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ADDRESS OF THE PRESIDENT OF THE CANADIAN
MEDICAL ASSOCIATION.*

BY DR. HARRISON,
SELKIRK, ONT.

Gentlemen of the Association:

MY first duty, as well as my pleasure, is to thank you for the honor you have done me in placing me in this position, an honor as unexpected as it was unsought. In fact, I might well have great misgivings as to my ability to fill it, for I need not tell you the mantle of my many able predecessors has not fallen on my shoulders, and I should not have accepted it had I not felt that I could rely upon your assistance and indulgence.

The subject of my address has been one of grave consideration. I might have taken the history of medicine or surgery, but it is trite, and has been worn threadbare. The history of the developments and improve-

*Delivered at the meeting of the Canadian Medical Association, held in St. John, N.B., August 22nd, 1894.

ments during the last one, two, or three decades, in this age of books and journals, is the property of the whole profession, especially of those who take enough interest in its progress to attend this meeting. It was with a good deal of diffidence that I took as my theme my personal experience and observations in medicine, extending over upwards of half a century.

Over fifty-seven years ago, with my father, the late Dr. Harrison, I settled near the shore of Lake Erie. The country at that time was an unbroken forest, with merely a thin and scattering fringe of settlements on or near the lake. The soil was heavy clay, and the surface very gently undulating. The water supply was mainly derived from the rainfall. The watercourses were more or less obstructed by the débris of the forest, so that the swamps held their moisture all summer, or until dried by slow evaporation or percolation. At this time miasmatic diseases were so prevalent that very few passed a summer without an attack of ague, and bilious remittent fever was common, and sometimes fatal, especially among the unacclimated. It was no uncommon thing to find, during the hot weather of summer, cases of ague or remittent fever in every house in a settlement, and frequently every member of a family would be attacked at once. Unacclimated persons who were healthy and vigorous sometimes passed the first summer without being attacked, but the fact that they developed it early the next year showed that the poison, though dormant, was still present, and had preserved its virulence through the long period of winter, ready to show itself on the first occasion of the lowering of the powers of life. When the system became saturated with the miasmatic poison, the patient was generally attacked every summer, as soon as the weather became warm, and it stuck to him either continuously or with intervals of apparent convalescence until the approach of cold weather. This would go on for, perhaps, from three to five years, when the susceptibility to the disease seemed to be worn out, but it left the patient with a constitution so shattered that it took years to recuperate, and left him an easy prey to the first serious attack of disease.

The miasmatic poison was so omnipresent that it complicated almost every other disease. I remember my father saying that he had scarcely seen an uncomplicated case of pneumonia, and the man who ignored its presence had little success in treatment. Quinia would check it as certainly, and I think in much smaller quantities than we now require. From ten to twelve grains in two-grain doses rarely, if ever, failed to stop the ague for at least seven to fourteen days.

At the same time there was a peculiar and very fatal disease among cattle. It had the local name of murrain. The animal was seen to be ailing; the eyes became sunken, the extremities cold. In a short time a bloody diarrhœa and hæmaturia ensued, and the animal died in from

twelve to twenty-four hours. A case of recovery was almost unknown. This disease was so prevalent that scarcely a herd escaped, and a farmer frequently lost from one-fourth to one-half his stock of horned cattle. Horses and sheep were not affected. In the next township to the west of us the soil was porous sand, well watered with springs and spring streams, and here, though ague was not uncommon, this disease of cattle was unknown.

Contrary to an opinion frequently advanced, the presence of malaria was not accompanied with the absence of typhoid, which, I think, was as prevalent as it is now.

When my father settled here, there was not a doctor nearer than a day's ride, and the medicine was entirely domestic. Charms and incantations were largely depended upon in cases of ague and hæmorrhage; but in cases where remedies were used they were pushed with a vigor that would take the breath of the modern patient. Whiskey was the universal remedy, and had the advantage of being indicated in all diseases, in all their stages, and in all conditions of the patient. It was a *sine qua non* in midwifery. I remember, when a boy, riding with two old settlers through the woods, and while passing a log house, many miles from the nearest neighbor, a woman rushing out and hailing one of the men with, "Have you any whiskey?" He slowly and hesitatingly acknowledged that we had a bottle, "just enough to take us through the woods." "You will have to give it to us," says the old woman. "Here's a woman sick, and no whiskey. Did you ever hear of such a thing?" My friend took a parting drink, and then, with a "longing, lingering look" at the departing spirit, handed the remainder to the midwife.

A disciple of Thompson had carried his peculiar ideas into the settlement, and the beautiful simplicity of the doctrine, "Heat is life, and cold is death," and that you had only to throw off the "cold phlegm" with lobelia, and keep up the heat with red pepper, to cure your patient, had gained many followers; and I know of at least two deaths caused by the lobelia.

Bleeding was resorted to on the slightest provocation, and there was scarcely a neighborhood that did not boast of a man who could open a vein with a dexterity that would shame the majority of the graduates of to-day; and the enormous bowls of the various infusions and decoctions that were poured down the patient would go far to convince the observer that, as in the case of New York's historian, they intended to drive out the enemy by inundating the seat of war. Some of their medicines were nauseous enough to have been derived from the pharmacopœia of the dark ages, the Chinese, or the homœopathists. An infusion of the excrement of the sheep was commonly prescribed for measles, and that of

the cat—no bad substitute for asafoetida—was considered “the sovereign’st thing on earth for fits.”

My father was the first in the neighborhood to treat diseases *secundum artem* ; but in those days the principles of medicine as taught by Sydenham and Cullen had not become obsolete, and he never hesitated to use contra-stimulants or the lancet in inflammation, in what was called inflammatory fever, or sthenic cases of disease with hyperaction, where he considered that the patient’s constitution would endure the treatment.

It was in this school that I learned the first rudiments of medicine, and in the first years of my practice I used the lancet with more or less freedom. And though the doctrine of Hugh Bennett and his followers has largely affected my practice, I am by no means convinced that the disuse of the lancet has been an unmitigated blessing. As there were brave men before Agamemnon, so there were skilful and *successful* physicians before we were thought of, or a bacterium discovered. It was certainly a dangerous mode of treatment for the mere routinist, who bled, blistered, and salivated each patient, as a matter of course ; but was a powerful weapon for good in the hands of the careful, observing physician, who understood the course and effect of disease, and carefully and intelligently studied and watched those of his remedies. And while our modern treatment saves patients who would have died under the old régime, I am convinced that the vigorous treatment of our fathers saved many who would have been allowed to die under the expectant treatment so fashionable a few years ago.

Diphtheria reached us before railways had opened up the country, and I repeatedly saw it on isolated farms, surrounded by woods, and where it could not possibly have been carried from without, and where the land had been so recently redeemed from the forest that it could not have been derived from some previous but forgotten case. This has seemed to me to prove that the origin of the Klebs-Loëfler bacillus requires further investigation. We also had cases of cerebro-spinal meningitis ; and I was much interested in a paper read by Dr. (now Sir James) Grant at the first meeting which I attended of this association, in (I think) the year 1869. It was on “Cerebro-spinal Meningitis,” or, as he termed it, “Purpuric Fever,” as it appeared in the Ottawa Valley. It had appeared with us at the same time ; and, changing the locality and the names, his paper would have fairly described my cases and their results.

The country became rapidly and thoroughly cleaned and drained, and it so completely rid us of the cause of miasmatic disease that I have scarcely seen a case of ague in twenty or twenty-five years, nor a case of old-fashioned remittent in my own practice of some forty years, and it is so long since we have had a case of murrain among our cattle that it has

ceased to be a tradition. We have occasional cases of typhoid ; but, though for years there was no attempt to isolate the patient, it is very seldom we have had a second case in a neighborhood. We have a German settlement near us, where it is considered to be the duty of every one within reach to visit the sick, which they do without the slightest precaution, yet I never saw it communicated. In the township adjoining, where the soil is very porous, the opposite obtains. There an isolated or single case is the exception. Time and time again I have seen a case of typhoid fever followed by one, two, or three others, in the same house, or in the immediate vicinity. The only difference between the localities is in the soil and in the water. Their water is spring, and from either springs, wells, or streams is bright, sparkling, and good-tasted ; while ours is far from being clear, and is contaminated with clay, lime, magnesia, and sulphur. But while our soil is heavy and impervious, theirs is as porous as a sponge ; and, I feel sure, allows the poison from the patient and his dejecta to find its way into the wells. These facts seem to me to go far to show that, if we disinfect or take care of the dejecta from our patients, there is little danger of spreading the disease.

For a long time in my earlier years I had no medical friend within easy reach, so that I had frequently to operate without assistance, and I have more than once amputated the leg or thigh with only the aid that a resolute neighbor could give, and I have been so used to perform all the operations required in obstetrics without medical assistance that I never think of asking for a consultation. But this state of affairs has its disadvantages. While it has a tendency to make a practitioner self-reliant and resourceful, and has bred in Canada a host of practical men, perhaps, second to none, it has a tendency to make a man opinionative and obstinate. In the language of Pasquier, he is apt "to think there is nothing left for him to learn ; he entertains oftentimes the most absolute confidence in himself, and the most profound disdain for all who do not share the ideas—the opinions he has already conceived unto himself." Or else he is apt to get into a rut, and to develop the mere routinist.

After my father's death, I particularly felt the necessity of meeting other medical men at least equal to myself, and with greater or more varied experience ; and, as soon as this association came within reach of me, I attended and joined it. I think this was at its second or third meeting, and I have attended most of its meetings since. When the Ontario Medical Association was formed, I was one of the first to join, and have been an active member from that time, and I attribute any measure of success I may have achieved to these circumstances. I hold it to be the duty of every live medical man in Canada to support these associations and to attend their meetings, and that the man who has an

opportunity to attend, and does not, fails in his duty to his profession, to himself, and to his patients. It is not enough to belong to his local society, and it is not correct or fair to hold that the Provincial Association takes the place of, or is in any way the rival of, the Canada Medical. The provincial societies should be its feeders, for, while the provincial associations are necessary to unite and to promote the brotherhood of the profession in each province, it is the Canada Medical that is the common bond of the profession of the Dominion, that knows no provincial boundaries, and unites the medical men from the Atlantic to the Pacific. But here we find an anomaly which, it seems to me, is a disgrace to the profession. Any medical man of good standing in his own province is eligible for membership of this association, and can attend its meetings anywhere; but, if he wishes to practise, the moment he crosses the imaginary line which bounds his own province, he is met by a shibboleth both vexatious and humiliating.

A man who, for a quarter of a century or upwards, has practised with credit and success is, on entering another province, required to pass the examination of a student; the examiners, perhaps, men without a tithe of his experience or ability—men perhaps unborn when he entered the profession. Surely this state of affairs should not and need not exist. Its inconvenience and unfairness must be manifest to all, and it should be the duty of this association to remove the anomaly. It has been several times brought to its notice. I remember hearing it discussed in, I think, the year 1869, by the president, Doctor, now Sir Charles, Tupper, but so far we have done nothing. The different standards of matriculation and education, the varying width of the portals to the profession in the different provinces, is, I think, the main obstacle. And one can easily see the unfairness of asking a province where the standard is high, the period of study required long, the examination rigid, and where the university degree gives a man no right to practise, to admit, on equal terms, men who have qualified in provinces where they are admitted on much easier terms, and where the university degree of M.D. is all that is required to obtain a license or to register. One can see that the result would be "a beggarly account of empty" benches in their colleges, while their students would go in crowds to the universities in the provinces where they found a royal and easy road to practice.

The only way to accomplish this is to establish a common curriculum, a common standard, a common portal to the profession, for all the provinces in the Dominion; and when a man has once entered he should be entitled to register in any of them; and as medical education, like the Roman eagles, cannot be allowed to retrograde, the requirements to practice should be based upon those of the province where these are the high-

est, and where the examinations are the most rigid. This can work no injustice. Our standards are none of them too high. A few days ago Mr. J. Greig Smith, in the address on Surgery before the British Medical Association, said : " Are we to lower the standard of surgery so that our brains may not be strained, or are we to strain our brains that surgery may be raised ? " And he answers, " Let surgery rise, if brains fall ; let the weak, the lazy, or the impatient fall out, but do not let us lower our standard because some men cry it is too high. It cannot be too high. " I think this sentiment will be endorsed by this association, and I think no man competent to give an opinion will say that in any of the provinces we have too high a standard.

We can only assimilate our varying standards by a joint action of all the provinces, and, as this association is the only body which contains, or should contain, representatives from them all, I think we must depend upon the Canada Medical to achieve this result. It has been for a long time held in abeyance, but the growth of our country, the increase in population and importance of many provinces and territories, which were not in existence when this subject was first brought up and discussed, and, above all, the enormous and continuing increase in the numbers of medical men, render its consummation more necessary than ever ; and although I am an old man, and in the course of nature not likely to practise much longer, and although it would not affect me personally, still, as a member of a profession that has descended to me in a direct line through surgeons, some of whom existed more than a century before I was born, and which I have transmitted to my eldest son, I am deeply interested in this question, and if I can feel that I have done anything to help throw down these barriers, and unite the profession of our whole Dominion, I shall consider my time well spent, and that I have not for so many years been a member of this association in vain.

POTASSIUM PERMANGANATE, THE NEW ANTIDOTE TO MORPHINE. REPORT OF EXPERIMENTS.

BY GRAHAM CHAMBERS, B.A., M.B.,

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THIS article was originally suggested by the published results of certain experiments carried on by M. J. Anthal, an Alsatian chemist, by which he claimed that potassium permanganate was an efficient antidote to a number of alkaloids, as well as to phosphorus and oxalic acid. These investigations were further continued by Dr. Moore, of New York City, in a report as to action in particular on morphine, and he further compelled attention, professional and otherwise, by taking three grains of morphine openly, followed by the antidote, and sustaining no ill effects through the action of the drug.

I might state here, before describing my experiments, that they confirm those of Dr. Moore as regards morphine; at the same time, I have brought out some new facts that may be of use to the profession.

