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EDITORIAL

DR. FRIEDMANN'S TREATMENT.

When it was announced that Dr. F. F. Friedmann would pay a visit to Toronto, and other cities in this country, we bespoke for him a fair hearing, and that he be accorded every opportunity to make good his claims to having discovered a method of treatment of value for tuberculosis. At Toronto, Ottawa, Montreal and London he was given an opportunity of administering his turtle bacilli to many patients in various stages of the disease, and afflicted in many organs of the body. We then made the statement that secrecy could only be permitted under the condition that he required time to perfect his methods before he gave it out to the profession in general. This course was adopted by Ehrlich in the case of salvarsan for the treatment of syphilis.

In our issue of a month ago, we said that the time for secrecy had expired. We took the position that, as Dr. Friedmann was treating patients and was himself a member of the medical profession, and coming in constant touch with members of the medical profession, it was no longer possible nor proper to surround the treatment with any air of mysticism or secrecy. This could only have the effect of creating a morbid curiosity on the part of the public, and a feeling of distrust on the part of the profession. A time must come, indeed, had come, when the medical profession, if true to traditions, must turn its back upon any methods of occultism.

The fact that the bacilli emplayed by Dr. Friedmann are obtained from the turtle has been for some time known. On this phase of the case there is no secrecy. There is, however, a strict secrecy maintained with regard to the methods of culture, dosage, the conformation to the laws of bacteriology and such like. On all these points Dr. Friedmann should make haste to take those who are familiar with bacterial science into his confidence.

It is easy to create false hopes. Perhaps there is no class of sufferers

who are so readily made the victims of the imagination with regard to their diseases. We have known dying consumptives inflated with the opinion that they were making excellent recoveries under the influence of some fake method, while in reality they were steadily growing worse, and soon died. This is most cruel and inhuman.

We think the time has come when the medical profession should demand the utmost frankness on the part of all concerned with this new treatment. The medical profession cannot tolerate any further delay in this regard.

Pasteur, Lister, Jenner, Koch, von Behring, Reid, Carroll, Simpson, Morton, Holmes, Semmelweiss and such like great men made no secret of their methods or discoveries; nor did they lose aught thereby. It is true that Lord Lister encountered much opposition, but not on the grounds of secrecy. The opposition he had to face was one arising from a skepticism of the value of what he stood for.

Should it turn out that the treatment is being turned to financial gain and that an attempt is made to keep it a secret in order that profit be made thereby, then the entire medical profession must refuse to countenance it for a single moment. If it should turn out to be true that the treatment has been sold and that it is to be put on the market as a proprietary remedy, or administered to patients only at certain points of the earth's geography where there may be stations, then it must be assigned to the lethal chamber.

On 9th May, in Washingtaon, before the National Association for the Study and Prevention of Tuberculosis, Dr. John F. Anderson, director of the Government's hygienic laboratory, and Dr. A. M. Stimson, another public health surgeon, who have been watching the progress of the patients treated at Mount Sinai Hospital, New York, gave out the following statement:

"We believe that at the present time we are not as yet in position to express an opinion based on the present conditions under observation. The disease for which the remedy is used is prolonged, and is characterized by periods of advancement and retrogression. It is also one in which psychic influences are a powerful factor.

"Time is therefore necessary to properly evaluate the effect of therapeutic measures.

"We must not lose sight of the possible therapeutic value of this preparation, and on the other hand it is necessary to guard against too great an optimism in respect to its merits. Without presenting in detail the conditions of patients under observation, we are in a position to state that the facts thus far observed do not justify that confidence in the remedy which has been inspired by widespread publicity.

"In our opinion harm may have been done by this undue publicity in so far as it has lessened the confidence of tuberculosis persons in well-

recognized methods of treatment or interrupted their use, and we are constrained to advise against any lessening of those well-known measures which not only had effected cures, but which have reduced the incidence of the disease. We are aware that Dr. Friedmann does not wish to be judged scientifically on newspaper statements, and we would certainly disclaim responsibility for certain of those which have appeared. Nevertheless, it is on those that the public bases its opinion until replaced by reliable and unbiased scientific pronouncements supported by convincing data.

"In our series of patients, Dr. Friedmann has almost exclusively made use of the intramscular method alone in pulmonary cases, and a very considerable proportion of them have either developed no considerable infiltrate at all, or have suffered from abscess formations. It is evident, therefore, that a very considerable portion of these patients may expect their treatment at the hand of Dr. Friedmann to extend over a long period.

"Concerning the cultures submitted to us we may state that a series of experiments is under way. The bacillus has been found to be an acidfast organism having properties quite different from those of any tubercle bacillus with which we are acquainted. It appears to be identical with an organism cultivated from a few loopfulls of the material used for injection which Dr. Friedmann permitted us to place on culture media in his presence. We requested Dr. Friedmann to furnish us with a large amount of this material for examination, but this he declined to do.

"We can state, however, that living acidfast bacteria are being injected by the intermsucular and intravenous method, although we are ignorant of what medium they are suspended in or what additional substance or substances may be contained in the final muxture."

Immediately after the presentation of the Public Health Service report, a resolution was unanimously adopted declaring it to be the judgment of the association that "no specific cure for tuberculosis had yet been discovered to warrant the confidence of the public or the medical profession."

The Toronto Academy of Medicine adopted the following at its annual meeting on 6th May:

"While the Academy of Medicine of Toronto disapproves of the spectacular and commercial manner in which Dr. Friedmann's treatment of tuberculosis has been presented, it strongly advises both the profession ond public to await results of investigation not yet complete.

"In the cases treated by him in Toronto there is nothing to show that there has been any improvement which is not secured by other methods of treatment.

"Dr. Friedmann has not received the endorsation of the medical

profession in Toronto, the University of Toronto, the medical faculty of the University, or any representative body of the profession.

"Dr. Friedmann was given every opportunity in the field of experimental medicine by individuals engaged in such work."

The press despatches from Montreal of 1st May contained the following:

Dr. Friedmann had a two-fold purpose in returning—namely, to see his former patients and to give additional treatment, and to form a Canadian company for the sale of his serum. His legal adviser, Mr. Arnold, of New York, said:

"It is expected that the arrangements to be made in Canada will be similar to those already made in New York, where a sanitarium has already been founded and where plans have been made for other institutions throughout the United States.

"As to the precise location of this sanitarium nothing can yet be arranged. The company formed in the United States can have nothing to do with the business arrangements in Canada. That company controls only the United States, and business details here in Canada will have to be made with other parties.

"The reason for a sanitarium here in Canada, or elsewhere, is that it should be a place where all those to be treated can be thoroughly examined by doctors instructed by Dr. Friedmann. Examinations would also be made of the financial position of the patients, and in case patients are unable to pay a fee they will be treated just the same. Dr. Friedmann himself, in a statement, answering some who criticized him for the sale of his secret, also emphasized these points—namely, the opening of institutes for the training of doctors in the use of the serum and the free treatment of poor patients."

The New York *Sun* contained the following statement:—

"The Friedmann patients in New York are not doing well, in fact some of them are very ill. This fact, combined with the knowledge of the nature of the sale Dr. Friedmann has recently accomplished, made all the medical men connected with the Friedmann tests anxious not only for their own patients, but for the welfare of the public in general.

"Before the week is out it is most probable that three and perhaps four public statements will be made from public institutions, none of which will be favorable to Dr. Friedmann or his treatment.

"Information has been placed in the hands of the health department, telling of the poor showing which the Friedmann patients, all of whom have been watched for the department, have made. The statements made are strong. One of them is supposed to be that some of the cases treated would have been better off if they had not had the Friedmann injection.

"It was learned to-day from the very best of sources that the Fried-

mann pulmonary patients at Bellevue have not only failed to show improvement, but that with many of them the disease was having its course uninterrupted. Many of the pulmonary sufferers there treated by Dr. Friedmann at first showed gains, such as increased weight, but had since fallen back. The actual conditions of the lungs have either remained the same or become worse. Only one case was mentioned to-day in which the lungs had improved, that in the incipient stage.

"It was also said that at the Mount Sinai Hospital the patients have not made progress, and that the disease is running its own course. The same is understood to apply to the Montefiero Home, where Dr. Friedmann also treated a great number of tubercular sick.

"Because of this information which has been circulating among the medical men interested, there is now a strong feeling that some definite stand should be taken by them before the various Friedmann Institutes are opened to the public."

In an editorial on "Friedmann Evading the Law," the *Journal of the American Medical Association* of 3rd May, has some very plain words on this subject. Here are some of the statements:

"Dr. Friedmann's course, since he landed on our shores, has been one of constant evasion. His claims for his treatment rest solely on his own statements.

"He has failed even to answer the letters of the officers of the Public Health Service. He has persistently refused to furnish any proof of the claims made for his preparation."

The *Journal* then refers to the reports of establishing institutes, and how these would make and administer the treatment. This the *Journal of the A. M. A.* condemns. The article closes with these words:

"The American people have no respect for the man who uses legal technicalities for profit or to escape punishment. Will the American public and the American press tolerate this attempt to make our unfortunate consumptives a source of gain for a rapacious foreigner, promoting a remedy of unproved merit in violation of the spirit of our laws?"

"In another part the *Journal* further remarks:

"Unless there is some totally unforeseen Government action, or unless some well-nigh impossible wave of skepticism sweeps over the land, it looks as if the sheaves of dollars to be wrenched from the wasted hands of the tuberculous would make a harvest which would outweigh the reapings of all the American quack remedies from Perkins' tractors to the worst nostrum of our time."

The following news item comes by press despatch to the Toronto *Globe*:

Berlin, May 9.—Professor Schleich, who is in charge of Dr. Fried-

mann's sanitarium while the latter is in New York, flew into a rage today when a newspaper correspondent asked what reply he wished to make to the statements of Frankfort physicians criticizing the conduct of himself and Dr. Friedmann regarding the patients inoculated by them at Frankfort. Prof. Schleich accused the correspondent of lying, and declared the Frankforters did not make any of the statements attributed to them. The correspondent reiteraated that the statements were made as reported. "There is not a true word in the whole thing. It is an utter falsehood," bellowed Prof. Schleich. The correspondent objected vigorously to the accusation of lying. Prof. Schleich ordered him to leave the house. He summoned an assistant, and the two followed the reporter menacingly to the door.

From Berlin (according to the Boston *Medical and Surgical Journal*), conflicting reports are received relative to professional opinion of the merits of Dr. Friedmann's work in that city. Professor Bier, of the University of Berlin, who has been widely quoted as having spoken favorably of Dr. Friedmann's treatment, issued on March 18 the following unequivocal statement of his position:

"I must publicly protest against the misuse of my name for the recommendation of a remedy of whose effectiveness I have so far no evidence. I hope that this statement may find its way into the foreign press as quickly and as widely as my alleged recommendation of the treatment. It should also relieve me of the burden of constantly answering letters and stating that I have seen as yet no evidence of any unusual curative action of Friedmann's treatment."

The *Medical Record* of 3rd May has the following in its editorial columns:

"The mission of Dr. Friedrich Franz Friedmann to the United States has been accomplished and our early conjectures as to its purely commercial object are fully confirmed by the announcement of the sale of the American rights in his alleged remedy to a stock company. According to the terms of the sale, this "scientist," as he is called by a New York newspaper which applauds the transaction, receives $125,000 in cash and a one-third interest in some thirty-five or forty 'Friedmann Institutes' to be planted in as many States. This scheme of independent 'institutes,' which recalls that of another 'scientist' with commercial instincts, the late Dr. Keeley, has been adopted apparently to nullify the anticipated action of the Public Health Service in forbidding the sale of the vaccine. As the stuff will be made in each 'institute' and sold there it will not be carried in interstate commerce, so the Federal Government cannot interfere. When Dr. Friedmann first came to New York, we thought he had been ill advised, but we were looking at the matter from the side of ethics; we now see, looking at it from an entirely different side, that he has been very well advised.

"Whether the purchasers of this secret remedy have been equally well advised time will show. They had to jump quickly, since other manufacturers had been approached and some one of them might at any time conclude a deal, and it is possible the leap was taken without the precautionary look. The results of the New York experiments would hardly seem to warrant an outlay of $125,000 for the Friedmann secret, but then the stuff has been widely advertised and moribund consumptives are hopeful and credulous. There has, as yet, been no official report on the experiments with the turtle bacillus culture in the hospitals in this city, but it is very generally known among medical men, if not among the laity, that the results have been not at all satisfactory—except to Dr. Friedmann. Reports from Berlin also are very far from giving support to the earlier statements that the patients treated there are doing well. On the contrary, many of the survivors are stated to be doing very ill. One of the reported cases, indeed, is of most serious import and it at once brings up the question whether the turtle bacillus is as innocuous as Friedmann has claimed and as has been generally believed—apparently only on his say-so. This case, referred to by correspondents of the *Southern California Practitioner* and the *Lancet-Clinic*, was that of one of those who died after treatment with the Friedmann vaccine. The autopsy showed that he had miliary tuberculosis, and fresh tubercles were found in the gluteal muscles, where the injection of the assumed nonvirulent bacilli had been made, and also in the glands receiving the lymph from that region, but the corresponding parts on the opposite side, where no injection had been made, were free from tubercles. Only one of Friedmann's New York patients, so far as we know, has yet died."

The following opinions by a number of the best-known medical men of Montreal show how commercialism is regarded in such a case as this:

The New York despatch telling of the sale of the American rights in Dr. F. F. Friedmann's tuberculosis serum to a syndicate, the purchase price being $125,000 in cash and $1,800,000 in stock, has been widely discussed by the medical men of Montreal. Dr. F. J. Sheppard, dean of the medical faculty of McGill University, said that he was not in the least surprised at Dr. Friedmann's course.

"It is just what I expected, and that is why I would have nothing to do with Dr. Friedmann's visit to Montreal. He came here for advertising purposes, and I do not suppose that the patients treated here will ever see him again."

"Lister and Pasteur never found it necessary to do what Friedmann has done," was the brief comment of Dr. J. C. Fishe, medical superintendent of the General Hospital.

Dr. H. A. Lafleur, one of the leading physicians in the city of Montreal, said: "Dr. Friedmann's course is unethical in the ex-

treme, and a direct violation of his hippocratic oath. The affair looks like a purely commercial transaction, such as would be looked down upon by any right-minded physician."

Dr. David J. Evans, president of the Medico-Chirurgical Society, said: "The transaction damns Dr. Friedmann absolutely, and puts him completely outside the pale of the medical profession."

A despatch to the Toronto Globe has the following:

"New York, May 12.—Dr. M. A. Sturm, former aide of Dr. Friedmann, and who entered suit against the latter to recover part of the profits of the sale of the rights, claims to have discovered Dr. Friedmann's turtle vaccine secret. He says he will make the secret known for the benefit of the people."

In *American Medicine* for April there is some plain speaking. Here are a few of the statements made therein:

"Respect for the American medical profession and our German confreres makes it incumbent upon us to point out with no uncertain note that if Dr. Friedmann is imbued with humanitarian motives, professional desires and ethical purposes, his recent manners, methods and acts have been most unusual, to say the least."

"Report has it that Providence physicians were strangely moved by the touching spectacle presented by the crowds of patients who refused treatment until Dr. Friedmann agreed to accept at least twenty to twenty-five dollars from each person. The anguish and suffering Dr. Friedmann was forced to undergo, with money constantly being offered to him can easily be understood.

"The cruelest act of all, Dr. Friedmann has had $125,000 cash and $1,800,000 in stock forced upon him for the American rights to his remedy, and this in spite of his repeated intention of giving it to the profession!"

"Whatever may be the final verdict of the scientific world concerning the specific value of Dr. Friedmann's vaccine—nothing definite having been determined as yet—it is a fact that this man has outraged every sense of professional propriety, and abused in the most astounding manner the courtesies and considerations extended to him for the purpose of proving the correctness of his claims and the efficacy of his treatment."

The New York *Medical Journal* of 10th April has the following:

"Friedmann's whole attitude is so degrading, and conflicts so utterly with the traditions of the American medical profession, that we venture the hope that any policy adopted will serve once for all to defeat any attempt to obtain such privileges."

To the Toronto *Globe* the following despatch comes from New York. It is brief, but tells so much:

"New York, May 18.—The plans for the opening of the Fried-

mann Institute here to-morrow do not include provision for the treatment of charity patients."

Dr. Joseph J. O'Connell, health officer of the port of New York, states that the investigator of the Health Department of New York "finds that the patients subjected to this treatment have not improved, but have lost ground to an extent greater than might be expected from the natural ravages of the disease."

The whole condition of affairs makes it obligatory upon those who are watching the progress of patients that have been treated by Dr. Friedmann in Toronto and elsewhere, to lose no time in issuing as definite information as possible with a view to guiding both the profession and the public.

THE WORK OF FLY-FIGHTING.

At this season of the year it may be opportune to refer to this subject. The fly has come to occupy a prominent place in the mind of those engaged in the work of preventive medicine. On this subject the report of the committee of the American Civic Association, and submitted at Baltimore some time ago, is worthy of consideration.

The report does not think that much good can come from a fly-killing campaign. The numbers destroyed in this way are not sufficient to make any real impression on the total numbers. A single pile of stable refuse will breed as many in a few weeks as can be destroyed in a whole summer. The real secret of success is to remove the breeding places.

There is no longer any difference of opinion on the spread of disease by house flies. All garbage should be covered and removed as soon as possible. Poisons may be introduced into places where the larvæ might be found. Everyone should early in the season thoroughly clean up their premises. Flies cannot live without food, and they cannot breed without suitable places in which to deposit their eggs. All this is common sense. The great difficulty is to induce people to take an interest in preventive medicine. The people must be educated, and here comes in the duty of the lay press.

In *La Semaine*, of Paris, the following appeared. It is of importance at this time to give it publicity in this country:

"At the last meeting of the Council of Public Hygiene and Salubrity, Dr. Vaillard, general medical inspector of the army, read a report on the means to be employed 'for organizing the destruction of flies on account of the danger these insects are to public health.'

"Place in large recipients and flat dishes a mixture of 15% of commercial formol, 25% of milk and 60% of water, with the addition of a little sugar. Flies, being fond of milk, suck up the beverage and per-

ish almost immediately after. The mixture thus prepared can be used for several days.

"Fumigations of cresol may likewise be employed. Exposed to heat on an alcohol lamp, etc., cresol gives forth abundant vapors which are immediately toxic for flies and even mosquitoes.

"But these processes can only be employed for living flies. Other and more efficacious methods exist for destroying flies and which can be used for the destruction of fly eggs and larva.

Mr. Vaillard indicates the use of schiste oil, or heavy petroleums (kerosene). Schiste oil or kerosene are viscuous oils which destroy the larva of flies. Its use is most easy. The oil or kerosene well mixed with an equal quantity of water is thrown into the closet pits, and other places where flies lay their eggs. About two liters of schiste oil or kerosene must be employed for every superficial meter of the pit.

Dung-hills may also without any inconvenience be sprinkled with this mixture. Lastly the eggs and larva of flies may also be sprinkled with diluted lime.

Mr. Vaillard also advises any people who desire to avoid the promiscuity of flies to observe a great cleanliness in the house and stables.

"Empty, every day," says he, "the rubbish-box, disinfect it with lime, and always keep it closed."

HEALTH AFFAIRS IN SASKATCHEWAN.

It is pleasing to note the marked progress made by that young Province in all matters that pertain to the welfare of the people.

An onward step has been taken in looking after neglected and dependent children. A superintendent has been appointed, and he is busy visiting districts and organizing local branches of Children's Aid Societies. Already much progress has been made, and many children are being placed under conditions where they have a chance to make good.

In the matter of hospitals, that Province has much to be proud of. The population is practically 500,000, and there are already 21 hospitals. These institutions have a total bed capacity of 922. During last year there were treated in these hospitals 9,499 patients. There were 529 deaths, or about 5 per cent. of the cases treated. The total expenditures on these hospitals were $432,359, of which the Government contributed $85,100, or a per diem of 50 cents for such cases as require Government assistance. The average daily cost for maintenance was $2.05. In all the hospitals there were 156 undergraduate nurses and 84 graduate nurses employed. Nine of the hospitals have training schools. All the hospitals are required by law to make provision in separate rooms or buildings for tuberculous patients. One-tenth of the total bed capacity is required for maternity patients.

