAN ORTHOPEDIC ASSOCIATION.

MEETING AT WASHINGTON, D.C., MAY 3, 4 AND 5, 1910, UNDER THE PRESIDENCY OF DR. AUGUSTUS THORNDIKE, BOSTON.

By B. E. McKENZIE, A.B., M.D.

IN connection with the meeting on Monday, May 2, a clinical day was provided by the medical profession of Baltimore.

Skin Grafting.

Dr. J. Staige Davis demonstrated a method by which the whole thickness of the skin was transferred, a modification of Wolfe's method. Two points were emphasized as essential to success. First, the surface should be thoroughly dried and the air excluded. Second, a retaining material, having wide open mesh, should be employed to keep the grafts intimately in contact with the surface.

Spasmodic Torticollis.

Dr. J. M. T. Finney and Dr. Thomas presented a patient who had suffered from spasmodic torticollis. The operation consisted of removing a portion from the spinal accessory nerve and from the second and third spinal nerves, together with section and removal of a portion of the sterno-mastoid and extensive section of all other muscles involved, commencing at the sterno-mastoid of one side, continuing backward and

around and ending with the sterno-mastoid of the opposite side. Dr. Finney stated that they were endeavoring to devise means by which less cutting would be done. Fourteen patients had been operated upon with an encouraging degree of success.

Ankylosed Joints.

Dr. W. S. Baer showed cases demonstrating the use of animal membrane with a view to securing motion after the manner of Murphy of Chicago. Pig's Bladder is found to be the best covering for the ends of the bones after complete separation and taking pains to shape properly the ends. It is difficult in the knee to secure stability together with a sufficient amount of motion. Prospects are more promising for success at the shoulder, elbow and hip. A reasonable degree of success has been attained.

Experimental Hypopituitarism.

Dr. Harvey Cushing and Dr. E. Goetsch gave a very informing address, demonstrating the effect upon young animals of removal of varying portions of the hypophysis cerebri. It was shown that the removal of varying quantities has a varying effect upon the deposition of fat, causing immediate increase in weight which afterwards is lost, a deteriorating effect in development and a tendency toward infantilism in the sexual life.

Ischaemic Paralysis.

Dr. A. C. Harrison at the Hospital for Crippled Children showed some excellent results secured by shortening the arm bones, associated with manipulation.

Sprengel's Deformity.

Dr. Henry W. Kennard exhibited a surprisingly good result following operation for congenital elevation of the scapula. He expressed his surprise at the small amount of hemorrhage where the operation was so extensive and emphasized the necessity for avoiding the nerve trunks.

Pott's Disease.

Dr. Gungstal Taylor and Dr. Compton Reilly showed a large number of very excellent results following treatment, laying emphasis upon the fact that it was possible in many cases to reduce considerably the amount of deformity by gradual methods. In following out their plan both recumbency and braces are employed. The latter must frequently

Fractures of the Neck of the Femur.

Dr. Alexius McGlannan showed several cases demonstrating the success which attends fixation in the strongly abducted position and

dressing with plaster-of-Paris. In fifteen cases out of seventeen osseous union had been obtained with practically no shortening. Two cases died.

Operations for Infantile Paralysis.

Professor Fritz Lange, of Munich, read a paper laying down the principles involved in tendon transplantation, and also operated demonstrating the method by which he makes use of strong silk strands to supplement tendons. The greatest care must be exercised to secure perfect asepsis. The silk employed after being thoroughly sterilized by boiling in bichloride is kept in a paraffine bath from which it is taken at the time of use.

At the meeting in Washington a large number of very instructive papers were read evincing the amount of original work that is being done by members of the Association.

Pott's Disease: Causes of Paraplegia and their Bearing upon Treatment.

Chas. F. Paynter, M.D., and George C. Moore, M.D., discussed the various causes for paralysis, the most constant of which are the tubercular granulations which form, intimately associated with the cord and its membranes. The prognosis is almost invariably good, the treatment conservative, and operative means seldom called for.

Support for the Spondylitic Spine Obtained by Healing in Steel Bars Attached to the Vertebrae.

Professor Lange has operated sinking in two steel bars, one on either side of the spinous processes from four to five inches in length and secured them by silk sutures to the adjoining vertebrae. This is applicable only in the early stages before the appearance of deformity, or when the deformity is slight.

Scoliosis.

Papers on this subject were read by Truslow, Suter, Lange and Bradford. Emphasis was laid upon the necessity of employing pressure upon the rib prominence and also upon the value of treatment continued during the night. For this latter Lange exhibited a brace intended to be worn throughout the night and tending to constant corrections. This notably difficult subject like all other problems called forth a great variety of recommendations.

Physical Training in Schools for Cripples: Henry Ling Taylor, M.D.

Great progress is being made in forming special classes and in organizing schools for cripples. The Wydener School of Philadelphia was spoken of, one costing millions. Throughout the United States and in Germany other schools have been established. In New York city it has taken the form of numerous smaller ones or of special classes, more then forty having been organized in the city. The work should partake largely of such studies as may be turned to practical account, such as will fit these cripples for some responsible position in life. Careful inspection should be provided, the assignments being under expert direction.

Relief of Scoliosis by Operation.

Dr. Z. B. Adams, of Boston, showed x-ray pictures where an unequal development of the fifth lumbar vertebra caused one of the lateral masses to press upon the ilissus, thereby causing deformity. Removal of this process proved successful in enabling him to overcome the scoliosis.

Chemical and Mechanical Stimulation of Bone with Reference to the Epiphyseal and Diaphyseal Lines.

Roland O. Meisenbach, M.D., gave the results of experiments were shown demonstrating the fact that irritation maintained in the vicinity of the epiphyseal junction in long bones causes an overgrowth. There results, however, later an earlier synostosis so that although the length of the bone may be at first increased there is liability that this will be more than counter-balanced by the early osseous union. This fact is in harmony with clinical observations.

Vaccines in Operative Treatment of Tuberculous Joint Disease.

William Ward Plummer, M.D., read a paper showing the beneficial effects of the use of the mixed autogenous vaccines in connection with operative cases.

On Wednesday at 10 a.m. there was a joint session of the Pediatric Society with the Orthopedic Association, the subject under discussion being poliomyelitis. Most interesting and edifying addresses were delivered by Dr. Robert W. Lovett, Dr. L. Emmett Holt, Dr. Simon Flexner, Dr. Irving W. Snow, Dr. Israel Strauss and Dr. Bernard Sachs.

Dr. Lovett spoke especially from the standpoint of a member of the Health Board, dealing with its etiology, extent and prevention; Dr. Emmett Holt with its clinical aspects, its varying types, its mortality and communicability. He pointed out that the death rate was frequently

much higher than was commonly thought to be the case, varying in different epidemics from five to fifteen per cent.

The experimental work done by Dr. Flexner went to show that in monkeys the virus could be introduced producing paralysis in from three to seventeen days. That it was most readily manifested when introduced pretty directly into the central nervous system, and that it was difficult to introduce by feeding or by injection into distal portions of the body. Dr. Sachs pointed out that there should be no departure from the name which has become so common, namely, infantile spinal paralysis, for while it is true that pathology shows that the affection extends to the cerebrums and also to the peripheral nerves, yet its main characteristics are described by the term. He has long ceased to feel that ordinary treatment by means of massage, electricity, etc., has any beneficial effect. He is impatient with the delay thus occasioned and advocated strongly that the cases at once be handed over to the care of the orthopedic surgeon.

Muscle Group Isolation and Nerve Anastomosis in the Treatment of Paralysis of the Extremities.

Nathanial Allison, M.D., and Sidney Schwab gave a paper on peripheral nerve surgery was compared with that of muscle and tendon transference. It was advised that the tabulation of cases of paralysis of the extremities be in terms of nerve rather than in terms of muscle or deformities. Alcoholic injection into nerve trunks in spastic paralysis is found to disable the over-acting muscles and afford an opportunity for their opponents to gain in power thereby assisting to establish balance.

Tuberculin in the Treatment of Tuberculous Joint Disease.