To discuss the subject thoroughly, it is advisable to first consider the chemical properties of morphine and potassium permanganate which pertain to their action upon one another.

Of all the vegetable alkaloids, morphine is the most easily oxidized. Indeed, it is so easily acted upon by oxidizing agents that iodic acid HIO_3 will oxidize it, iodine being liberated. This is a distinguishing test for morphine. I might say that a ptomaine has been recently isolated which has a similar action upon iodic acid.

Potassium permanganate $\text{K}_2\text{Mn}_2\text{O}_8$ is one of our most active oxidizing agents, as it corresponds to manganese heptoxide Mn_2O_7 . Now, when this comes in contact with any substance which is capable of oxidation, it gives off oxygen, becoming reduced to one of the lower oxides of manganese, or, in the presence of acids, to salts corresponding to the lowest oxide.

The action of potassium permanganate upon some alkaloids is fairly well known. With quinine, cinchonine, quinidine, and cinchonidine, it

forms pyridine tricarboxylic acid (1, 2, 3). In order to ascertain the action of potassium permanganate upon morphine, I performed the following experiments :

Experiment 1. I dissolved half a gramme (7.7 grs.) of morphine hydrochloride in 250 c.c. of water, acidified with hydrochloric acid. Then I gradually added a solution of potassium permanganate of same strength, *i.e.*, two grammes per litre. At first the violet color quickly disappeared, but as I added the permanganate the color disappeared more slowly. When an equal quantity of permanganate was added the violet color remained for two or three minutes. When the solution became colorless, I tested part of it for morphine by adding ferri chloride and then potassium ferri-cyanide, which is a test, delicate to at least 1 in 100,000. I also confirmed the result by making the remaining part of the solution alkaline with potassium carbonate, shaking with a mixture of equal parts of ether and acetic ether, separating the ethers, allowing the ethers to evaporate, and testing residue for morphine, with negative result.

From these experiments, we conclude that morphine is decomposed by potassium permanganate, and the question arises, what becomes of the morphine? Our chemist states that it forms pyridine tricarboxylic acid $C_5H_2N(COOH)_3$. However, that does not appear to be correct.

Experiment 2. I added to the solution, as in Experiment 1, white of egg, cane sugar, grape sugar, starch, and acetic acid. I then repeated the experiment, using the same quantity of potassium permanganate, with the same result as in Experiment 1.

Experiment 3. Next, to determine the action when potassium permanganate is added to a neutral solution of morphine hydrochloride, I dissolved 1 decigramme of morphine hydrochloride in 100 c.c. of water, and gradually added the potassium permanganate solution. At first the liquid appeared green, due to potassium manganate. Afterwards a bulky, black precipitate, which consisted of manganese dioxide MnO_2 , and manganoous manganite Mn_3O_4 . When the solution remained violet for a minute I filtered and tested the filtrate for morphine, with negative result.

Having proved that morphine was decomposed by potassium permanganate, I performed the following experiments with a view of ascertaining the toxic action, not only of morphine and potassium permanganate, but also of the new substance or substances formed by the action of potassium permanganate on morphine.

TOXIC ACTION OF POTASSIUM PERMANGANATE.

As a rule, a chemical antidote must not be an active poison to be of therapeutic use. When a strong solution of potassium permanganate is applied to a mucous membrane, it corrodes it. However, a dilute solution

(1-500) has no corrosive action, as may be shown by holding it in the mouth several minutes without corrosion of the mucous membrane, nor discoloration of the permanganate. With a view of ascertaining its toxic action internally and hypodermically, I performed the following experiments :

Experiment 4. To dog of 39 lbs. I gave 6 grs. of potassium permanganate dissolved in 6 oz. of water by the stomach, without any deleterious result.

Experiment 5. Two days after I gave the same dog 3 grs. of potassium permanganate subcutaneously in the neck. In about two hours he appeared drowsy and weak. Next morning, fourteen hours afterwards, the dog vomited, and showed muscular weakness and inco-ordination. The latter was so marked that he had to support himself against the fence. Micturition was frequent, and the urine was found to contain bile-coloring matter and a very small amount of albumin. These symptoms remained constant for about thirty-two hours, when he gradually recovered.

Experiment 6. To a dog of 20 lbs. I gave 5 grs. subcutaneously. The symptoms were similar to those in Experiment 5, but more marked. The dog died in the night, thirty-eight to forty-four hours after administration of the drug.

TOXIC ACTION OF MORPHINE.

Experiment 7. To 39 lb. dog I gave, subcutaneously, 5 grains of morphine hydrochloride. In about half a minute the dog appeared excited, and kept moving his tongue and jaws, with a free flow of saliva, which was followed, in about five minutes, by deep sleep, which lasted about three hours. Nearly all reflex actions were abolished. The respirations were more frequent than normal at first ; afterwards, less frequent. When the narcosis was passing off the dog would occasionally start up, especially at any noise. Afterwards the dog suffered from partial paralysis of hind legs. With drooping tail, he appeared to drag his hind legs after him, assuming the position known as "hyenoid."

TOXIC ACTION OF THE NEW SUBSTANCES FORMED BY THE ACTION OF POTASSIUM PERMANGANATE ON MORPHINE.

Experiment 8. I dissolved $\frac{1}{2}$ gramme (7.7 grs.) of morphine in about 250 c.c. of water, acidified with hydrochloric acid, and then added $\frac{1}{2}$ gramme (7.7 grs.) of potassium permanganate dissolved in same quantity of water. When the solution became colorless I added potassium hydrate until alkaline, which precipitated the manganese. I then filtered and washed precipitate with hot water. The filtrate was evaporated down to about 50 c.c., which I injected, subcutaneously, into a dog, without any marked symptoms.

Experiment 9. Four days after the preceding experiment I gave the 39 lb. dog, by stomach, 5 grains of morphine hydrochloride, and then, immediately, 6 grains of potassium permanganate dissolved in about six ounces of water. No symptoms of morphine poisoning followed, nor were there any other symptoms, except one or two ineffectual attempts at vomiting.

CONCLUSIONS.

(1) Potassium permanganate in dilute solution, not stronger than 1 gr. to an ounce, may be given by the stomach without danger.

(2) Potassium permanganate, subcutaneously, is poisonous.

(3) Potassium permanganate, grain for grain, completely decomposes morphine, the decomposition occurring in acid media more rapidly than in a neutral medium.

(4) Foodstuffs and acetic acid do not interfere with the decomposition.

(5) Potassium permanganate is an efficient antidote if taken while the morphine is in the stomach.

The question still remains as to whether potassium permanganate is of therapeutic use after the morphine is absorbed into the system. It has been proved conclusively that if morphine is introduced subcutaneously into the system it is excreted into the stomach. Now, the morphine passes from the blood into the stomach by osmosis and by excretion, and, by the principle of osmosis, more morphine will be excreted if it is decomposed as soon as it passes into the stomach. Reasoning on this principle, we would expect that repeated small doses of potassium permanganate by the stomach would be of use in cases where the morphine has been absorbed into the system. This is rendered more probable by the fact that morphine, as a rule, is a slow-acting poison.

18 Gerrard Street East, Toronto.

THE ELEVENTH INTERNATIONAL MEDICAL CONGRESS.

E. E. KITCHEN, M.D.,
ST. GEORGE, ONT.

Mr. President and Gentlemen :

IN 1867 a large congress of medical men met at Paris, no less than five hundred of them being foreigners. This was the year of the great World's Paris Exhibition, and it was resolved to make it a permanent institution, and, since then, every two, three, or four years, a great meeting of the medical fraternity has been held in Florence, Vienna, Brussels, Geneva, Amsterdam, London, Copenhagen, Washington, Berlin, and the one which has lately closed at Rome. The success of each has been varied, and notably those held in London in 1881, Berlin in 1890, and Rome in 1894 have been pronounced great successes. At London over 3,000 members assembled, one-third of whom were from distant lands, and were presided over by the distinguished Sir James Paget; while the Berlin meeting gloried in the large increase to over 5,000, over whom presided the world-famed Professor Virchow. This has now been nearly eclipsed by the Eternal City, that has drawn within her walls the large number of 7,800 delegates, accompanied by 1,200 ladies. Of this number nearly 1,000 were Germans, 800 English, 800 Austrians, 700 French, 300 Spaniards, 250 Russians, 250 Swiss, 175 from United States and Canada. Thirty-five countries were represented, these coming from every clime—even from the island of Borneo. To accommodate so large a number was an easy thing for Rome, for she had been preparing a place for their meetings for a long time. The city was building a hospital, called the Policlinico, just outside the walls, and hurried it on to its completion in order to give a grand place of meeting to the congress. This consists of five large buildings in a line, connected with each other by a passageway, the largest, in the centre, being used for administrative purposes, for president's and general secretary's offices, manager, foreign committees, post, telegraph, and telephone offices. The other buildings are in the form of the letter V, and are intended for two surgical clinics and two medical clinics, but, for the present, were kindly given for the nineteen sections.

Building "B" proved a pleasant meeting place for the sections of Hygiene, Dermatology, and Syphilology, Sanitary Engineering, Hydrology, and Climatology; while building "C" contained Internal Medicine, Diseases of Children, Physiology, General Pathology and Pathological Anatomy, Forensic Medicine, Psychiatry, Neuropathology and Criminal Anthropology; building "D" gave nice seating accommodation to the sections of Pharmacology, Laryngology, and Otolaryngology; and building "E" gave similar room to the sections of Surgery and Orthopædy, Anatomy, Obstetrics and Gynæcology, Military Medicine and Surgery, Ophthalmology, and Odontology. It was here that the meetings were held from 8 a.m. to 3 p.m. (15 o'clock by continental reckoning). The general sessions were held in the large Eldorado amphitheatre in Via Genoa at 4 p.m. It was in the Eldorado, on Thursday morning, March 28th, that I met with my first actual experience at the great congress. At an early hour the large offices were crowded, and a glance around soon showed me that the larger number were making their way to the Treasurer's office, where a deposit of twenty-five lira constituted me a member. Then a call upon other officials soon supplied me with all necessary information. The tessera, or ticket of membership, not only admitted me free to galleries, palaces, etc., in Rome, but acted in a similar manner anywhere throughout the Kingdom of Italy. At half-past eight in the evening a reception of ladies and gentlemen of the congress was held in the Palace of Arts, adjoining the Eldorado, where an immense throng congregated, and many acquaintances were made which added greatly to the pleasure of the following days. On Thursday morning the long-expected event, the formal opening of the congress, was held in the Constanzi Theatre. Long before the hour of ten had arrived, that great building was densely packed. The Queen, leaning on the arm of the King, made their way between two lines of guards to the stage amid thunderous applause. Queen Marguerita, radiant, and beautifully dressed, took her seat, while King Humberto, in the uniform of a general, covered with many decorations, stood at her right through the whole ceremony. At a signal from His Majesty, Premier Crispi stepped forward, and, in a robust voice, that could be heard through the whole building, welcomed, in the name of Italy, the congress to Rome, and said many flattering things of the profession. The Hon. Dr. Baccilli, President of the International Medical Congress, and Minister of Education, then arose, and, in beautiful Latin, gave an oration which few are able to do. The applause which met him was as great as his popularity, in and out of the profession, is unbounded. His eloquence was at its height when he referred to the universality of eternal Rome, and to Humberto and Marguerita as examples of royal virtue. Prince Rospoli, the syndic or mayor of Rome, also extended warm greetings on behalf of

Rome. Then Professor Virchow, of Berlin, the last president of congress, arose to speak, and was grandly received, but when it was discovered that the venerable German scientist was speaking in Italian the applause passed all bounds.

A statement of the numbers attending the congress, etc., which I have already given you, was made by the General Secretary, Dr. Maraglioni, of Genoa, who was followed by representatives of foreign committees, etc., in short, terse speeches. Professor Virchow then moved that those who had been occupying the temporary offices be made permanent for the congress, after which His Majesty requested Dr. Baccilli to present him to the foreign representatives, when he thanked a number for their kind words of Italy. A grander sight than this royal couple of Savoy, surrounded by so many representatives, with thousands of upturned faces from the platea, and thousands more looking down from the balconies and galleries above, showing not only that they were from various climes and many lands, but equally plainly their happiness and satisfaction, it would have been difficult to conceive.

The King and Queen then descended to their carriages amid cheers and waving of handkerchiefs and hats, and shouts, in various languages, of "Viva l'Italia! Viva Roma!" At 3 p.m. the members met in their various sections and elected their definite officers. Then commenced the real work of the congress—2,700 papers had been presented, but few, comparatively, could be read; neither had the United States delegates nor those of Canada reason to find fault, for eighteen papers were read from the former country and one from the latter. As it will be impossible to mention every paper, I will but give a passing glance at a few of the very many able ones which were before the congress. One of the earliest was that on "Morgagni and his Influence on Animal Thought," by Prof. Virchow. The learned savant, after hastily sketching the progress of medicine for twenty-eight centuries, referred to the *immoral* pathology of Galen, foiled by a school which rose in the East which taught the *spiritual* element. The two schools gradually blended into one, more especially in Italy. As soon as the church granted a reluctant consent to the practice of dissecting human bodies, discoveries became numerous. Harvey discovered the circulation of the blood, and Malpighi extended it to the capillary system. Morgagni, by enquiring into the seat of disease, inaugurated the system of localization of disease, which was the radical and necessary commencement of logical study. He taught us to *think anatomically*, and thus became the founder of modern pathology.

At the close of this address Dr. Casati presented Dr. Virchow with a commemorative gold medal, in the name of the citizens of Forlì, the birthplace of Morgagni.

Prof. Bouchard, of Paris, gave a very interesting address on "Reflex Fevers." He stated that fever patients brought into hospitals have invariably an elevation of one degree of temperature either on the day of arrival or the following day. This elevation is solely due to the influence of the nervous system, an influence which is susceptible of preventive and curative treatment by directly intervening in these causes. Reflex causes protect us more against cold than internal heat. The variations of internal temperature act, as a rule, in an inverse sense. The elevation of temperature seems to be directly in proportion to the intensity of the muscular effort, rather than to the length of time in which it lasts, so that nobody can deny the existence of muscular fever. He also referred to fever accompanying abnormal digestion. He concluded from these facts that the nervous system, when weakened, reacts in a manner which is extraordinarily sensible to all those agents which provoke fever.