The following table gives a summary of these hospitals in the matter of location, size, patients, Government grants, revenue and expenditures:

Name and Place	No. of Beds.	No. of Patients	Government Grant	Revenue.	Expendiure
Gen. Hospital, Regina	110	1,508	$14,823.00	$88,874.75	$84,804.85
Grey Nuns, Regina	80	736	4,272.50	32,104.87	28,710.37
General, Moose Jaw	139	764	10,093.50	15,808.98	23,021.12
St. Paul's, Saskatoon	70	1,154	10,180.00	95,975.19	94,465.70
City, Saskatoon	148	1,616	14,721.50	77,504.05	77,634.14
Holy Family, Prince Albert	32	588	4,627.00	16,485.34	15,210.56
Municipal, Prince Albert	65	506	5,930.50	20,513.00	19,772.00
General, Swift Current	30	426	2,999.00	.....	.....
Queen Victoria, Yorkton	35	409	3,091.00	11,499.03	11,499.03
General, Moosomin	12	197	1,563.00	6,869.75	6,097.18
General, Lloydminster	14	82	486.50	1,654.30	1,690.09
Alexandra, Rosthern	14	117	731.00	.....	.....
General, Indian Head	22	155	1,650.00	6,461.40	6,375.38
General, Maple Creek	31	281	2,427.00	8,195.87	7,675.91
St. Elizabeth's, Humboldt	19	31	161.50	253.00	1,029.00
Cottage, Lashburn	10	107	1,017.50	6,431.04	6,406.98
Lady Minto, Melfort	20	202	1,357.50	7,291.72	7,251.22
Municipal, Melville	28	192	1,677.00	15,905.34	15,905.34
Notre Dame, North Battleford	16	222	1,470.50	17,759.92	16,841.95
Municipal, Scott	10	78	670.00	3,795.78	3,783.36
Anna Turnbull, Wakaw	17	128	70.100	4,621.90	4,509.06
	922	9,499	$85,100.50	$438,005.59	$432,359.24

PROTECTION OF IMMIGRANTS SEEKING EMPLOYMENT.

The Government of Canada has issued some very useful regulations on this subject.

Every person, firm or company that acts in the capacity of aiding immigrants to secure employment, must take out a license. In order to obtain this they must show that they are complying with the Act and Orders-in-Council re immigration. This license is not transferrable and is revocable. A register of all such licenses must be kept.

It is further laid down that no person, firm or company shall in any way by advertisement, letter or poster, make false representations to immigrants as to opportunities or conditions of employment. Every person in any way aiding immigrants to secure employment shall keep a list of these and their Canadian addresses, and the name of the steamship and railway by which they have journeyed and other information of a similar character. The fee chargeable shall be $1.00, but this must be returned if the immigrant does not secure the position to which he is sent.

All licensed agents must have written instructions from employers before they can accept any fee from an immigrant or send him to such employer with the view of finding employment. These orders from employers must not bear date of more than two months prior to that of treating with the immigrant.

Any agent who violates the regulations is liable to have his license cancelled, and may be fined $100, and in default to a term of imprisonment not exceeding three months.

MENS SANA IN CORPORE SANO, ET PUER PATER VIRI EST.

These are two axioms that have and always will prove true. That of a sane mind in a sound body, and the boy is the father of the man have come down to us from old times. The importance of these truths were given a new interest a month ago by the visit to Toronto of Mr. Jacob A. Riis, of New York. Riis has given much study and time to the question of the normal growth and development of the boy.

He laid down the working rule that play was the true employment of the boy. He said that it is most disastrous in its results when the boy is deprived of his proper amount of play in the open air, and, as far as possible, with proper company. He emphasized the fact that the boy who does not have the opportunity for normal amusement in a large number of instances develops into a man who will not work. "The boy without play is the father of the man without a job."

Further, he claimed that a vast amount of crime had its origin in the early days of boyhood. If they do not have the opportunities for play they will form "gangs," and get into mischief, and commence committing petty offences. In Chicago 30 per cent. of the crimes disappeared when playgrounds were established; and in St. Louis it has been noted that 90 per cent. of the criminals began their evil ways under 16 years of age.

All the regulations, such as "Keep off the grass," "Do not play on this street," and such like, were infringements of the boy's rights, when no place for him is furnished where he can play. A boy is a steam engine, and it will not do to repress him within unhealthy and constructed confines. Boys should play together, as "a boys' club is better than a policeman's club." There was no form of school so valuable for a boy as normal play. "Crime in our cities is a question of athletics."

This leads to the conclusion that proper play and healthy playgrounds are amongst the best of all factors in preventive medicine, as well as in the prevention of crime. Just as sure as fresh air and sunshine are of the utmost value in the preservation of health, so are they of the utmost value in preventing vice. Mr. Riis mentioned that a number of States had passed Acts making it obligatory for cities of 10,000 and upwards to furnish adequaate playgrounds.

Mrs. Humphry Ward, when in Toronto two years ago, said that in

many of the cities in Britain and Europe the children did not know how to play, and if placed in park or field, could not amuse themselves.

THE BRADBURY BILL.

Mr. G. H. Bradbury introduced a bill into the Federal Parliament some time ago providing for the preservation of the purity of our rivers and lakes. The bill provides for a fine of $500 on any municipality that empties untreated sewage into rivers and lakes, and $50 a day for the continuation of the offence. In speaking to the bill he said:

"Good authorities were agreed that not a lake remained undefiled in the inhabited portions of America, and every river in the well-settled parts of the country was practically an open sewer.

"In 1903 the death rate from typhoid in Ottawa was 32 per 100,000 of population. In 1906 it jumped from 40 of the year previous to 254 per 100,000. In Winnipeg the rate jumped from 82 to 248 in 1904. There had been 2,000 cases and 120 deaths in Ottawa in the two years of the typhoid epidemic. This meant a loss of $1,000,000 a year, or capitalized, $20,000,000—enough to protect half a dozen cities. Ontario had lost at this rate $28,000,000 in ten years. Mr. Bradbury took the valuation of the average human life at $5,000. He counted in the nursing expenses, and the loss of wages to convalescents to make up his total.

"In Winnipeg the loss capitalized reached $100,000,000. The sewers of several towns, including the City of Winnipeg, poured into the Red River by way of the Assiniboine. In the former river below Winnipeg, a dam had been built at St. Anthony's Rapids, raising the water twenty-one feet. Where once the current had carried the nuisance from the abattoirs and the stock yards and the big cities away, now it was held in this big basin, twelve miles long and one hundred yards wide.

"This water flows through my town of Selkirk, and the conditions are terrible," said Mr. Bradbury earnestly. "It is unfit for even animals to drink. Men have quit taking their cattle down to the river. Lake Winnipeg is contaminated for eight or ten miles out. Men employed on the dredges have been stricken with typhoid."

Hon. J. D. Hazen, Minister of Marine, spoke strongly in favor of the bill, and asked that it be sent to a select committee to report next session. This would give the public time to become aware of the meaning and effect the proposed measure.

It is to be hoped that the members of the House will give this matter serious consideration, and be prepared to act effectively when the bill comes up again.

THE NEW GENERAL HOSPITAL.

This great enterprise is now almost completed. The buildings are practically finished and some of them are ready for occupation. In the arrangement of the buildings an effort has been made to secure the maximum of sunlight and air. At the rear of the main building on College Street there are spacious grounds. These buildings are laid out in an attractive manner, and will prove of the utmost value to the patients. The roofs of the buildings are so arranged as to permit of the placing of patients on them.

The main kitchen is in a separate building. There is a very perfect X-ray and electric plant installed. This is now regarded as a necessity in any well-arranged hospital.

There is a very large and well-arranged out-patient department. Every facility is afforded for a thorough examination of the patients.

The nurses' home is a large building. It affords accommodation for 300 nurses. As the hospital gradually fills up to its full capacity, it is thought this is the complement of nurses that will be required.

The obstetric building is located so as to secure the greatest degree of quietness. Every detail is to be found in it for the care of this class of patients.

The foods are transported to the various warming kitchens situated in convenient places throughout the buildings, and adjoining the wards. In this way the food can be served in the best condition.

Every attention has been given to have a complete suite of rooms for operating work. The operating rooms are well supplied with light, and in proximity to these are the anæsthetic and recovery rooms, and those for the surgeons.

There is an air-pumping system. The air is washed by being passed through a shower of water before it enters the wards. It is expected by this device to remove all dust from it.

The engineering and electric building contains generators for the electric energy that is to be used, operated by steam, and the exhaust from this supplies heat to all parts of the institution, a tunnel extending to every section and carrying steam pipes, water pipes, and the electric wires.

The hospital will have accommodation for 670 patients, a marked increase over the capacity of the old one, which contains but 370 beds.

Such a tremendous undertaking naturally represents a very large expenditure, and the estimated total will approximate $3,400,000. From the various generous benefactions and other sources all but $1,000,000 has been raised, but the trustees still feel a great responsibility upon their shoulders, although the sale of the old hospital will bring in something less than half the sum still required.

ORIGINAL CONTRIBUTIONS

EXAMINATION FOR LICENSE TO PRACTISE SIXTY YEARS AGO.

By the Honourable Mr. Justice Riddell, L.H.D., LL.D., Etc.

THE *"Anglo-American Magazine"* was published in Toronto by Thomas Maclear beginning July, 1852, and continuing for a few years. Running through the whole series was a department called The Editor's Shanty, not wholly unlike the Noctes Ambrosianae and *me judice* not wholly unworthy to be compared with Wilson's famous work. The author must have been a Scot—the dialect is unexceptionable—and a medical man, or have had the assistance of a Scotsman and a doctor. The characters who take part in the dialogue are the Major, the Laird, the Doctor and the Squireen, assisted sometimes by Mrs. Grundy. They have usually a generous supply of Davis' "Port Hope," and of redolent Havannah with T. D. cutties.

In the number of the Magazine for May, 1853, the Doctor gives an account of an examination for licence to practise Physic, Surgery, etc., which he had attended during the previous month. This contains considerable burlesque, but must have been not wholly without verisimilitude.

The examination was held in the General Hospital "in the best room of this worst of buildings" which the Doctor does not hestitate to call an "old pest-house." The General Hospital then with its grounds, occupied nearly all the block bounded by King, Adelaide, John and Peter streets, the main building was 107 feet long by 66 feet wide and two stories high, and there were two smaller buildings for fever cases —the average number of patients was about 100. Toronto considered herself no mean city, having a population of 31,000 and an assessment of $12,000,000—the whole province had a population of about 1,000,000.

A visiting physician, Dr. "Cuticle," had in the March number described the hospital as a large square brick building set down *crookedly* in a vacant lot of land—which he thought was t very judicious arrangement as strangers could not possibly mistake it—he was informed, however, that it had, to please some fanciful gentleman,* been placed with the front facing due south, so that the corners might represent the cardinal points of the compass. He found that the attending physicians did not attend at regular hours, the surgery (dispensary) was a badly lighted room having a partition across the centre with shelves of musty-

*Said (by Dr. Scadding) to have been Dr. Grant Powell, the well-known son of Chief Justice William Dummer Powell.

looking old bottles covered with dust and cobwebs. There was no proper operating theatre but only a dark close room, and the hospital was one of the worst arranged and managed and "a sort of Calcutta Black-hole." Such was the building the scene of the examination; a new building was, however, put up a few years later.

The law at that time required a practitioner of medicine to obtain a license which (with the exception of those holding a license or diploma from a British university of the R.C.P., Lond., or R.C.S., Lond., or a commission as physician or surgeon in the army or navy), must be obtained after an examination before a board appointed by the Governor. There were no less than three medical schools in Toronto at that time, the Toronto School of Medicine (Dr. Rolph's school which was in 1855 to become the Medical Faculty of Victoria University), the Upper Canada School of Medicine (Dr. Hodder's school, then become the Medical Faculty of Trinity University), and the University of Toronto Medical Faculty (this last being abolished at the end of the year by the Act of 16 Vic., C. 89). Clinical lectures were also given during the winter sessions at the General Hospital.

The Medical Board was composed of Drs. Widmer (President), Gwynne, Beaumont, Hornby, Herrick, Telfer, Nicol, Durie, King and Clarke (Secretary).

Dr. Widmer was the father of surgery in Upper Canada: a F.R.C.S., he served through the Peninsular Campaign; coming to "Muddy Little York" in 1815 he soon had an immense practice; he became a member of the Legislative Council and filled many other offices, surviving till 1858.

Dr. William Charles Gwynne was an Irishman, M.B., T.C.D., and a post graduate student at Edinburgh. He came to Upper Canada in 1832, served in the Rebellion of 1837, and was a professor in King's College Medical Department. He died in 1875.

William Rawlins Beaumont, M.D., F.R.C.S., came to Canada from England in 1841, and became professor in King's College. A man of great mechanical skill, he invented several surgical instruments—he was a sound surgeon and an admired lecturer. He died in 1875.

Robert Hornby, M.D. (Edin.), L.R.C.S., Lond., an Englishman, practised for a time in Cleveland, Ohio, and came to Toronto in 1835. He died in 1869.

George Herrick, A.B, T.C.D., M.D. (Edin.), M.R.C.S., (Lond.), after practising in Cork in his native land came to Upper Canada in 1838,and not long after he became Professor of Midwifery in King's College. He had a large private practice and was deservedly popular with patients and students.

Dr. Walter Telfer, L.R.C.S. (Edin.), a Scotchman, came to To-

ronto from Niagara in 1835. He was for some time superintendent of the Lunatic Asylum, but was removed in 1847, it is said at the instance of Dr. Rolph, but this is disputed. He was one of the attending physicians at the General Hospital, and a member of the Board from 1838 till his death in 1857.

Dr. William Nicol, born in England, passed the Upper Canada Board in 1836, practised in Bowmanville and in Toronto, became Professor of Materia Medica in King's College, and graduated as M.D. of the university. He had a very large practice until his death in 1866. George Nicol, the well-known clerk of Assize, Toronto, is a son.

Dr. William Durie, born in Scotland, entered the Royal Artillery as assistant surgeon in 1797, subsequently became full surgeon, came to Canada in 1836 and joined the Medical Board in 1838. He practiced in Toronto and Thornhill, dying in 1871.

John King, M.D., (Edin.), L.R.C.S. (Edin.) an Irishman, came to Canada in 1830, and became a member of the Board in 1832. He was in 1843 appointed Professor of the Theory and Practice of Medicine in King's College, and for a long time was on the staff of the General Hospital. He died in 1857.

Dr. Edward Clarke, M.R.C.S. (Edin.), was house surgeon of the Hospital, and succeeded to the secretaryship of the Board in 1848 on the removal from Toronto of Mr. Edwin Henwood, resident apothecary and subsequent house surgeon of the hospital, the former secretary. Henwood while apothecary had studied medicine, passed his examination in 1845, was immediately appointed house surgeon and in 1848 went to Hamilton to practise his profession.

The "Doctor" who in "The Editor's Shanty," describes the examination, says: "In the middle of this Doctors' Commons stands a walnut table, such as was used by the denizens of Old York when its streets *were* muddy—at its eastern end is placed a painted elbow chair for the aged President, and around the thirsty crumbless board are six other body-rests for the reception of the corpusses of the Examiners. The to-be-examined unfortunate wretch is perched off at one corner at some distance, to prevent the possibility of his getting any information from "the understandings" of the table. At a small settle by the window sits the Secretary with all the insignia of office, consisting of blank licenses, old pens, wafers, etc., etc." Dr. Widmer was at this time 73, which was considered "aged" sixty years ago.

The candidate is called in, Mr. Seth Obed Bramble, "a ponderous nondescript sort of being, by his dress . . seeming to implore mercy and by his sleek plausible physiognomy suggesting caution to the

Faculty who were to weigh his merits.'' He is turned over by the president to ''Dr. Labermahn'' to test his acquirements in Latin and materia medica.

It may seem anomalous to begin a professional examination with an inquiry into the knowledge of Latin possessed by the candidate; but it must be borne in mind that in those days everyone of education had some knowledge of Latin—and an ignorance of that language indicated if it did not absolutely prove a lack of general culture. Accordingly from the first, candidates were from time to time rejected on account of their want of knowledge of Latin. In October, 1824, two are rejected because ''deficient in classical education''; July, 1830, one as ''ignorant as a classical scholar''; April, 1832, another ''deficient in classical knowledge''; October, 1832, two for the same reason. In April, 1834, one unfortunate who ''had tickets from Fairfield* of two courses of lectures and a doctor's degree in medicine after four years' study and without any knowledge of the classicks, presented himself.'' This was enough to reject him, ''he was not examined further.'' In July, 1834, one candidate from the Royal College of Surgeons, Edinburgh, ''could not construe a prescription written by Dr. King,'' and was not examined further—two years after, one gentleman ''from the United States educated at the University of Maryland and Pennsylvania, exhibited a total ignorance of the Latin language'' and was rejected.

The practice seems to have been to examine in Latin first—a sort of matriculation examination—and to proceed with the professional subjects only if the candidate exhibited some familiarity with that language. We find the Board writing the sister Boards in Montreal and Quebec in April, 1847:—

''The course this Board pursues in the examination of candidates is as follows: 1st, Some acquaintance with the Latin language is required. With this view if the candidate cannot construe some paragraphs of Gregory's Conspectus, a portion of the Pharmacopoeia Londinensis or a Latin written prescription is substituted; in the event of

*Fairfield Medical College began in 1809 as an unincorporated institution, known as the Academy of Medicine of Fairfield, at a small village, Fairfield, not far from Little Falls, N.Y. In 1812 it was granted a charter by the State Legislature, under the style ''College of Physicians and Surgeons of the Western District of the State of New York,'' known as Fairfield Medical College. This, it is said, was the sixth medical college organized in the United States. From 1813 to 1839 lectures were given at Fairfield, Frank Hamilton delivering his first course of surgical lectures at its last session. Geneva Medical College, of Geneva, N.Y., had been chartered in 1834, and its first course of lectures was given in 1835. When Fairfield Medical College closed its doors (which it did after the session of 1839-1840) some of its Faculty, including Hamilton, joined the staff at Geneva. This college continued until 1872, when it removed to Syracuse, N.Y., becoming the Medical Faculty (College of Medicine) of the Syracuse University. This is still in active operation, with an attendance of about 150 students.

a total failure in these, the professional examination is not proceeded in. If the Latin examination is satisfactory, then follow:

"2nd. Materia Medica and Pharmaceutic Chemistry.

3rd. Anatomy and Physiology.

4th. The Theory and Practice of Medicine.

5th. Practical Surgery.

6th. Midwifery and the Diseases of Children."

"Dr. Labermahn" was I think, Dr. Nicol, who was certainly a "labor man" (for that and not "lebermann," is probably the meaning). Nicol was not only Professor of Materia Medica in the University, but also a member of the Senate and Dean of the Faculty and Secretary of the Chirurgical Society. He also had a very large practice in Toronto. Moreover, the kindness of Dr. Labermahn to the unfortunate candidate and his protect against an unfavorable decision accord with Dr. Nicol's well-known kindly disposition.

The examiner says: "Mr. Bramble, will you be kind enough to translate this prescription:

℞ Baccarum Juniperi contusarum, uncias duas
Aquae ferventis octarium.
Digerantur vaso claudo in loco calido;
colatur et colaturae adjice
Potassae acetatis drachmas duas,
Aceti Colchici drachmas tres
Syrupi Zingib. unciam. Misce.
Sumatur uncia tertiis quartisve horis."

The student makes rather a hash of the Latin—"Recipe" is "receive," "Baccarum Juniperi," "of the juniper of Baccus," "Aquae ferventis" "fervent water," while "octarium" quite floors him. But the kindly examiner excuses his "naturally slight forgetfulness," and helps him over the difficulty. He also forgives a false quantity in the verb, and expresses himself satisfied, notwithstanding the protest of "Dr. Rex"—who is of course Dr. King.

Professor Rex then takes the candiate in hand and examines on toxicology, the symptoms and antidote of arsenical poisoning. The knowledge displayed by Mr. Bramble on this subject is not immense, especially as he thought an alkaloid was an alcoholic mixture. Prof. Rex was not satisfied—but Prof. Hayrick (Herrick) took over the examinee. His department was practice of medicine, and his only question the treatment of "a child—a little thing you know—that had the—

hang it, you know what—comes on in the infernal hot weather—'' the student suggests ''the summer complaint,'' and Prof. Hayrick says ''Exactly now.'' The answer is satisfactory to the professor, who jerks his thumb over his shoulder to Dr. Belmont. This was a characteristic gesture of Herrick's, as will be seen by a reference to Canniff's Medical Profession in Upper Canada, p. 427.

Dr. Belmont (Dr. Beaumont) then examines, but his questions are plainly travestied and we may pass them over—one characteristic question may however, be mentioned—the student is asked the name of the inventor of a certain instrument. Dr. Beaumont was himself such an inventor.