Dr. John Ridlon reported at length the results obtained in the Home for Destitute Crippled Children, Chicago, reaching the conclusion that no advantages had ensued. Gibney, of New York, and others in the discussion took a more hopeful view of the results. It was generally expressed that vaccine therapy should be extended in its use, especially employing the autogenous vaccines, and that it was of service not only in tuberculosis, but in the treatment of gonorrhoeal joints, rheumatism, non-tuberculous arthritis and in syphilis.

Observations on the Operative Treatment of Paralytic Talipes of the Calcaneous Type.

Royal Whitman, M.D., took up this subject. The operation consists chiefly in the removal of the astragalous, the adapting of the crural extremity to the anterior portion of the os calcis. The author claims that

it is the only operation which is a direct remedy for the deformity as well as the disability. Results shown are highly gratifying.

Report of Five Cases of Fractured Dislocation of the Shoulder.

A. R. Shands, M.D., claimed that operation had been necessary in all cases, sometimes removing the fractured end and adapting the distal portion to the glenoid cavity. Upon a similar subject Dr. Fred H. Albee discussed the diagnosis and frequency of juxta-epiphyseal fracture of both humerus and femur, pointing out that faculty diagnosis was frequent and that position and fixation of the long controllable fragment in a linement with the short or uncontrollable fragment is generally possible and that the best fixation means is plaster-of-Paris. The femur generally should be rotated inward to retain which position the leg may be flexed at the knee.

Osteophytes of the Os Calcis.

J. D. Griffith, M.D., said that in the removal of these the horse-shoe shaped exision is preferred; the opening pointing forward, is the better one.

Operation for the Relief of Anterior Metatarsalgia, Including Morton's Disease.

A. McKenzie Forbes, M.D., in his paper reviewed the literature and the clinical course was recounted and the operation recommended consists in transferring the extensor tendons of the toes to the corresponding heads of the metatarsal bones.

OBSTETRICAL EDUCATION IN EUROPE AND AMERICA.

The following report was presented to the president and fellows by the committee of the American Gynecological Society on the present status of obstetrical education in Europe and America, and on recommendations for the improvement of obstetrical teaching in America. The committee was composed of the following well known teachers: B. C. Hirst, chairman; E. B. Cragin, J. C. Edgar, C. M. Green, E. P. Davis, J. W. Williams, J. C. Webster.

Your committee has received reports from Great Britain, Germany Austria, Switzerland, France and Italy. In contrast with the present system in those countries, a report is submitted from seven representative

medical schools in the United States, which may be fairly classed among the best medical schools in this country.

Great Britain.

A course of lectures, thirty to forty or more each year, is given in obstetrics in all London schools. It usually extends over two years, and lectures on gynecology are given at many schools in addition to those in obstetrics. You will find details as to hours in the *British Medical Journal* for September 4, 1909.

The work in obstetrics consists of the above lectures, clinical teaching in the obstetrical wards (most of the general hospitals now have beds for this numbering from eight to twelve). A class of practical obstetrics, demonstrations in the museum, personal attendance on about fifty cases each student, the number varying with the different hospitals. Each student must attend twenty cases, and in addition each university student (Oxford and Cambridge) must have previously attended cases in the lying-in wards for at least one month.

The teachers of obstetrics also teach diseases of women and their surgical treatment; they are the only teachers who do teach this subject in the medical schools for men students.

(Signed) HERBERT SPENCER.

Germany.

I have arranged the instruction in obstetrics and gynecology in the University of Königsberg, as follows:—

Sixth Semester: Theoretic obstetrics.

Seventh Semester: Obstetrical-gynecological clinic (as spectator); a course in gynecological diagnosis. A course in examinations of pregnant women.

Eighth Semester: Obstetrical-gynecological clinic (as practitioner). A course on obstetrical operations on the mannikin.

Ninth Semester: Obstetrical-gynecological clinic (as practitioner). A course in microscopical diagnosis. A practical course in minor gynecological therapeutics. The physiology and pathology of the newborn infant.

Tenth Semester: Obstetrical-gynecological clinic. Course in obstetrical operations. Course in cystoscopy. Physiology and pathology of the puerperium. A demonstration, weekly, for nine weeks of pathological anatomy (with the epidiascope, microscope, etc.).

Each student in the tenth semester must live a month in the clinic where he observes and conducts about 40 labors and performs the minor operations.

(Signed) PROFESSOR WINTER.

Austria.

Of the five years' course, the student must occupy himself during one year with obstetric and gynecology. During this time, he is obliged to attend the lectures ten hours a week. During this time also he must have his practical training in which he has the opportunity to see a large number of labors and to perform minor operations such as perineal lacerations, episeotomy, manual extractions, etc.

There is mannikin practice in the obstetrical operations.

In addition, he receives practical training in the examination of pregnant women, and gynecological patients. The examination consists of diagnosis in parturient and pregnant women, and in gynecological patients and operations performed upon the mannikin.

HENRY PEHAM,
University Professor of Obstetrics and Gynecology, Vienna.

Switzerland.

1. During the customary ten semester medical course, three to four semesters are devoted to obstetrics and gynecology. Three semesters are obligatory.

2. During this time, the students visit the obstetrical-gynecological clinic and polyclinic where opportunity is afforded them to observe gynecological cases, to examine pregnant women and thus to acquire the necessary technical skill.

In addition, a certain proportion of the students attend the theoretical lectures on obstetrics and gynecology, which are not obligatory.

The obstetrical operations are practiced upon the mannikin, and in addition the students occasionally have the opportunity to perform these operations upon the living patient under the supervision of an instructor.

In the final examination, there is required:

1. Practical demonstration of sufficient knowledge in the examination of pregnant and parturient women and of gynecological patients.

2. The performance of several obstetrical operations on the mannikin.

3. A theoretical oral examination on obstetrics and gynecology.

TH. WYDER,
Director of the University Frauenklinik, Zürich.

France.

In answer to your letter of November 26th, I went to see Professor Lannelonge, one of the leading surgeons here, also a member of the "Institute" of France and senator. The following is a translation of the answers he dictated to me after reading the questions of your letter:—

"Two terms of six months each are devoted to the study of midwifery and obstetrics. The students of the two clinical departments are

inscribed turn about night and day to make a stage in the hospital wards and follow the labor hour by hour till period of delivery. During a term they can follow about 15 cases or more if they wish to do so.

The scope of the course in obstetrics includes not only delivery proper but also all the medical or surgical treatment of women's diseases such as, for example, fibromes, disease of the ovaries, of the large ligaments, etc.

In France the courses are no more given in a theoretical way but are principally practical demonstrations either in the lecture rooms or in the hospitals (woman's wards). All apparatus or instruments for demonstration are used, mannikin work, ward work, polyclinic service, touch courses, etc.

In one word the teaching is very complete, and great stress is laid on the assiduity of candidates. One can say that after their two terms of practically a year's duration, the students are quite qualified to undertake any kind of delivery, and have a sufficient knowledge of women's diseases from a practical view as from a scientific one. This study being far from neglected."

Italy.

In Italy there are schools for obstetrics and gynecology for physicians annexed to all the universities. Equally in all the universities are annexed schools for mid-wives. In Florence there is the Superior Institute for obstetricians and physicians.

The course of obstetrics is of one year for the physicians (the full university course for physicians is 6 years), and the course of obstetrics is by rule assigned at the sixth year. For mid-wives the course is of two years.

The character of teaching is theoretic and experimental (clinic), and comprises also the assistance of women in labour made by the teachers or by their assistants.

The course includes also diseases of women and their operative treatment, as well as the physiology and pathology of the child-bearing process.

The theoretical instruction is given three times a week for the students in medicine, while it is daily for the mid-wives. The clinic practice is daily for everybody.

The students in medicine and the mid-wives cannot perform any operation before the end of their course of studies.

The examination is only theoretic.

Columbia University, College of Physicians and Surgeons Medical Department; Course in Obstetrics.

Second Year. Recitations and demonstrations (once a week for 30 weeks)—30 hours.

Third Year. (First half) didactic lectures (twice a week for half year)—30 hours. Clinical lectures (once a week for half year)—15 hours.

Fourth Year. Practical instruction in hospital and tenements.