Prof. Foster, of Cambridge, gave an extemporaneously delivered address on "Organization in Science." The scholarly speaker pointed out that the salient points of an organized creature were *differentiation* on the one hand, and on the other *integration*. Integration was carried out by the unwritten customs. Differentiation had gone far. There was a time when one man could push forward by himself several sciences; now each one had to be content to devote himself to a single science, or even to a small portion of that science. Differentiation must go still farther. He pressed upon the congress, where so many nations were gathered, especially a congress of medicine, which he considered the mother of all sciences, that they would be a fitting body and Rome a fitting place for putting forward the question, if there were not difficulties, which required to be overcome by integration among the workers in science. There were two kinds of enquiry, the *individual* and the *combined*. An enquirer was, like a poet, born, not made, and there might be a certain amount of tyranny in exercising the machinery of organization which might destroy individual enquiry. It might interfere with the motives which sustained such an enquiry. There was the motive of ambition, the love of fame. There was likewise the love of curiosity. Organization would prevent men from going over the same ground, and guide young workers who did not know where to begin. He was much opposed to having the crude material contaminating the pure stream of science. He concluded by urging that, if organization were a good thing, nations should join together and carry it forward.

"Idiopathic Hypertrophy of the Heart and the Degeneration of the Heart Muscle" was the title of a paper read by Dr. Laache, of Christiania, Norway. After developing the different theories of disease of the heart, and giving great glory to Italian medicine through Lancisi and Albertini

for their work, the speaker went on to consider the etiology of the disease. He ascribed the cause to be found in beer alcoholism, excessive muscular and intellectual fatigue, and the struggle for life. After recounting the symptoms he passed on to treatment, recommending digitalis, iodide of potassium, and strophanthus. He was opposed to the ancient way of training the heart muscle, but favored sparing the heart as much as possible; in fact, speaking highly of the system recommended by Ortil.

An address, the title being "Non Nocere," "Harm Not," was delivered by Dr. Jacobi, of New York, chairman of the committee for the United States and Canada. The speaker referred to the neglect in the study of special branches. Many so-called specialists were untrained men, and others calling themselves scientific men were given to accepting and recommending proprietary medicines and food nostrums. He considered that harm was often done by rash surgical and gynaecological interference, while overdosing and the expectant treatment were denounced. By neglecting intubation and tracheotomy in critical cases, harm was done. Diseases like pertussis, which could be shortened, should be treated to prevent complications. Eruptive diseases watched and treated, to avoid mental disturbance or collapse. Venesection in pneumonia was advocated, if required to save life. Strong stimulants and great care were often needed in convalescence. He spoke of the folly in overfeeding or underfeeding infants, or too much sugar. Even the use of sterilized milk alone was highly objectionable. He referred to many other practical matters, and closed his paper by referring to the harm done in diphtheria by the application of medicines to struggling infants. An amusing fact in connection with this paper was that the Latin title had been transformed into the Italian "Non Nuocere" on the official programme, the result being a large attendance of Italians, expecting to hear an address in their own tongue by an American. They were badly disappointed, but the English-speaking were correspondingly delighted.

"Transfusion" was the simple name of a paper by Dr. Ziemssen, of Munich. The learned speaker contended that intravenous transfusion of undefibrinated blood is a perfectly harmless procedure in skilful hands, but subcutaneous injection of blood was recommended for those without sufficient experience. The immediate effect of intravenous transfusion was heightened color and an increase in strength, in which the increase in red blood globules and in the proportion of hæmoglobin is not always proportionate. Frequent transfusions of small doses, say, 3 or 4 ounces, was recommended in anæmia as more effectual than a single dose of a larger quantity.

Dr. Golgi, of Pavia, in a well-prepared paper, spoke of swelling and chromatic changes he had observed in the nuclei or the nerve cells of animals dead from experimental rabies.

Dr. Tison, of Paris, reported on a new local anæsthetic which he called "Cooyl." It was a mixture of chloride of methyl and chloride of ethyl. When applied to the skin or mucous membrane, the temperature is reduced to about the freezing point, low enough to cause complete anæsthesia, but not so low as to form eschars.

Dr. Lucas-Chamionnière, of Paris, gave a report of sixty-four cases of trepanation of the skull for epilepsy. Good results were observed when it was performed for the relief of renal epilepsy or certain forms of traumatic meningo-encephalitis, accompanied by pain in head and vertigo, but the operation was not satisfactory in Jacksonian epilepsy.

Dr. Schernlitz, of Nice, spoke for some time on uterine drainage by catgut. He maintained that a certain number of cases, as metritis, salpingitis, amenorrhœa and dysmenorrhœa, could be successfully treated by this method, the only contraindication being acute inflammation of the womb. He contended that catgut drainage was easy of application, not requiring dilatation of the uterus, and perfectly aseptic.

Time will not permit giving my notes on very many other equally interesting papers. Those read were delivered in either English, German, French, or Italian, the only recognized languages of the congress. In connection with this it may be stated that a petition signed by 700 doctors throughout the world, praying for the re-establishment of Latin as the international language of science and hygiene, and that a periodical magazine in Latin be established, was presented to congress.

In closing this hurried sketch of this premier congress, it would be out of place were I to omit the social reception received at the hands of the Romans—the King and Queen, the Pope and Cardinals, the Government and city magnates, the medical men, and *all*, vied with each other to make our stay as pleasant as possible. For this purpose Humberto and Marguerita gave receptions at the Quirinal in the form of a garden party, when the royal couple added much to their already great popularity. The Queen conversed with those presented to her in English, French, and German as fluently as in her native tongue. On Sunday, Rome gave a complimentary concert at the Opera, where many attended, but many stayed away. The same may be said of the horse and bicycle races at Tor di Quinto—many went to Tivoli. On Monday night the illumination of the Forum, Palatine Hill, and Coliseum was something not to be forgotten. On Tuesday evening a reception was given by the municipality of Rome on Capitoline Hill. The buildings surrounding the Piazza Campidoglio were very tastefully illuminated, and the square was a mass of flowers and palms. The throng that filled the Capitoline Museum and the Palace of the Conservators was immense. The little gallery in which that wondrous piece of sculpture, the Venus Capitolini, was illumined by a pale red light, causing

that world-famed piece of art to stand out in all its beauty and symmetry. And through this crowd walked Virchow, surrounded by a dense throng, vying with royalty in the large attention being paid, and receiving it with that peculiar modesty which so befits the man and gentleman. The evening ended with a grand ball, where Rome's daughters appeared in all their grandeur. Wednesday evening was taken up with the dinners of the sections, which were very successful. On Thursday noon the large luncheon was held, and 8,000 or 10,000 gentlemen and ladies sat or stood at the tables in the grand old ruins—the Thermæ of Caracalla. A pleasing feature was—at a given signal, thousands of carrier pigeons were let loose and rose together and hovered for a moment over the ruins, and there fell in their flight hundreds of slips of paper bearing greetings to the congressists assembled. At five o'clock a battle of flowers was waged in the Corso, and in the thickest of the fight was the Queen and her attendants. In the evening the great illumination in the Corso took place, and ended with the archæological procession and the Maccoletti. The illuminated procession consisted of representations of pillars, temples, etc., ending with lanterns, each one representing one of the thirty-five countries at the congress, and having the name of the country inscribed upon it, and closely followed by a similar number of lanterns, each bearing "au revoir," "auld lang syne," and, near Canada, "good-by." Thus closed happily the largest and most successful meeting of medical gentlemen that has been held in our time, if not in all time. A large amount of knowledge was acquired, our views were broadened, and great pleasure attained. These, amid those old and ancient surroundings, will ever be bright in memory's page, and it was not without a pang of regret that I bade good-by to the Eternal City, and looked for the last time, perhaps, on fair Italia's beautiful sky and temperate clime, her mountains of marble, her orange and other groves, and passed by the Riviera into fair France.

PHLEGMON OF THE HAND.*

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GENTLEMEN,—Allow me to present to your attention a disease which we, as surgeons, meet with very frequently, and, therefore, we ought to know about the latest methods of treatment, as also its etiology and pathology.

Phlegmon is a term applied to an acute inflammation, in which the cardinal symptoms, heat, pain, swelling, and redness, are well marked. I wish to make a few remarks to-day on this variety of inflammation, affecting the fingers and hand, generally known in text-books as felon, whitlow, paronychia, or panaritium.

We know that phlegmon of the hand may originate in any of the tissues, but most frequently the point of infection is in the connective tissue of the terminal phalanx, which, by the arrangement of its fibres, tends to propagate the disease toward the deeper structures. The anatomical peculiarities of the tissues in this region are as follows: The connective tissue fibres are intimately attached to the integument. These fibres are short and thick, and separate into various layers to form spaces, in which are enclosed quantities of fat. The main direction of the course of these fibres is from the cutis down to the periosteum, or to the sheaths of the tendons. The lymph channels also follow this course from the integument down to the bone. It will be noticed from the above arrangement of lymphatics how inflammation will extend to the periosteum or tendons.

The manner of the extension of phlegmonous inflammation within the tendinous sheaths of the palmar aspect of the hand is also prescribed by their special arrangement, and it is very important to remember that supuration may extend along the synovial sheath either of the flexor of the thumb and little finger into the palm, and even far up the forearm, by passing under the annular ligament.

*Read before the Southwestern Minnesota Medical Society, Worthington, Minnesota, July 12th, 1894.

The sheaths of the index middle and ring fingers do not communicate with the general sheath, which passes under the annular ligament, but are closed below, opposite the heads of the metacarpal bones, and therefore, in suppuration in these fingers, the pus does not extend beyond that point. Phlegmon of the thumb and little finger is, therefore, far more serious than the same condition in the three middle digits.

Etiology and pathology. Phlegmon may result from the prick of some unclean instrument or punctured wound of the finger, but by far the most common cause is the introduction and thriving in the living tissues of a micrococcus, chiefly the staphylococcus pyogenes aureus. Other forms of cocci also are found in this acute suppuration, as the staphylococcus pyogenes albus and Rosenbach's streptococcus pyogenes or pus-generating chain coccus. Whenever colonies of staphylococci or streptococci find their way into tissue, they grow and multiply, and all structures within a certain area become uniformly permeated by them. They coagulate then emulsify and the result is a circumscribed collection of pus with a tendency to spread in the direction of least resistance. In this paper I do not wish to enlarge on the modern theories of inflammation, but in the meantime we will accept the theory that suppuration or pus is formed by uncleanliness.

I mean by uncleanliness, the entrance into human tissue by some of the cocci just spoken of, as some authorities maintain, that if a foreign body is introduced into tissue, it will not cause the formation of pus, except it carries with it infection. Gerster, of the New York polyclinic in aseptic and antiseptic surgery, says: "*Mechanical irritation by foreign substances* imbedded in tissue, such as bullets, splinters of glass, or a broken point of a knife, is also a myth in the old meaning of the phrase *They never cause suppuration unless infectious substances—that is, microbial filth—be adherent to them* at the time of their being deposited in the tissues. They may cause pain by pressure upon nerves, or may interfere with the play of a joint or muscle; but, as a rule, never will cause inflammation or suppuration. Well-disinfected steel nails driven by mallet through femur and tibia after exsection of knee-joint are unhesitatingly left imbedded for thirty or more days, never causing any irritation." I think some of the gentlemen present will bear me out in the fact that very frequently they come across cases where a foreign body is introduced into human tissue without causing the slightest degree of inflammation. For instance, a small sliver of wood introduced into the end of a finger will sometimes cause an intense degree of inflammation, with the formation of a phlegmon. In other cases there is hardly any symptom whatever, except a little pain, probably from the pressure on nerves.

Symptoms. There is generally a history of some injury. If the cellular tissue is the point of infection, there is the most acute tenderness.

Redness is not well marked until the inflammation has reached the surface. Œdema is not well marked at first, but when tension is great there is throbbing pain, especially when the arm hangs down. The thick epithelium of the finger does not allow the pus to escape. Superficially, therefore, it burrows more deeply, and the symptoms become more severe. The phalanx is swollen, and becomes a dark red color, with glazed surface, tense, and most acutely tender. If the tension is not relieved, the pus, being unable to point through the thick cuticle of the finger, becomes diffused through the whole pulp. The areolar tissue sloughs, and, as it is closely connected with the periosteum in this situation, this also perishes, and the bone necroses. When this occurs the finger becomes two or three times its normal size, and presents a large sloughing opening from which large quantities of pus exude. Sometimes the pus finds its way into the sheaths of the flexor tendons, which is a more serious condition, and, if the sheaths of the tendons of the little finger or thumb, which communicate with the general sheath, are affected, there is a great danger of the wrist joint becoming destroyed by acute septic arthritis. When suppuration extends to the common sheath, the most prominent symptom is the red, puffy swelling at the back of the hand, and the palm is generally tense and very tender on pressure; fluctuation may be felt when much pus is found, the fingers are semiflexed, and any attempt to flex them causes great pain. There will be fullness in front of the wrist above the annular ligament, and often there is redness in this region.

Often the constitutional symptoms are quite severe, with febrile disturbance, and, if a large amount of septic matter be absorbed into the blood, symptoms of septic traumatic fever will appear, with light temperature, disturbance of appetite, often delirium, brown tongue, bowels constipated, and sleepless nights.

Treatment. Many text-books still recommend poulticing a phlegmon to bring it to a "head"; and, even now, there are times, when a patient presents to a surgeon, he is told to go home and poultice it. Now, we know that a poultice hastens the process of suppuration by increasing the exudation and migration of corpuscles, but why should we wait until suppuration has advanced to such a degree before we take steps to get rid of it? We must remember that when pus is once formed it will burrow and cause destruction of tissue wherever it comes in contact. Is it not much better to make an incision and let out the pus just as soon as it is diagnosed?