Dr. Stowell* then examined on physiology, asking his questions on the liver, ''slowly as if calling to his mind the experiments of Bernard and the appearance of Kiernan's liver under the microscope.'' I have no doubt we have here a side hit at an incident which did much to make Dr. Gwynne famous. A young man attempting to climb a lamp post one night fell down, suffering a fatal internal injury. The medical men called in were puzzled, but Dr. Gwynne alone said the liver was ruptured, which the post mortem proved to be the fact. (Claude Bernard's investigations upon the glycogenic functions of the liver are of course classical). As Dr. Gwynne was Professor of Physiology in the University, the idendification of Dr. Stowell with him seems very probable; but I do not know any reason for dubbing him ''Stowell.'' Dr. Stowell asks, ''State to the Board the physiology of the organ and particularly with reference to the formation of sugar.'' The student answered, ''Sugar! Never heard tell of such a thing, you know, Sir! Some of them English and French know a mighty deal more nor we Cannucks.'' His ignorance of the results of the then very recent experiments and investigations was not to be wondered at and was certainly shared by a very large proportion of the profession everywhere. The rest of his answers showed him a perfect master of his subject so ''that the assemblage, principally students, could not forbear applauding him.'' After the examination had covered the liver, etc., it went on to the making of gruels, broths, etc., for the sick and ended by an inquiry into the proper formulae for ''drinks.'' The student's prescription for a gin cocktail I copy as indicating what was considered a ''drink'' sixty years ago:

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*I had thought that this might be Dr. James Bovell, who was professor of the Institute of Medicine in Hodder's School (Trinity University), but Dr. Bovell does not seem to have been a member of the Medical Board.

"℞ Simpl. Syrup ..... ℥ ss
Sto-ton Bitter ..... ℥j
Genev. ..... ℥jss a ℥ij
Aq. ..... quant. suf.
Misce per swizzle—stick.*

To be followed by 7 grs. jalap and one of cal. every eighth hour—donec alvus bene soluta sit." Celsus himself could not give better Latin and perhaps not a better "drink."

Mr. Bramble was finally passed, over Prof. Rex's strong dissent and protest.

Some others of the students are said to have "passed highly brilliant examinations, examinations, I can assure you, which would have reflected credit on any Royal College of Surgeons or Physicians in the world."

A curious feature of the examination is that not only were the other students present but also by virtue of a by-law then recently passed, any member of the profession who chose. After the Doctor had given his narrative in The Editor's Shanty, a good deal of discussion took place as to the proper method of examination—the conclusion apparently being that there should first be a written examination and then a *viva voce* examination on the answers.

*This word puzzles the President, and much to the amusement of his colleagues, he asks to have it translated. It is at length explained with the assistance of a diagram and a split quill inserted in the inkstand and whirled rapidly around. The President said, "Hang me, I must get one."

RADIUM IN DERMATOLOGY*

By Dr. W. H. B. Aikins,

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In collaboration with

F. C. Harrison, B.A., M.B.

Assistant in Pharmacology ,University of Toronto, Physician Toronto Hospital for Incurables.

RADIATION in some form or other has formed a branch of therapeutics for some considerable time, X-ray treatment representing the earliest variety. The radio-active rays are now chiefly used, usually proceeding from radium itself, but occasionally from synthetic radio-

*Read at a meeting of Ottawa Medical Soceity, Jan. 10, 1913.

active products, and the recent improvements in technique, both in simplicity and adaptability, have resulted in increased facility of application, and thus greatly added to the value and scope of this form of treatment. In estimating the value of radium treatment it should always be remembered that each case should be judged on its own merits, and careful consideration given to the variety of lesion present, its site, extent, and the greater or less susceptibility of the tissues to the action of the rays.

The employment of this method of treatment in dermatology dates from 1906, when the *Laboratoire Biologique du Radium* was established in Paris with the object of developing radium treatment, from a scientific, educative and philanthropic point of view. From this date onwards Wickham and Degrais carried on extensive investigations, the results of which demonstrate conclusively its value in the treatment of many diseases of the skin, and indicate the possibility of its occupying a still more prominent position in this connection in the future.

For convenience one may roughly classify the various conditions of the skin in which the use of radium is of service into:

1. What the French call "Dermatoses," a term which includes the eczemas, psoriasis, pruritus, etc.

2. Inflammatory and parasitic conditions such as acne vulgaris, ringworm sycosis, lupus vulgaris.

3. The vascular new growths—nævi and angiomata.

4. Other new growths, benign and malignant, such as warts, moles, rodent ulcer, epithelioma, sarcoma.

Analgesic Action of Radium.—Owing to the analgesic and decongestive properties of the radium its beneficial effect is very marked in pruritus ani, and considerable relief is also given in pruritus vulvæ and pruritus of the scrotum. The obstinate resistance of many cases of pruritus to all ordinary methods of treatment is well known, but radium has given extraordinary results, the improvement in some instances being apparently permanent. The intolerable itching ceases within one or two days after irradiation, and Wickham and Degrais report two cases in which cure has persisted twelve and fifteen months respectively, Barcat, one which has been without recurrence for three years, and two which have remained cured for one year and eight months respectively. We can also report good results from the use of radiferous pomade in pruritus ani.

The analgesic action of radium also influences the severe pain which is often associated with herpes zoster. In such cases heavily screened placques applied for many hours in succession are used to influence the deep branches of the nerve, whilst slightly screened plaques, applied for shorter periods, produce the desired effect on the

superficial terminations of the nerve. Many cases are reported in which great relief was experienced within a few days after this treatment.

Eczema.—It has been demonstrated that radium has an action on the sensory, motor and trophic functions of the nervous system, and it it therefore obvious that it ought to exert a beneficial influence in eczema, which is characterized by trophic and sensory disturbances. It has naturally only been employed in obstance forms of this condition, with the result that they have often been relieved when all other measures have failed. In chronic dry eczema great success has followed the applications for short periods at a time of plaques of a low degree of radio-activity, the intolerable itching, which is such a troublesome symptom in this disease, being usually relieved within a short time after the commencement of the applications. If there is not manifest and definite improvement within three weeks it is advisable to give another course of treatment, increasing the duration of the exposures. Wickham and Degrais, in their latest publication, state that they have treated about two hundred cases of chronic eczema, associated with lichenification, in this manner, and that the results have almost invariably been favorable. Bayet also reports 42 cases, 41 of which were successful. The decongestive and analgesic properties of radium are of special service in relieving the symptoms in this condition. Repeated applications of an unscreened plaque for five minutes at a time, are sometimes very useful in cases of acute eczema, with a tendency to recurrence. In chronic weeping eczema irradiation cannot be performed with equal facility, but in spite of this many successful cases have been reported, in some of which the eruption has not reappeared for a year or more after the cessation of the treatment. The prognosis is most favorable in the localized forms. Toiles of a low degree of radio-activity may give as good results as the stronger apparatus, but they cannot be applied with equal facility in the irritable and weeping form of eczema as in the dry variety. In all cases of eczema in which radium treatment is employed it is advisable to combine with it the ordinary local and constitutional treatment of the condition.

Radium has also utilized in a few cases of eczema in the form of a pomade, which is applied with the object of relieving the inflammation and pruritus.

As an example of the favorable action of radium in this condition we may cite the following case which we have under observation:

A gentleman, age 51, had suffered for years from eczema of the exposed parts of the body, and the skin on the face and hands was quite thickened and caused him constant irritation. He had employed all manner of local and internal medications. Twenty minute exposures of a radium plaque were given over the affected area. He was seen

again in three weeks. The irritation was much less, but the thickening of the skin was still present. The same exposure was repeated. About two weeks later he had an acute exacerbation, and the skin was very red, irritable and formed vesicles at several points. During this acute attack he received three minute exposures to a placque. When the acute inflammatory process had subsided the skin gradually lost its chronic thickness and in a short time was quite normal in appearance, and has occasioned him no discomfort since.

Psoriasis.—Psoriasis has been very successfully treated by radium, either alone or in combination with other methods of treatment, and in some cases it may succeed where the X-rays have proved ineffectual. In dealing with obstinate patches the most suitable form of apparatus is the naked plaque, applied for short periods at a time. The scales are generally loosened, and fall off in from eight to ten days, the slight residual stain rapidly disappearing. When the eruption is on the face a thin aluminium screen should be used in order to prevent pigmentation. As a rule radium therapy is indicated in the forms of psoriasis associated with pruritus. In some cases very weak doses may relieve this symptom, and anti-pruriginous treatment may therefore be beneficial even in the most extensive cases. Retrogression and finally complete disappearance of the eruption may be expected in from six to eight weeks after the commencement of the applications, but unfortunately with this, as with all known methods of treatment of psoriasis, recurrence is very likely to take place. In spite of this, however, the great relief afforded by even a temporary cessation of the intolerable pruritus and irritation render the treatment justifiable in every case of psoriasis.

Lupus Erythematosus.—Radium therapy constitutes a comparatively new departure in the treatment of this obstinate skin affection, and it frequently proves successful when other methods have failed. In this condition, as in lupus vulgaris, Wickham and Degrais recommend fairly large doses, and that in all cases and applications should include from two to three millimetres of tissue outside the apparent limit of the lesions, in order to obviate as far as possible the possibility of recurrence. A combination of irradiation with other forms of treatment usually gives the best results, although several cases are reported which were cured by radium alone. Wickham and Degrais have had good results from the injection of radium bromide in one case, but this appears to be anisolated instance.

Barcat recommends (*Precis de Radiumtherapie,* Paris, 1912, 148) that in cases with but slight infiltration the doses should not be sufficiently large to entail any ulcerative reaction, whilst in those associated with extensive infiltration much stronger doses should be employed. In his experience irradiation has resulted in improvement in all instances, and in complete success in many cases.

Granulosis Rubra Nasi.—This condition, which is characterized by diffuse congestion of the extremity of the nose, is extremely refractory to treatment, but Barcat reports excellent results in two cases from the employment of radium. In both cases after the first application of the rays, which lasted for half an hour, there was a temporary reaction, but the favorable results were very obvious in six weeks and two weeks respectively, subsequent treatment producing a complete cure.

Hypertrichosis.—Owing to the facility with which they can be applied and the slight degree of inconvenience experienced by the patient, the radium rays, when applied with suitable precautions, afford a convenient method of destroying the superfluous hair, which is sometimes such a disfigurement to a woman. A light lead screen covered with paper should be used, the exposures lasting from two to three hours, with intervals of twelve to fourteen days between each exposure. By this method the hair follicles will be destroyed without the drawback of the excessive irritation, in some cases pigmentation, which may result from exposures of shorter duration to unscreened plaques.

Acne Rosacea.—This condition which causes great disfigurement, usually affects the nose, chin and cheeks, and in dealing with it radium therapy is very often efficacious and gives permanent results, these results being evidently and pre-eminently due to the decongestive action of radium. It is not infrequent for obstinate cases of the disease, which have proved refractory to all other measures, to be cured after exposure to the radium rays for a short period. Owing to the fact that the eruption usually appears on the face the greatest care should be taken to avoid residual disfigurement. With this object the plaque should be covered with a light aluminum screen and from five to ten sheets of black paper, the exposures should be of short duration, and the applications should not be given too frequently. It is well to employ in somd cases doses of sufficient strength to produce an erythematous or erythemato-pityriasic reaction. In spite of the temporary accentuation of the redness, due to this reaction, the acneiform eruption rapidly retrogresses, and on the cessation of the reaction the area appears decongested and normal. It is only in rare cases that the result is not successful, and in the majority of instances the beneficial effects are fairly permanent

Hypertrophic rosacea or rhinopyma which may be found unassociated with acne of the rest of the face is a permanent hypertrophy, the nose is bulbous and the affected parts are irregularly mammillated and covered with blood vessels. This condition which hitherto was only amenable to mechanical measures can now be treated successfully with radium.

Acne Vulgaris and Acne Keloid.—Chronic cases of acne vulgaris,

particularly those associated with considerable scarring, may be treated in a similar manner with good results.

Acne keloid is usually situated on the nape of the neck, and the difficulty of permanent cure of these tumors by surgical operations is recognized by all surgeons. As a rule recurrence takes place, the tumor frequently being more voluminous than that removed by operation. Electrolysis and scarification are successful in a few cases, but very prolonged and painful treatment is invariably required. Radium applied by means of plaques, appears to be particularly appropriate to the treatment of obstinate cases of keloid acne. This fact is attributed by Wickham and Debrais to the special receptivity of the keloid tissue and to the influence of radium on the pilo-sebaceous glands. It produces immediate destruction of the hair and glands, and thus prevents recurrence of the keloid tumor. In their latest publication they stated that they have treated some hundreds of cases in this way, with more or less marked improvement in every instance, and in the majority of cases complete disappearance of the tumor. Recent keloids sometimes disappear in from six weeks to two months. Although some of these cases are of long standing there has not been a single recurrence, which is the more remarkable when one takes into consideration the fact that such tumors almost invariably recur when treated in any other manner. In a few cases they have combined radiation with surgical extirpation, and they report one case in which a tumor had recurred four times after operation, but after the fifth operation, which was followed by radiation, there has been no recurrence, although the case is of several years' standing. We have had also a most excellent result in a case of acne for six years.

Parasitic Diseases of the Skin.—These include sycosis of the beard, and ringworm of the scalp. Sycosis represents a localized folliculitis affecting the beard or moustache, and due to the presence of staphylococci in the pilous follicles. Both the X-rays and radium are beneficial in this condition, as well as in ring worm of the scalp, the lesions disappearing within two or three weeks after the commencement of radiation. Only short applications of unscreened plaques are required. If sycosis has reached the stage of deep involvement of the cutis, together with hypertrophic dermatitis, it is necessary to obtain depilation by means of the ultra-penetrating rays, care being taken not to destroy the hair follicles permanently or to produce sclerosis of the skin.

Lupus Vulgaris.—Radium was first employed in the treatment of lupus by Dr. Danlos. Wickham and Degrais report two cases in which excellent results were obtained from the use of radium alone (*Le Radium dans le Traitement du Cancer,* v913, p. 82).

Experience indicates that the rays have no selective action in this

class of case. They recommend the employment of sufficiently large doses of radium to produce a large amount of destruction, with protection of the neighboring healthy tissue, and believe that when used in this way radium represents a most important adjunct in the treatment of lupus, although it cannot be depended upon to definitely and permanently cure all cases, or to invariably prevent recurrence.

The advantages of radium as compared with other methods of treatment, are that the treatment is not so prolonged, does not entail so much inconvenience to the patient, and that it is effectual in cases in which the lesion is inaccessible to other methods. It is also of importance that the residual scar is much less disfiguring from a cosmetic point of view.

Lupus.—One of the most satisfactory cases healed has been that of a lady referred in May, 1911, by Dr. James Third, of Kingston, for lupus of the nose and cheek altogether of ten years' duration. The condition first began on the mucous membrane of the left nostril and gradually spread. Various local treatments were used as cauterization, electrolysis, X-rays, curettage. In 1905 her general health was very poor and the condition extended, and perforated the septum. Since then the skin at the alar margins had become involved, and shortly before we saw her nodules had appeared on the left cheek. The nose when first seen presented a most distressing appearance, the margins of the nostrils being covered with large unhealthy granulations. (Fig. 1.) There was a free foul discharge from the nostrils. Very heavy destructive doses of radium were employed, and as a result the diseased tissue had been removed and the nostrils now present a healed margin. The disease present inside the nasal cavity was treated by radium tubes,

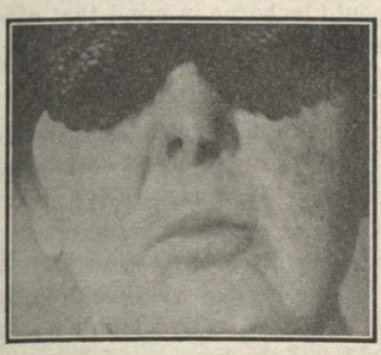

Fig. 1.—Lupus.
Appearance before Treatment

Fig. 2.—Lupus.
Appearance following Treatment

which were inserted into the nostrils. On the cheek the modules present have cicatrized. This patient's general health is not very good, and

close watch has to be kept over the condition for fear of a recurrence of the disease. The present local appearance is regarded as very satistory. (Fig. 2.)

Angiomata and Naevi.—Until within the last few years radium therapy has not been regarded as a routine procedure in the treatment of these conditions. Electrolysis was somewhat successful in removing small port wine marks, but this procedure was painful and repeated seances were required. Good results were obtained from radium by Danlos, Rehns, Hartigan and others, and in 1907 Wickham and Degrais published a communication, in which they stated that they had treated successfully a very large number of cases of this nature, namely, port wine marks and angiomatous tumors. The duration of the applications and the strength of the dose should be regulated in accordance with the nature of the lesion, and in the case of superficial port wine stains the object aimed at should be to produce gradual obliteration of the stain by repeated applications, each individual case being judged on its own merits in regard to the length of time during which radiation can be tolerated and the frequency with which it is advisable to repeat the seances. The doses should be regulated so as to produce practically no perceptible reaction, and the best results are obtained with plaques or toiles of 50,000 to 100,000 radio-activity screened with lead, the latter being covered with 8 or 10 sheets of black paper, in order to cut off the secondary rays of Sagnac. All writers on the subject are agreed in emphasizing the importance of avoiding if possible inflammatory reaction, and of protecting the normal skin surrounding the lesion. In the majority of cases slight superficial desquamation will occur in the course of four or five weeks after three sittings of one hour each. In estimating the dosage in repeated applications it should be borne in mind that after radiation the tissues become more susceptible to the action of the rays, and the length of the sittings should therefore be reduced.

In cases of fairly large vascular angiomata, associated with the development of a moderate amount of fibrous tissue, a more destructive action is advisable, and this may be obtained by exposure to the unfiltered rays for three or four hours at a sitting, or a similar result may be obtained without so severe a reaction by using filtered rays and increasing the duration of the applications. In the case of very voluminous tumors the "cross-fire" method may be employed with advantage, the apparatus being placed on the opposite sides of the tumor, which is then saturated with the rays. Wickham and Degrais were the first to demonstrate the beneficial effects of radium in this class of tumor, and their results have since been confirmed by many writers. Individual idiosyncrasies are, however, an important factor in determining the success or

otherwise of the treatment, and the prognosis of radium therapy is not so good if the lesion has been previously treated by electrolysis.

In the vascular and pulsatile angiomata of softer consistency, the destructive action which is indicated is the variety referred to above must be avoided, owing to the risk of hæmorrhage. In cases in which the lesion represents a combination of all three forms of angiomata we have had most success with the "cross-fire" method, of Wickham, using fairly strong plaques screened, applied in series consisting of five or six applications, and repetition being dependent upon its results.

The advantage of radium in this connection, as compared with other methods of treatment that have been recommended, are the facility of application and the fact that the treatment causes practically no pain, which is of special importance in view of the fact that a large proportion of the patients are young children. The cosmetic results also compare favorably with those of surgery, the X-ray or electrolysis, the scar being scarcely distinguishable from the surrounding skin.

NEW GROWTHS—BENIGN AND MALIGNANT.

Senile Keratosis.—This condition is very common in people above the age of fifty, and is liable in many cases to degenerate into cancer. Radium rays can be applied with facility, and have been found very efficacious, the pigmentation gradually disappearing, and the surface becoming completely normal in color and consistency in about five or six weeks after the application. If cure is not complete a second application may be made a month later. In some cases, in which there is a scab of very hard consistency, it is advisable to remove this with the curette, and to subsequently apply the rays.

Papillomata.—The common wart and other papillomatous growths which so frequently, either through irritation or advancing years, take on a malignant growth, respond most readily and conveniently to short exposures of radium rays. When so much stress is being laid as it is at present on the proper treatment of many pre-malignant conditions one can see what a field radium-therapy has in this connection.

Keloids and Cicatrices.—It is necessary to make a distinction in this connection between the cicatrices which are associated with keloids and those due to other causes, in view of the fact that Wickham and Degrais are of opinion that keloid tissue reacts in a selective manner to the radium rays, whilst the normal cell does not do so. Keloid cicatrices may be dealt with either by the destructive or the non-destructive method, the former consisting of treatment by unscreened plaques, with the object of producing a severe superficial reaction. If the non-destructive method is selected screened plaques are used, with exposures of longer duration, the result being a gradual absorption and disappearance of the

cicatrix without any visible signs of reaction. Wickham's so-called "cross-fire" method is often useful in dealing with large keloids, and it is advisable that the peripheral portions of the affected area should be thoroughly irradiated, in order to influence possible extensions of the growth beyond its apparent superficial limits.

Although radium may be regarded almost as a specific in regard to keloid tissue, it does not appear to have a similar affinity for non-keloid cicatrices, such as those following cervical adenitis, and therefore, although these may yield to a certain extent when treated by doses sufficiently large to cause a very destructive action, such favorable results cannot be anticipated as those which regularly occur in the case of keloid tissue.