(a) Three weks' service in hospital; two weeks being spent on day duty and one week on night duty. During this term of service each student receives daily bed-side instruction and makes antepartum examinations, both abdominal and vaginal on from 50 to 60 pregnant women. Moreover, the students on duty receive a daily clinical lecture and mannikin instruction from an instructor in obstetrics who is the resident obstetrician.

(b) Two weeks' service in the tenements; one week being spent on day duty and one week on night duty.

Each student during his five weeks of practical service delivers personally on an average seven or eight cases, and sees from forty to fifty deliveries.

Columbia University; Course in Gynecology.

Third Year. (First half) recitations (once a week for 15 weeks)—15 hours. (Second half) didactic lectures (twice a week for 15 weeks)—30 hours. Clinical lecture (once a week for 15 weeks)—15 hours.

Fourth Year. Practical instruction in small sections in dispensary and hospital (26 hours for each student)—26 hours.

(Signed) E. B. CRAGIN.

Cornell University Medical College, New York City; Plan of Instruction in Obstetrics, January, 1910.

Second Year. Recitations—32 hours.

Third Year. Section and mannikin work—16 hours. Clinics—16 hours. Illustrative lectures—32 hours. Recitations—32 hours.

Fourth Year. Clinics—16 hours.

In addition, students are required to reside for at least two weeks in the Manhattan Maternity or other Hospital and personally confine at least six women.

J. CLIFTON EDGAR.

Harvard Medical School; Department of Obstetrics and Gynecology.

A. Course in Obstetrics.

Third Year. Lectures on the theory and practice of obstetrics (twice a week)—64 hours. Recitations (once a week)—32 hours. Conferences (once a week)—32 hours.

Clinical Instruction:—Each student spends two weeks in hospital residence, devoting his whole time, day and night, to his obstetric opportunities. He sees operations and normal deliveries, and under supervision and instruction he personally attends from six to ten out-patient cases. After his two weeks of residence he is required to devote a part of his time for a week or more to completing the visits on his patients and writing reports of his cases.

Fourth Year. (In the Harvard Medical School the work of the fourth year is elective; but all students intending to practice medicine elect obstetrics.)

The class work in sections of from six to ten, and each student in obstetrics devotes his entire time for a month. For two weeks he is in hospital residence, and attends from six to ten out-patients, under supervision and instruction. After his period of residence, he completes the visits of convalescence and reports on his cases. There is a clinical lecture and ward visit every forenoon (except Sunday), at which the student has opportunity for antepartum examinations (inspection, palpation, auscultation, pelvimetry, and estimates of size of foetus, for witnessing normal and operative deliveries, for studying puerperal convalescence and the care of young infants. Each student has also a course of instruction, with mannikin and foetal cadaver, in which the various obstetric operations are demonstrated and repeated by the student. Each student also writes a thesis on an approved subject of his choice.

(Many of the Harvard students make use of the opportunities afforded by the summer courses of the Harvard Medical School, and thus increase their clinical training. In addition to the many cases witnessed, the graduates of 1909 attended personally an average of 23 cases.)

B. Course in Gynaecology.

Third Year. (Second half) lectures or recitations (twice a week)—32 hours. Clinical exercises in small sections. Each student attends six clinics, lasting from 1½ to 2 hours. In these clinics the student is instructed in physical examination, diagnosis, and the treatment of ambulatory cases.

Fourth Year. (Elective, taken by a large part of the class.) Instruction is given in sections of from 6 to 10 students, and each student devotes

his entire time during the forenoons of two months. The work is clinical, and is given in the wards and out-patient department of the Boston City Hospital. Opportunity is afforded for practice in history-taking, examination, diagnosis, and minor treatment in the out-patient department. In the house the service the student hears clinical lectures daily, has opportunity for physical examinations, and witnesses operations with demonstration; he follows the convalescence of cases, and each in turn assists in the work of the resident staff. Each student also has abundant opportunity for the study, under supervision, of pathological specimens removed in his presence by operation, and each student writes a thesis on an approved subject of his choice.

(Signed) C. M. GREEN.

Jefferson Medical College, Philadelphia; Course in Obstetrics.

The anatomy and physiology of reproduction fully taught by the departments of anatomy and physiology in the first two years. Embryology and histology are included in this teaching.

Third Year. Three didactic lectures and recitations weekly—90 hours. Demonstration with the mannikin and diagnosis, obstetric manipulations and vaginal deliveries—18 hours. At least one case of spontaneous parturition in hospital, fully demonstrated by an instructor.

Fourth Year. Lectures to the entire class (one weekly)—30 hours. Hospital ward classes with the examination of pregnant patients, the study of complications of pregnancy the puerperal period, normal infancy and complications—16 hours. Clinical conferences in hospital with study of cases—24 hours. Demonstrations of hospital cases by instructors to small groups of students—16 hours. From two to six cases delivered in tenements and under supervision and instruction. Written reports of these cases with quizzes upon the reports by a demonstrator. Record of all work done during the senior year, which record with final examination constitutes final grade for securing a degree.

E. P. DAVIS.

Johns Hopkins University, Baltimore; Courses in Obstetrics.

Third Year. (Obligatory course.) Recitations and demonstrations twice weekly for 33 weeks—66 hours. Mannikin work, once a week for 33 weeks—33 hours. Ward rounds and clinics in groups, once a week for 16 weeks—16 hours. Examination of pregnant patients in groups once a week for 16 weeks—16 hours, total 132 hours. Obligatory attendance of at least 5 cases of labor under supervision in the ward. Optional work and courses in obstetrical histology and pathology, two hours a week for 11 weeks—22 hours.

Fourth Year. (Elective work.) Repeated every 11 weeks to not more than 10 students each time. Each course occupies 99 hours, not including obligatory attendance on at least 10 cases of labor in the out-patient department and attendance at as many operations in the ward as feasible. The course consists of:—Ward rounds—11 hours. Conferences —11 hours. Discharge examination of puerperal woman—11 hours. A practical course in pelvimetry—11 hours. A laboratory course in infant feeding—11 hours. Nursery rounds—11 hours. A practical and laboratory course on the toxaemias of pregnancy—22 hours. A course in comparative placentation—11 hours.

I might add that many of the students in these groups see from 25 to 40 out door deliveries. In each case they are accompanied by an assistant and a trained nurse, and I find that such training is even more valuable than the ward deliveries. They also make visits for the first five, the seventh and tenth days of the puerperium in normal cases, and as many visits as may be necessary in abnormal cases.

These visits are checked in two ways, first, by having the student leave a daily written report in the letter box of the resident obstetrician, and secondly, by having the nurse, who makes daily visits for ten days render a similar report.

J. W. WILLIAMS.

University of Chicago.

The subjects of obstetrics and gynecology are taught in the junior and senior years in laboratory, recitation, and conference courses, in dispensary and hospital clinics, and in the conduct of labor in the homes of patients. Students are obliged to commence their studies by taking the laboratory and recitation courses. Final examinations in both courses are compulsory.

Obstetrics.

1. Conference course on normal pregnancy, labor, and the puerperium. A lecture and recitation course. Each section limited to forty students.

2. Clinical conference on normal pregnancy, labor and the puerperium. Prerequisite: Course 1. Limited to forty students.

3. Clinical conference on the pathology of pregnancy, labor and the puerperium. Prerequisite: Courses 1 and 2. Limited to twenty-five students.

4. Practical obstetrics. Prerequisite: Courses 1, 2 and 3. Limited to fifteen students (senior year).

Clinical obstetrics. In the maternity department of the Presbyterian Hospital, Charity Hospital, Chicago Lying-in Dispensary, Chicago Maternity, and Central Free Dispensary. Prerequisite: Courses 1 and 2. Throughout the year. Attendance upon cases of confinement in various hospitals, and at the homes of patients is required of each student before graduation. Each student will be summoned to cases at the time of delivery, and will attend the patients during and after delivery, under supervision. Clinical records must be kept by students and certificates obtained for attendance on five cases.

Gynecology.

6. Laboratory and Recitation Courses:—Limited to twenty-five students (junior year).

7. Clinical Conference:—Prerequisite: Course 6. Limited to forty students (junior and senior year).

8. Dispensary Clinics:—Conferences in practical gynecology, limited to four in each section. Prerequisite: Course 6—24 hours. 4M. Each term throughout the year.