Surgeons of the present day recommend early incision. I think we ought to say the proper treatment of phlegmon should be "early and deep incision." I add the word "deep" for this reason. Supposing the pus

is formed between the periosteum and the bone, and the incision for relief is made only through the cellular tissue, it will easily be seen that pus will not be reached.

The diagnosis of the exact locality of the pus is easily made by the aid of a probe used very gently in the vicinity of the area of suppuration. When the probe comes in contact with tissues which are most acutely tender, we may be sure that pus is present in this spot.

The treatment of a phlegmon at this stage is as follows: After we have satisfied ourselves as to the exact spot where the pus is, a free incision down to the bone is required to relieve tension; the finger should now be submerged in warm bichloride of mercury solution 1:2000 for a few minutes, or it should be thoroughly irrigated with this solution.

The wound should be kept open for thirty-six hours with a strip of iodoform gauze, when it should be removed and the finger dressed antiseptically and allowed to heal.

The incision may be made perfectly painless by the use of cocaine. Proceed as follows: Around the root of the finger apply a rubber band tightly; then inject, say, fifteen minims of a four per cent. solution of hydrochlorate of cocaine. The needle of the syringe should be inserted deep into the tissues; now press the piston down and draw the needle backwards a little, but not enough to allow the solution to trickle out from the puncture. If the injection of cocaine is done properly, the patient will not feel the slightest pain when the incision is made.

The treatment of phlegmon when it has extended along the tendons should be conducted on the same plan; but if the case has gone on to extensive suppuration, the patient should be given an anæsthetic, and the limb rendered bloodless by elevation and application of a tourniquet. The incision must be made carefully towards the affected sheath exactly in the middle line on the finger, and the pus evacuated thoroughly. The wound is now irrigated with bichloride solution, a small drainage tube inserted, and dressed antiseptically.

I will not take your time in describing the treatment of neglected cases, or cases where the disease has extended up the forearm. They are to be treated by incision, drainage, and antiseptis.

The object of this paper is to show how important it is to treat rationally, even one drop of pus under the end of a finger, when we know, if it is not attended to properly, irreparable injury might be done, or even a valuable life be lost. I quote from Gerster in saying "there is no region of the human body where senseless poulticing of phlegmons has done more harm, and timely incisions can do more good, than in the palm."

Selected Articles.

INFILTRATION-ANÆSTHESIA AND ITS RELATION TO GENERAL ANÆSTHESIA.

Dr. Cholewa reports the following researches of Dr. Schleich, Berlin, Germany, as follows :

The efforts hitherto made to perform painless operations by means of local anæsthesia have not been very successful. To all the methods of local anæsthesia hitherto employed was opposed a danger in one or another direction. Anæsthesia produced by vaporization of ether, or mixtures of ether, brought with it the danger of gangrene of the frozen tissues, to which was added great pain, especially of the inflamed parts during the freezing, thus considerably diminishing the advantages of the process. The dangers of poison were opposed to the general use of cocaine, that most excellent of all local anæsthetics. To this must be added that the pricking with the Pravaz needle and the act of injection itself, especially into the inflamed parts, was so painful that the procedure was considerably robbed of its value. By the employment of the ether-spray as a preliminary to anæsthesia by means of cocaine injections, I succeeded, to some degree, in avoiding this evil. The surface of the skin above the part to be made anæsthetic became sufficiently insensible by the ether-vaporization to render painless the introduction of the needle. The contents of the syringe entered first into the skin (intracutaneous), and not under the skin (subcutaneous). If I am not mistaken, it was our colleague, H. Schmidt, of Stettin, who first suggested the necessity of these primary intracutaneous injections. I have for many years very frequently performed operations by this species of cocaine anæsthesia, and have reported several cases. Nevertheless, after the application of solutions from 1 to 5 per cent., as soon as a maximum dose of 0.005 cocaine had been reached, frequently even below this point, the most serious symptoms of intoxication have taken place. This occurred even after the application of from two to five small syringefuls, and even when, by previous compression with Esmarch's bandage, the circulation was stopped as long as the nar-

cosis lasted. Medical periodicals are full of reports of cocaine intoxication, a large percentage of which have had a fatal issue. Owing to this state of things, it was impossible that local anæsthesia could successfully compete with "general" narcosis.

I have, therefore, undertaken the task, in a series of trials on myself, on my assistants, and the attendants of my clinic, to settle where precisely lay the limit of the efficacy of cocaine. These and the experiments following, the results of which I had the honor of laying before the Medical Society of Berlin last November (1891), were all performed in such a manner that the real question, whether a given fluid be an anæsthetic one or not, was decided within the intracutaneous limits of the skin. We made the punctures as parallel as possible to the surface of the skin immediately under the papillæ, until a white and slightly elevated blotch rose, resembling the sting of a gnat. The reason that the investigations of this subject, so carefully made by Liebreich and his pupils, as well as by Levin and Kanewsky, did not immediately lead to the discovery of any new facts was that the aforesaid authors applied the fluid under examination *subcutaneously*.

We tried these experiments first on ourselves; those authors experimented chiefly on the skin or the mucous membrane of animals. During these "intracutaneous" trials of the various solutions of cocaine, first appeared the surprising fact that solutions of 1-5000 in water were able, within the limits of the infiltration, to produce a complete anæsthesia, so that punctures, cutting, scratching, and scraping could be done absolutely without pain. Henceforth this fact may be justly considered as indisputable, after my having proved it in several hundreds of operations. After the discovery of this fact it was a natural inference that the cocaine could be altogether left out of the fluid, and the same results were obtainable with pure water and solutions of salt. We found, indeed, that pure distilled water is able to produce perfectly anæsthetic blotches. But here an essential difference appeared, namely, the process of injecting water into the substance of the skin itself with the formation of water blotches is painful, and that to no slight degree. Not until from a half to a minute after the injection does pure anæsthesia take place, and then is quite as perfect as after the injection of cocaine of from 1-5000, or in stronger solutions. The result was that distilled water, according to the meaning of Liebreich, is an "anæsthesia dolorosa"; that is, the commencement of anæsthesia (the paralysis of the nervous substance) is preceded by a stage of pain, a hyperæsthesia of the nerves. This hyperæsthesia was an obstacle to the use of pure water for operating purposes, although the refrigerating of the water to zero (Cels.), as well as the use of the ether-spray, employed in the above-mentioned way, reduced this stage of irritation to a minimum, so

that I was several times enabled to perform with pure distilled water such operations as opening furuncles or carbuncles, removal of small ganglia, etc.

Further experiments revealed that a number of substances were practically available as anæsthetics without producing irritation. First, as strong a solution of common salt as 0.6 per cent. produces no anæsthetic effects worth mentioning. On the contrary, it was found that a further diluted solution of common salt, namely, a 0.2 per cent. solution, by itself, especially in lower degrees of temperature, produces a perfectly prompt anæsthesia in the region of the infiltration. I may here, perhaps, remark that what is true of the skin also refers to other tissues of the body; for instance, to the subcutaneous layers, the muscular layers, and the periosteum. The 0.2 per cent. solution of common salt produces not only anæsthesia, an effect which it possesses in common with water, but the process of injection is painless. This proves that it is the infiltration itself that produces the anæsthesia.

The anæsthetizing fluid need not be itself anæsthetic. The proportion of common salt in a solution is important, as witness the following experiment: The smallest effective dose of cocaine—weaker injections caused pain—was 0.2-100, or 1-5000. This watery solution of cocaine produces anæsthesia and makes other injections painless. The same dose of cocaine containing 0.6 per cent. of common salt is painful and is not able to produce anæsthesia, while the same solution wherein the amount of common salt is not greater than 0.2 per cent. again affords perfect anæsthesia; indeed one gramme of cocaine in ten litres of a 0.2 per cent. solution of common salt is capable of producing complete anæsthesia, or, in other words, I may use half a litre of my anæsthetic solution before the maximum dose of 0.05 cocaine is reached.

Now, when you consider that for most operations, as, for example, the amputation of the breast, about fifty to eighty grammes of the solution are employed, you will agree with me that there can be absolutely no question of danger of poisoning from this method of anæsthesia, especially as the dose is never administered all at once, but is extended over the time occupied by the whole operation. If I may be permitted to suggest a theory to explain the incontestable fact of anæsthesia by the thoroughly penetrating infiltration of "indifferent" fluids, I must not omit to say that cocaine, common salt, and water are not the only materials that are able in this way to produce anæsthesia. You will obtain as complete a state of anæsthesia by using a solution of 3 per cent. sugar, or of 0.1 per cent. morphia, or of 3 per cent. potassic bromide, or of 1 per cent. methyl-violet, or of 2 per cent. caffein, and so on. I may mention that the efficacy of all these materials, to which may certainly be added a great many

others, will be increased by dissolving them, not in water, but in a 0.2 per cent. solution of common salt.

How is this fact to be explained? I assume that the physiologic solution of common salt of 0.6 per cent. on account of its similarity with the composition of blood serum is highly irritating when presented in excess to the sensitive nervous tissues.

Water, on the other hand, is sufficiently different with respect to the lining tissues, and its normal fluid to modify the nervous substance; it first produces irritation, and afterwards paralysis of the nerves and anæsthesia. I surmised that between these two effects, the indifferent one of the 0.6 per cent. solution of common salt and of the distilled water (differing from the composition of the fluid of the lining tissues), there must be a territory within which a weaker solution of common salt would be able to produce anæsthesia without the irritation to nervous tissues resulting from the use of both stronger and weaker solutions. This border land was found in a 0.2 per cent. solution of common salt in distilled water. This is the very anæsthetic fluid which I employ in my operations; the addition of 1 gramme of cocaine to 10,000 or 5,000 grammes of this solution facilitates the practical application of the solution without entailing even a shadow of danger. One gramme of this solution contains only 0.0001, that is a tenth of a milligramme, of cocaine. The maximum dose of cocaine is not reached till 500 grammes of the solution have been used. It must be remembered, also, that during the operation more than half of the fluid employed runs out again or is wiped off.

In minor operations I make use of a solution of 1-5000 grammes, and for dressings recommend the employment of a solution from 1-1000 grammes.

I advise two "stock" solutions: One of 1 gramme of cocaine to a 1000 grammes of water (Solution A), and the second of 2 grammes of common salt to a 1000 of water (Solution B). Parts of solution A are mixed for use with five or ten times as much of fluid B. Both fluids are easily sterilized.

The cause of anæsthesia by infiltration is not a simple one; several factors are at work; first, the pressure of the injected fluid and the removal of the blood from the infiltrated tissues. After a properly performed injection, they appear perfectly white. That is, instead of the tissue juices the foreign mixture is incorporated in all the lymph vessels and the areolar spaces, while the blood is gradually forced into the neighboring vessels. But besides this pressure and anæmia of the tissues, temperature plays a prominent part. The proof of this is very simple. All my solutions of common salt of from 1-1000 to 10,000 have the best effect at zero, Celsius.

Every œdema of the skin would produce anæsthesia of the parts, every swollen limb would become insensible, did not the injected fluid, which causes this pathologic œdema, contain the same amount of common salt (0.6 per cent.) as the serum of the nervous fluid. If one produces an artificial œdema with other fluids—with or without a little common salt—the whole region of the artificial swelling will become insensible and will enable one to operate without causing pain. This is briefly the principle of infiltration-anæsthesia, which in practice has gained such a widespread application. This proceeding is, in the first place, beneficent to the patient, for whom the danger of the operation is diminished in the same degree as we are able to spare him the general narcosis.

The danger of an operation, in so far as loss of blood is concerned, scarcely exists, thanks to the advanced progress of our operative technique, for which we are indebted chiefly to our great masters of the pre-antiseptic era, and not the least to him whose immortal name has been given to this house. Lister has enabled us to make the dangers of infection depend upon our sense of duty and our carefulness; the danger of poisoning by the use of antiseptics we have banished by our efforts to reveal the laws of asepsis. What remains, then, to be done? To diminish the dangers of narcosis. What is wanted is sufficiently shown by the ever recurring recommendation of new and improved inhalation-anæsthetics, such as ether, ethyl-bromide, pental, etc. Among these, local anæsthesia claims the first rank.

For operations of medium importance, in which I include simple uncomplicated laparotomy without extensive adhesions, amputations of the breast, and removal of large tumors from other situations, there can now be no question of the efficacy of infiltration-anæsthesia. It will be the task of the future to render this matter of proceeding, in principle unassailable, practical for surgical purposes in still more serious and extensive operations. I have so far operated upon 521 patients painlessly and without a sign of danger. Among these I might mention such operations as nephrotomy, herniotomy, removal of sequestra, amputations of the mammæ, removing glands from axilla, and laparotomies. It must never be forgotten that chloroform narcosis increases the danger of the operation. This danger is incalculable. Even the most circumstantial statistics can not tell us anything definite as to whether the danger be great or small for the individual. But how many dangerous cases of asphyxia of this or that kind, even of the deaths happening hours or days after the use of chloroform come to our knowledge, but are never in our statistics!

“General narcosis” is not the ideal method for the patient or for the physician;—if I operate upon one part, why should I deprive the individual wholly of his consciousness and force him to give himself helplessly

into my hands? especially if, as frequently happens, I am obliged to deprive him of consciousness, not in the form of a quiet, delightful sleep, but too often only after a struggle followed by anxiety about the eventful danger of the narcosis.

Of 537 operations, I have used chloroform in only 16 instances, and then in cases where an especial exigency demanded it, as, for instance, insurmountable fear, hysteria, the personally expressed wish of the patient, and failure of local anæsthesia.

I now consider myself no longer justified in making use of general narcosis in my operations, unless the method of infiltration-anæsthesia has been previously tried. To perform operations under chloroform or other narcosis, when they are certainly practicable with one or other form of local anæsthesia, I must, from the standpoint of humanity, denounce as absolutely unjustifiable.—*The Journal of the American Medical Association.*

CHRONIC PROSTATITIS AFTER GONORRHŒA.*

BY M. KROTOSZYNER, M.D., AND JOHN C. SPENCER, M.D.,
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I. CLINICAL PATHOLOGY.