Keloid.—In this connection we would report a case which was referred to by Dr. Chas. Noecker, of Waterloo, with the following history as furnished by Dr. Noecker:

"Miss M. R., aet. 26 years, had had the ovaries which were enlarged and cystic removed by Dr. Edmund E. King, Toronto, Ont., on June 25th, 1908, and the recovery was uninterrupted. About a year after the operation, the cicatrix became sensitive and developed into a characteristic cicatricial keloid. On several occasions subsequently small vesicles developed, which, however, healed readily. About July, 1911, a small inflamed area became infected and caused a great amount of suffering to relieve which morphia was administered. The infection was of the virulent type. Soon the wound became gangrenous, and the greater part of the cicatrix sloughed away, exposing the deep fascia over an area 3 x 3 inches. Local treatment was of no avail, and as a last resort the edges were excised, the remaining parts thoroughly curetted, and the wound closed with silk worm gut sutures. The operated field had an angry appearance for some days, but we had primary union rather unexpectedly.

"Several months after operation the cicatrix hyperthrophied as before, and the sloughing process apparently without external infection began again. At this stage Thoremedin paste was used, and for a time with good prospects of complete success. The streptococci, however, won out, and the wound was 4 x 4 inches in extent, when the case was referred for radium treatment."

When first seen there was an ulcer irregularly oval in shape, situated in the middle line of the abdomen about one inch above the pubis. The ulceratted area was 4 inches in diameter and presented hard thickened edges, particularly on the left side where it was one-half inch in depth. The base was covered with a dirty-brownish colored slough, and there was a free purulent discharge. The patient complained of a great deal of pain in the wound and refused to have a section removed for

microscopic examination. Heavy doses of radium were given around the margins and over the base of the ulcer, and within a month great improvement was noticed. Healthy granulations had sprung up, the discharge was less and the area of ulceration had been reduced to two and one-half inches in diameter. Following this, however, the healing process was for a time arrested and another slough formed on the base of the ulcer . She was given further heavy doses of radium, with the result that the base became clean, the hard edges softened down and healing has steadily progressed since.

Epithelioma of the Skin.—This condition may be considered under the headings of rodent ulcer and fungating epithelioma of the skin.

Rodent Ulcer.—This is a lesion where radium gives us perhaps the most gratifying results, for we know how difficult a process it is to treat in many cases. To the action of radium on these cases Wickham has applied the term "selective" on account of the almost specific effect exercised by the rays in destroying the pathological cells and stimulating the healing process. The duration of exposure to the action of the rays should be varied to suit individual conditions, and should be chiefly dependent upon the manner in which the tissues respond to the treatment. It is advisable to employ unscreened plaques of 100,000 radioactivity, containing 4 milligrammes of radium, and in the first place to give applications of an hour's duration on four successive days. In many cases one such series of applications will suffice, a scab forming in from ten days to two weeks, which gradually loosens and falls off, leaving a smooth non-depressed scar, scarcely distinguishable from the surrounding skin. It is important that if possible the scab should not be interferred with, but allowed to detach itself naturally. If there should be suppuration beneath it mild antiseptics may be applied. It is also advisable that the plaque should be rather larger than the ulcer, in order to include any foci which may be in the course of development outside the visible limits of the lesion. In the case of very small ulcers practically no inflammatory reaction is necessary, but if the ulcer is larger and deeply situated, and if time is an important consideration, it is advisable to employ sufficiently strong doses to result in a certain amount of destruction. If there appears to be thickening of the subcutaneous tissues after the removal of the crust applications of larger duration may be given, light lead screens of one or two-tenths of a millimetre in thickness being used to screen the plaque.

In an experience of between sixty and seventy cases, not one has failed to be benefitted by radium treatment. Where the ulcer has extended deeply and involved bone or cartilage complete healing is not always to be obtained, but the advance of the process can be controlled. When confined to the soft parts one can almost guarantee results.

Fungating Cutaneous Epithelioma.—Of this condition a very small portion of cases do not yield to radium treatment, and Barcat and Balzer report 160 cases, nine only of which were unsuccessful. The failures are usually those cases in which radium therapy has not been resorted to until they are in a very advanced stage. As regards the method of treatment, radium may be used alone, or the growth may be treated surgically by curettage and subsequent applications of radium, the latter procedure being advisable if it is neccesary to economize time.

As a rule the operation can be performed under local anaesthesia, radium plaques being applied forty-eight hours later, the dose being sufficiently large to destroy all peripheral cancer cells. In cases in which it is impossible or inconvenient to give fairly frequent applications it is necessary to induce a more severe reaction than in those which can be kept constantly under observation. After cicatrisation careful watch should be kept for the slightest sign of recurrence in the scar or the surrounding tissue, and the applications repeated if any thickening is observed. Owing to the fact that the lesions are rather deeply situated in these cases, the ultra-penetrating rays sometimes give excellent results, and the same may be said of the "cross-fire" method. The deeper tissues may be influenced without excessive superficial destruction by applying the harder penetrating Gamma rays for fifty to one hundred or more hours at a time. According to the statistics the cured cases amount to 90 per cent., and in some of them cure has already persisted for seven or eight years.

The way in which these lesions respond to treatment is so striking that one may venture to instance two cases: T. F. T., aet. 54, referred by Dr. Bowman, of Penetanguishene, Ont., presented on October 29th, 1910, a fungating mass, as large as a fifty cent piece, below and behind the left ear. There had been a small ulcer for about five years, but latterly the growth had been very rapid. The growth was covered with

Fig. 3—Fungating Epithelionea, Before Treatment.

Fig. 4—Same patient as in Fig. 3. After Treatment.

cauliflower excresences, and projected ¾ of an inch above the surrounding skin. The edges were hard and everted, and the tissues about were quite hard, as though the growth extended to some depth. There were no enlarged glands to be felt. Under local anaesthetic the vegetations were removed, and the next day radium applications were made. These were repeated for four days, and then the patient returned home. He was seen again in three weeks, at which time all that was observed was a small, healthy ulcer, one-half inch in diameter. The epithelium was growing over it, and it looked as though it should be healed completely in another two weeks. The edges were quite soft, as were all the surrounding tissues. A few more applications were made to stimulate the healing, and he again returned home. On December 15th he reported it "practically healed, with only a small crust to be detached."

This patient has been seen since and there is absolutely no ulceration or sign of recurrence.

Another patient referred by Dr. H. L. Anderson of Niagara-on-the-Lake, Ont., was first seen in September, 1911. The condition had started four years before behind the left ear. At the date mentioned the (Fig. 3.) The part was curetted under cocaine and a radium plaque with one lead screen left in position subsequently for 12 hours. When seen a month later there was still a small area three-eights of an inch The healing process continued and the conditions has remained satisfactory since then. (Fig. 4.)

A MORE LIBERAL USE OF ANTITOXIN IN THE TREATMENT OF DIPHTHERIA.*

By M. B. Whyte, M.D., Resident Physician, Toronto Isolation Hospital.

MR. CHAIRMAN and Fellows of the Academy,—In presenting this paper, I do so with apologies to Dr. John H. McCollum, and to Dr. Edwin H. Place, of Boston, who were among the first to show the advantages of the administration of antitoxin in large doses.

Diphtheria, since the introduction of antitoxin, has become one of the few diseases for which we have a specific and thoroughly scientific treatment. It is not many years since diphtheria was dreaded, and rightly so, as a most fatal disease. A conservative estimate before the introduction of antitoxin, shows a mortality of from 40 to 50 per cent. for all coses. When antitoxin was first used, in 1895, at the Boston City

*Read at the Toronto Academy of Medicine.

Hospital for example, the mortality rate very suddenly dropped from more freely used, the figures have gradually decreased to the remarkably low percentage of 6.43 per cent.

It will be seen that the very marked difference in mortality rates occurred with merely the use of antitoxin, no matter in how small a quantity. And now, as the figures become smaller, the greater is the effort necessary by different means of administration and large dosage, to obtain even more favorable results.

It was my privilege a year ago to spend a little time in the isolation hospitals of four easter American cities—Boston, Providence, New York and Philadelphia. I was particularly impressed with the thorough treatment and wonderfully good results which obtained in Boston, now a city of a million and a half of population, with slum and tenement districts, and a virulent form of diphtheria, such as is seldom seen in the other three cities mentioned. I found that antitoxin in large doses was the one word in the treatment of cases in Boston.

In Philadelphia antitoxin was used as freely as in Boston; in Providence, not quite so freely. Where 200,000 or 300,000 units were used in Boston, 100,000 or 150,000 were used in Providence. In New York it was used in about the same dosage as in Toronto, 10,000 to 20,000 to 40,000 units.

There are those who can remember when 3,000 units of antitoxin was considered to be almost a fatal dose for an adult. These same persons have lived to realize that much better results are often obtained by the administration of from 10,000 to 20,000 units. Now we know that there are malignant, or so-called septic types of diphtheria, seen chiefly in hospital practice, in which a single 20,000 unit dose has no more effect upon the ultimate result than a 3,000 unit dose. In other words, the toxaemia is out of all proportion to the amount of serum used. It is in these very severe cases thrust upon a hospital when other measure fail that serum should be used in what seems like almost heroic doses, severe cases which have progressed for three or four days before coming under treatment, and cases which are seen to be severe and rapidly spreading from the start. Such a case would present the following clinical features:

The patient lies in bed in a semi-comotose condition, the head thrown slightly backward, the eye lids partly closed, the face bears a peculiar but typcial ashen pallor, the glands of the neck are greatly enlarged, and there is a profuse serous and later purulent discharge from the nose with excoriations about the nares and lips. The pulse is very rapid, soft and compressible, the temperature may or may not be high. The rate of respiration is increased, and as mouth breathing is the rule in these cases, respiration is stertorous. An examination of the

throat shows considerable swelling of the anterior pillars of the fauces, and the tonsils, pharynx and naso-pharynx are covered with heavy membrane, which may be spreading about the uvula and up over the soft palate to the hard palate. The line of inflammation along the margin of the advancing membrane is readily seen. The characteristic odor is very marked. It is this type of case, apparently hopeless, which may often be saved by the use of 200,000 or 300,000 units of antitoxin. It is administered as follows:

If possible, the initial dose at least is given intravenously, 20,000 to 40,000 units being used. The patient's general condition is watched closely, and together with the appearance of the throat and false membrane, is used as a guide to the amount and frequency of subsequent doses. The case is examined every six hours at least, and unless the membrane curls at the edges and shows undoubted signs of separating, and there is improvement in the pulse rate and degree of temperature, the antitoxin is repated. This is continued during the first 48 hours of treatment in most cases, but is never carried on beyond the third day. On the morning of the fourth day one can with this treatment predict that the throat, with the exception possibly of a few small adherent tags in the tonsillar crypts, will be quite free of membrane, the nasal discharge will have ceased, the temperature will be normal, and the pulse normal or approximately so. The patient is stimulated during the time that antitoxin is administered to promote a vigorous circulation and aid rapid absorption, but this is subsequently gradually discontinued and dispensed with altogether. The patient is then required to be kept in bed in the horizontal position for from six to three months, with careful and limited dieting. In comparatively mild cases, not less than 20,000 units is given, and in the moderately severe cases this dosage is repeated as required. The advantage of such treatment are as follows:

Membrane is never present on the throat for more than three or four days in the worst cases, consequently there is less absorption of toxin, with a diminution in the frequency of myocarditis and the various forms of post diphtheritic paralysis. Paralysis is almost sure to occur in the very severe cases, as is to be expected, considering the profound degree of toxaemia, but it is not any more pronounced or more frequent than in some mild or moderate cases which have received insufficient serum.

The serious deleterious effects of antitoxin, if there are any, are certainly no more liable to occur with a large than with a small dose—on the contrary, I think the reverse is true. I might mention one case in point: Case admitted to the hospital in serious condition after four days' delay in treatment, because of a history of having suffered seri-

ous symptoms of shock which all but ended fatally six months previously, upon the administration of 500 units of antitoxin. A total of 280,000 units was given, regardless of former history, and an excellent recovery was the result. The only evidence of anaphylaxis seen in this case was the occurrence of a mild form of antitoxin rash a week later, and lasting only 24 hours, with little or no inconvenience. Therefore, if one is prepared to take the risk of giving any serum at all, a large dose may be as safely given as a small dose. The only real objection is the expense to the individual, and this, I think, should be met by the government, as is done in other countries.

This treatment as outlined has been adopted at the Toronto Isolation Hospital during the past year in 653 cases. The result has been a mortality of 6.8 per cent. for all coses, as compared with in an average mortality during the past five years at the same hospita, of 11.7 per cent., the figures in that time never being below 10.1 per cent., and ranging as high as 13.0 per cent. The mortality throughout the city at large showed no decrease, being 34 per 100,000 during both 1911 and 1912, so that it cannot be said that the hospital death rate has been influenced to any extent by a variation in virulence It is rather suggestive that the hospital mortality of 6.8 per cent. should, during the first year in which similar treatment has been adopted, so closely approximate that of the Boston City Hospital of 6.6 per cent., and 6.4 per cent. for 1910 and 1911 respectively.

Of course, there are many factors bearing on mortality besides the size of the dosage, especially the length of time elapsing before coming under treatment and the possibility of mixed infection. But I have personally followed this treatment with interest during the past year, and am convinced that antitoxin is as harmless in large doses as it is in small doses; that in severe and late cases it will save life in large doses where it fails in small doses, and that there are some cases which require large and continued dosage from the start.

Quoting Dr. Edwin H. Place of Boston:—"It is obvious that sufficient antitoxin must be given to neutralize all the toxin possible. When one can say in a given case that a small dose will do that as surely as a large dose ,we will have to give up large doses, but not till then."

Knowing as I do from experience that antotoxin in large doses is harmless, and having a very wholesome respect for the quickly degenerative action of freely circulating diphtheretic toxin, I prefer to err on the side of a liberal use of the serum.

CURRENT MEDICAL LITERATURE

MEDICINE

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

PATHOLOGY AND TREATMENT OF PERIODONTAL DISEASE. (PYORRHOEA ALVEOLARIS).

Dr. E. B. Drowett, International Congress, will among other things state in his paper, the following:

That gingivitis is the primary lesion and due to inefficient modes of, or no attempt at cleaning.

That mouthbreathing, inefficient inarticulation and the wearing of dentures are strong predisposing factors.

That the condition of the teeth often shows that the disease is far deeper seated than appears clinically.

That a cure by conservative methods can be hoped for only when the pockets are quite shallow.

That recurrences are very frequent on account of patients' not keeping up the local treatment and maintaining oral cleanliness.

That in cases with general symptoms, all the affected should be removed except the incisers and premolars with quite shallow pockets.

That vaccine therapy is unnecessary in the majority of cases.

THE EXCITATORY AND CONNECTING MUSCULAR SYSTEM.

At the International Medical Congress Dr. Lewis will take up this subject. Dr. Lewis's paper will be an epitome of observations upon the pacemaker in the mammalian heart. By comparing the forms of electric curves obtained by stimulating the auricle in various areas with the natural electric curves and by studying the forms of electric curves obtained by leading directly from the auricular substance, it has shown conclusively that the contraction wave starts in the immediate neighborhood of the sinu-auricular node in the normal heart. The application of heat and cold to various areas of the auricle has established the fact that the impulses are created in the same neighborhood; experiments in which injury to the node (mechanical, chemical and thermal) has been employed lend support to the same conclusion. *The sinu-auricular node is the pacemaker of the heart in all mammals.*

THE EXCITATORY AND CONNECTING MUSCULAR SYSTEM OF THE HEART.

Dr. Ivy Mackenzie, of Glasgow, will discuss this topic at the International Medical Congress.

The sinu-auricular node and the auriculo-ventricular node and bundle have their homologues in the various vertebrate hearts. In the fish they are in the form of rings of specialised muscle surrounding the sinu-auricular and auriculo-ventricular orifices. They become transformed from rings to large spindles as a result of the morphological changes in virtue of which the heart becomes divided for the propulsion of arterial and venous blood. The sinu-auricular spindle is derived from the original sinu-auricular ring, and the auriculo-ventricular spindle is probably dervied partly from sinu-auricular tissues and partly from auricular canal; the former derives its main nerve supply from the right side and the latter from the left. Their function is associated in some way so far unexplained, with the coordination of the cardiac movements.

THE RELATION OF THE MYOPATHIES.

Dr. W. G. Spiller, of Philadelphia, will contribute to the International Medical Congress a paper of which the following is an epitome:

Myopathy consists of the congenital and the acquired forms. The congenital embraces the cases of arrested growth in certain limited regions. It may be from defect of muscles with complete integrity of the nerve apparatus, or the peripheral neurones may be much affected. It usually is not progressive. The acquired form is muscular in origin with intact nervous system, or is with degeneration of peripheral neurones. Amyotonia congenita in relation to myopathy and the Werdnig-Hoffmann type. Resembles myopathy but in the greater number of cases has distinguishing features, and the exceptions show merely a transition from amyotonia to myopathy but not identity of disease. Amyotonia may be from purely muscular lesions, or there may be alteration of anterior horn cells in some cases slight, in other intense, when diagnosis from the Werdnig-Hoffmann type may be difficult.

STUDIES UPON THE LEPROSY BACILLUS.

The following is an abstract of the report by Dr. C. W. Duval, New Orleans, at the International Medical Congress:

The acid-test rods known in the human leprous lesion as the Hansen

bacillus may be cultivated in vitro under special nutritive conditions. The initial multiplication outside of the animal body occurs only in a medium that contains the split products of protein digestion; however, after repeated transplantations the culture will slowly adapt itself to grow upon other nutrients. Experiments show conclusively that the specific organism of leprosy is unable to attack the whole protein when first removed from the tissue of the host. The readiness with which it multiplies in digested excised pieces of the leprous nodule, and its failure to grow in the removed tissue which has not altered, or to grow in any medium where the amino-acids are absent proves the correctness of this hypothesis.

The specific organism of leprosy in vitro as well as in vivo is always distinctly acid-fast and a bacillus. These characteristics are as constant for B. lepra as they are for B. Tuberculosis. Non-acid fast diphtheroids, streptothrical or actinomycetal "stages" for the Hansen organism described by some European writers (Babes, Kedroaski, Rost & Williams and Bayon) do not exist. It can be stated positively that the micro-organism of human leprosy belongs to the bacteriacae family, genus bacillus, and is not of the family chlamdobateriacae, genus streptothrix.

ABSTRACT OF REPORT ON ACUTE HAEMIC INFECTIONS OF THE KIDNEY.

George Emerson Brewer, M.D., New York, will take up at the International Medical Congress, the subject of haematogenous infections of the kidney, the importance of which was not adequately recognized until recently. Experimental evidence completely proves that in the presence of bacteremia from whatever cause, one or both kidneys may become the seat of an infective lesion. In the great majority of cases, these lesions are unilateral, due to diminished resistance of that particular organ as the result of trauma, previous septic disease, calculus irritation, anemia, passive hyperemia, obstruction of the ureter intermittent or permanent hydronephrosis. The passage of pathogenic organisms through such a kidney results often in bacterial emboli lodging in the small arterioles or capillary vessels. As the result of the former we have triangular infarcts; as the result of the latter we have multiple embolic foci resulting in cortical miliary abscesses.

Clinically considered haemic infection of the kidney may be divided into three types, the fulminating type is often unrecognized, and is almost invariably fatal unless treated by early nephrectomy. The intermediary type is dangerous not on account of its initial toxemia, but

for the reason that it is rarely recognized until one of the gross pathological lesions as pyelonephritis, pyonephrosis, renal abscess, or perinephritis has developed. These clinical text-book lesions represent the terminal stage in both the ascending and haemic types of renal infection. Their presence indicates faulty early diagnosis. The treatment of this intermediary type is by early decapsulation, and the opening and draining of cortical abscesses or areas of necrosis. The third or mildest type is not a surgical condition, and is only of interest to the surgeon in that it furnishes a rational explanation for the occurence of the so-called "idiopathic pyelitis."

FILTER PASSERS.

At the International Medical Congress, Professor Dr. Loeffler, of Greifswald, will read a paper on this subject. With reference to the report given by Loeffler and Doerr to the "Freien Vereinigung für Mikrobiologie" in Dresden in 1911, Dr. Loeffler will give a review of the diseases, the irritating agent of which belong to the filter passers, now "38." He described the nature and biology of these irritating agents, mentioned the important circumstances in regard to filtration, such as the influence of the size of the pores, (?) filter pressure, duration of filtration, and the quantity of filtrate, as well as the filtration of the irritating agent through ultra-sized filters. He will refer in detail to the artificial cultivation of the filter passers of pleuro-pneumonia, chicken cholera, chicken diphtheria, vaccine (?) poliomyelitis, foot and mouth disease and molluscum contagiosum, and further to their cultivation in large quantities in the bodies of animals in chicken pox and agalactia. He recommended the establishment of special institutes for the study of the filter passers.