9. College Clinics:—(Senior year.) In gynecology and obstetrics. Prerequisite: Course 6—48 hours. 4Mj. Each quarter throughout the year.

10. Special Laboratory Work:—For a limited number of students selected by the department staff.

Our teaching methods have been gradually changing in the last ten years. Systematic lectures have been entirely or almost entirely abolished and we have endeavored to instruct our students in small classes. Twenty-two majors of work are required in the junior and senior years, three being necessary in obstetrics and gynecology (at least. two majors in obstetrics are required). Most students voluntarily take more than the requisite three majors.

The faculty feels strongly that there should be an extra fifth year in which more clinical instruction could be given. However, as all our graduates are able to obtain interneships, we feel that we are better off than most medical schools.

The enclosed statement of departmental work gives a detailed account of our method of instruction.

We feel that the number of obstetric cases which should be attended by students is too small. It should be at least twelve. We intend to increase this requirement as our clinical facilities improve.

J. C. WEBSTER.

University of Pennsylvania, Medical Department; Course in Obstetrics.

Third Year. Clinical lectures twice a week—60 hours. Demonstrations of abdominal palpation, pelvimetry, etc., to individual students, each 1 hour. Attendance on a patient in the hospital under supervision and visits daily for two weeks afterwards, average 24 hours. Recitations; Voluntary (quiz).

Fourth Year. One clinical lecture a week for half the year—18 hours. Two weeks of ward class instruction for two hours a day—24 hours. Six demonstrations on the mannikin to sections—6 hours. One week's residence in the southeastern dispensary for out-patient work.

Number of labors attended by each student is 7. There are recitations and voluntary quiz. The physiology and pathology of the child-bearing process, including all the complications and pathological consequences at all periods and their treatment, medical and surgical.

B. C. HIRST.

Recommendations.

We recommend that the teaching of obstetrics should occupy at least two years of the medical course, and that those expecting to practice obstetrics, should be urged to avail themselves of elective opportunities.

That the number of labor cases personally attended by each undergraduate student should be at least six; under supervision and instruction.

Character of Instruction.

We recommend all the known methods of teaching this branch of medicine, namely, didactic lectures, clinical lectures, clinical conferences, ward classes and touch courses, hospital and out-patient instruction, Mannikin practice in operative obstetrics and recitations.

Of the first three methods, we recommend specially, clinical lectures and conferences.

We recommend that ample facilities should be afforded students to make antepartum examinations, including inspection, abdominal palpation, pelvimetry, foetometry, vaginal examinations, etc.

We recommend that a two weeks' hospital residence should be required before the out-patient practice.

Scope of Instruction.

It is recommended, that as obstetrics at present includes pregnancy and parturition, their complications and consequences and the complete recovery of the women after labor; that obstetric instruction should include the medical and surgical treatment of these conditions.

The tendency of obstetrics to become more surgical in practice and to require a surgical training, is evidenced by the fact that in the medical schools of Europe, and in more than one-third of the first fifteen medical colleges of the country, the chairs of obstetrics and gynecology are combined under one head, namely, Columbia, Cornell, Jefferson, Medico-Chirurgical, Tulane, Yale, Lond Island, Harvard Johns Hopkins, Rush, Bellevue, Western Reserve, Michigan, University of Pennsylvania, California.

Of these 15 medical schools, six have combined chairs.

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. W. H. B. Aikins will remove to his new residence, 134 Bloor St. west, in autumn.

Progress is being made in the work of the excavations for the foundation of the New General Hospital, Toronto.

Dr. J. Cameron Wilson, son of Dr. John D. Wilson, has been appointed chief house surgeon of Victoria Hospital, London.

Dr. H. B. Andrew, of Sandbridge, and Dr. H. Bethune, of Eran, Ontario, have been appointed associate coroners.

Dr. Joachin Guinane, of Toronto, has been appointed one of the license commissioners.

Dr. R. D. Rudolf has been made an F.R.C.P. This is a very high honor, indeed.

Sir James Grant, Ottawa; Dr. James Thirrd, Kingston, and Dr. Adam H. Wright, Toronto, will visit Britain this summer.

Dr. R. W. Powell, of Ottawa, has not enjoyed very good health of late. His many friends will wish for his speedy recovery.

Dr. Price Brown, Dr. Murray McFarlane, Dr. Greene, and Dr. Emory have disposed of their properties to those making extensive purchases in the neighborhood of Yonge and Carlton, Toronto.

The new addition to the Toronto Isolation Hospital will cost $75,000. It will be used for diphtheria and measles, while the old wing will be used only for scarlet fever.

Dr. T. A. Duff, of Kingston, Ont., has been appointed house surgeon to Kings County Hospital, Brooklyn, N.Y. He secured the appointment by competitive examination.

C. S. Gideon, Archibald Moir, A. S. Moorhead, A. H. Rolf, all of Toronto, and S. J. Elkin, Manitoba, have been granted licenses of the Royal College of Physicians.

Dr. C. A. Hodgetts, secretary to the Ontario Board of Health, has been appointed the medical officer for the Dominion Conservation Commission.

Drs. Murray McFarlane, F. N. G. Starr, J. G. MacKenzie, and C. J. Hastings, all of Toronto, have returned from their trips to various points in the States.

The wife and son of Dr. Kinder, of Eganville, Ontario, were accidentally poisoned on 11th of May, by taking each a dose of Epsom salts. It is not known how the poison got mixed with the salts.

The infant son of Mr. John Bailley, living near Peterborough, died a short time ago of pneumonia and an abscess behind one ear. The child was treated by Christian Science. An inquest has been ordered.

Dr. Chas. A. Hodgetts, secretary of the Provincial Board of Health, was signally honored in Washington by the medical men of the entire continent. He was elected president of the Executive of the State and Provincial Boards of Health. This organization meets annually in Washington.

The nursing mission on the corner of Hayter and Laplante Streets, Toronto, closed a successful year. Five nurses graduated. The report showed that 346 persons had been nursed. In all 3,339 visits had been made, and 1,873 dispensary cases treated. The receipts amounted to $1,353 and the expenditures were $1,343.

Another old landmark is passing. The fine residence of Dr. W. W. Ogden, 184 Spadina Avenue, Toronto, has been bought, it is understood, by the J. L. Nicholls Co., publishers, for $30,000, Dr. Ogden has occupied the place for over thirty years. The property reaching from Spadina to Cameron Street, some 75 by 200 feet, will be converted to mercantile uses.

WESTERN PROVINCES.

Dr. Brett, of Banff, is doing post-graduate work in Vienna.

Dr. E. E. Meek, of Regina, has been appointed medical health officer for that city.

Dr. Hugh Gillis, of Bethune, Sask., has completed his handsome new residence.

Dr. Brydone-Jock has been appointed health director for the public schools of Vancouver, B.C.

The annual meeting of the British Columbia Medical Association will meet in August.

The citizens of Saskatoon voted down a grant of $110,000 for hospital accommodation. Two years ago the city gave $55,000 for the hospital, and it was thought that the present grant was too large.

H. A. Gibson, M.D. of Calgary, Alberta, who has been taking special courses in surgery and gynæcology in the New York Post-graduate Medical School and Hospital, will return to Calgary about June 8th, 1910.

The Board of Health for the Province of Saskatchewan is composed of Dr. W. Seymour, Regina; Dr. W. J. McKay, of Saskatoon; Dr. E. G. Meek, of Regina; and Dr. A. R. Turnbull, of Moose Jaw. Dr. Seymour is the commissioner of health. Much attention will be paid to tuberculosis.

At Carnduff, Sask., a short time ago a representative meeting was addressed by Dr. Seymour, Health Commissioner for the province, and Dr. Porter, who is travelling in the interests of the Canadian anti-tuberculosis League. A local branch was formed at Carnduff, with J. H. Riddell, M.P.P., Hon. President; Dr. W. F. Lockhart, President; and M. R. Foults, Secretary-Treasurer.

FROM ABROAD.

During the year 1909, there were 887 women attended in the Boston Lying Hospital, and 2,074 were attended in the Out-patient Department.