WE desire to call your attention to a new method of examination and treatment for a certain form of prostatitis, which is very often found as a sequela of a prolonged and severe posterior urethritis.

Our knowledge of the pathology of specific urethritis has increased more during the past ten—or even five—years than on any other subject in medical science. All our ideas upon the etiology, pathology, and treatment of this affection have entirely changed through the successful bacteriologic researches of the last few years. Further, we have learned to diagnose all possible complications of gonorrhœa since rare culture methods of the specific micro-organisms, the gonococcus Neisser, have been made on modified blood serum by Brunner and Wertheim.

The difficulty connected with the study of this micro-organism has always been, and is at present, to ascertain the presence of gonococci in all the organs secondarily affected by the specific malady. We are still in want of an easy method of demonstrating the gonococci and differentiating them from non-infectious diplococci. But the rapid progress made by continued bacteriologic investigations upon the features of this micro-organism will, in the near future, surely solve this question. Every physician will then be able to give a decided opinion on the possible danger of infection after gonorrhœa just as easily as, for instance, in tuberculosis, by finding the tubercle bacilli.

Comparing both constitutional affections—tuberculosis and gonorrhœa—we are fully justified in stating that, as important as it is for the patient himself and his possible cure to find the specific micro-organism in tuberculosis, it is just as important to demonstrate successfully the diploe gonococcus Neisser after a prolonged chronic gonorrhœa, on account of the possible danger of infection an individual might have for others. It is

*Read in the Section on Surgery and Anatomy, at the forty-fifth annual meeting of the American Medical Association, held at San Francisco, June 5th to 8th, 1894.

evident that, by our present methods of examination, it is often impossible to state whether a chronic posterior urethritis has entirely died out or not. Experienced gynæcologists coincide in the statement that, in cases of posterior urethritis where, by objective examination, nothing could be found, and, as subjective symptoms existed, the female genital apparatus was very heavily infected. It is worthy of note that Zweifel says, in his latest work upon gynæcology: "This disease (or chronic urethritis) has a strictly social danger, and wives and families even were then syphilitic, for it produced zoospermia and sterility in males, and sterility and general debility in females."

You will readily coincide with me that every contribution which throws more light upon the question, at what time a chronic posterior urethritis can be considered as cured, or is no longer infectious, must be gratefully received by the medical profession.

While in Europe last year, Dr. Posner, of Berlin, told me that, in his opinion, the infection in cases of posterior urethritis apparently cured might be produced by the secretion of the diseased prostate gland, which is pressed out at the moment of ejaculation. In an important contribution upon this subject this same author called our attention to the fact that by examining the prostatic secretion much benefit might be derived as regards an exact diagnosis in obscure cases of posterior urethritis. Where, by digital palpation of the gland and microscopic examination of its secretion, a chronic inflammatory condition of this organ could be ascertained, this chronic prostatitis was, in his opinion, in almost all cases, complicated with an insufficient action of the ejaculatory ducts, or even with chronic spermato-cystitis. The anatomic basis for Posner's suggestions was given, a few years later, by Finger, of Vienna. In a number of cadavers where the prostatic portion of the urethra showed chronic gonorrhœal affections, he found the glands of the prostate the seat of periglandular as well as endoglandular infiltration. Very interesting is the fact that, in a considerable percentage of cases thus examined, passive pathologic conditions of the ejaculatory ducts could be found, namely, an obstruction of the ducts by an invasion of round cells. To such conditions, apparently, ejaculation is difficult or prevented.

We, therefore, have sufficient reason to believe that the residue of chronic gonorrhœa lies here. It is evident that, by the insufficient action of the ejaculatory ducts, as well as by the cardoglandular infiltration of the prostate, infectious material is retained in the deeper appendages of the posterior urethra.

Lately v. Schlen, almost simultaneously with myself, has utilized the investigations of the authors above mentioned to devise a new method of examination, by which positive results may be obtained where our previous

methods failed to furnish any infectious material. Let the patient urinate, at first, in two portions, keeping a portion of urine in his bladder. As a rule, these first two portions appeared to be almost void of threads, pus, etc. Then the prostate gland is forced out from the rectum, and immediately afterwards the fluid and last portion of the urine is voided, which was uniformly cloudy, containing abundant material of an infectious character.

In palpating the prostate of many cases suffering from chronic posterior urethritis for this purpose, I could ascertain the fact that in a large percentage this organ was rather enlarged, of unequal consistence, and often painful to the touch. None of these patients complained of any of those symptoms generally ascribed to a subacute or chronic form of prostatitis. I am inclined to think that this condition of the prostate must be considered as an extension of the gonorrhœal infection from the posterior urethra to the prostate gland and the peri-prostatic tissue. The deeper the inflammation extends, the more it loses its violent character. If these glandular organs are once infected, those remedies which will readily remove the infection from the urethral canal will certainly not influence the morbid condition of these organs, owing to their anatomic structure and the insufficient action of the ejaculatory ducts.

I therefore concluded, with the valuable aid of Dr. Spencer, to systematically examine our entire clinical material of cases of posterior urethritis to ascertain what rôle the prostate gland plays in the infectious process. In order to exclude possible errors in drawing conclusions from our investigations we have, at the same time, examined a number of persons who never had suffered from gonorrhœa. In all cases the prostatic secretion was acquired by pressing open the gland from the rectum; the fluid was then examined microscopically and bacteriologically by Dr. Spencer, who will give you his report in addition to mine, and will illustrate the importance of our investigations through some excellent drawings.

As I proceeded in my investigations, I began to utilize his method of pressing out the prostatic secretion for therapeutic purposes. At first, in a number of cases, the palpation of the prostate was quite painful. Later, all tenderness gradually disappeared. I therefore combined with my diagnostic object, in pressing out the prostatic secretion, a systematic massage of the gland, and could very soon macroscopically, as well (in the appearance of the fluid) as microscopically (in the gradual disappearance of pus cells), notice a decided improvement. At the same time, in those cases which presented subjective symptoms, the symptoms gradually disappeared under the beneficial influence of the massage.

One case will illustrate the satisfactory results obtained by this method :

Patient, C., æt. 29, consulted me early last winter. He had suffered from repeated attacks of gonorrhœa, a slight discharge having been present

for the last two or three years. In the last eight months he had been under very able treatment in New York, as well as here, with the result that all discharges had disappeared and no other symptoms were present. As he intended to marry shortly, he wished to satisfy his mind upon the possible danger of infecting his future wife. In this case the two-glass method gave a negative result, both portions being absolutely normal. In palpating the prostate from the rectum it was found slightly enlarged, and the left lobe was very painful to the touch. The microscopic examination of the prostatic secretion showed an abundance of pus cells. The third urine portion, voided after the expression of the prostate, was cloudy, and contained several threads, in which there were found gonococci. I advised the patient to postpone the wedding, which he did. Meanwhile I treated him with systematic massage of the prostate, with the very satisfactory result that after two months all threads had disappeared, while the prostate appeared to be normal in every way. His wife is perfectly healthy up to date.

Since then I have treated several other cases similarly, and desire to mention particularly one case in which we both (Dr. Spencer and myself), after each expression of the prostate, made a careful microscopic and bacteriologic examination of the prostatic secretion. Here the gradual decrease of pus cells was accompanied with the disappearance of subjective and objective symptoms. In another case I have to report that the improvement is only very slight up to date. Undoubtedly this method will fail to give satisfactory results where the prostatitis is complicated with a severe chronic spermato-cystitis.

Our material has not been large enough, at present, from which to draw absolutely certain conclusions. Even in the limited number of normal cases we could obtain for our purposes we could occasionally notice an invasion of round cells, indicating a congested condition of the prostate. This was, in one case, most decidedly due to a hyper-irritation of the genital apparatus by masturbation. The positive value of our investigations still lacks the presence of gonococci in the prostatic secretion of any of our cases. Dr. Spencer will give you his reasons why the absence of gonococci in the prostatic secretion does not prove the absence of an infectious condition of the gland. Still, I am ready to confess that the positive proof of a gonorrhoeal prostatic can only be obtained by the presence of the gonococci.

From our preliminary investigations—we intend to publish the result of our future studies upon this subject at a later date—I am convinced that much harm to the female genital apparatus will be avoided if any man having suffered from chronic gonorrhoea is examined in regard to his prostatic secretion before marriage. No patient who has suffered from

chronic posterior urethritis can be pronounced as cured without an examination of his prostatic secretion. The best treatment, if no after symptoms of posterior urethritis are present, will be the systematic massage of the prostate. If symptoms of post-urethritis are still present, the massage of the prostate might be combined with a local treatment of the posterior urethra.

II. ITS MICROSCOPIC AND BACTERIOLOGIC ASPECTS.

As an indispensable adjunct to the rational therapeutics of chronic prostatitis, we must consider the microscopic phases of this affection. Owing to the limited time and material at our disposal, our observations are necessarily incomplete. Such as they are, however, they are of the greatest interest to the urologist and importance to the patient. Owing to more or less imperfect diagnostic methods, the knowledge of the actual condition of the prostate gland has been left largely to chance. Reliance has been placed principally upon the subjective symptoms of the patient and the very meagre objective symptoms which he presented. By the aid of the comparatively simple method of expression of the contents of the prostatic follicles, as outlined by my colleague, Dr. Krotoszyner, and by a microscopic examination of the expressed fluid, a great flood of light is thrown upon the actual conditions present.

The literature upon this important subject, up to the present, is exceedingly scanty. Fürbringer, of Berlin, may be regarded as the pioneer in the use of improved direct diagnostic methods of ascertaining the exact condition of the diseased prostate. A notable contribution is that by Finger, of Vienna, in the *Archives of Dermatology and Syphilis*, in 1893, afterward incorporated in the last edition of his work on "Blenorrhœa of the Sexual Organs." As my colleague, Dr. Krotoszyner, also refers extensively to this work, I will confine myself solely to the microscopic features. He examined the prostates of patients known to have had posterior urethritis during life, but who died of intercurrent diseases. He found a number of cases in which the gland follicles were filled with desquamated epithelial cells. In such, during life, the prostatic secretion had shown nothing beyond a striking increase in the number of epithelia. In another group of cases examined in a similar manner, beside the desquamated epithelia, he found numbers of polynuclear leucocytes completely filling the gland tubules. In these cases, during life, the expressed prostatic secretion showed large numbers of pus cells in addition to the epithelia. Neither set of cases presented any subjective symptoms as affecting the prostate.

The last article on this subject appeared in the *Berliner Klinische Wochenschrift*, May 21, 1894, by Dr. Tonton, of Wiesbaden, entitled, "The Gonococcus and its Relation to Blenorrhœic Processes." Among

other matters, he writes "that he believes in the possibility of a continuance of chronic inflammatory processes (in the genital tract) without the presence of gonococci." He further believes it reasonable to assume that the vascular lesion caused by the virus may outlast the virus itself, and be the cause of continued exudation. An extension of the process is due to the presence of the virus itself.

In order to make comparisons which should be the more striking, we have expressed the prostatic secretions of a number of normal cases, who have never had a gonorrhœa or any known inflammatory lesion of the genital tract. For present purposes it will suffice to describe the microscopic findings in three cases :

CASE 1. *Æt.* 19 years. Fluid expressed shows immense numbers of lecithin granules. Of these the majority are very minute in size ; many are larger, approximating in size a red blood cell. They are perfectly circular in shape, and present a uniform hyaline appearance. The majority lie free in the fluid or may lie on an epithelium, or corpus amylaceum.

There were numbers of medium-sized cells, presenting, for the most part, a densely granular structure, and containing several glistening bodies which were undoubtedly oil globules from a beginning fatty degeneration. The majority of these were simply granular.

There were modern numbers of cylindrical epithelial cells from the gland follicles of the prostate. These presented a characteristic appearance of a long spindle-shaped cell body terminating in a long stem-like process. In certain cases this process branched at its extremity and formed two rootlets, as it were. Each cell contained a large oval nucleus, and was granular. There were a very few cells with one nucleus, which we regard as lymphocytes, and of no pathogenic significance.

There were a few motionless zoosperms scattered about.

CASE 2. *Normal prostate.* H.S., *æt.* 19 years. Fluid appeared in rather unusual amount for one of his age, at the meatus. Upon microscopic examination, there appeared numerous lecithin bodies as described in the previous case. A moderate number of medium-sized cells, presenting the granular appearance before referred to, and also evidences of beginning fatty degeneration ; corp. amylacea ; a very few scattering cells, with one nucleus, which we regarded as lymphocytes ; a number of the characteristic cylindrical epithelia ; a few zoosperms.

CASE 3. H.H., *æt.* 24 years. Never had gonorrhœa. Abundant lecithin bodies ; abundant granular cells, with a few showing fatty degeneration ; lymphocytes ; cylindrical epithelia, and corpora amylacea.

CASE 4. S., *æt.* 33 years. Although we have examined several cases of chronic prostatitis, this case will stand as a type in lieu of a detailed description of the others. The case has been under treatment for nearly

six weeks. The fluid at first expressed contained an abundance of dense flocculent masses, which, upon examination, proved to be closely packed masses of pus cells. At the beginning the expressions were carried out about twice a week, and subsequently once a week. A striking feature of the fluid was the unusually large cells, which had undergone granular and fatty degeneration. These occurred in groups. There were also the numerous lecithin granules, as in normal cases; cylindrical epithelia, and a few zoosperms. With each succeeding expression, the diminution in the number and arrangement of the pus cells was very marked. After the second or third expression and instillation of silver nitrate solution, the pus cells ceased to appear arranged in the dense groups as at first. They became progressively more scanty and scattered through each field of the microscope. Finally, they were so reduced in number as to give evidence that the process had come to a close. A similar course obtained in the behavior of the pus cells in the other cases examined.

The corpora amylacea showed the structure of concentric laminæ, and more or less well-marked cleavage as one might be led to expect in crystalline structures. There were also a number of more or less cylindrical-shaped bodies, which consisted evidently of hyaline casts of the prostatic follicle, as described by Paget, Clark, and Fürbringer. In this case there were large numbers of isolated pus cells. Many cylindrical epithelia as in the normal cases. Abundant lecithin granules. A few zoosperms.