THE CAUSES, PREVENTION AND TREATMENT OF VISUAL DEFECTS IN SCHOOL CHILDREN.

The following is an abstract of report by Dr. R. Possek, Graz., Austria, to be given at the International Medical Congress:

The most prevalent cause of visual defects in school children is myopia, which develops itself during the years of school life by different circumstances depending on close-eye-work. According to the experimental investigations of Levinson, which I can fully corroborate, it is the inclined attitude of the head by which the eyes, according to the law of gravitation, experience a pulling effect at the back part of the bulb.

Consequently it is necessary to avoid all that occasions an inclined attitude of the head. Besides avoiding everything that may cause a diminution of the eye-work-distance, such as bad lighting, small print, unsuitable seats, etc., it will be most necessary to introduce a great inclination of the desk-boards. A strict medical control by specially trained school-surgeons and an early and full correction of myopes.

THE EFFECTS OF DUST IN PRODUCING DISEASES OF THE LUNGS.

Edgar L. Collis, M.B., M.R.C.S., etc., H,M, Medical Inspector of factories, will read a paper at the International Medical Congress in London, of which the following is an abstract:—

This paper summarises many inquiries, reports of which are only to be found in government publications, into the effects produced by dust, and from evidence so obtained two propositions are considered:— (1) Dusts are injurious in proportion as they differ chemically from the composition of the human body, and (2) those dusts which contain free crystalline silica are associated with an excessive death-rate from phthisis which increases with the amount of silica inhaled. Dusts of animal, vegetable and mineral origin are discussed, and positive and negative evidence is quoted in support of the above propostions. Particular attention is devoted to the relation existing between silica dust and phthisis, and phthisis so caused is claimed to show certain characteristics distinguishing it from phthisis due to other causes. Stress is also laid on the different types of respiratory diseases found among those exposed to different dusts, and the theory is suggested that these differences depend rather on the chemical composition than on thea shape of the dust particles.

DISINFECTION AND CONTAGION CARRIERS.

Of all the hygienic procedure dating from ancient days, no other has so strong a hold upon the public as disinfection. In the face of the almost uniform habit of compulsory disinfection after communicable diseases, it is interesting to note that in the City of Providence under the direction of Dr. C. C. Chapin, disinfection is not compulsory but is done only when desired by the family. From the report of this progressive Superintendent of Health for 1911, we learn the actual results of his practices over a period of years during which disinfection was compulsory as compared with a period during which it was merely available.

Since 1905 disinfection followed diphtheria has been stopped un-

less two successful negative cultures were secured from each member of the family in which diphtheria occurred. During four years previous to 1905, 1475 families were infected and the rate of the recurrence of diphtheria after disinfection was 1.71 per cent. During the seven years since the discontinuance of compulsory disinfection, the rate of recurrence has been 1.80 per cent. This suggests that the recurrences are entirely independent of disinfection. It is very suggestive indeed that the recurrences are not due to germs that lurk in the house, but rather to a large extent are due to infection from germs carried in the throats or nasal pasages of other members of the family.

This is further supported by the fact that despite compulsory terminal disinfection, .77 per cent. of the persons who were away from home during the course of the diphtheria and until after the disinfection, were later infected with the disease. For a similar class of persons within the period for which compulsory disinfection has been abolished, the percentage of attacks was only .14 per cent.

Scarlet fever investigations revealed practically similar results. During the six years previous to 1909, the rate of recurrence despite terminal disinfection was 1.48 per cent., while during the four years since disinfection has not been practised the recurrence rate was 1.61 per cent.

This demonstration by Dr. Chapin is of imense economic importance in view of the large municipal investments in disinfection plants and the exceedingly great cost of general disinfection following communicable diseases. While further investigation is necessary in order to prove beyond cavil the force of Dr. Chapin's position, it is worthy of careful consideration.

Anderson and Goldberg have recently demonstrated that the infectivity of measles does not depend upon the desquamation but upon those particles which are thrown off from the mucous membranes by sneezing and probably by coughing. Most discharges of this nature dry rapidly and the contagion loses in virulence through desiccation. It would therefore appear rational that safeguards should be taken during the incipient stage of measles rather than to place reliance upon the value of the terminal disinfection. Disinfection after a communi-cable disease is certainly of far less value with quarantine and isolation during the period of illness. Again the danger of cariers appears to be of greater moment than the posibilities of infection by fomites.

Personal contact with the communicable diseases must be lessened. Personal hygiene with nose and throat disinfection affords a more rational preventive measure than house fumigation and room disinfection as practicised at present.

CHOLELITHIASIS.

Treatment. Sodium salicylate, with or without extract of belladonna, found valuable in drug treatment. Its chief influence is upon inflammatory symptoms. Best results seen in acute and chronic cholecystitis, especially with simultaneous rest in bed and application of hot compresses. In such cases, give 2 to 4 times a day a powder of sodium salicylate, 0.5 gm. (7½ grains), and extract of belladonna, 0.01 to 0.02 gm. (⅛ to ¼ grain), dissolved in warm water. In severe cases of biliary colic with constant pain and high fever, calomel, 0.06 gm. (1 grain) every hour for first 3 to 5 doses, then every two hours until first typical calomel stool appears, not exceeding 8 doses a day, often gives striking results. All patients should drink in bed about an hour before breakfast 1 to 2 tumblers of hot water; also a tumbler before retiring, and smaller quantities frequently during the day. Where chronic jaundice, gastric atony or dilatation, or intestinal catarrh, rectal injections of water, especially Carlsbad sprudel at 40 to 50 deg. C., very useful. Dietetic Treatment: At least 5 small meals a day; food to be taken minced or as purée; very cold foods and drinks to be avoided. After each biliary attack, patient should be kept in bed several days. Physical exercise, including deep-breathing exercises, important in cases free of colic and local tenderness for some time.—*Monthly Cyclopedia*, Oct., 1912.

TUBERCULOSIS OF THE URINARY SYSTEM IN WOMEN.

E. H. Richardson in the Bulletin of the Johns Hopkins Hospital for April, 1913, devotes most of his attention to the study of a case of renal tuberculosis in a female. Among the important local symptoms, he emphasizes polyuria, frequent and painful micturition, hematuria, pyuria, pain in the lumbar region, a sensitive kidney, and tubercle bacilli in the urine. The important constitutional symptoms are: irregular fever, night sweats and progressive emaciation. In treatment he recommends immediate operation to remove the kidney if only one is affected or if the remaining kidney is but slightly affected. He devotes only a few lines to the usual hygienic and dietetic measures, and says that tuberculin should be given a cautious trial.

THE ABUSE OF MORPHINE AND COCAINE.

According to Martin Gilbert and Murray Galt Motter the use of cocaine and morphine in the United States is out of all proportion to

the actual needs for these drugs. Their researches concerning the laws and regulations in force in the United States relating to the possession, use, sale, and manufacture of poisons and habit forming drugs have been embodied in a psecial report (*Public Health Bulletin* No. 56) by the surgeon-general of the Public Health Service. From this we learn that there has been an annual importation of over 400,000 pounds of opium for the past ten years. Of this total 300,000 is manufactured into morphine, and more than three-fourths of the morphine is used by the victims of that habit. Cocaine, which should be only in the hands of doctors and dentists and never prescribed by the latter, is consumed illegitimately at the rate of over 150,000 ounces every year.

TREATMENT OF INSOMNIA.

Sir James Sawyer, in the recently issued second edition of his little book, entitled "*Insomnia: Its Causes and Treatment,*" states that while a hypnotic should be prescribed only when this is unavoidable, removal of the cause being an all important measure, in the more severe forms of psychic insomnia, the prompt use of a hypnotic will soon restore to the brain the power of sleeping, without further aid from drugs.

DIET IN SKIN DISEASES.

Friedländer opines that insufficient attention is paid to the importance of diet, both as an ætiological factor and in the treatment of skin diseases (*"Deutsche Aerzte-Zeitung,"* 15th February, 1913). Most writers are content to regard it as playing a part in the urticarias and to ignore it elsewhere. Prurigo in children is very common and is usually regarded as a scrofulous manifestation, whilst it is really due to some digestive trouble. Eczema in children is, again, almost entirely due to errors in diet. Besides gross under or over-feeding, the relative proportions of the foodstuffs must be kept in mind. Thus, in impetigenous eczema in children, in addition to local treatment, there must be a reduction in the fats. In prurigo, again, the proteids should be diminished. The difficulty is to find "natural" foods which are pleasant, and at the same time contain the proper proportions. He regards Rufeke as a very useful foodstuff in such cases. This contains carbohydrates and proteids in the proportion of five to one, and is almost devoid of fat. By preparing it with milk any required proportion of the three constituents of a diet can be obtained. If lessened fat is called for water is added. In cases of malnutrition the food is made with milk alone. In adults, Friedländer has found the same proportions to give equally valu-

able results in skin diseases. (Obviously, there need be no resort to Rufeke in a desire to alter the proportion of the constituent parts of a diet for skin patients. The milk can, of course, be itself modified if required.—*Universal Med. Record.*

L'ANEMIE DES ENTERITIQUES.

Prof. M. Loeper in *le Progress Medical* states that anaemia is not rare among patients with enteritis, either acute or chronic whether the patients be young or adult. This anaemia is usually met with in certain cases of choleriform enteritis when microscopical examination shows the presence of bacilli resembling coli b., paratyphoid, perfringens and enterocolic bacilli, and it may rapidly fall to 2,500,000 or even 2,000,000 red corpuscles. It is rather frequent in torpid intestinal conditions, muco-membranous enteritis, intestinal dyspepsia, typhlatony or typhlestasis, and then occurs in intermittent attacks appearing at the same time as an increase in the intestinal symptoms.

This anaemia, connected both with hypohaemataemia and with hypo-haemoglobinaemia, is frequently accompanied by subicterus, arteria hypotension, urobilinhaemia, but not by choluria; the spleen is often hypertrophied and there may also be an increase in that of the liver. One may easily understand why anaemias which have their origin in the liver with intestinal troubles and abdominal pains should be often mistaken for liver attacks since both are characterised by the same discoloration of the skin and by an almost exactly similar localisation of the pains.

Vomiting, however, as well as the pains spreading towards the shoulders and the urinary pigments are generally absent, and the condition is improved not by treating the liver but by treating the intestine, a point of the utmost importance. The examination of the stools reveals a slight insufficiency in the transformation of protein; the bacteria most frequently found are, as already stated, perfringens, enterococci and coliform bacilli.

If we try to investigate the nature of these anaemias, we clearly realise that they are the result of a haemolytic process; still the resistance of the corpuscles is generally less, the auto-agglutination of the red corpuscles is absent but the increase in the haemolytic power of the serum is almost constant. The haemolysis is therefore the result of an exaggeration in the destructive power of the serum towards the red corpuscles, and not of a weakness of the red corpuscles themselves.

If injected to rabbits, the serum of anaemic enteritic patients very often causes a diminution in the resistance of the corpuscles, and almost

always a fall in the number of red corpuscles, this fall being much greater than with normal human serum.

The haemolytic substance is also hypotensive since these patients have always a tension below normal; it passes in the urine since the sediment of the urine experimentally produces hypotension and anaemia.

This substance, which is certainly organic, seems to be produced in some cases by the ferments which are absorbed all along the alimentary canal; in other cases by bacteria, namely perfringens and coli, the haemolytic action of which is well known; in other cases again by the hypersecretion of the intestinal cells or even by their destruction.

No doubt the bacteriolytic products play a prominent part in cases of acute enteritis; the products of a cellular origin, the cytolysins, have an importance which seems to be greater in chronic cases.

If extracts of the intestinal mucous membrane, and especially of the mucous membrane of the ileon and colon, are injected to animals, a distinct anaemia is produced; and the haemolysing action of these extracts is increased by addition of pancreatic ferments. Therefore the obsorption by the inflamed human intestine of pancreatic ferments and of intestinal products is an important factor of haemolysis.

In its normal condition, the liver prevents the haemolysing action enteritis.

Of the above exposé leads to the following practical rules in the treatment of enterogenous anaemia; a disinfection of the intestine, even with lactic bacteriotherapy and aperients in small repeated doses; strengthening of the powers of the liver by salts of magnesia; increase in the resistance of he blood by lipoids and regeneration of the blood by calcium and iron products.

SURGERY

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

PARASYPHILIS.

Fournier, who coined the term, defined parasyphilitic affections as those which do not necessarily and exclusively derive from syphilis, whilst syphilitic manifestations, properly speaking, can arise from nothing else but syphilis. At first he did not regard tabes as a parasyphilitic affection, but considered post-syphilitic tabes as a simple tertiary affection, concluding that tabes in general might be due to other causes than syphilis. Later, however, he admitted tabes to the rank of parasyphilis.

Fournier's conception of parasyphilis has been largely followed in France. A rather different view has been held in Germany. Möbius, and with him Strumpell, would regard parasyphilis as something not due to the direct effect of the "syphilitic organism;" it was syphilis — *x*, although that *x* could not in itself produce the particular disease without the syphilitic antecedent. Attemps have been frequently made, *e.g.*, in Scotland, to disclose this *x*, without, however, so far doing more than to exclude some unknowns from the list of candidates. Generally speaking, by some, a parasyphilitic affection is understood to be one where syphilis has been an antecedent, as shown by the history, but where syphilis cannot be actually demonstrated as existent.

Shoenborn and Cuntz contend that whatever value there may ever have been in this view, the discoveries of Schaudinn and Wassermann have made it quite unsatisfactory ("Deutsche med. Wochenschrift," March 20th, 1913). They ask, do we require the concept parasyphilis any longer? Why should we not regard tabes and paralysis as true syphilitic affections? Noguchi has now found spirochaetes in the cortex of the brain in fourteen out of seventy-one cases of general paralysis. Some of the specimens were sent to Hoffman for confirmation, who said they were unquestionably *Spirochaeta pallida*. ("Deutsche med. Wochenschrift," March 13th, 1913, p. 532.)

Schoenborn and Cuntz have examined the question of the presence of spirochætes in some affections frequently regarded as parasyphilis; aneurysm and diseases of the heart, liver and kidney.

These authors have investigated three groups of acquired affections of the heart and vessels, the liver and kidneys, as regards their relationship to syphilis—affections hitherto regarded as post-syphilitic. Their researches have been carried on during the last four years; they chose the organs firstly from those cases where there was a strong presumption in favor of connection with syphilis, and then sought to determine whether, either in regard to the former treatment or to the Wassermann reaction, any laws could be discovered governing the future course of the disease.

Among sixty-five affections of the heart and blood vessels they had thirty-seven cases of aortitis, seventeen of aortic aneurysm, five dilatations of the aorta, one aneurysm and two dilatations of the innominate, and eight of myocarditis. They had, at the same time, ten cases of tabes, two of tabes and paralysis, one of paralysis, and eight of nephritis. Sclerosis of the cornea was present in ten cases, general arterio- sclerosis in seven, aortic insufficiency fourteen times, and stenosis three times. The Wassemannn reaction was negative in six cases, positive in forty-six; in the other thirteen cases, for various reasons, the test had not been made. The first treatment in most of these cases had been very

unsatisfactory; out of the sixty-five only twenty-six had received any treatment at all, two with salvarsan. Only in three cases could it be said to have been sufficient. In most cases the patients failed to carry out the directions as to the treatment which had been given them. In eight cases a *post-mortem* was made; in six of these typical syphilitic changes were found; spirochætes were not discovered.

They had thirteen certain cases of syphilitic disease of the liver—eight reacted positively and two negatively to Wassermann's test; eight were cases of cirrhotic liver, two were gummatous, and two gave a portion of Banti's complex; nine had received no treatment, whilst four had been insufficiently treated.

Among twelve cases of renal affections, four gave a positive Wassermann reaction and ten admitted having had syphilis; five had not been treated and seven had received insufficient treatment.

They isolated as far as possible all cases which showed signs of early syphilis or gumma, since these, of course, are everywhere regarded as purely syphilitic manifestations, and then included in their list those in which

(1(The history gave clear evidence of syphilis.

(2) The Wassermann reaction was positive.

(3) The presence of other certain late syphilitic or post-syphilitic processes pointed to a similar affection of the organ in question. Very few of this group are, however, included in their material.

In all these cases syphilis could, with every certainty, be diagnosed. They see no value in retaining the term parasyphilis for the diseases of the circulation, liver and kidneys. That spirochaetes have not yet been found is not a contradiction to this opinion; no one, for instance, would question the syphilitic origin of a gumma, although the presence of spirochaetes has not yet been proven. Parasyphilis lingers for them superfluous on the stage; let us get rid, they advise, of this obscure and verbose conception.

They have not been able to arrive at any conclusion as to why some special organ—the liver, the aorta—should be attacked by a general infection like syphilis. Their material gives no warrant to the supposition that the organ in question had been previously diseased in some way. There was nothing to show that there had been any intoxication previous or subsequent to the acquirement of syphilis, by alcohol, nicotine or other infections.

Their work confirms the older experience that non-treated cases of syphilis suffer more from late manifestations. They are inclined to think, however, that few cases have been hitherto adequately treated. And, of course, there is nothing to show what percentage of untreated cases do not get late manifestations.—*Universal Med. Record,* April, 1913.

THE RANGE OF ACTIVITY AND THE UNTOWARD EFFECTS OF CERTAIN SPINAL ANALGESICS, BASED ON TWO THOUSAND ADMINISTRATIONS.

By Dr. W. Wayne Babcock, Philadelphia.

In the two thousand cases were included all kinds of operations in all parts of the body. This kind of anesthesia should properly be called nerve-root anesthesia, rather than spinal, as it was the nerve roots which were affected. Its safety depended largely on the height in the spine of the nerve roots which it was necessary to narcotize for any given operation. The higher up they were, the greater the danger. The delicate thing was to have the solution employed sufficiently light to affect the sensory nerves without involving the motor ones. It could be made lighter by the addition of 10 per cent. of alcohol to 4 per cent. of solution. By regulating the position of the patient's body it was possible to arrest the anesthetic at any point of the spine desired. The speaker considered the doses used by Jonnesco unnecessarily large, and said that the same results could be obtained from half the doses he employed. In all operations in the upper part of the body it was essential to be prepared to perform artificial respiration at any moment. In the cases embraced in the report various anesthetic agents were employed.

MIRACULOUS CURE OF CALCULUS.

The following account is taken from the works of Gregory of Tours: Mommulus was the ambassador of King Thendebert and came to the court of justice during that Emperor's reign in the sixth century. It appears that the ambassador suffered much pain from calculi of the urinary bladder and, during his journey to the court, had a severe attack of renal colic. No help could be afforded the unfortunate Mommulus, as a result of which, things went badly with him. We are told that matters had come to such a pass that he was in a great haste to make his will. At this juncture he was advised to pass one night sleeping in St. Andrew's Church, at Pateras, for St. Andrew had performed many miraculous cures at that place. The suggestion was acted upon at once. Mommulus, very much tormented by pain and fever, and despairing even of life, caused himself to be placed upon the stone flags of the sanctuary, and there waited for those things which were to happen. The text continues: Suddenly, about the hour of midnight, the patient awoke with a violent desire to urinate and discharged, in a natural manner, a calculus which, as St. Gregory assures us, was so enormous that it fell with a loud clatter into the vessel. From that

very hour Mommulus was hale and hearty, and joyfully started on his homeward journey. This case is not purely one of superstition, and it has had many prototypes in modern times insofar as the discharge of the calculas is concerned.—*St. Louis Medical Review.*

A SIGN OF KIDNEY DISEASE.

Rigidity of the muscles in the flank on deep palpation is as valuable a diagnostic sign as is rigidity of the anterior adbominal muscles. In the presence of a urinary disturbance (e. g., anuria, pyuria, hematuria), unilateral tenderness and rigidity in the loin are presumptive evidence of affection of the kidney on that side.—*American Journal of Surgery.*

SIMPLE TREATMENT FOR CORNS.

Frederic Griffith, M.D., New York, states that: As bare pated philosopher turns away from deeper thoughts to watch his simian sedately pluck a buzzing morsel from the window-pane so the considering of simple treatment for a corn may prove of slight attraction for your readers. Removal of a corn by cutting is always fraught with danger whether accomplished by the inquisitorial gouge and thumb method of a Sixth avenue toe specialist or by the doctor's scapel. Due to the fact that devitalized tissues are being dealt with; in a portion of the body most dependent; where lymph stasis most readily occurs thereby interfering or cutting off entirely capillary circulation. Furthermore the patient considers the whole matter a triviality and may be assumed to never give the condition a thought either before treatment or afterwards unless "it hurts."