It is being urged that there should be a school of tropical medicine for the United States under the public health and marine service.

The Supreme Court of Brooklyn has refused to grant osteopaths the right to sign death certificates.

Dr. Abraham Jacobi has attained his eightieth birthday. The event was suitably celebrated by the New York State Medical Society.

Mr. Adolph Lewisohm has given $130,000 to the Mount Sinai Hospital, of New York, for a new pathological laboratory.

The Boston Hospital Saturday and Sunday Association distributed recently over $76,000.

Dr. Herbert Leslie Burrell, a distinguished surgeon on the staff of the Boston City Hospital, died recently in his 54th year.

During the past 40 years there has been a very remarkable fall in the death-rate from consumption in Edinburgh.

The library of the late Dr. Valentine Mott will be transferred from his original home to the New York Academy of Medicine. The old home is to be sold.

The town of Great Barrington, Mass., will receive from the estate of Mrs. Mary A. Mason $500,000 for the establishment and maintenance of a memorial hospital for Henry Hobart Mason.

Dr. Andrew H. Smith, of New York, died 8th April in his 73rd year. He held many hospital appointments and was a well known physician.

The recent centennial of the death of Charles Brockden Brown recalls the character of Arthur, in one of his novels, who is made to live through an epidemic of yellow fever in New York in 1793.

Dr. Robert Fletcher has been awarded a gold medal by the Royal College of Surgeons, of England, for his work of indexing the catalogue of the library of the Surgeon-general of Washington.

The news comes that over 50 per cent. of the native population of Pago Pago, in Samoa, are affected with uncimariasis, or the hookworm disease.

It is authoritatively announced by Professor Elie Metchinkoff that he has succeeded in communicating typhoid fever to monkeys. He is now going to try to secure a reliable vaccine.

Recently the managers of the Hospital for Deformaties and Joint Diseases, New York, gave a complimentary dinner to Dr. A. Jacobi, who has been consulting physician since its establishment.

Since the death of Dr. Andrew J. McCosh, of New York, upwards of $116,000 has been collected for the purpose of erecting a memorial building for surgical work in connection with the Presbyterian Hospital.

For some years, Buenos Ayres, the capital of the Argentine Republic, has had a lower infantile mortality than any other city of its size in the world.

There has been a local outbreak of typhus fever in Newmarket in the County of Cork, Ireland. The disease has appeared in the poorest district.

Professor Kümmell, addressing the German Surgical Congress, said that the only cure in appendicitis in the true sense was early operation. In this view Professor Kocher concurred.

Activity is shown in the matter of establishing a school of tropical medicine in Calcutta. It is proposed to use the hospital accommodation in that city.

Dr. James Reid, chairman of the Hospitals Committee of the British Medical Association, died on 31st March. He was senior surgeon to the Canterbury Hospital.

The hospital problem is attracting much attention in South Africa. There is a strong disposition to ask for state aid to secure adequate accommodation, now that the various provinces are united into one commonwealth.

Rio de Janeiro in Brazil has long been a noted centre for yellow fever. The population of the city is about 1,000,000. In 1894 there were 4,852 deaths from yellow fever. Sanitation has almost wiped out the disease.

Dr. John Burns, of the same family as the poet, died in Glasgow a short time ago at the age of 95. At one time he was Vice-President of

the Faculty of Physicians and Surgeons. He was the father of the medical profession in Scotland.

Dr. Byron Robinson, a distinguished anatomist and pathologist of Chicago, died recently. He was in his 53rd year. He was an extensive contributor to medical literature; and the author of a work, "The Pelvic Brain."

The Association of American Medical Colleges at its recent meeting discussed two very important subjects, namely, not to increase the length of study as now in use by the best colleges; and that colleges within a certain area of each other should amalgamate.

The *New England Medical Monthly* and the *Annals of Medical Practice* have united. Dr. W. C. Wile, the editor of the former journal retires, and Dr. F. D. Donoghue will edit the united journal under the name of the *New England Medical Monthly.*

It is understood that from $2,000,000 to $3,000,00 has been subscribed for a new Medical College in St. Louis in connection with Washington University. The sum aimed at is $5,000,000, and the college is to be the finest in the world.

Dr. William Osler has published through the Oxford University Press, a small volume on the life of "Michael Servetus," which was delivered originally as a lecture before the Johns Hopkins Medical School Historical Club.

The Talbot Colony for Epileptics in Victoria, Australia, is much in need of funds. It is going behind at the rate of £700 or $3,500 a year. There is much need for a ward for children. It is contended that there are about 5,000 children in Victoria suffering with epilepsy. An appeal will be made to the government for aid.

Dr. John Smith died in Edinburgh on 15th April at the age of 85. In 1884 he was president of the Edinburgh Royal College of Surgeons. He held many important appointments at various times. At the tercentenary celebrations, the University of Edinburgh conferred upon him the degree of LL.D.

The Medical Press and Circular contends that a hospital system that cannot provide accommodation for the poor consumptive must be regarded as a failure. The article contends that if a mass of the trivial complaints treated by hospitals were swept away, there would be time and money for the more important diseases.

The Metropolitan Life Insurance Company has secured 225 acres of land in Westchester County, Mass., for its tuberculosis sanitarium. It is hoped to have the institution in operation within a year. The institu-

tion is for the use of the employees of the company, numbering about 14,000.

Dr. G. B. Massey, of Chicago, has been investigating cancer in the London Cancer Hospital. He has shown that a mass of cancer tissue can be destroyed by introducing into it three zinc needles covered with mercury amalgum. A current of 1,000 amperes is employed. This he claims will destroy the cancer all without injuring normal tissue.

The annual report of the hospital in Sydney, Australia, states that 3,458 patients had been admitted during the year. There were 376 deaths, or a rate of 6.53. There were performed 3,365 operations of some sort. The expenditures amounted to £28,229 and the income £27,722, showing a slight deficit.

Walter Butler Cheadle, F.R.S.P., consulting physician to St. Mary's Hospital, London, died a few weeks ago. He was a physician of marked ability. He was born in 1836, and had been a fellow of the Royal College for 30 years. He was an extensive contributor to medical literature. All his articles bore the evidence of much care in preparation, and careful finish.

In New York a study has been going on regarding the birth and death rate in different portions of the city. Three sections were chosen, containing the same population. In the rich section there were 37 births. In the middle class section there were 160, in the poor section there were 434. In the weeks of hot weather there were 16 deaths among infants in the poor section, and none in either of the other sections.

A test that has been carried out shows it is possible to diagnose heart troubles by telephone at a distance of a hundred miles. The experiment was conducted between Dr. Milne's house on the Isle of Wight, where the seismologist and four physicians, using an ordinary telephone, listened interestedly to the beating of a women's heart in London. A stethoscope, held over her heart in the familiar manner, had attached a telephone relay invented by Sidney Brown, by means of which minute sounds are magnified.

Professor Osler a short time ago while addressing a meeting at the London School of Tropical Medicine, said that France had 36,000,000 persons under her control in tropical parts; Germany had 12,000,000; the United States had 8,000,000; and Great Britain had 330,000,000 under her sway in tropical regions. These figures showed that great responsibilities rested upon these countries. There might be difference of opinion about enforcing manners, morals and religion upon these dependent people, but there could be no difference of opinion about urging upon them the laws of sanitation.

BOOK REVIEWS.

AMERICAN UROLOGICAL ASSOCIATION.

The Transaction of the American Urological Association. Eighth annual meeting at Atlantic City, N.J., June 7th and 8th, 1909. Edited by Charles Greene Cumston, M.D. Printed for the Association at the Riverdale Press, Brookline, Mass., 1910.

This very excellent report opens with a brief, but feeling obituary notice of the late Dr. Ferd. C. Valentine. Dr. Valentine was one of the founders of the Urological Association. The present volume contains 475 pages, and 38 articles. The contributors are amongst the best known of the surgeons in the United States on this class of work. The volume is very well illustrated. This volume constitutes a very fine aid to any practitioner on this important group of diseases.

PHYSIOLOGY AND PATHOLOGY OF THE SEMICIRCULAR CANALS.