CASE 5. S., æt. 43 years. Fluid contained an abundance of flocculent threads. Upon microscopic examination, these threads were found to consist exclusively of pus cells grouped in masses held together by a scanty amount of mucus. In this case there were numbers of corpora amylacea, fatty and granular cells, lecithin granules and epithelia, as in the previous case.

CASE 6. R., æt. 24 years. This case presented features resembling those of the previous case. The fluid expressed contained numerous shreddy floccules which consisted of densely-grouped masses of pus cells, corpora amylacea, epithelia, and zoosperms.

The importance of our diagnostic methods is well illustrated in Case 6. After apparent subsidence of all of the symptoms and physical signs of urethritis, an expression of the prostatic contents revealed the presence of an abundance of pus cells in the characteristic manner, thus necessitating still further treatment.

From our observation we have concluded that, in the normal cases, the large cells seem uniformly smaller, and showed less of a tendency to fatty degeneration than in the cases of the maturer and infected cases. From this we are led to the deduction that these bodies do not reach the large size, and show evidences of fatty degeneration, in young persons

whose sexual functions are yet in a more or less dormant state. In cases in which the sexual function was already somewhat active, we observed an increase in the number of lymphocytes. While this increase may hardly be said to assume the importance of indicating some pathologic change in the prostate itself, yet we regarded it as evidence of a functional over-activity. It is interesting to observe that upon a subsequent attempt to obtain fluid from this case the fluid was distinctly sanguinolent, and, upon examination, proved to contain large numbers of red blood cells. Upon questioning the patient we found that he had indulged freely in sexual pleasures on the day preceding our expression. Through this indulgence the prostate became undoubtedly hyperæmic, and, owing to the presence of round cells, showed a condition of irritability.

As regards the presence of the above-mentioned hyaline casts, we agree with others that they seem to occur toward the close of a desquamative prostatitis, as verified by our own experience. In order to exclude all doubt as to the nature of these bodies which we have regarded as pus cells and lymphocytes, we treated them with a 20 per cent. solution of acetic acid. Upon clearing, the pus cells were found to be uniformly polynuclear, and the lymphocytes mononuclear. According to certain authors, there are mononuclear pus cells, but Ziegler's "Pathology" in the last German edition says: "Among the cells emigrating from the circulatory system, two forms may be distinguished, viz., mono- and polynuclear, and the term pus cell refers to the polynuclear forms."

Fürbringer, in his classical work, "Die Inneren Krankheiten der Harn u. Geschlechtsorgane," edition 1890, states, that pus cells may appear plentifully in prostatic secretion as a result of a catarrh confined to one gland follicle, and not of the entire organ. Under all circumstances, the finding of the large and beautiful Bottcher crystals determines the secretory involvement of the prostate. The addition of a drop of one per cent. solution of ammonium phosphate to a drop of the expressed fluid on a slide should show these crystals after the lapse of an hour. Further, he says: "It must be admitted that these crystals may not be found in true prostatorrhœa, because of extensive chemic changes in the gland secretion, especially in those forms tending to form necrotic areas and abscesses, also because of the admixture of urine." But the failure of this reaction by no means weakens the proof in the positive results afforded by their presence.

We have endeavored to demonstrate the presence of these crystals in each of our cases, according to the method indicated, but as yet without success, perhaps owing to the obstacles mentioned. Likewise, in each case we have searched through many specimens for gonococci in the pus cells of the expressed secretions, but without success. Undoubtedly, with

the advantage to be derived from examination of greater clinical material, our efforts in this direction should be successful.

Our method of staining for gonococci is one which has given us beautifully clear pictures, and generally brilliant results. It is that recommended by Lanz in No. 9 of the *Deutsche Medicinische Wochenschrift* of this year. Briefly, it is as follows: Spread on the cover glass, dry and fix in the usual manner, being particularly careful not to overheat in fixing. Immerse from one-half to one minute in a 25 per cent. solution of trichloroacetic acid. Wash, dry, and fix again. Then immerse for about five minutes in a solution of thirty c.c. of distilled water, to which add enough of a saturated aqueous solution of methyl blue to give a deep blue tint, and one or two drops of a 5 per cent. solution of caustic potash. The gonococci will appear a deep blue, and the rest of the cells a lighter blue. A double stain may be produced by immersing the cover glasses for a few minutes in a dilute solution of Bismarck brown. The cell protoplasm will take on a greenish or brownish hue, while the gonococci will remain unchanged. As a negative criterion in cases in which all other methods of determining the presence of gonococci fail, cultures may be made. They grow only on such media as blood serum, serum agar, or blood agar, in the form of minute dewdrop-like colonies. It is a distinguishing characteristic of gonococci that they do not grow on plain nutrient gelatin or agar.

In conclusion, we must express our regret that our limited time and clinical material have not enabled us to give you more extensive results, but we trust that the little we have presented will serve as a stimulant to our colleagues to devote more time and painstaking methods to the examination and treatment of this hitherto somewhat unsatisfactory class of cases. If by definitely excluding all possibility of infection after an attack of specific urethritis we may lessen the misery entailed on young wives through innocent contact with husbands pronounced free from infectious possibilities by their medical advisers, we may feel some degree of satisfaction; if in no other way, at least by curtailing some of the work of the gynæcologists.—*The Journal of the American Medical Association.*

Progress of Medicine.

MEDICINE

IN CHARGE OF

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A PREMONITORY SIGN OF PULMONARY TUBERCULOSIS.

M. Destrée, of Brussels, at the Medical Congress in Rome, stated that unequal dilatation of the pupils was frequently to be observed in tuberculosis. If the disease was unilateral, the pupil was most dilated on the affected side; if bilateral, the dilatation was variable. This inequality of pupils is not observed in other diseases of the lungs (bronchitis, emphysema, pneumonia), but may follow an ancient pleurisy. This inequality is produced by excitation of the great sympathetic in the thorax of animals. Excitation of the hilum of the lung causes pupillary dilatation of the same side. This excitation is to be observed clinically in cases of tuberculous glands. The ganglia being altered and hypertrophied before the tuberculous lesions of the lungs are notably developed, mydriasis may occur early and form a sign, a warning. The author has observed this mydriasis five years before the pulmonary affection manifested itself in one case. He calls attention to the possibility of its being of value in the early diagnosis of pulmonary phthisis.—*Universal Medical Journal*.

"THE DISEASES OF OLD AGE."

Dr. E. B. Montgomery, Quincy, Ill., summarizes his observations in the following conclusions in a paper read before the Illinois State Medical Society:

(1) There are no diseases that are a necessary result of mere length of life; in other words, that old age is not of necessity pathologic.

(2) That diseases of a degenerative nature, occurring in the aged, most frequently, are those most distinctive of the decline of life.

(3) That such diseases are either due to faulty heredity, overwork, errors in food and drink, or constitutional dyscrasiæ, than from any necessary wear and tear of the vital mechanism, the result of long life.

(4) As a corollary of this, the prophylaxis of such diseases consists in a good heredity and a well-ordered life, especially the avoidance of syphilis and alcoholism.

(5) That their treatment consists largely in proper personal hygiene and the treatment of the constitutional dyscrasiæ upon which such degenerations so frequently depend.—*The Journal of the American Medical Association.*

REFLEX SPASM OF THE TONGUE, LIPS, AND PHARYNX INDUCED BY IRRITATION OF THE GREAT OCCIPITAL NERVE.

Gallerani and Pacinotti (*Neurol. Centralblatt*, 1893, No. 14; *Centralblatt f. d. med. Wiss.*, 1894, No. 19, p. 335) have reported the case of a man who had been struck upon the head twelve years previously. The site of injury was from time to time the seat of pain, both spontaneous and induced. In the stellate cicatrix a small, round, hard body could be felt, pressure upon which induced pain. There was present contracture of the muscles of the left side of the neck, so that the head was held downward and directed to the left, and there was also disturbance of speech, contraction of the lips, slight trismus, and some difficulty in swallowing. The spasmodic condition was a result of irritation induced by the presence of the foreign body, and disappeared after excision of the cicatrix at the point of union of the great and small occipital nerves.

THE SEAT OF THE FORMATION OF UREA IN THE ANIMAL ORGANISM.

As the result of personal investigation and from existing data, Kaufmann (*Archives de Physiologie normale et Pathologique*, 1894, No. 3, p. 531) reaches the conclusion that urea exists in all of the tissues of the mammalian organism, and in greater proportion than in the blood. All of the tissues seem to take part in the production of urea, although in varying degree. The liver is the most active seat of urea-formation. The production of urea seems due to processes of denutrition that take place in various tissues, and results especially from the work performed by the liver.

THERAPEUTICS

IN CHARGE OF

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LOCAL ANÆSTHESIA BY HYPODERMIC REFRIGERATION.

Dr. Letang (*Rev. de Therap.*) gives the technique of this method as follows: Place a test tube filled with salt water (in which are plunged a thermometer, and a syringe filled with the same liquid) in a freezing mixture consisting of eight parts of sulphate of soda and five parts of hydrochloric acid. When the thermometer shows a temperature of ten degrees above zero, remove the filled syringe and make the injection. In place of salt water, the following may be used:

Distilled water	
Neutral glycerine	- aa 100 parts.
Sulphuric ether	- - 2 "

DIGESTION WITHOUT DIGESTIVE FERMENTS.

(Dastre: *Arch. de Phys.*, 1894.) Fibrin, in the presence of a neutral saline solution (sodium fluorate, two per cent.; sodium chloride, fifteen per cent.), is not only dissolved, as formerly believed, but undergoes a form of digestion. Three different substances can be found in the solution: One, strictly speaking, dissolved fibrin; the second shows the globulin reaction (coagulable at 75° to 84°); a third made up of peptones. The same to be observed with albumin and casein. Thus the digestive process can be brought about by mere contact with a salt solution. Examples of such transformation were certainly known before, by the action of physico-chemical substances, but the conditions were much more vigorous: the amyolytic effect of diastase; the inversive effect of yeast juice by acids acting with heat; the formation of peptones from albumin-

oids in acidulated water, by heating to 180° C. The process pointed out by the author takes place under natural conditions (mild ones). In both cases the provoking material remains unchanged.—*Revue Internat. de Bibliographie Med.*

PARAFORMALDEHYDE (CH₂ O).

This substance is formed by union of three molecules of formic aldehyde (CH₂ O). It is a white, indistinctly crystalline mass, almost insoluble in water. It can be administered internally in large doses—seventy-five grains per diem—without bad effects. As an internal antiseptic medicament it has been found superior to iodoform, B. naphthol, salol, naphthalem, and bismuth salts. Its antiseptic properties probably depend upon the elimination of formic aldehyde vapor, which has been found to be an intensely active antiseptic. Paraformaldehyde has been very useful in infantile cholera, and, no doubt, will be found as effective in typhoid, typhus, etc.

A NEW METHOD OF USING COCAINE FOR LOCAL ANÆSTHESIA.

Krogius (*Centralbl. f. Chir.*) describes a new method of producing cocaine analgesia, which is based on the fact that when a solution of this agent is injected into the subcutaneous tissue, near to a nerve trunk, it causes loss of sensation over a large zone corresponding to the peripheral distribution of this nerve. In order to reach the selected nerve trunk with certainty, and to apply the cocaine to several of its branches at the same time, the author, in injecting the subcutaneous tissue, passes his needle across the long axis of the limb, and, as the needle is thrust along, the solution is gradually discharged. An injection made in this way across the root of a finger will, in the course of ten minutes, result in analgesia of the whole digit, not of the skin only, but also of the tendons, the periosteum, and all the deep structures. If one or two injections be made transversely, near the wrist, a considerable extent of the palm of the hand may be thus rendered analgesic. The sensibility of the ulnar side of the hand, as far as the roots of the last two fingers, may, it is stated, be abolished by injecting a solution of cocaine over the ulnar nerve at the back of the elbow. By injecting over both supraorbital notches analgesia may be produced in the whole of the middle portion of the forehead. The analgesia caused by this method of using cocaine attains its greatest intensity from five to ten minutes after the injection, and is maintained for a quarter of an hour or even longer. The author injects only a weak (two per cent.) solution of cocaine, and keeps the patient recumbent for at least a quarter of an hour after the operation. This method has been

practised with success at Helsingfors in two hundred minor operations, such as amputation of the fingers and toes, excision of palmar fascia and phimosis.—*The Times and Register*.

SOMATOSE.

This substance, which has received considerable attention of late, consists of albuminous substances which have already been digested, and is, therefore, readily assimilated, and, in its own form, replaces the albumin of the body. It is a yellowish powder, tasteless, and soluble in water. It has been found particularly useful in phthisis, chronic gastritis, etc. It may be given with soup, milk, and cocoa.

DIPHTHERIA: ANTITOXINE.

The dose, as calculated from experiments on guinea pigs, has been found too small; 2 c.c., in place of 1 c.c., of the solution should be injected into children above the age of four years in order to secure immunity. The injections are made deeply into the subcutaneous tissues behind the shoulders.

QUININE IN WHOOPING COUGH.

Dr. Barou (*Bul. de Therap.*) gives a report of fifty cases treated with quinine. The doses ranged from 1 to 40 centigrammes ($\frac{1}{8}$ to 6 grs.) three times a day, according to the age of the patient. The disease, in a few cases, was aborted, while the average deviation did not exceed three weeks. The drug was found particularly useful in whooping cough complicated by lung affections.

A GOOD NUTRIENT ENEMA.

R.—Egg, one.
 Fresh milk, $\bar{\text{z}}\text{iv}$.
 Pancreatic solution, $\bar{\text{z}}\text{ii}$.
 Sodium bicarbonate, gr. xx.
 Hot water, $\bar{\text{z}}\text{ii}$.

Switch the egg and milk thoroughly together, add the pancreatic solution and bicarbonate of sodium, then the hot water, and let stand in a warm place for half an hour. A little brandy or wine may be added, if desired. The addition of a few drops of laudanum frequently assists in the retention of the enema.—*Medical Press and Circular*.