In the method to be described the writer depends upon the macerating power of ordinary adhesive plaster to effect the result sought. A strip of this material from three-eights to one-half of an inch (1 cm.-1.25 cm.) in width and four to six (10 cm.-15 cm.) inches long is to be applied in spiral fashion to the affected toe covering the digit from neck to nail. The degree of tightness of the application deserves consideration to avoid compression. However the feelings of the patient when stepping upon the foot will serve as an adequate guide in this matter. Given instructions to cut through the plaster lengthwise or to soak off the entire dressing by immersion in a hot water foot bath affords ample protection in cases of undetected microbic infection. Soaking the foot for ten to twenty minutes in water at a temperature of 100 degrees F. with gentle removal by rubbing with a piece of sterilized pumic stone or forceps of the crown of hardened epidermis shortens the time of

treatment. Properly applied the plaster strap dressing described should afford relief from the moment of its application and may be worn continuously for from one to six or eight weeks—bathing seeming to unaffect the adhesive properties of the plaster after having once set. Removal of the dressing at the end of an adequate time reveals the cornus completely freed when it may be picked out entirely by means of a dressing forceps, or after an additional soaking. A wisp of absorbent cotton held on by means of a narrow adhesive strap may be subsequently worn for a few days.—*St. Louis Medical Journal.*

PYELOTOMY.

D. M. Eisendrath, Chicago (*Journal A. M. A.*, April 12), says that since the X-ray has been in use a new era has been begun in kidney junction as shown by the X-ray and without other complications, pyelotomy is the ideal method, and he gives in detail the technic as performed by himself. Nephrotomy is preferable in cases in which there is a large branched calculus filling the renal pelvis or in which there are many small calculi lying scattered throughout the kidney and inclosed cavities. It is also to be chosen in infected cases in which there is more or less destruction of the parenchyma, and here the question comes in as to whether nephrotomy or nephrectomy is more desirable. One cannot urge too strongly the need of ureteral catheterization before operating to determine the functional capacity of each kidney. In infected cases in which nephrectomy is not needed drainage is better through a nephrotomy wound than through that of pyelotomy . Nephrotomy is the safer operation when the renal pedicle is short or extensive perinephritic changes render the delivery of the organ into the wound very difficult. The condition of the parenchyma can be determined much better by the nephrotomy incision. The disadvantage of nephrotomy are the greater danger of hemorrhage, which may be serious, and the danger of overlooking calculi which is greater with nephrotomy than with pyelotomy. The danger of necrosis after nephrotomy has doubtless been exaggerated, but it is not altogether negligible in selecting the method of operation. The advantages of pyelotomy are that it is the simplest and safest method of removing calculi at the ureteropelvic juncton or small or moderately large calculi, either free in the ampullary type of pelvis or in a primary calix, either free in the ampullary type of pelvis or in a primary calix of a bifid or trifid type of pelvis. It is also becoming the method of choice for small calculi lodged in the calices of the ampullary type. Some operators combine transverse or vertical incisions into the parenchyma with pyelotomy for the removal of larger calculi.

It is the best method for calculi in one or both pelves of a horseshoe kidney, as well as in bilateral cases, especially in those complicated by anuria. Hemorrhage is less likely to occur and there is less danger of overlooking a calculus. It can be performed much moer rapidly and the period of convalescence is much shorter than with nephrotomy. Its drawbacks are that it is contra-indicated when the pedicle is short, when the kidney is fixed by adhesions or when extensive infection is present. There is a slight danger of a fistula after operation, especially if one overlooks any obstruction in the distal ureter. A ureteral catheter should always be passed down into the bladder before suturing a pyelotomy incision. The danger of bleeding from the peripelvic vessels, though slight, should always be borne in mind. In conclusion, Eisendrath says that he believes that pyelotomy is destined to become an active competitor with nephrotomy as the operation of choice in the majority of cases.

GASTRO-ENTEROSTOMY.

J. B. Deaver considers that gastro-enterostomy is indicated in the following conditions: chronic gastric and duodenal ulcer, with their sequels.—perforation, recurrent hemorrhage and cicatricial contraction; carcinoma of the pylorus, in connection with excision or alone as a palliative measure; benign pyloric stenosis; gastire tetany; gastroptosis with stasis; chronic dilation with stasis; infantile hypertrophic stenosis of the pylorus; duodenal cancer or tumor causing obstruction; duodenal fistula; and rare cases of deformity of the stomach. It is contra-indicated in acute dilatation of the stomach, gastric neuroses, dilatation without stagnation, advanced carcinoma and gastric crises. While on the one hand Deaver urges exploration in chronic dyspeptics on the chance of finding a remediable cause for symptoms, he is emphatic in warning against gastro-enterostomy in gastric neuroses.

SPECIAL RATES TO BRITAIN.

Those going to Britain this summer to attend the Bristol Medical Association at Brighton, July 21 to 26, and the International Medical Congress in London, August 6 to 12, should communicate with the editor of *The Canada Lancet* for special rates via the Canadian Northern steamers, and dates of sailing.

PERSONAL AND NEWS ITEMS

Ontario.

An addition, costing about $5,000 is to be made to the Wingham Hospital.

The hospital at Thessalon has been closed for a time, pending arrangement of funds.

The Fisher Memorial Hospital, Woodstock, received a gift of a fine X-ray apparatus worth $1,700.

Dr. Greer has been appointed medical health officer for North Monaghan at a salary of $100 a year.

The Hamilton scale of fees is advice over the phone, $1, advice without medicine $1 to $3, full advice $2 to $5, morning calls $2 to $5, afternoon calls not notified in forenoon 50 cents extra, midwifery $15 to $50.

The Government has made a grant of $87,000 to the Hospital for Feeble-Minded at Orillia.

The London Medical Society elected the following o cers:—President, Dr. Reason; Vice-president, Dr. Tillman; Sec.-Treas., Dr. S. Holmes.

Under tht will of the late Mrs. Emily Gillette, formerly of Oshawa, who died at Santa Barbara, bequests of $500 each are made to the Hospital for Incurable Children, the Toronto Newsboys' Home, the Shelter for Homeless Children, and the Oshawa Hospital.

Dr. G. B. Archer, of Campbellford, who has been in the Indian missionary field for five years, returned this week for a rest.

Dr. Hodgetts will see what is being done in England during his visit there this summer in connection with the sewage problem, and will submit a formal report to the committee when he returns.

Dr. Robert A. Stevenson, of Bloor Street, was entertained at a dinner at the Toronto Club on the evening of May 23 by sixty-five of the leading members of the profession.

Last word from Dr. S. M. Hay, of Toronto, he was in Florence. He had visited Gibraltar, Genoa, Naples and Rome. He was going on to Berne and Paris on his way to London. He expresses the opinion that Toronto hospitals are doing as good work as any he had visited. He will return about the end of July.

Dr. C. K. Clarke, Medical Superintendent of the Toronto General Hospital, is preparing a history of the Toronto General Hospital. The history of this institution covers a century of time and represents much of the medical progress of Ontario. The book will be of much interest

and should find its way into the library of every practitioner in the province, indeed, of most practitioners in all Canada. The price is $1.50 and $2.00 in special binding.

The handsome hospital presented to Bowmanville by Mr. John W. Alexander, was opened some time ago by his Honor, Sir John Gibson.

Dr. and Mrs. Joseph Bascom, of Toronto, celebrated their golden wedding recently. Several hundred called to pay their respects to Dr. and Mrs. Bascom. Mrs. Bascom is a daughter of the late Dr. Joseph Workman, who was superintendent of the Asylum for many years. The Toronto Academy of Medicine sent a letter of congratulation and a basket of American beauty roses.

The Board of Control, for Toronto, made a grant of $10,000 to the House of Industry.

Dr. J. O. Orr, manager of the Toronto Exhibition, was ill for a month in London, but left for home on 8th May, feeling much improved.

At the meeting of the Medical Congress in session at Washington recently, it was decided to establish an American College of Surgeons, to be controlled by a board of twelve regents. Three Canadians were elected to serve on this board. They were: Dr. Armstrong, of Montreal; Dr. H. A. Bruce, of Toronto; and Dr. MacKechnie, of Vancouver.

T. A. Lomer, B.A., M.D., C.M., D.P.H., (McGill) of Montreal, has been appointed Medical Officer of Health for Ottawa, by the civic Board of Health, at a salary of $4,000. Dr. Lomer is at present in Paris, taking a special course of study, but he has notified the local authorities he will accept the appointment.

Dr. G. W. Ross, son of Sir George W. Ross, of Toronto, was married to Miss Margaret Wildridge, of Syracuse, on 21st April. Many will be the congratulations to both.

There has been some lively discussion over the care of tubercular patients in London. Dr. Ross, of the Sanitarium, contended that Dr. Hutchinson, Medical Officer of Health, should have ordered some patients to the sanitarium. Dr. Burdon, chairman of the local Board of Health resisted this view.

A by-law to grant $30,000 to the Guelph General Hospital, was carried on 28th April. The money is to be used in rebuilding one of the wings.

Dr. C. J. Hastings, medical health officer, Toronto, is on the trail of the fly again. The doctor is determined to make this year's crus-ade against the fly an effective one. Prosecutions will follow notices to clean up possible breeding places for flies. Crude petroleum will also be used by the city to spray all stagnant waters where mosquitos might breed.

The residents of North Toronto were very much opposed to the location of the Preventorium in their midst, as proposed by the Daughters of the Empire, who had the matter in hand. It was opened by Sir John Gibson on 8th May.

In connection with the Shield's Emergency Hospital, a department of the Toronto General Hospital, an ambulance service has been established, and a surgeon will accompany it on its calls. The ambulance has a speed of 35 miles an hour if required.

Dr. J. J. Cassidy, of Bloor street, east, Toronto, has moved to 6 Spadina Road.

A movement has been started for the erection of a general hospital in Leamington, and a preliminary canvass indicates that little difficulty will be met with in raising the necessary $20,000. One citizen has offered to donate a suitable site.

A new ward for women will be built for the hospital in Collingwood.

Dr. Hastings, Toronto threatens to indict the School Board if the common drinking cup is not discontinued.

Mrs. H. M. Campbell, of Toronto, has left these bequests in her will: Boys' Home, $2,000; Girls' Home, $2,000; Hospital for Incurable Children, $2,000; Aged Men's Home, Belmont Street, $2,000; Aged Women's Home, Belmont Street, $2,000.

Dr. W. W. Ogden, of Toronto, and for so many years a member of the School Board, writes from Europe that he has seen nothing better than Toronto.

The Dominion Medical Council will meet again in Ottawa on 17th June.

Dr. R. A. Stevenson, of Toronto, who has been in Britain since last summer, and who had a very serious illness, has arrived home.

Dr. W. P. Caven has handed in his resignation from the active staff of the Toronto General Hospital.

Dr. E. F. Trow has commenced a special practice of disease skin at 21 Wellesley street, Toronto.

Dr. F. C. Harrison, of Toronto, has gone to Britain. He will visit the leading clines in Britain and Europe.

Dr. J. L. Bray, Registrar of the College of Physicians and Surgeons of Ontario, has recovered from his recent severe illness.

Dr. M. J. Haffey, who has spent some time in the London and Vienna hospitals, has located in Toronto, as a specialist in diseases of the eye, ear, nose and throat.

The Aesculapian Club of Toronto, has elected the following officers for next year: President, Dr. J. M. Cotton; Vice-President, Dr. B. L. Riordan; Treasurer, Dr. E. E. King; Secretary, Dr. George Elliott, and

Executive Committee, Drs. H. B. Anderson, H. J. Hamilton, W. J. Malloch, and Samuel Johnston.

Drs. A. A. Campbell, G. W. Clendenan, J. W. Smuck, J. Duncan, W. J. Kayler, W. A. Burr, J. E. King, and J. D. Webster have made application for incorporation for the purpose of obtaining funds with which to acquire a site and erect a building for hospital purposes. The location is the corner of Bloor and Dundas streets, Toronto. The name of the hospital will be the Howard Park. There are no shares in the company.

Sir William Osler, Regius Professor of Medicine, Oxford University, paid a visit recently to Toronto. He was entertained by Dr. R. A. Reeve at the York Club. Professor Osler stated that there was no truth in the report that he was to be made president of Johns Hopkins University. He has been delivering some lectures in the United States.

Bright days are promised for the hospital in Coburg. It is proposed to raise $15,000. This, with two donations respectively, Mr. Wm. Black for $10,000, and Mr. Helm for $20,000, will erect a modern hospital with the requisite accommodation for the place.

A disgraceful scene occurred recently at a hospital meeting in Port Hope. There was some ill-feeling over some matter which led to blows. A doctor of the town was implicated in the fracas. This sort of thing cannot be too strongly condemned in hospital work and where the interests of the profession and patients are at stake.

Several medical men in the eastern part of Toronto have secured a charter for a hospital to be called the Riverdale Hospital. The doctors interested in the movement are: C. R. Sneath, John Noble, W. P. Greig and A. P. Fraleigh. The charter is the easiest part of the work.

The Toronto Board of Education had a lively time recently when Dr. John Noble urged classes to teach the care of infants. The motion was carried by a very small majority. Dr. Noble claims that proper instruction given to girls will greatly reduce infant mortality. Instructions have already been commenced in some of the schools.

An interesting event happened a short time ago, when the painting of Dr. Widmer, that had hung for so many years in the old Toronto General Hospital, was removed to the new General Hospital. Dr. Widmer, in his day, was a noted practitioner of Toronto, and left many interesting anecdotes behind him as to his manner. He is worthy of a place in the new hospital.

Dr. Hastings stated a few days ago that there was no typhoid fever in Toronto unless the cases that result from carriers.

Quebec.

The Bedford General Hospital at Sweetsburg, cared for 73 patients last year, at a daily cost of $1.90.

The appeal for funds for a tuberculosis hosptial for Quebec is meeting with success. Over $50,000 has already been subscribed.

Out of 207,431 pupils examined in Montreal, 67,608 had some illness or defect.

Sir William Osler, Regius Professor of Medicine at Oxford University, paid a visit to Montreal on May 14, and one of the features of his engagement was the dinner to him at the Ritz-Carlton, at which the Medico-Chirurgical Society was the hosts.

The Montreal General Hospital has adopted the rule of retiring the members of its staff on attaining the age of 62 years.

The University of McGill has conferred upon Dr. James Algernon Temple the degree of LL.D., honoris causa. Dr. Temple is a graduate of McGill University and was professor for many years of obstetrics and gynaecology in Trinity Medical College, and later on Dean of the Medical Faculty. Dr. Temple is well-known to the medical profession of Canada.

The medical faculty of McGill University will give special courses of instruction from May 26th to June 20th. The courses are independent of each other and may be takenn separately. They cover a wide range of subjects and are well arranged.

Maritime.

In Fredericton there is urgent need for an isolation hospital. The Board of Health has urged this upon the council.

Hon. Charles Dalton has promised $20,000 to build a sanitarium for Prince Edward I$sland, and $1,000 a year ten years for maintenance.

The Halifax Hospital for Women has been opened. It was instituted by Dr. E. K. Maclellan, and admits medical, surgical and maternity cases.

Western Provinces.

The marriage of Dr. Ralph Anderson Hughes to Miss Isabel Alice Victoria Crandall took place at Moose Jaw on 30th April, at the home of the bride's mother.

Dr. Walter Bapty, of Victoria, has been appointed inspector of hospitals for British Columbia.

The Vancouver General Hospital cared for 5,500 patients last year. The average daily cost was $1.93

The Alberta Government will aid two doctors to the extent of $4,000 to locate in outlying districts of Northern Alberta.

The Medical Register for Saskatchewan has now nearly six hundred names on the roll.

An act was passed at the recent session of the British Columbia Legislature that makes municipalities liable for the hospital care of their indigent poor. This will prevent dumping these cases on hospitals. The Act gives hospitals the power to charge municipalities $1 per day. Private hospitals must secure a license. Infringement of the Act may be punished by a fine of two hundred dollars.

Dr. G. W. Sinclair, of Vancouver, has been appointed superintendent of the Winnipeg General Hospital.

Brandon is much in need of more hospital accommodation, and an effort is to be made along this line.

The Winnpeg General Hospital last year cared for 5,599 patients. The total days stay was 94,925. There was a deficit of $37,185. The death rate was 6.84. The cost of the new buildings was $650,000.

The hospital at Swift Current treated during the year 504 patients.

The new hospital at Saskatoon will be built on the University grounds. It is intended to add sections from time to time until the accommodation will be 1,000.

The Camrose Hospital has decided to charge one week in advance for patients, and has fixed the fees at $2 for private wards and $1.50 for public wards.

The hospital at Red Deer was enlarged last year at a cost of $15,000.

Over $23,000 have been subscribed for a hospital at Walkerville, Alta.

The Edmonton Medical Association has adopted a resolution to the effect that the medical men should not be debarred from the hospital board.

The Kootenay Lake General Hospital last year had a profit of $1,302. Plans for a new addition have been agreed upon furnishing accommodation for 53 beds.

From Abroad.

The Historical Medical Museum which has been organized by Mr. Henry S. Wellcome in London, is unique in many respects. There is a collection of the instruments used by Galvani in the 18th century. There is also a very fine accumulation of votive offerings of various countries and ages. Old and rare microscopes and optical instruments find a place in the museum. Amulets, charms and old medical medals lend

further interest to the collection Those visiting Britain should make a point of seeing this array of curious objects.

The American Board of Commissioners for Foreign Missions, Boston, U.S.A., has issued an appeal to physicianns who may wish to engage in medical missionary work in India, China, Turkey, Korea, and Persia, to apply to their Board secretary, Mr. W. B. Smith, 600 Lexington Ave., New York . A medical missionary is required for Bura, Portuguese East Africa.

Sir William Osler, who was in Boston in the early days of May, with the object of delivering some lectures was taken ill for a short time. He had to take a complete rest for a short time.

Taken ill with typhoid fever at twenty-one years of age and still in bed at eighty is the experience of Miss Sybilla Schnatz, who after fifty-nine years, celebrated her birthday in St. Joseph's Hospital, Philadelphia. She holds all hospital time records.

Vaccination parties have become a fad in the Swedish capital as the result of an outbreak of smallpox. In many of the fashionable residences "at homes" are given during the afternoon. A doctor is invited to vaccinate the guests, and when the ordeal is over there is a dinner party.

Miss Frances Margaret Harper, the first woman to receive such honor, has been granted a diploma in tropical medicine and hygiene. This is granted jointly by the Royal Colleges of Physicians and Surgeons.

The Secretary of State for the Colonies has appointed a commission of medical men to enquire into the fevers occurring among Europeans and natives on the West Coast of Africa.

One of the effects of the Insurance Act of Britain is to materially reduce the sale of patent medicines. The supply of qualified medical attendance is supplanting the proprietary mixture.

The Royal British Medical Benevolent Fund is doing excellent work for the relief of suffering and want among members of the medical profession. Last year it distributed £5,645 among the families of medical men who required assistance.

Very many will hear with deep regret of the death of Sir Henry R. Swanzy, the eminent ophthalmologist of Dublin. He was the author of a very useful text book on diseases of the eye.

The University of Edinburgh has conferred the degree of LL.D., honoris causa on Prof. Greenfield, W. Allan Jamieson, and John Stewart, of Halifax.

Professor Samson Gemmell, of the University of Glasgow, died on 2nd April. He had been a professor for 13 years. He was associated with the late Sir W. T. Gairdner.

Mr. Jordan Lloyd, of Birmingham, died 4th April in his 70 th year. He was senior surgeon to Queen's Hospital, in his city, and was well-known throughout Britain.

The minister of war in Russia has issued an edict that all medical students must give the military salute to officers of the army. This has caused much dissatisfaction, and protesting meetings are held. It will end as usual in a number who stand out for freedom being sent to Siberia.

Sir Thomas Barlow, so well known to many Canadians, has been re-elected president of the Royal College of Physicians.

Many will regret to learn of the death of Dr. A. L. Galabin, consulting obstetric physician to Guy's Hospital. He was the author of a popular work on diseases of women and a text book of obstetrics that have been in the hands of students for over thirty years.

Dr. Orth, one of Virchow's pupils, and his successor in the chair of pathology in Berlin, has stated recently that bovine tuberculosis does not often infect the adult, but is a genuine source of the disease among children. His words were "war against the human bacilli, but war also against the bovine bacille."

By the will of the late Sir Alfred Jones, the Liverpool School of Tropical Medicine has received a bequest of £80,000. This will permit of the erection of laboratories, wards and other accommodation in connection with the Royal Infirmary.

Dr. George McClellan, the noted anatomist of Philadelphia, died on 29th March. He was born in 1849, and was the grandson of the founder of Jefferson Medical College, and a nephew of General George B. McClellan.

Under the National Insurance Act of Britain, the commissioners may set aside one penny for each insured person for the study of preventable diseases. This will give the large amount of $285,000.

Dr. Charles H. Knight, a well-known laryngologist of New York, died on 29th April at the age of 64 years.