Being on excerpt of the clinical studies of Dr. Robert Barany with notes and addenda gathered from the Vienna clinics. By Adolph E. Ibershoff, M.D., and a foreword by Royal S. Copeland, A.M., M.D. 12mo. cloth, with 8 illustrations. $1 net. Paul B. Hoeber, 69 East 59th Street, New York, 1910.

Extensive researches made of late years at the Berlin and Vienna Clinics have served to reduce the subject of Labyrinthine Physiology to a practical basis and to evolve a new and valuable basis for the diagnosis of conditions hitherto obscure. Nystagmus, formerly associated almost exclusively with congenital or acquired optical defects, has become a great aid in differential diagnosis and has greatly extended the field of the Otologist, and Surgeon.

The author has spent much time with the pioneers in this line of research (Drs. Barany, Ruttin, Neumann, Alexander, etc.), and offers to both specialist and practitioner the first detailed presentation of the subject (in English) in simple clear and concise form.

COMMISSION OF CONSERVATION, CANADA.

The Report of the First Annual Meeting held at Ottawa, January, 1910. Hon. Clifford Sifton, Chairman, and James White, Secretary. Ottawa: The Mortimer Company, Limited.

This report contains the speeches delivered at the first annual meeting held from 18th to 21st January, of this year. These speeches contain

very much useful information, and should be read by every one who takes a real interest in this country. The subjects are very varied, such as the timbers, game, fur animals, streams, minerals, etc., etc. We have read these addresses with much pleasure. Their diffusion will do much good. People are realizing that the natural resources of the country must not be wasted.

OBITUARY.

JOHN D. WILSON, M.D.

The late Dr. John D. Wilson, who died 16th May, at the age of 52, was a native of Morpeth. He was the son of the late William Wilson and Matilda Delmage, of Dublin, who came to Canada in 1838. While yet a youth, Dr. Wilson went to London, where he attended school, afterward entering Trinity College and studying medicine. He graduated in 1882, and began the practice of his profession in London. Later he went into partnership with the late Dr. Fraser until 1888. About that time he became ill and was thought to be affected with tuberculosis, but after spending a year in California he came back to London much improved in health. He there resumed his profession, diligently and successfully following it up to the present time.

In Dr. Wilson's thirty years' residence in London he had always taken a keen and active interest in public affairs. He served four years on the Board of Education, and he was the first magistrate for the city of London.

In 1898 he was elected Mayor by a large majority, though he had never served in the council. During his term of office the street railway strike occurred, and his task at that time was not an easy one, but friends and opponents both respected him, and he retired with an unsullied record. His work for the Irish Benevolent Society won for him hosts of friends, and practically his last public appearance was at the society's annual election and the following banquet, when he responded to the toast of "Dear Old Ireland." But, perhaps, Dr. Wilson will be best known and remembered for his untiring efforts in behalf of the sufferers from tuberculosis. Early and late, on every possible occasion, he urged the necessity of having a proper place in which to treat the unfortunates, and largely through his efforts the community has been aroused to its duty in this respect. While some might not approve of his methods, all admired his motive and his zeal. At the last meeting of the Irish Benevolent Society, in making his plea for the consumptive poor, and especially for the hopeless cases for whom no provision had been made,

he said: "I do not care how this work is done; I do not care who does it, or who gets the credit—I am only concerned that it be done. I have no interest to serve. I am not seeking glory or gain, but I want to see these poor people cared for and their last days made peaceful and happy."

As a physician he commanded the respect and esteem of his patients. As a public man he was farseeing, courageous and above reproach. As a friend he was warmhearted and sincere.

OSBORNE TOTTEN, M.D.

Dr. Totten died suddenly at his home in Forest, Ontario, April 14th. He was seized with an attack of apoplexy. He was a graduate of Trinity Medical College of the year 1885. He held the position of Government Medical Attendant on the Indians of Kettle and Stoney Points. He had a large practice and was very popular with all who knew him.

MISCELLANEOUS.

CANADIAN MILK PRODUCTS.

This company have issued the following statement:—

We take pleasure in offering the medical profession a modified milk in powder form for infants and invalids—Modified Milk Powder (C.M.P.).

This is a split proteid modification, containing in relation to normal cows' milk one half the casein and twice the soluble lact-albumen. Our process is the only one in which the albumens have not been coagulated. The milk is guaranteed free from pathogenic bacteria, but has not been sterilized, and the enzymes are undestroyed. This preserves the antiscorbutic properties, and does away with danger of scurvy or ricketts.

The milk is guaranteed pure, and contains no preservatives and no starches either in natural state or in the form of dextrose. Although very easily assimilated, this food has not been peptonized or pre-digested, and constant use will not impair the ability of the infant to digest other foods when the time for them arrives.

A large number of tests have proved that this food is in many cases better for the child than mothers' milk on account of its unvarying uniformity, and far better than the usual milk foods containing malt, starch or cereal in any form. We have in several instances succeeded in saving

infants who could take no other food and whose lives had been despaired of by their physicians. Several doctors in Toronto have used it with great success and are prescribing it and giving it their unqualified approval. The cost of feeding on this food is considerably below that of the other milk foods, and the results obtainable decidedly better. Every physician who has used it has become an ardent advocate. Mothers like it not only on account of its results but because of the ease with which it is prepared, requiring only to be dissolved in cooled sterilized water.

We shall be glad to send you samples and give you any further information if you will send us a line in regard to it.

Standard analysis of Modified Milk Powder (C.M.P.).

Milk fat	14.24
Casein	11.14
Soluble lact-albumen	8.48
Milk sugar	47.11
Ash	7.54
Moisture	1.49

Very truly yours,

CANADIAN MILK PRODUCTS, LIMITED,

GEO. G. REID,
Secretary.

CASE OF FEEBLE-MINDED.

Dr. Helen MacMurchy, whose work in connection with feeble-minded women in the province is well known, has just issued her fourth annual report, in which she makes some rather startling statements. She says: "The feeble-minded women and girls alone who need care and have it not in this province are according to our best estimate and information, at least from 500 to 1,000, and there are probably born to them every year about 100 children, most of whom probably will be feeble-minded." She urges that prevention is better than cure, and says that children should be better cared for.

In conclusion, Dr. MacMurchy says: "This question of the welfare of the feeble-minded is not the only question, nor at present the most important question, with which this department is at present concerned. The question of prison reform, the question of modern methods for studying and caring for psychiatric patients, the whole direction of

charitable and philanthropic institutions in the province, and the direction and fostering of preventive efforts for the benefit of the neglected children of the province must have a first place."

LEPER INSTITUTE IN NEW BRUNSWICK.

Leprosy, that most dreadful of all diseases, is prevalent in only one part of Canada, the Province of New Brunswick. How it came there is unknown beyond a tradition which tells how 90 years ago two afflicted sailors, shipwrecked on the Gulf shore off Caraquet, were taken in and cared for by the hospitable inhabitants of the district. For some years after they left no trace of their visit was felt, but two generations afterwards the horrible disease became rampant amongst the descendants of those who had entertained the unclean sailors.

For a time no step was taken to stamp out the leprosy, but about fifty years ago the Government began to take an interest in the matter. A lazaretto was instituted in the Town of Tracadie, where all patients were banished, and a Government superintendent of leprosy was appointed. Under his superintendence the patients receive the most sympathetic and humane treatment, and the disease is gradually being stamped out. Sixteen nuns of the Sisters of Providence Order live in the building and minister to the victims. They do all the work of the establishment and actually tend to the sores, which cover the majority of the sufferers. They apparently have no fear of contagion, in spite of the fact that many of their predecessors have died of a disease, which has been called tubercular leprosy. Too much cannot be said in praise of these devoted women who have given up their lives on behalf of the lepers.