ACCIDENTS FROM SALOL.

M. Josias, in *Journal des Practiciens*, reports an instance where the administration of fifteen grains, followed by thirty grains on the next day, gave rise to a scarlatiniform erythema, with spots resembling measles, and red papules. The urine showed the presence of both phenic and salicylic acids. Dujardin-Beaumez believed that one cause for these symptoms was to be found in the renal impermeability which is set up by the ingestion of aromatics, as phenol. Bardet has found that in febrile conditions the aromatics act as antithermics, and chilling, cyanosis, and rashes are not uncommon; therefore, in these cases care should be exercised, while in non-febrile cases accidents do not occur, even if the doses are large. A proof of this is found in the administration of large doses in dyspepsia. Jasiewicz, from his own experience, could not admit the absorption of this drug when used as a topical application, even in large doses.—*American Journal of the Medical Sciences*.

 ARTIFICIAL SERUM FOR HYPODERMIC INJECTION AFTER SEVERE SURGICAL HÆMORRHAGE.

According to *L'Union Médicale*, Cheron recommends the following mixture for injections under these circumstances :

℞.—Sulphate of sodium.....	ʒii.
Phosphate of sodium.....	ʒi.
Chloride of sodium.....	gr. xxx.
Pure carbolic acid....	mxv.
Sterilized distilled water.....	ʒxxxvi.

The inside of the thighs, the abdominal wall, or loose tissues of the back are the proper points for these injections to be made.—*Therapeutic Gazette*.

 TREATMENT OF DIABETIC COMA.

Dr. Harley (London *Lancet*) contributes a valuable paper on diabetic coma, and concludes as follows :

The rational treatment founded on the results obtained from the above-mentioned experiments is to administer alkalis. If the symptoms are urgent, and time is of moment, sodium carbonate might be administered subcutaneously or intravenously, as recommended by Stabelmann, the pulse being carefully watched in case of heart failure. At the same time, since the author's experiments have shown so great a diminution in the oxygen absorbed, it is advisable to encourage oxidation. The inhalation

of pure oxygen may help, as well as trying to improve oxidation by massage. Diuretics, together with large quantities of fluids, will be of value in increasing the rapidity of the elimination of the toxic products derived from the sugar. These are the means suggested to ward off attacks of diabetic coma, or even to diminish the severity of a coma already set in.—*Therapeutic Gazette*.

THE STRYCHNINE TREATMENT OF PULMONARY CONSUMPTION.

Next to rest and food, strychnine in large doses is the most important agent in the treatment of pulmonary consumption. Begin with $\frac{1}{32}$ of a grain, and gradually increase to $\frac{1}{16}$, $\frac{1}{10}$, or $\frac{1}{8}$ of a grain, or even larger doses, given four times a day. According to the author, it does not produce albuminuria or diabetes, as is generally supposed. It alleviates the loss of appetite, the vomiting, the constipation, the nervousness and sleeplessness, the pain in the chest, the cough and expectoration, the dyspnoea, the weakness of the heart, and acts as a blood-builder in an eminent degree. Its usefulness rests, of course, on its influence over the nervous system, and is another link in the chain of evidence which shows that in the great majority of cases pulmonary consumption is the direct result of primary disease of the pulmonary nerve supply.—Thomas J. Mays, in *College and Clinical Record*.

OBSTETRICS

IN CHARGE OF

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GLYCERINE INJECTIONS AS AN OXYTOCIC.

Pelzer (*Centralbl. f. Gynäk.*, No. 26, 1894) read a communication on this subject at a recent meeting of the Cologne Obstetrical Society. He had collected twenty-eight cases, including nineteen in his own experience. Glycerine was used eighteen times for induction of premature labor; in fifteen of these cases the pelvis was narrowed, in two there was Bright's disease, and in one placenta prævia. To stimulate uterine action at term glycerine was injected in seven cases of simple atony, in two of placenta prævia, and in one for some other complication. The pains came on after an average interval of two hours following the injection. Eight to ten hours elapsed before complete dilatation of the os, or a longer space of time in cases of contracted pelvis. Two of the mothers died, both from severe eclampsia; the foetus was putrid in both cases. One child required craniotomy on account of its great size. Three children died from placenta prævia and strangulation by the funis. One, hardly thirty-two weeks old, died a quarter of an hour after birth. Only in one case could the violence of the pains be a possible cause of the death of the child. The glycerine had done its duty. Pelzer, however, deprecates injudicious zeal about this method; thirty to fifty cubic centimetres, not one hundred cubic centimetres, are sufficient for injection. The method is not suitable for cases of eclampsia and placenta prævia, except the lateral variety, where the placenta can be avoided. Geuer (*ibid.*) read notes of three cases of induction of premature labor by injection of glycerine, in all of which both mother and child were saved. The first two mothers were over thirty-two, with contracted pelvis; craniotomy had been performed in previous labors. The third case was an instance of bad eclampsia; forty grammes of glycerine were injected, the os being at the time uncon-

tracted ; there was œdema, with much albuminuria. Forty hours later a healthy living child was born.

Oscar Embden (*N. Y. Medical Record*, July 28th, 1894) adds another case to those published by Pfannenstiel illustrating the dangers of glycerine injections into the uterus for the purpose of producing premature labor. His patient, in the ninth month of pregnancy, was noticed to have albumin in the urine, which was rapidly increasing in amount in spite of strict milk diet. The urinary sediments contained some white blood corpuscles, no red ones; a few renal epithelial cells, and a few hyaline casts. Headache, nausea, œdema of feet and hands in this case were circumstances under which it seemed best to induce premature labor. 90 c.c. pure glycerine were injected between the uterus and foetal sac. She had a few slight pains at longer or shorter intervals for six hours, when a severe eclamptic seizure supervened. The os uteri barely admitted the finger, but rapid manual dilatation was performed by Dr. Jewett, and the child extracted by axis-traction forceps two hours later. The temperature was normal, but the pulse rate very slow, 50-55 per minute, whilst it had been 78 per minute before glycerine injection. Urine, which was drawn off by catheter after delivery, was of dark-red color. It contained no red blood corpuscles, but a large quantity of hæmoglobin. Twelve hours after delivery the water was only slightly colored, and twenty-four hours after the color was normal. The albumin gradually disappeared. The day following delivery a severe icterus set in, and the patient fell into a semi-comatose condition, which lasted for six days. The patient gradually recovered.

He concludes : (1) That glycerine does not act as quickly as we should expect.

(2) That Pelzer's method is liable to occasion indisputable symptoms of glycerine poisoning. (It is shown by Schwan, Luchsinger, and others, that glycerine is liable to cause a decomposition of the blood.)

(3) That concentrated glycerine may possibly produce thrombosis when brought into the circulatory system.

(4) That there is the danger of introducing air into the circulation with any kind of fluid injection between the uterus and foetal sac.

(5) That there is danger in glycerine injections in all cases, but particularly in cases where nephritis exists.

In the case reported, it seems indisputable that the icterus was caused by the decomposition of the blood poisoned by glycerine. That the coma, which did not look like an uræmic coma, was brought on by the same cause it was impossible to say, but it might possibly have been one of the indirect effects of the decomposition of the blood.

FATAL NAUSEA AND VOMITING OF PREGNANCY.

Dr. E. P. Davis, of Philadelphia, read a paper upon "Fatal Nausea and Vomiting of Pregnancy" before the American Gynæcological Society at its nineteenth annual meeting, held at Washington. He described in detail three fatal cases of nausea and vomiting of pregnancy. The first patient had been treated for chronic gastritis previous to coming under the author's notice. She had had continuous vomiting, and was very much emaciated. A tampon was put up to the cervix, and every effort made to nourish by the rectum, but the patient died from exhaustion. Before her death purpural spots made their appearance. The size of the uterus compared with that of the second month of pregnancy.

In the second case there were prolapse and anteflexion of the uterus at the end of two weeks of pregnancy. There was intense vomiting, with nausea, with considerable straining and retching. The diet was regulated, but the patient grew worse. At the end of the fourteenth week it was found that the body of the uterus was anteflexed and the fundus impacted behind the pubes; this was corrected, but the condition did not improve. The os was then dilated, with slight improvement. It was decided to hasten delivery, and this was accomplished without much trouble and with very little hæmorrhage. Subsequently the patient attempted to rise, and died from syncope. The autopsy showed considerable fibrous tissue in the cervix posteriorly and anteriorly. The uterus, tubes, and ovaries were normal. The blood remained fluid and stained peculiarly. Two retention cysts were found. The points of interest in this case were the dense tissue found in the cervix, the retention cysts, the tenderness of the tissues, the hæmatin staining, and the signs of fatty degeneration.

In the third case the patient had suffered with severe substernal pain, nausea, and vomiting of coffee-ground-looking material. The uterus was not impacted, but sharply anteflexed. Everything possible was done, but the patient died from exhaustion.

In a summary of the symptoms of this very fatal condition, Dr. Davis laid special stress upon that of the coffee-ground vomiting and the substernal pain. The nausea and vomiting of pregnancy were dangerous by reason of their being apt to cause pernicious anæmia. A case showing signs of obstinacy in yielding to treatment should be treated promptly by modern surgical methods.

 POST-MORTEM CÆSAREAN SECTION: CHILD SAVED.

Backer (*Centralbl. f. Gynak.*, No. 24, 1894) states that last January a woman, aged 40, and in the last month of her eighth pregnancy, was admitted into hospital in a dying condition, with extreme dyspnœa owing to

œdema of the lungs. Delirium set in, and then eclampsia, immediately followed by death. The abdominal wall was at once opened, blood flowing freely, and then the uterus was incised. The presentation was pelvic; the foetus was seized by the foot and extracted. It was born in a state of algid asphyxia. After being swung fifty-six times, according to Schultze's method, it cried lustily. It was a female, seventeen inches long, and well developed. When the report was published, one hundred and eight days after birth, the child appeared to be doing well. From the moment when the operation was begun the mother showed no sign of life. The sphincter ani had yielded, and liquid motion escaped during the fit, which ended fatally. In 1891 a somewhat similar case occurred in the same hospital. The mother had just died of purulent meningitis. The foetus was asphyxiated; it was swung seven hundred and thirty-three times, but could not be saved.—*Epitome, British Medical Journal.*

SALICYLIC ACID IN PREGNANCY.

Salicylic acid and its compounds should not be administered to pregnant women who have a predisposition to abort. Their administration should be watched carefully in all cases of pregnancy, and, on the appearance of any "show," or anything resembling labor pains, they should be discontinued.—Vineberg, in *New York Medical Journal*, June 23rd, 1894.

A CASE OF MELENA NEONATORUM.

Shütze (*Centralblatt für Gynakologie*, 1894, No. 9) reports the case of a male child born of a healthy mother after a normal labor. The skull was found somewhat drawn after birth, and a tumor formed on the posterior part. During birth the cord was wrapped around the child's neck.

Three days after birth intestinal hæmorrhage appeared, accompanied by loss of weight and symptoms of anæmia. The autopsy showed the stomach distended with gas, and containing a teaspoonful of liquid blood. The gastric mucous membrane was intact. The duodenum, jejunum, and upper half of the ileum were free from blood, but in the lower small intestine and colon were found fluid and clotted blood, although there was no break in the mucous lining. Under the tentorium cerebelli on both sides small effusions of blood were found resting on the dura, and somewhat infiltrating the tissue.

SURGERY

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TUBERCULAR PERITONITIS—LAPAROTOMY—CURE.

Ruckis (*Pacific Medical Journal*, 1894) has added a case to those gathered by Hartman and Aldebert. It is that of a girl of eight years, operated on in 1892, in a severe attack of the disease. The drain was dispensed with on the second day. A small quantity of fluid reproduced itself in the abdomen soon afterwards; paracentesis was done, and since that time no signs of the disease have returned.—*Rev. Internat. de Bibliograph. Méd.*

CONTRIBUTION TO THE STUDY OF MOVABLE KIDNEY.

(MM. Verhoogen and Godard, *Gaz. de Gynécologie*, March 1st, 1894.) This is an abstract, by Dr. Philippeau, of a paper read before the Belgian Society of Surgery. Movable kidney is more common than is generally admitted. Out of 66 women in the department for digestive diseases, 28 had movable right kidney, and 4 of them had the left kidney movable as well. Of these 28, 14 had enteroptosis, 7 had the right kidney displaced, 4 had both kidneys floating, 3 had a movable kidney, but in its normal situation. This proportion the authors think too high. As regards causation, they mention repeated pregnancies leading to eventration, muscular atony, and laxity of the connective tissues, but movable kidney is also found in nulliparous women and in young girls, and hence it must be admitted that there is a complete independence between enteroptosis and movable kidney. Under these conditions the principal cause of displacement of the kidney ought to be attributed to abuse of corsets. From the point of view of symptoms, they divide the patients into three classes:

(1) *The neurotics*, very impressionable, with painful points in the back, the flanks, the sides, palpitations, etc. They are neurasthenics or hysterical. (2) *The dyspeptics*. This is the most numerous class; dyspeptic troubles are often added to those of movable kidney, and still further increase the difficulty of discovering which symptoms belong to each. (3) Patients troubled with uterine symptoms brought on by the floating kidney. In the symptomatology of movable kidney must be mentioned renal troubles, such as congestions, lithiasis, and alterations due to retention of urine in the pelvis of the kidney. As regards treatment, the authors consider that nephrorrhaphy is indicated in the dyspeptic troubled with obstinate vomiting with emaciation. M. Verhoogen considers that it is not necessary to attempt to fix the kidney in its normal position, for this would mean fixing it to the diaphragm, or the last ribs; if it is fixed in a convenient position in order to obtain the required results. He uses the L-shaped incision, and sews the kidney by four catgut sutures passing through its substance to the posterior lip of the wound. M. Verhoogen has done the operation in ten cases; eight healed by first intention, two suppurated, but finally healed.—*Quarterly Medical Journal*.