By the will of Henry Rutherford, of New York, the Rockefeller Institute in that city receives $200,000 for cancer research work.

An In Memorian meeting of the late Dr. John Shaw Billings, was held in the New York Public Library on 25th April. The principal speakers were Dr. S. Weir Mitchell and Sir William Osler.

Dr. Alexis Carrel and Dr. H. Noguchi, of the Rockefeller Institute signed the editorship of the *Bristol Medical Journal.* Those who know for Medical Research, Dr. Herman M. Biggs and Dr. William H. Park of the Department of Health, and Dr. John W. Brannan, president of

the Board of Trustees of Bellevue and allied hospitals, have been made knights of the Royal Order of Isabella the Catholic, by King Alfonso of Spain.

Dr. Robert S. Smith, after twenty years of faithful work, has resigned the editorship of the *Bristol Medical Journal*. Those who know this journal also know how well he did his work. He was given a dinner by his friends and presented with a picture, an antique silver salver, and an album with the names of the donors.

The Fourth International Congress on School Hygiene, and the first to be held in America, at Buffalo, August 25-30th, according to an announcement of the executive committee, will be by far the most elaborate effort yet made in this country toward getting the problem of school hygiene before the world. The first international Congress was held at Nuremberg in 1904, the second at London in 1907, the third at Paris in 1910.

According to press despatches, the entire resident medical staff of Bellevue Hospital, New York, was taken ill on 18th April, after partaking of chicken salad at luncheon. The illness was due to ptomaine poisoning. In all 65 doctors were ill.

Dr. Jacob W. Bolotin, of Chicago, who is blind, took his full course in medicine, and obtained his license from the State Board of Illinois. He has become so expert by the sense of touch that he can take temperatures and make accurate chest examinations. He has been appointed to the staff of the Tuberculosis Hospital. As a test he named 500 out of 600 of his class by shaking hands with them.

Infant mortality in Australia is 78 per 1,000 births, and in New Zealand 71. In Ontario it is 125. It is contended that woman suffrage accounts for the low death rate.

The third International Congress on Neurology and Psychiatry will meet in Ghent, August 20th to 26th.

The conference on the Prevention of Infant Mortality will meet in Caxton Hall, London, August 4th.

From 1885 to 1910, the population of Germany increased by 34 per cent., while the medical profession increased 106 per cent.

The International Congress of Hygiene will be held in Buffalo on 25th to 30th August.

Hon. Dr. W. J. Roche, who is now in England, is much improved in health. He was staying for a short time in Devonshire.

J. McB. WOODS.

As the result of a fall downstairs at his residence, 859 College St., Toronto, Dr. James McB. Woods died 24th April. He was 74 years old, and was one of the oldest medical practitioners in Toronto. It is thought that he stumbled in the stairs and in falling fractured his skull.

The late Dr. Woods was a son of James Woods, a Peel County farmer, who died 20 years ago, and had followed his profession for over half a century, of which the last 33 years were spent in Toronto. He was a graduate of the old Toronto Medical College.

Dr. Woods is survived by one son and three daughters, two of whom are livinng in the States. His wife died three years ago.

JOHN BRADY.

The remains of Dr. John Brady, who died at Marshall, Mich., on 22nd March, were brought to Ingersoll and interred in the Roman Catholic cemetery. The deceased was the youngest son of the late Sheriff Brady of Woodstock, and spent his early days there.

JOHN E. LUNDY.

Dr. John Edgar Lundy, prominent medical practitioner, of Portage la Prairie, died 28th April, at his home. He was born in Galt, Ont., 38 years ago, educated at Toronto University, and wennt West eleven years ago. His body was sent to Galt for interment.

ROBERT LAWRENCE.

Dr. Lawrence died at his home in Vancouver on 19th March, in his 71st year. He was born at Springfield, Ontario, and graduated in 1871. He practised at different times in Mono Mills, Hontywood, and Vancouver. In the latter place he had a large practice. The cause of his death was paralysis.

LORNE CAMPBELL.

Dr. Campbell died at Peaton, Scotland. He was a son of Dr. Geo. Campbell, of Montreal, and graduated in 1882 from McGill. Six years ago he went to reside in Scotland. He leaves a widow and three children.

GEORGE MARTIN.

Dr. Martin died in Montreal from an attack of diphtheria, on 1st April. He was a graduate of Laval University.

RANKINE DAWSON.

Dr. Dawson, a son of Sir William Dawson, died last April. He was born in Montreal in 1858, and graduated from McGill in 1882. He was surgeon to the P. & O. steamers, and made voyages to many points in the East.

ROCH M. S. MIGNAULT.

Dr. Mignault, of Yamaska, Quebec, died last March, in his 79th year. He was a member of the Quebec Legislature for many years.

ANGUS J. MURRAY.

Dr. Fredericton, N.B., died on 3rd April. He was born in Picton County, in 1855. He was a graduate of Halifax College, and the University of Illinois. He was in 1909 president of the New Brunswick Medical Society. He was also a member of the Provincial Board of Health, and was for two years warden of his county. He leaves a widow and four children.

DAVID F. STONE.

Dr. Stone, who graduated from the University of Toronto in 1870, died in Bay City, Michigan, where he had carried on his professional work for many years. He was in his 70th year.

MARION OLIVER.

In the death of Dr. Marion Oliver, the Presbyterian Church in Canada has lost one of its oldest and most zealous missionaries. The late Miss Oliver was born near St. Mary's in 1857. In 1884 she graduated from Queen's University, receiving the degree of Doctor of Medicine. Two years later she was sent out by the Presbyterian Church, as missionary to Indoor, Central India. There she remained until two years ago, returning on account of poor health. For some time her health improved, but a few weeks ago she suffered a relapse from which she failed to recover, and died on 22nd May. The funeral took place on Monday from Avondale church, near St. Mary's.

BOOK REVIEWS

CHEYNE & BURGHARD'S SURGICAL TREATMENT, VOL. IV.

By Sir W. Watson Cheyne, Bart., C.B., D.Sc., LL.D., F.R.C.S., F.R.S., Hon, Surgeon in Ordinary to H. M. the King; Senior Surgeon to King's College Hospital, and F. F. Burghard, M.S., (Lond.), F.R.C.S., Surgeon to King's College Hospital, and Senior Surgeon to The Children's Hospital, Paddington Green, Lnodon. New (2nd) edition. Thoroughly revised and largely rewritten. In five ovtavo volumes, containing about 3,000 pages, with about 900 engravings. Price, cloth, $6.00 net, per volume. Philadelphia and New York: Lea and Febiger, 1913.

The fourth volume of this very practical work takes up the surgical affections of the entire alimentary system. Beginning with the mouth, tongue and jaws, it covers fractures of the bones, tumors, congenital malformations, injuries, syphilis, tuberculosis and other diseases having a surgical bearing. With equal thoroughness it proceeds to the pharynx and esophagus, and then to the surgical affections of the stomach and intestines. This section includes methods of examination of the stomach, and general remarks on laparotomy and intestinal suture, and on affections of the abdominal wall. The treatment of the numerous pathological conditions to which the stomach and intestines are subject is gone into carefully and in detail. The last division of the book gives full attention to the rectum and anus. The illustrations, 208 in number, are unnusually large and clear.

This splendid work is advancing rapidly to its completition, as only one more volume has to be issued. For a number of years this volume will be a standard one on surgical treatment. Pathology is but briefly given, the authors aiming at producing a book mainly on treatment. Mr. T. P. Legg and Mr. Arthur Edmonds have rendered valuable services in the revision of this edition. A careful examination of the pages of these volumes as they appear reveal how carefully the editing has been performed. The present edition is dedicated most fittingly to the memory of Lord Lister, the founder of modern surgery. The publishers have spared no pains to make the book worthy of their old and honorable reputation.

GENERAL PATHOLOGY.

Text-book of General Pathology, by A. P. Beddard, A. E. Boycott, C. H. Browning, A. E. Garrod, J. S. Haldane, J. W. Hall, A. F. Hertz, F. W. Mott, M. S. Pembery, J. A. Ritchie, J. H. Ryffel, S. V. Sewell, J. L. Smith, E. A. Walker, Price, 18s net.

In the introduction the statement is made that "General pathology is the study of disease from the physiological point of view." This

is a sound position. The work of the pathologist is to correlate the processes that take place in the diseased and the healthy. The admission is frankly made that "it is impossible to draw a hard-and-fast line between physiology and general pathology." It is beyonnd our skill at present to say just when health ends and disease commences. Throughout the volume the closest attention is given to the cell; for no matter how complicated any body or organ may be, it is only an aggregation of cells. The influences of disease on the cells in "degenerative, reaction, and new growth" is well shown. This volume contains nearly 800 pages. It is got up in excellent form, and the paper, binding, type and illustrations are such as would please the most fastidious. Each subject receives full consideration, though there is evidently a decided desire to avoid all prolixity. The various chapters have been prepared by admitted specialists in these fields of pathological work. A feature of the book that should be specially mentioned is that it is so well calculated for the active practitioner. It is a bedside manual as well as a laboratory guide. It should go with one's works on practice and treatment as an inseparable companion. This volume is just what was needed and it has come when most needed. We congratulate all concerned.

ALIMENTARY TOXAEMIA.

The Consequences and Treatment of Alimentary Toxaemia from a Surgical Point of View, by W. Arbuthnot Lane, M.S. London: John Bale, Sons & Danielsson, Ltd., 83-91 Great Titchfield Street, Oxford Street, W., 1913.

This pamphlet of 70 pages is reprinted from the Proceedings of the Royal Society of Medicine. Those who have been keeping themselves in touch with the work that Mr. Lane has been doing on the surgery of the intestinal canal will naturally expec t something of interest and value from him on such an occasion as that of a deliberate expression of views before such a body. Mr. Lane has been a careful student for years of the results of intestinal stasis. He has created a new departure in surgery, and, by his skill as an operator and his scientific methods, he has proven what may be done by the surgeon for the relief of a class of sufferers who cannot be aided in any other way. At one time there were many who thought that Mr. Lane was too radical in his views, but their number is steadily decreasing. Much of the teachings and practice of Mr. Lane has come to stay. We do not now employ carbolized putty, but antiseptic surgery is still with us. Mr. Lane has made a positive addition to surgery for which he is entitled to all due praise. This pamphlet sets forth his views and his methods of operating, and should be carefully studied by every physician and surgeon—the former to learn about the disease and the latter to acquire the best method of treating it.

DISEASES OF CHILDREN.

Diseases of Children, by Various Authors, edited by Archibald E. Garrod, M.D., M.A., F.R.C.P., F.R.S., Physician to St. Bartholomew's Hospital, and to the Hospital for Sick Children, Great Ormond Street, London; Frederick E. Batten, M.D., M.A., F.R.C.P., Physician to the Hospital for Sick Children, Great Ormond Street, and Physician to the Out-patients, National Hospital for the Paralyzed and Epileptic, London, and Hugh Thursfield, M.D., M.A., F.R.C.P., Physician to Out-patients, Hospital for Sick Children, Great Ormond Street. Illustrated. London: Edward Arnold. Price, 30s net. 1913.

When a volume of nearly twelve hundred pages appears on a special subject, one naturally becomes interested to look into its claims to the attention of the class for which it has been written. In the first place the contributors to this volume are men who have won a fine reputation for themselves as clinical teachers and authors. The list is: H. G. Adamson, F. E. Batten,, . Walter Carr, Edmund Cautley, H, M. Fletcher, J. S. Fowler, A. E. Garrod, E. W. Goodall, A. M. Gossage, L. G. Guthrie, Robert Hutchinson, T. Langmead F. J. Poynton, H. D. Rolleston, F. A. Rose, G. F. Still, G. A. Sutherland, H. T. Thomson, John Thomson, Hugh Thursfield, A. F. Vœlcker, and G. E. Waugh. With the exception of J. S. Fowler and John Thomson, they are connected with London hospitals. The book, therefore, is an exposition of the best clinical thought of the London men of to-day. There are 182 illustrations, and two colored plates. There are four chapters devoted to general subjects, and 23 on special subjects and diseases. The type, paper and binding are such as to satisfy the most exacting. This much gives a general impression of the book. A few words about its contents are now in order.

It would be quite superfluous to state that those who have contributed chapters to this work, are highly trained and competent to accomplish in a satisfactory manner the tasks that have been assigned to them. A review of the sections reveal with what care the material has been arranged. Each disease is discussed with great fulness under the usual headings of introduction, etiology, varieties, symptomtology, course, diagnosis ,and treatment. The authors are to be congratulated on the excellency of their contributions. We have often observed in the perusal of works prepared by a number of authors that there is an unfortunate tendency to duplication. The editing in this case has been so carefully done, that this blemish is absent. The subjects have been allotted to each so as to avoid duplication. This whole work is such as every practitioner would enjoy possessing and would profit greatly by reading. in one's library the possessor could have many a useful and suggestive consultation with the most experienced, much to his own pleasure and the benefit of his patients.

OLD AGE.

Its Care and Treatment in Health and Disease, by Robert Saundby, M.D., Edin., Hon. LL.D., McGill, Hon. M.Sc., Birm., F.R.C.P., Lond., Hon. F.R.C,P,, Irel,, Professor of Medicine, University of Birmingham, Consulting Physician to the General Hospital, ex-President of the Council of the British Medical Association, Eueritus Senior President of the Royal Medical Society. London: Edward Arnold, 1913. Price, 7s 6d.

Some very distinguished members of the medical profession have made the disease of old age a special study. Among them we might emention Professor J. M. Charcot and G. W. Balfour. In their day, these men rendered a fine service to the profession. At the present time it would be difficult to find any one better qualified than Professor Saundby to give us the modern views on this important aspect of medical practice. One might ask why a special book on the management of old age in health and disease? It has long been admitted that age modifies the course and to some extent the nature of disease. This is the excuse for special work on disease of children and the aged. This phase of the question was elucidated with much ability by Prof. Charcot. Professor Saundby first gives a good deal of attention to the duration of life. He then treats of normal old age. The next section discusses a group of diseases that are almost limited in their incidence to old age. The diseases of the various systems are then dealt with. Professor Saundby states : "This book describes the diseases to which the aged are especially liable, points out how they are caused, by what means they may be avoided, and how they may be appropriately treated." With care and judgment the theories of former writers are passed under review, such as Hufeland, Cicero, St. Aulaire, Weber, Metchnikoff and others. This book is full of suggestions on *what not to do,* as well as on *what to do.* All the way through runs the idea of moderation in all things. The modifications that diseases assume in the aged is made clear, and with a view to treatment. One of the most interesting portions of the book comes at the end and takes up "Regimen, Dietary and General Treatment." This section will reward any one who may give it the consideration it merits. We wish to congratulate the eminent author on results of his efforts to throw new light and interest on the subject of old age and its diseases. This book will long remain as a valuable guide to many a practitioner who desires to do the very best for his aged patients.

REPORT OF PHIPPS INSTITUTE.

Seventh Report of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis, April 1st, 1913. From the Phipps Institute, Seventh and Lombard Streets, Philadelphia.

This report discusses many phases of tuberculosis. Those who are

working in the Phipps Institute have many advantages of study and observation that give weight to what they may say on this disease. There is much useful information in the pages of this report.

THE OPERATING ROOM AND PATIENT.

By Russel S. Fowler, M.D., Chief Sureogn First Division, German Hospital, Brooklyn, New York. Third edition, re-written and enlarged. Octavo volume of 611 pages, with 212 illustrations. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, $3.50 net. Canadian agents, The J. F. Hartz Company, Toronto.

This book deals with the operating room and the patient. Everything that should be in the operating room and the accessory rooms are fully discussed. An excellent place for these rooms is given. The care of patients before and after operations receives due consideration. The dress of surgeons and nurses is taken up also. Full attention is given to the question of anæsthetics. The method of applying the first dressings is considered and well illustrated. It is a first-class book by a surgeon of high standing. It is such a book as would prove a real companion to the busy surgeon.

MISCELLANEOUS

CANADIAN MEDICAL ASSOCIATION.

The provisional programme for the London meeting of the Canadian Medical Association on the 24th, 25th, 26th and 27th of June, has been distributed, and gives evidence of advanced progress in the preparation for this meeting. A programme containing the names of such men as Dr. Paterson, of London, Eng.; Dr. Billings, of Rush Medical College, Chicago; Dr. Barker, of Johns Hopkins; Dr. Stockton, of the University of Buffalo; Dr. Ochsner, of Chicago; Dr. Angus MacLean, of the Detroit College of Medicine; Dr. Cullen, of Baltimore; Dr. John B. Murphy, of Chicago, not to mention the large representation of distinguished Canadian physicians from the Atlantic to the Pacific —such a programme should attract a very large concourse of medical men to the Forest City to this meeting of an association which has now become one of the largest and most important of the medical associations of the world.

The popularity of London as a convention centre, the recognized hospitality of its citizens, and the attractiveness of the city itself and its surrounding., leave nothing to be desired to insure the medical profession of Canada a delightful holiday outing, as well as a profitable

educational treat. The madical fraternity of London are sparing no pains to make this the record-breaking meeting of the association, and their efforts are deserving of a hearty response on the part of the profession throughout the Dominion.

Special attention is directed to the fact that to ensure single return fare, it will be necessary for everyone buying a ticket to secure a standard certificate at home station, at commencement of journey.

The revised programme will be furnished in due time to all who are to take part in the programme, and further copies will be supplied at the time of the meeting.

From Fort William and all points east, tickets for the going journey must be purchased between June 20th and June 26th inclusive; from points west of Fort William, June 18th and June 22nd. Return good until July 1st and 12th respectively.

THE INTERNATIONAL MEDICAL CONGRESS IN LONDON.

August 6th to 12th, 1913.

The Seventeenth International Congress of Medicine, which will be held in London next August under the patronage of H. M. the King, will be opened by H.R.H. Prince Arthur of Connaught, as the representative of His Majesty, at a meeting in the Albert Hall at 11 a.m., on Wednesday, August 6th.

The last meeting of the Congress in London took place in 1881, when Sir James Paget was President. This year the President is Sir Thomas Barlow.

The central office of the Congress will be in the Albert Hall. The sectional meetings will be held in rooms in the University of London, the Imperial College, the Royal School of Science, the School of Art, and the Central Technical College. These bodies have generously placed their buildings, which are all close together in South Kensington, at the disposal of the Congress. The Student's Union of the Imperial College will serve as the men's club, and the authorities of Alexandra House have kindly lent rooms for a ladies' club.

There are in all twenty-six sections and subsections. Their sessions will be held in the morning and in the afternoon. The morning sessions will be devoted to discussions on fixed subjects, which will be introduced by eminent medical men from every part of the world who have been invited for the purpose.

Five general addresses have been arranged. These will be delivered by Professor Chauffard (Medicine), Professor Harvey Cushing

(Surgery), Professor Ehrlich (Pathology), Mr. W. Bateson (Heredity), and the Right Hon. Jno. Burns, M.P., President of the Local Government Board (Public Health). They will be delivered in the Albert Hall.

It is estimated that about 5,000 medical men and 2,000 ladies will attend the Congress.

The organization of the Congress has been going on for nearly three years. At the present time the reports drawn up by those chosen to introduce the discussions are being received and set up in type. It is hoped that all these reports which will form the basis of discussions will be printed and bound as a separate volume for each section before the Congress opens. A second volume for each section will be published subsequently containing the speeches delivered and the independent papers presented at the Congress itself.

A circular issued on April 30th, gives information on travelling facilities, both to London and in London, on hotels annd boardig houses, on the location of the various sections, and on other points likely to be useful to members.

Subscriptions to the General Fund of the Congress should be forwarded to the treasurers of the Seventeenth International Congress of Medicine at the same address. It should be borne in mind that the membership subscription of £1, only suffices to meet the expenses of producing the Volume of Transactions subsequently delivered to each member. The entire cost of arganization and conduct of the meeting has, therefore, to be provided for by private subscriptions to the General Fund. Office of the Secretary of the Canadian Committee, 134 Bloor street, west, Toronto.

WESTERN MEDICAL FACULTY GRADUATES.

London, Ont., May 7.—The Examining Board of the Medical Faculty of Western University announced 7th May that twenty-five out of a class of twenty-eight candidates had been successful in the fourth year. Of those who graduated from the Medical School this year, Mr. Thornley Bowman, of London, son of Prof. J. H. Bowman, leads in the honor list, winning the gold medal for the year. Mr. Lee Elliott of St. Thomas is silver medalist. Three other honor men are: Alfred T. Turner, Carlingford; Clarence F. Wright and Lorne F. Jones, London. The following complete the list of graduates: Geo. A. Smith, L. K. Pontz, Toronto; Frederick H. Bowen, S. O. Jones, Wm. J. Scott, London; Frank W. Overholt, Allen M. Yeates, Hamilton; Wm. H. Avery, Thos. Cuddy, Strathroy; A. S. Mutterer, Ingersoll; Cecil H. Edmunds, Arcona; Chas. H. Brereton, Bethany; Archie T. Laird, Blenheim; Wm. J. Aikenhead,

Brucefield; Richard McAllister, Fernbank; Chas. A. Harris, Lakeside; Leslie Aiken, Mandaumin; Robert M. Luton, Mapleton; C. E. McDonald, North Bay; Thos. W. Moore, Listowel.