The people in the neighborhood are even more indifferent than the sisters in the institute to the danger of contagion. Young people will marry into families where the disease has been found and take chances on coming under its influence. They, by every means in their power, try to conceal an outbreak of the disease in their family. When at last it is suspected by the authorities, they will go to almost any lengths to prevent the afflicted member of their family from being taken away to the lazaretto, where they know they will be forever lost to the world. Once, however, the person has been taken away, the officials of the lazaretto say that it is a most unusual occurrence to have a visitor from outside, and even enquiries are rare. Several reasons are given for this, one being that people feel it a disgrace to have leprosy in the family and try forget about it as soon as possible. The patients, too, seem to give

up all interest in the outside world and become absolutely indifferent as to whether their relatives care about them or not. This is easier to understand, because in the institution these people receive more attention and live under circumstances more comfortable than they have ever been accustomed to before, for the disease is most prevalent amongst the lower classes of people. The building has accommodation for about forty, but is seldom more than half full.

One class of patients, which has not yet been mentioned, are those immigrants from Asia and Europe who are found by the immigration officers to be victims of leprosy. These are taken directly to Tracadie by specially chartered schooners. Little trouble is experienced by those in charge of the institution with refractory patients. The men are usually sullen, but seldom disobey rules or cause unpleasantness, while the women are almost always cheerful. Only on rare occasions have patients endeavored to escape.

A DOCTOR'S HEROISM.

The Western Highlands are ringing with the story of a doctor's heroism. Dr. Gunn, medical officer at Lochbroom, in the early morning received an urgent call to a keeper's house twenty-five miles distant, and although he left behind a patient who must be visited that night at all hazards, he made his departure on his cycle.

To walk back by the road might, because of the delay, imperil the life of the patient at home. The only way was to take a short cut over the hills. That entailed climbing the dreaded Coigach rock, a spur of the Benmore Coigach. By day it is calculated to try the nerve of even the hardest mountaineer; by night it was regarded as the height of foolhardiness to attempt it. Nevertheless, accompanied by the most reliable guide in the district, Dr. Gunn accomplished the seeming impossibility, and after a terrible struggle arrived at his destination in a very exhausted condition, but in time to render his patient the urgently needed aid.—*From the London Chronicle.*

LONDON MEDICAL GRADUATES.

In the recent medical college examinations 20 students were successful out of a class of 24. Wm. H. McFarlane, of that city, won the gold medal. G. E. Buterwick, of London, formerly of Strathroy, took the silver medal.

The third year scholarship was won by Cyril Imrie of Whitehall, Mich., and Mr. J. Moriarty, of Orillia, wins the second year scholarship.

A. Muterer, of Ingersoll, heads the first year class, and takes the scholarship.

The graduates—William H. McFarlane, city; Gordon L. Jepson, city; George E. Butterwick, city; J. C. Wilson, city; W. Marshall, city; T. Blake Ramsay, Hyde Park; George A. Ramsay, city; W. H. Taylor, city; Hadley Robinson, city; Harry E. Johnston, city; Bernard R. Mooney, Windsor; A. E. Shore, White Oak; Charles T. Riley, Avonbank; Perry O. King, St Thomas; Herbert Wall, city; Calvin T. McCallum, Kintore; Thomas Sawden, Edgley; W. H. McGuffin, city; J. D. Collins, city; James O'Brien, Wyoming.

Gold Medalist—W. H. McFarlane, city.

Silver Medalist—G. E. Butterwick, city.

Third year scholarship—C. G. Imrie, Whitehall, Mich.

Second year scholarship—J. Moriarty, Orillia.

First year scholarship—A. Muterer, Ingersoll.

Honors—Fourth year—McFarlane, Butterwick, Jepson, Wilson, Marshall and B. Ramsay. Third year—Imrie, A. Duncan and Knight. Second year—Moriarty, Douglas, Glenn, McAuley, Bice, Birks, McRoberts, Yealland, Campbell, Coulter and Bodkin. First year—Muterer, Turner, S. Jones, Brereton and Elliott.

THE USE OF HYPNOTISM IN SURGICAL OPERATIONS.

"Though nearly a century has elapsed since Recamier first applied hypnotic sleep to surgical operations," says *The Medical Record,* "use of this power of mind over mind has never generally been made in surgical practice. Occasionally one hears of the extraction of a tooth or the opening of a furuncle while a patient is under the influence of hypnotism, and in rare instances more extensive operations have been performed.

"That the use of hypnotism is not necessarily confined to minor or momentary operations is shown by an article in *The Deutsche Medizinische Wochenschrift,* in which Hallauer reports his experience in Strausman's gynecological clinic in Berlin. The author does not depend solely upon the use of mental influence to anaesthetize his patients, but begins the procedure by giving a few drops of chloroform. When the patient has begun to be drowsy, and has lost to a certain extent her self-control, by gently stroking the forehead and hair and suggesting in a monotonous voice first that she is going to sleep and finally that she is asleep, a thorough hypnotic condition is produced.

"In some instances the patient falls into a deep sleep, while in others, though remaining conscious, she is quite oblivious of all sense of pain. When, however, the operation is completed and the patient is told that she is awake, she is able to arise at once, and in the case of one of the simpler precedures, to go to her home immediately, having none of the symptoms usually experienced after chloroform or ether narcosis.

"Hallauer has made use of this procedure in more than 300 cases. In 60 to 70 per cent. the results were perfect; in 20 per cent. the effect was only partial, but quite sufficient to permit the operation, while in but 10 per cent. it failed, and chloroform anaesthesia was required."

ANNUAL MEETING OF THE ACADEMY OF MEDICINE.

The annual meeting of the Academy took place in the Academy building on the 3rd of May and was well attended. The retiring president, Dr. McPhedran, has every reason to feel gratified with the result of the year's work.

Men distinguished in particular branches of medicine and surgery—Doctors Hoover, Maurice Richardson, L. F. Barker, W. S. Thayer and John Lovett Morse, were the guests of the Academy during the session and made the general meetings of great interest. Many of the fellows, however, appreciated more the smaller meetings of the sections on account of the exhibition of cases and the freer discussions which took place at them.

The Toronto profession should, and no doubt does, value the Academy as an educational and harmonizing factor in its midst, and everyone should unite loyally in its interests and in promoting its usefulness. There is a great future before it.

By careful management of the funds, the trustees have a reserve at the credit of the Academy of some $11,000, and except shortly to announce the conclusion of negotiations for the erection of a permanent home for the Academy. This, too, it is hinted, may be done without touching the reserve mentioned above.

The financial statements of the trustees and treasurer and the report of the library committee are to appear in pamphlet form and a copy will be mailed to each of the fellows. The library contains about 6,000 bound volumes and receives 145 periodical publications. The report of the committee contains a request for donations of medical literature of all kinds. No doubt there is much valuable material throughout the country, hidden away in attics and dark recesses, which might well be sent to the Academy. We commend the suggestion to our readers.

The following officers were elected:—

President, Dr. A. A. Macdonald; Vice-President, Dr. N. A. Powell; Honorary-Secretary, Dr. W. Harley Smith; Honorary-Treasurer, Dr. W. A. Young; Post-President, Dr. Alex. McPhedran. The elected members of the council are: Drs. J. F. R. Ross, R. A. Reeve, H. J. Hamilton, W. H. B. Aikins, H. B. Anderson, E. E. King, Milton Cotton. The following chairmen of sections are also members of the council: Medicine, Dr. John Ferguson; Surgery, Dr. A. H. Perfect; Pathology, Dr. R. D. Rudolf; State Medicine, Dr. J. F. Goodchild; Ophthalmology and Otology, Dr. Price Brown; Pediatrics, W. B. Thistle.

In the section of medicine Dr. Pepler is editor and Dr. O'Reilly, secretary. In surgery Dr. Gallie is editor, and W. W. Jones secretary. Drs. Mann and W. Scott, are editor and secretary respectively in the section of pathology. In state medicine these offices are filled by Drs. Addison and Helen MacMurchy. Drs. Trebilcock and G. Royce are editor and secretary for the section of opthalmology. In the section of pediatrics the editor and secretary are Drs. Graham and McVicar.

RUDYARD KIPLING ON DOCTORS.

The following address, taken from a lay paper, conveys a good idea of what a layman thinks of the doctor. It is republished here in order that we may "see how others see us."