The twenty-ninth member of the fourth year class, Mr. Meredith Sudsworth, of Ingersoll, was not a candidate, being prevented by illness from taking the examination.

The third year scholarship was won by Mr. C. Cornish of Ingersoll; the second year by Mr. Gerald H. J. Pearson of London, and the first year by Mr. Paul Andrus of London. In addition to securing the second year scholarship, Mr. Pearson took the third year course in arts at the university. He won the Robb medal when he entered the collegiate here, and made splendid progress prior to matriculation. Then in the first year at the Medical College he was medalist, repeating his success this year. Mr. Paul Andrus, the medialist in the freshman year, is a son of Mr. Guy Andrus of the Collegiate Institute staff.

Mr. Wilbur Denny of London East was a close competitor for the medal in the first year, and Mr. M. D. Campbell of Southwold Station in the third year, the honor list for the first three years being: Third year, Cornish, Campbell, McPherson; second year, Pearson, Fisher, J. S. Young; first year, Andrus Denny, Ferguson.

QUEEN'S UNIVERSITY MEDICAL GRADUATES.

Queen's Medical College graduates have been announced as follows.

Degree of M.D., C.M., W. Boake, Vancouver, B.C.; G. W, Burton, M.B., Great Shemogue, N.B.; M. H., W. Fizzell, Schomberg; W. G. Hamilton, M. B., Elgin; H. M. Harrison, M. B., Kingston; J. L. Tower, B.A., Belleville; G. N. Urie, B. A. Deloraine, Man.

Degree of M. B.—S. M. Asselstine, Marlbank; V. Blakslee, Sydenham; F. W. Burden, St. Johns Nfld.; C. T. Coulter, Thornton; K. C. Dean, Brighton; J. S. Dickson, Kingston; J. A. Dobbie, B. A., Ottawa; A. B., Earl, Athens; W. R. Jeffrey, St. Marys, N.B.; A. W. Johnson, Oak Leaf; R. F. Kelso, M. A. Wallacetown; W. W. Kennedy, B. A. Stratford; V. T. Lawler, Kingston; F. L. Leacock, Crystal; L. M. MacDougall, M. A. Kingston; J. F. Maciver, Gould, Que.; W. M. MacKay, Cornwall; H. Mackinnon, Lake Anslie, N.S.; C. G. Merrick, Kingston; D. J. Millar, North Battleford, Sask.; W. M. McLaren, Cobden; L. J. Nacey, Oswego, N.Y.; J. Norman, Cupids, Nfld; R. B. Richardson, Norwood; N. Sonford, Montego Bay, Jamaica; A. B. Simes, Sweets Corners; J. C. Smith, Kingston; M. T. Smith, Greenbush; E. G. Springer, Hyinn, Barbodos; E. L. Stone, Forfar; C. K. Wallace, B.A., Kemptville; G. A. Williams, Allenford; L. E. Williams, St. Thomas.

Prize list: Faculty prize in anatomy, S. R. McGregor; faculty prize, $25.00, for highest marks on second year examinations in anatomy, physiology, histology, chemistry, and materia medica, C. B. Waite; faculty prize for highest percenntage of marks on second year examination in materia medica, C. B. Waite; the N. F. Dupuis scholarship for highest marks in chemistry of the second year, value $60, G. T. G. Boyce; the Dean Fowler scholarship for highest percentage of marks on the work of the third year, value $50.00, D. E. Bell; faculty prize for best written and practical examination in third-year pathology, M.D. Graham; the Chancellor's scholarship, value $70.00, for highest percentage of marks on five years' course, not granted; medal in medicine, E. W. Boak; medal in surgery, V. T. Lawler.

SIR WILLIAM OSLER BANQUETED.

Sir William Osler, Bart., Regius professor of medicine at Oxford University, was the guest of honor at a private dinner tendered him at the Ritz-Carlton Hontel, Montreal, on 14th May, by fellow-members of the Montreal Medico-Chirurgical Soceity. The chair was occupied by Dr. D. J. Evans, President of the society, while Dr. D. F. Gurd was in the vice-chair. Only two toasts were drunk, one to the King, and the other to Sir William, the latter being introduced by Dr. F. J. Shepherd, Dr. Roddick and Dr. Lafleur, Sir William responding in a speech which was a happy blending of wisdom and humor.

The invited guests were: Mayor Lavallee, Principal Peterson, of McGill, Dr. Lachapelle, Dean of the Medical Faculty of Laval University; Dr. Hamilton, President of the Toronto Academy of Medicine, and Dr. O'Brien, President of the Ottawa Medical Society.

ONTARIO'S VITAL STATISTICS.

Statistics of communicable diseases through the Province during the month of April, furnished by the local Boards of Health, show that measles is epidemic in many places. There were 1,422 cases reported during the month with three deaths. Last year the number was 579 cases and three deaths. Other diseases are:—

Disease	Cases	Deaths	Cases	Deaths
Smallpox	100	1	103	..
Scarlet fever	279	14	338	16
Diphtheria	161	19	156	15
Whooping cough	23	3	110	9
Typhoid fever	69	14	34	14

Tuberculosis	149	105	117	78
Infant paralysis	2	1	2	2
Cerebro-spinal meningitis	8	6	12	12
Total	2,234	173	1,451	149

TORONTO'S HEALTH.

The monthly report of Dr. C. J. Hastings, of the Health Department, shows that out of 481 deaths in April, 27 were due to violence. In the same month in 1912 there were 528 deaths, which, considering the growth in population, is a large decrease for this year. The deaths due to violence stand third on the list, the two preceding being those for tuberculosis and pneumonia. Diphtheria, scarlet fever, typhoid fever, and other contagious diseases claimed 23 victims, as compared with 47 last year.

Sixty-seven new cases of tuberculosis were reported to the Health Department during April. This makes a total of 275 cases that are now maintained by the city at seven hospitals. The total number of tuberculosis cases on the health officer's list is 1,265.

Scarlet fever cases are coming in rapidly. There are 93 cases at the Isolation Hospital at present, and only six cots remain vacant, and no beds for adult patients.

SICKNESS DECREASES.

There was a noticeable decrease in sickness in Toronto during the month of April, as compared with the same month of last year. There were 71 less cases of typhoid, 33 less of diphtheria, and 13 less of tuberculosis reported. Measles, however, increased from sevenn to 611. This, however, is largely due to the ew method regnistering this disease under the present requirements. Scarlet fever was most prevalent during the month, next to measles, there being 120 cases reported. There were 70 cases of diphtheria, and 49 of chicken-pox.

There were 1,332 births in April as compared with 957 for last year, 598 marriages and 461 in 1912, and 546 deaths against 602 last year.

CANADIAN PUBLIC HEALTH ASSOCIATION.

The Third Annual Congress of the Canadian Publis Health Association will be held in Regina, Sask., on Sept. 18th, 19th and 20th. This will be the first occasion on which the members of the Association have met in the West.

The Provincial Government realizing the educational value of such a conference, and the stimulation of interest which it will effect in matters of public health, have decided to bring all the medical health officers of the Province, some 200 in number, to the Congress.

There is therefore every indication that the attendance will equal, if not surpass, that of the two previous meetings in Montreal and Toronto.

Local committees have already been formed, and are actively engaged in preparing a program of outstanding strength and interest.

Apart from the high standard of instruction and education which the committee are aiming at in the program, every possible provision will be made for the comfort and entertainment of the visiting guests during their stay in the city.

The secretary to the Local Arrangements Committee is Mr. R. H. Murray, Engineer to the Bureau of Public Health, Regina. The names of sectional convenors will be announced later.

TORONTO ACADEMY OF MEDICINE.

The annual reports from the various sections and committees for the year just ending, were of a very gratifying character, and showed progress all along the line.

The treasurer, Dr. W. A. Young, presented an excellent financial statement. There had been received from fellows $3,523. There was from other sources and cash on hand a total of $1,099.25. The total expenditures amounted to $2,845; and there was transferred to savings account $1,700.

Dr. John Ferguson, chairman, submitted the report of the Library Committee. The total number of volumes now on the library was 5,521. In addition to these volumes there are 300 in the Bovell Library, and 40 in the Workman Library. During the year 91 volumes were presented, 74 were purchased, four were secured by exchange, and nine were bound periodicals, making a total of 178 volumes. The library receives by purchase or gift 167 periodical publications. Of these 34 are British, 13 Canadian, 98 American, 12 German and 10 French. Of these 57 are purchased and 110 are by gift. A number of fellows have been specially generous in making gifts of books and journals.

The trustees' report showed that in cash, in interest bearing securities, and in equity in the building, the assets of the academy amounted to $22,810. This did not include the library which was worth perhaps $25,000 or $30,000 in addition to the above.

The honorary secretary, Dr. Harley Smith, mentioned that the number of fellows was now 372. During the year two fellows had died, namely, Drs. J. T. Duncan and W. J. Wagner. The council held eleven meetings. There had been seven stated meetings of the Academy, with an average attendance of 128. Dr. William Oldright had been made a life member.

Arrangements have been effected for a full report of the discussions at the general and section meetings next year. A competent stenographer has been secured for this work.

The meetings of the sections were well attended and good programs were furnished. At the general meetings addresses had been given by Mr. Lane, of London; James Third, of Kingston, and Ramon Guiteras, of New York, in addition to those by fellows of the Academy.

The officers for the coming year are:—President, H. J. Hamilton; Vice-President, H. B. Anderson; Treasurer, W. A. Young; Hon. Sec., Harley Smith; Past President, R. A. Reeve; Section of Medicine, J. T. Fotheringham; Section of Surgery, Wallace Scott; State Medicine, J. H. Elliott; Ophithalmotogy and Otology, Dr. Maclennan; Pædiatries, H. C. Parsons; Pathology, Duncan Graham. The elected members of the council are: N. A. Powell, J. Ferguson, W. H. B. Aitkins ,Graham Chambers, H. A. Bruce, J. A. Amyot, E. E. King, D. J. Gibb Wishart. The trustees are: Drs. N. A. Poule, R. A. Reeve, and D. J. Gibb Wishart.

MEDICO-LEGAL SOCIETY JUBILEE MEETING.

The Medico-Legal Society announce a special jubilee program for the May meeting to commenorate the founding of the *Journal* to be held at the Waldorf-Astoria, May 21, 1913 at 7.45 p.m. to be published in the closing of volume 30 and the opening of No. 1 of Vol. 31, June 1913.

The President, T. D. Crothers will present and have charge of the presentation of the contribution of honorary corresponding and active members who are invited to contribute to the *Journal* to be presented at the meeting and forwarded to the secretary, on the work and influence of the*Journa* ,land also of the Medico-Legal Society since the election of Mr. Clark Bell to the Presidency in November, 1872.

Brief addresses will be made by prominent members and officers.

Contributions will also be furnished by Sir Geo. H. Savage, M.D.,

of London, Frederick Needham, M.D., Lord Chancellor, visitor in Lunacy of London and Dr. A. Berrillon of Paris, who have accepted honorary membership.

NEW CATALOGUE.

W. B. Saunders Company, Publishers of Philadelphia and London, have issued another edition (17th) of their handsome illustrated catalogue.

In going through this edition we find it describes nine new books and ten new editions, not described in the previous issue. These new books are of great interest to the medical man, because they treat of subjects being daily discussed in medical circles.

Any physician can get a copy of the Saunders' catalogue by dropping a line to these publishers. A copy should have a place on the desk of every physician, because it is most valuable as a reference work of modern medical literature. Send to Saunders to day for a copy.

A HUNGER STRIKE OF 1357.

We have to go back to the reign of Edward III. to find the holder of the English hunger strike record. Cecilia, wife of John de Rygeway, was in 1357 confined in Nottingham jail on a charge of murdering her husband, and there, according to the old records, she abstained from meat and drink for forty days. Which, being reported to the King, he was "moved by pity, and for the glory of God and the Blessed Virgin, to grant the woman a pardon." The records say nothing of her guilt or innocence, nor do they throw any light on fourteenth century ideas of forcible feeding.

COBOURG HOSPITAL FUND.

Hospital Field Day passed off most successfully, almost $17,000 being subscribed by citizens towards the erection of a new hospital. This includes a subscription of $5,000 from Mr. W. J. Crossen, and a number of other liberal subscriptions from prominent citizens. Twenty gentlemen conducted the canvass, visiting every home in the town. Banners across the streets announced that it was Hospital Day, while the autos used were decorated with flags. A banquet was tendered the committee in the evening. Additional to this $17,000 the Hospital Board has bequests of $20,000 from the late John Helm, Port Hope, and $10,000 from the late Wm. Black, making about $47,000 altogether. Construction will be proceeded with at once. The ladies of the town are looking after the furnishings.

WESTERN MEDICAL COLLEGE.

News comes to the effect that negotiations are practically completed by which the Medical College in London will become a part of the Western University in that city. So far the Medical College has been conducted as a separate institution in affiliation with the university.

PHOSPHORUS LEGISLATION IN INDIA.

The member for Commerce had little difficulty at the last meeting of the Viceroy's Legislative Council in making out a strong case in favor of the white phosphorus matches bill. It was introduced in March, 1912, and the postponement has served the useful purpose of allowing fuller and more convincing proof of the need for the measure to be collected, and the fact that the American Congress has passed a law imposing prohibitory taxation on matches made with white phosphorus and forbidding their importation has ben duly noted. Even in England before prohibition was enforced, dfficulty was experienced in obtaining evidence of the occurrence of necrosis, and in India, among a floating and very ignorant factory population, this difficulty is enormously increased. Sir. C. P. Lukis, Director-General of the Indian Medical Service, has pointed out that eight cases of necrosis of the jaw had been discovered last year in districts in which match factories were working, though there was no evidence to connect these cases with the match industry, but the Indian laborer would not associate his disease with his occupation, and as the match industry is still in its infancy in this country, medical officers would be unlikely to make inquiries on this point. An additional argument is the fact that the present market in India for foreign phosphorus matches helps to bolster up the industry in other countries. As regards the inconvenience and loss to which the Indian villager would be subjected by being deprived of his favorite "strike-anywhere" match, it is sufficient to state that out of 271 brands of "strike-anywhere" matches tested at the English Customs Houses, only 11 were found to contain white phosphorus. The argument that white phosphorus matches are a practical necessity in damp climates is disproved by the fact that since 1890 their importation into Burma has been prohibited and no inconvenience has been felt in that province. It is also significant that in Calcutta, which serves such damp districts as Assam and Eastern Bengal, the proportion of white phosphorus matches imported is only 25 per cent., as against 75 per cent. at Madras, 60 per cent. at Bombay, and 50 per cent. at Karachi. There is little reason to doubt that as soon as the bill is passed a "strike-anywhere" match

manufactured without white phosphorus will be placed on the Indian market, and will remove any temporary inconvenience to which the bill may lead.

SEA TURTLES USED FOUR HUNDRED YEARS.

A French historian, in connection with the alleged cure for tuberculosis now being advanced by Dr. F. F. Friedmann in the United States, calls attention to the little known fact that the medicinal use of the sea-turtle is by no means of recent date.

On July 8, 1483, King Louis XI. of France sent George the Greek, master mariner, to the Cape Verde Islands to seek "various things touching nearly to the well-being and health of our person." The Cape Verde Islanders had the reputation of possessing a cure of leprosy, a report of which had been brought back to France by a traveller from the coast of Guinea at about the time King Louis was in declining health. According to the recital of this traveller, the big sea turtles were caught by the islanders when they came out on the beach at low tide to feed. They were at once killed, and their blood caught in large tubs. Persons afflicted with leprosy bathed in the blood, and afterwards ate of the turtle's flesh. This treatment was kept up for two years, at the end of which time the patients were usually completely cured of the dreadful disease.

This record would tend to show that Louis XI. was a leper. That such was the case had been rumored by chroniclers, but the reason of the exepedition to the Cape Verde Islands, now published for the first time, throws much light on the psychology of Louis XI., his ill-humor, and his sedulous avoidance of mankind during the last days of his life. The wretched man evidently believed himself smitten with leprosy. He was, however, never fated to test the efficacy of the sea-turtle remedy, for he died August 30, 1483, before the return of the expedition.

MEDICAL PREPARATIONS, ETC

PLASMODIAL ANEMIA.

In spite of the modern theory of the etiology of malaria and malarial affection (mosquito-borne infection) this plasmodial disease continues to be rife in certain sections of the country and bids fair to be, like "the poor," "always with us."

Every physician of experience appreciates the principles which should guide him in the treatment of the various acute manifestations of paludal poisoning, i.e., the destruction of the plasmodial hosts which have invaded the blood and which, if not eliminated, consume and destroy the red cells, the vital element of the circulating fluid.

When this purpose has once been accomplished the patient is but partly cured; the damage done to the red corpuscles must be repaired and the vitality of the blood restored, if re-infection is to be avoided. If there is any one condition in which direct hematinic or blood-building therapy is positively indicated, it is in Post-Malarian Anemia. As soon as the febrile period has passed, iron, in some form, should be given in full dosage. Pepto-Mangan (Gude) constitutes the ideal method of administering this essential blood-building agent in this as well as in any anemic condition. Both the iron and manganese in Pepto-Mangan are in organic combination with peptones and are therefore easily and promptly absorbed and assimilated without causing digestive derangement or producing constipation.

THE GOOD OLD SUMMER TIME.

The coming summer season will no doubt produce its usual crop of cases for physicians, peculiar to the season.

Insect bites, bee stings, sunburn and its frequently following dermatitis, strains and small joint injuries from base-ball and other sports, sprained ankles, ecchymosed eyes, infected wounds, etc., will demand the first attention of the physician and a second thought will be a suitable remedy.

All inflammatory conditions, whether from infective or traumatic causes, rapidly subside when dressed with Antiphlogistine. Its convenience of application with the assurance of satisfactory therapeutic results, makes it almost indispensable in emergency work.

REPUTATION COUNTS.

The reputation of a pharmaceutical remedy must stand or fall by the therapeutic results it produces.

Medicinal remedies come and go but one based upon logic and having proven its therapeutic efficiency, not merely by incidental reports, but by the incontrovertible evidence of prominent clinicians, covering a period of nearly half a century as to its uniformity of results rendered,

will continue to live and grow in popularity. Such a product is Hayden's Viburnum Compound.

H. V. C. is of known composition. Its reliability of action in treating Gynescological and Obstetrical cases, has standardized it as a dependable product, upon which confidence can be placed to produce the desired results.

In Congestive Dysmenorrhea and other forms of painful menstruation where no abnormal anatomical condition exists, it has proven of inestimable service, even since the time of Sims.

In Amenorrhea, Menorrhagia, Metrorrhagia, it is also of particular service. In Obstetrical practice, where difficult labor is encountered due to a Rigid Os, its sedative and antispasmodic action makes it almost indispensable.

Hayden's Viburnum Compound contains no narcotic and can be given with an assurance that no dangerous after-effects will be the consequence. Administered in teaspoonful doses in hot water, it will prove dependable in all conditions wehere indicated.

THE NEW TREATMENT FOR GONORRHEAL INFECTIONS.

Physicians who have had any considerable experience in the treatment of gonorrhea and its complications know how stubborn many of these cases are; how, not infrequently, they resist ordinary routine methods for weeks and months. The average general practitioner encounters these cases with unpleasant forebodings. He realizes that treatment of them is more or less empirical. He experiences a sense of relief when he can bid "good-bye" to one of them—when he can discharge it as "cured."

For the reasons enumerated any new therapeutic agent which promises a fair percentage of recoveries in gonorrhea and its sequelae is certain to be accorded a warm reception by the medical profession.

Is Gonorrhea Phylacogen such an agent? There is a basis for the belief that it is. Here are some figures that seem to lend assurance: "660 casese treated; 539 recoveries; 121 failures." These figures pertain to carefully recorded cases, under observation in various sections of the country and embracing both hospital and private practice. They include such complications as gonorrheal arthritis, chronic urethritis, vaginitis epididymitis, orchitis, prostratitis, vesiculitis, ophthalmitis, iritis, endometritis and salpingitis. These cases were reported to Messrs. Parke Davis & Co., producers of the Schafer Phylacogens. The results point clearly to this conclusion: Gonorrhea Phylacogen is worthy of careful, serious consideration.