"It may not have escaped professional observation that there are only two classes of mankind—doctors and patients. I have had a delicacy in confessing that I belong to the patient class ever since a doctor told me that all patients were phenomenal liars where their own symptoms were concerned. But I should say that the average patient looks on the average doctor very much as the non-combatant looks on the troops who are fighting on his behalf. The more men there are between his dearly beloved body and the unkind enemy, the better the non-combatant is pleased. Medical students are trained men who in due time will be drafted into the permanently mobilized army which always is fighting, always under fire, against death. It is a little unfortunate that death, as the senior practitioner, is bound to win in the long run.

But the non-combatants—the patients—console themselves with the idea that it is, or will be, the business of the doctors to make the best terms they can with death on our behalf, to say how his attacks should be longest delayed or diverted, and when he insists on driving the attack home to see that he does so according to the rules of civilized warfare.

"Every human being—every sane human being—is agreed that this long drawn fight for life is one of the most important things in the world.

It follows, therefore, that those who control this fight and those who will re-inforce the army must be among the most important people in the world. Certainly the world will treat them on that basis.

It long ago decided that you have no working hours that anybody is bound to respect and that nothing except extreme bodily illness will excuse you for refusing to help the man who thinks he will need your help at any hour of the day or night. Nobody will care whether you are in your beds or your baths, or on a holiday, or at church, or in a theatre. The little vitality you have accumulated in your leisure will be dragged out of you again. In all times of flood, fire, famine, plague, pestilence, battle, murder and sudden death it will be required of you that you report for duty at once and that you stay on duty until your strength—or your conscience relieves you—whichever may be the longer period. These are some of your obligations and I do not think they will grow any lighter.

Have you heard of any recent legislation to limit your output, any bill for an eight-hours' day for doctors? Do you know of any change in public opinion that will allow you not to attend a patient when you know that the man never means to pay? Have you heard of any outcry against the people who could perfectly well afford to pay you but who prefer to cadge around the hospitals and get advice and glass eyes and cork legs for nothing? I have not. It is required of you at all moments to save others. It is nowhere laid down that you must save yourselves.

That is to say, you belong to the privileged class. You and kings are about the only people whose explanation policemen will accept if you exceed the speed limit with your motor cars. On presentation of your visiting card you can pass through the most turbulent crowd unmolested and even with applause. If you wave a yellow flag over a centre of population you can turn it into a desert. If you choose to fly a red cross flag over a desert you can turn it into a centre of population towards which, as I have seen, men will crawl on their hands and knees. You can forbid a ship to enter a port. If you think it necessary to the success of an operation you can stop a 20,000 ton liner with her mails in mid-ocean till the operation is concluded. You can tie up the traffic of a port without notice. You can order whole quarters of a city to be pulled down or burned, and you can count on armed co-operation to see that your prescriptions are efficiently carried out.

We poor patients do not often dispute your orders unless we are frightened by the long continuance of an epidemic. In that case, if we are uncivilized, we say that you have poisoned the drinking water for your own purposes, and we throw stones at you. If we are civilized we do something else, but civilized people can throw stones, too.

You have been exposed, and you always will be exposed, to the contempt of the gifted amateur, the gentleman who knows by intuition everything that has cost you years of study. You have been, and always will be, exposed to the attacks of those persons who consider their own undisciplined emotions more important than the world's most bitter agonies—the people who would hamper and limit and cripple research because they fear that it may be accompanied by a little pain and suffering. Such people have been against you from the beginning, ever since the earliest Egyptians erected images in honor of cats and dogs on the banks of the Nile. But your work goes on and will go on. You remain now perhaps the only class that dares tell the world that man can get no more out of a machine than he puts into it and that if the fathers have eaten forbidden fruit the teeth of the children will be affected.

Your training shows you daily and directly that things are what they are and their consequences what they will be, and that people deceive nobody but themselves when they pretend otherwise. Better still, you can prove that you have learned. If a patient chooses to disregard your warning you have not to wait a generation to convince him; you know he will be glad in a few hours or weeks to call you and you will find your careless friend with an eruption on his side, or visions in his head, precisely as you warned him would be the case if he continued his errors. Have you considered what a tremendous privilege that is?

In a day when few things are called by their right names, when it is against the spirit of the time even to hint that an act may entail consequences, you are going to join a profession in which it not only pays to tell the truth, but in which you will be paid for telling it. Realizing these things, as I had good reason to do, I do not think I need talk about the high ideals and the lofty ethics of a profession which exacts from its followers the largest responsibility and the highest death rate for its practitioners of any profession in the world. I will only wish for your future what all men desire—enough work to do and strength enough to do the work."—*The Kansas City Medical Index-Lancet.*

McGILL MEDICAL COLLEGE SUMMER SESSION.

The Medical Faculty of McGill begs to announce that an extended course of study for Graduate Students will be given during the coming summer. Beginning on Thursday, June 9th, the course will be continued for a period of six weeks, during the first half of which the work will be conducted in the Royal Victoria and during the second half in the Montreal General Hospital.

The post graduate course is open to graduates of medical schools in good standing.

Intending candidates must first register with the Registrar of the Medical Faculty.

The fee for the course, including registration, is $50.00, payable in advance at the office of the Bursar of the University.

Receipts for fees paid must in all cases be shown to the Superintendent on the occasion of the first demonstration in either hospital.

Applications will be received and further information furnished by J. W. Scane, M.D., Registrar Medical Faculty, McGill University.

MEDICAL PREPARATIONS, ETC.

SOME THERAPEUTIC USES OF SANMETTO.

To facilitate easy childbirth some physicians prescribe sanmetto, beginning about six weeks before confinement, with good results in every case.

If sanmetto is used in conjunction with instrumental treatment of urethral stricture it will be found to soothe, check or prevent the smarting and inflammation that is so common after passage of bougie.

In allaying inflammation in the prostatic urethra, before surgical operations, and in keeping the urine bland and non-irritating after the operation is complete, sanmetto has been used very extensively and found valuable.

SYMPTOMATIC OR COMPLICATING ANEMIA

Is that form or condition of blood poverty which results from various constitutional infections and diatheses. Prominent among such causes are, syphilis, rheumatism, paludal poisoning, tuberculosis, carcinoma, etc. In many instances, such an anemia is due to some obscure, latent metabolic perversion, or a slow but persistent intestinal auto-intoxication of gastro-intestinal origin. While it is an axiomatic principle that successful therapy depends upon the removal of the causative factor, it is more than often wise and eminently judicious to adopt direct hematinic treatment while the underlying cause is being sought for and combated. Pepto-Mangan (Gude) being bland, non-irritant and readily tolerable, can almost always be given, with distinct advantage to appetite, digestion, nutrition and general well-being, while causative therapy is under way.

Neither constipation nor digestive disturbance results from its steady use, and a general hematic gain is practically a certainty, if its use is persisted in.

FAITH IN DRUGS.

"The courage to try to do a thing before you know how, the patience to keep on trying after you have found out that you didn't know how, and the perseverance to renew the trial as many times as necessary until you do know how, are the three conditions of the acquisition of physical skill, mental power, moral virtue or personal excellence."—Hyde.

We do not know where this quotation is more applicable than to our friends of the old school who have been trying for years to work out some therapeutic salvation. They have many good men in the ranks; men who are broad-minded, honest and sincere, and standing foremost among them we find Drs. Abbott and Waugh. We remember distinctly, a few years ago, when we were closely associated professionally and socially with a practitioner of the old school—one of the best fellows that ever lived—who said to us that he had absolutely no faith in the use of drugs, and while he used them for their moral effect, he gave nature the credit for restoring people to health. Since that time he has been using Abbott's alkaloids and is now one of the most enthusiastic prescribers that one would wish to meet—and he is successful. He is simply one of the many of the old school who have been so instructed in the use of drugs that they get results and have faith in them.—Dr. Dale M. King, in *The Medical Counselor.*

ANEMIA.

A physician who has treated many cases of anemic girls writes:

"The anemic patient suffers long and is treated for many functional disturbances before the real cause is diagnosed.

"Ordinary food, medicine and hygienic measures can barely hold in check the rapid and subtle effects of this disease, much less furnish reserve strength.

"Scott's Emulsion of Cod Liver Oil quickens the action of all proper food and remedies, and is the quickest, concentrated blood-making food-medicine the anemic patient can take. Daily doses should be prescribed in all cases until the patient is fully restored."