A NEW DRESSING FOR CIRCUMCISION.

Gundrum, in the *Therapeutic Gazette*, recommends that after suturing the skin and the mucous membrane together with fine catgut, the penis should be thoroughly cleansed with some aseptic solution and completely dried. Then, with the camel's hair brush, paint the penis from the meatus almost to the root with the following mixture:

R.—Resin	ʒii.
Copal varnish	ʒii.
Beeswax	ʒi.
Tallow	ʒii.
Iodoform	ʒi.

M.

Apply coats enough to hermetically seal the penis, leaving the meatus free. The dressing is completed by wrapping one or two layers of aseptic gauze around the penis, and painting with the mixture.

When this dressing is used, there is no inflammation, no discharge, no swelling, no pain, and no crying and screaming. Before using this dressing the most troublesome feature of circumcision in children was the care of the patient after the operation. Now this is all changed, and after the first night the patient seldom loses sleep, and he eats well.

TREATMENT IN FOREIGN BODIES IN THE EAR.

M. Guillaume read before La Société Méd. de Reims a paper in which he lays particular stress on some important points. After having insisted on the necessity of always using warm water injections first, he cites a method to use when this has failed: instruments with agglutinous substances. Among these last he finds gutta-percha the most useful. He uses it as follows: It is melted in an iron spoon, and gathered in the end of a wire stilette provided with an eye at the end; thus prepared, the stilette is applied to the foreign body and kept there for five minutes, to allow of the gutta-percha getting a good hold. The foreign body comes out. M. Guillaume terminates his paper by recommending that no foreign body be left in any ear; when all other methods have failed, use the bistoury.—*Lyon Médical*.

TREATMENT OF PARAPLEGIA IN POTT'S DISEASE.

M. Ménard, of Brecksur-Mer, at the Medical Congress, observed the uselessness of laminectomy in two cases of paraplegia due to Pott's disease, and in practising the same operation in a third case incidentally opened a tubercular abscess of the vertebræ, the patient recovering rapidly. He now no longer opens the medulla in the spinal canal, but in two recent cases directly incised the tuberculous areas in the vertebræ. The patients were nine and ten years of age, respectively, and suffered from Pott's disease, with complete paraplegia and deformity, dating back some months. There were contractures and almost total anæsthesia, as well as complete loss of voluntary motion. The evening of the operation voluntary movements and sensibility had returned to a slight degree, and within four or five days sensibility as to touch, pricking, and heat was considerable. Three weeks later the patients could stand and had begun to walk, while at the time of report the cure of the paraplegia could be considered as definite.—*Universal Medical Journal*.

PÆDIATRICS AND ORTHOPÆDICS

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MESSAGE IN INFANTILE CONVULSIONS.

Schumann (*Therap. Monatsh.*, March, 1894), after discussing the intestinal causes leading to eclampsia and convulsions in children, dwells on our inability to render much active and immediate assistance. Anæsthetics, purgatives, etc., are dealt with, and the author then describes how he has lately, in the case of several children, resorted to abdominal massage, which led to instantaneous relief. With or without an anæsthetic, according to the nature of the case, the child's abdomen should be rubbed for several minutes, when the passage of flatus and a thin stool will show the success of the treatment. The history should be inquired into first, and, when there is a probability of the presence of peritoneal irritation, the massage may be contraindicated.

THE ALIMENTATION OF YOUNG CHILDREN.

In a valuable paper on this subject (*Archives of Pediatrics*, June, 1894) by Dr. Lewis Smith, the part played by milk in the dissemination of disease is well shown. Illustrations are given of conveyance of tuberculosis, scarlet fever, diphtheria, and typhoid fever by the milk supply. He quotes Klein and Prudden as being of the opinion that the milk of a tuberculous cow may contain tubercular bacilli, in whatever part of the animal the tubercles are situated.

The following brief résumé of cases reported by well-known clinical teachers show the need of frequent and careful inspection as regards the presence of tuberculosis in the dairy which furnishes milk for the nursery. Ollivier (*La Semaine Médicale* Feb. 25th, 1891) states that within three

months, in a school for girls there occurred eleven cases of tuberculosis, of which five were fatal, and with several of these patients the disease seemed to originate along the gastro-intestinal tract. Two other pupils of this school died of tuberculosis. Their previous excellent health and that of their parents justified the belief that they also contracted tuberculosis from the milk. On searching for the cause of this disease, it was believed to be the milk supply, and on killing the cow that furnished the milk its lungs were found to be in an advanced state of tuberculosis.

DIPHThERIA TREATED BY ANTITOXIN.

In *The British Medical Journal*, July 28th, 1894, Dr. George F. Still gives the following report of a case of diphtheria under the care of Dr. Goodhart in Guy's Hospital, in which treatment by injections of antitoxin was adopted :

J.C., aged 3 years, was admitted at 2 p.m. on June 23rd. It was said that he had been at play, and apparently quite well that morning. At midday he complained of his throat, and had croupy cough, and respiration soon became difficult. On admission there was considerable inspiratory stridor, and some "sucking in" above and below the clavicles, and also in the lower intercostal spaces. On the right tonsil was a patch of membrane. The tonsils and fauces were very slightly injected and swollen. The temperature was 102.4°, the pulse 140, and the respiration 34. The color was good, but the child was distressed and restless. Tracheotomy seemed imminent, but the operation was deferred till bed and steam kettle had been tried. At 4.30 p.m. antitoxin *mxj.* was injected hypodermically in the forearm, with strict antiseptic precautions. At 6 p.m. the patient seemed more comfortable. The temperature was 99.2°; respiration continued difficult, but the patient was less restless, and slept fairly well during the night.

June 24th. The temperature was about 99° all day, the pulse 128, and the respiration 32. The child was again becoming restless, and the stridor was increasing. Antitoxin *mvij.* was injected at 4.30 p.m.

June 25th. The stridor was much less. The child was playing and talking, and took solid food. The temperature was normal.

From this time the stridor decreased. The child seemed perfectly well, playing and laughing merrily, although the cough remained croupy until June 27th, and membrane persisted on the tonsil until June 30th, that is, seven days.

The diagnosis was made certain by cultivation from the membrane.

The only additional treatment adopted was a steam kettle and tent bed, and brandy *mxix.* every four hours. A spray of iodine and carbolic

acid was tried twice on June 23rd, but as the child objected it was not used again. The antitoxin used (kindly given by Messrs. Zimmermann & Co.) was Schering's. Whether the favorable result was *post hoc* or *propter hoc*, it is noteworthy that the subsidence of constitutional disturbance was extremely rapid, occurring within a few hours after the injections; that the constitutional improvement occurred while the visible membrane persisted, apparently without corresponding improvement; and last, but not least, that the injection would seem to be entirely innocuous, being followed by neither local nor general disturbance.

A REMARKABLE CASE OF INTUSSUSCEPTION.

A remarkable case of intussusception, which terminated in recovery, is reported by E. M. O'Connor (*British Medical Journal*, July 21st, 1894).

A lad, aged 13, after a severe wetting, suffered from obstinate constipation. He was given purgatives at intervals, but without effect, except to cause extreme pain. This continued for six days, when medical advice was sought. An opiate was given to allay pain, and a second visit paid in the evening. In the interval there had been a very copious passage from the bowels. On examination, the greater part of the matter consisted of intestine. The pain now became less, and the patient's condition improved daily until in two weeks' time he was able to sit up, and was quite free from pain. Diarrhœa still continued, the bowels being moved sometimes six times a day. It is now twelve months since the attack. The boy looks strong and healthy. Has had no pains in abdomen. Bowels continue slightly relaxed ever since the attack.

The evacuated bowel, as shown by the photograph, consists of ilium, with Meckel's diverticulum. The total length was eleven and one-quarter inches. The upper portion was invaginated into the lower, the entire length of the diverticulum appearing through the lower opening.

SURGICAL TREATMENT OF IDIOCY AND MICROCEPHALUS.

In an address delivered before the International Congress at Rome, 1894, Dr. Jacobi discusses at length the operation of linear craniotomy for the relief of idiocy presumably due to microcephalus. The speaker points out that while the operation is made for microcephalus, yet, from the measurements given and histories obtained, many of the cures do not belong to that class. Moreover, in cases undoubtedly microcephalic the cause is not always due to premature ossification. In his own experience it is the rule to see microcephalus with open sutures. A strong point against the operation is the fact that there is no evidence to show that enlargement of the cranium follows removal of the strip of bone. In

one reported case, instead of enlargement, there was positive diminution of the cranial cavity. After discussing the operation at length, the experience of several American surgeons is given in the following :

“ I hold in my hand, Mr. President, the reports of cases operated upon for so-called idiocy, or for so-called microcephalus, by such American surgeons only as I could reach personally, so as to have their tales verified from their own lips. The cases I command are 3 of Dr. Charles McBurney, of New York ; 2 of Dr. Willy Meyer, of New York ; 8 of Dr. John A. Wyeth, of New York ; 14 of Dr. W. W. Keen, of Philadelphia ; 3 of Dr. Bernard Sachs, operated upon by Dr. Arpad Gerster, of New York ; and 2 of Dr. A. Vanderveer, of Albany, N.Y. On these 33 cases 41 operations were performed. Of 33 there were 14 deaths and 19 recoveries. The deaths did not occur in the very young ones alone, but also in those four, five, and six years of age. Most of them occurred soon after the operation, six within a day. Cause of death is not always given or known ; in one it was attributed to the anæsthetic ; a number of them developed a very high temperature which was not explained, inasmuch as not even the dura was injured. Many died of shock a few hours after the operation. The final report as to their mental and general condition was as follows : No history obtained, 1 ; uncertain, 1 ; no improvement, 7 ; slight improvement, 7 ; “ some,” 1 ; much improvement, 2.”

INHALATION FOR NASAL, PHARYNGEAL, AND BRONCHIAL CATARRH.

In considering the treatment of this condition, Dr. Clarence Rice (*Archives of Pediatrics*, April, 1894) recommends the following formula :

Menthol.....	grs. v.
Thymol.....	grs. v.
Carbolic acid.....	grs. v.
Oil of eucalyptus.....	ʒii.
Oil of pinus sylvestris.....	ʒiii.

Directions : A teaspoonful on the boiling water, or twenty or thirty drops on the sponge or absorbent cotton. Inhale for ten or fifteen minutes.

The spout of the croup kettle can be placed near the head of the patient while she is asleep, and both the child and kettle enclosed under a sheet. This warm medicated steam will liquefy the secretions, diminish congestion, relieve the dyspnœa, and stop the cough. Nicely finished apparatus for giving these inhalations may be found in the market, though they are on the principle of the croup kettle, which can be manufactured cheaply in any tin shop.

EPIDEMIC JAUNDICE

Dr. Wm. Rankin, in the *British Medical Journal*, May 26, reports a number of cases of acute jaundice occurring at the same time or with slight intervals. During the months of July and August he saw eleven cases of this kind, and all within a limited area—not more than a mile long and half a mile wide. When one case occurred in a family, as a rule other members were affected. In one instance three children in one family had the disease. All recovered quickly. The district where these cases occurred was low-lying. In March and April of 1894 a similar epidemic was encountered in this series; six children of one family had the jaundice.

Treatment consisted of a calomel purge, repeated after an interval of three days, and a mixture of acid nitro-mur. dil. and nux vomica.

The cases were invariably in children, the eldest being 13.

INFANT FEEDING.

Percy Boulton, in the *British Medical Journal*, publishes a useful table showing the normal weight for height of children born at full term. The height and weight is given at six-month periods, from birth up to the fifth year.

The table shows that an infant should double its weight in six months and treble it in a year if its nutrition is in every way satisfactory. The practical point is this: If a child does not increase at the rate of 1 lb. a month during the first year of life, and 12 ozs. a month during the second year, its nutrition is not satisfactory. If a child does not grow nearly three-quarters of an inch every month during the first year of life, and one-half inch a month during the second year of life, it is not satisfactory. The latter is, of course, not of the same importance as the former. Clearly premature children would not be so large, though they should increase at the same ratio.

PATHOLOGY

IN CHARGE OF

JOHN CAVEN, B.A., M.D., L.R.C.P. Lond.,

Professor of Pathology, University of Toronto and Ontario Veterinary College; Pathologist to Toronto General Hospital and Home for Incurables.

ASSISTED BY

JOHN A. AMYOT, M.B. Tor.,

Demonstrator of Pathology, University of Toronto; Assistant Surgeon to St. Michael's Hospital; Physician to House of Providence.

THE ROLE OF NERVOUS DEBILITY IN THE PRODUCTION OF FEVER.

Professor Bouchard, of Paris, presented a paper on this subject at the Medical Congress in Rome. Fever patients brought into hospital nearly always show an elevation of temperature on the day of the entrance or the following day, this elevation—sometimes as much as one degree—being due entirely to the influence of the nervous system. The visits of friends, as is well known, cause a return of the fever; muscular fatigue increases it, or causes its return in a convalescent who gets up for the first time; and, in a tuberculous patient, even a very short walk will cause an increase of two degrees in temperature. These factors do not produce fever in a healthy man, and fever in disease is not generally attributed to them. Daily observation, however, warrants the author in asserting that indigestion, bodily or intellectual fatigue, or moral perturbation, which plays an established empirical rôle in the development of diseases, may also aggravate such diseases or compromise recovery. Fever would here be produced by the aggravated disease, and not by the perturbing influence, which would thus act but as the indirect cause.—*Universal Medical Journal*.

RENAL SARCOMA.

Brandt reports a case of a male infant, aged fifteen months, in whom a sarcoma of the right kidney filled two-thirds of the abdominal cavity, extending to the right lumbar region as far as the left mammary line. The tumor was removed without difficulty, and without opening the peritoneal cavity, and the recovery of the little patient took place in a very short time.—*Norsk Magazin for Lægevidenskaben*.

THE BRAIN IN EPILEPSY.

Harold Holm (*Nordiskt Medicinisk Arkiv*) has found, in microscopical examination of the brains of three epileptic patients, degenerative processes in the cortical substance, extending to the psychomotor centres, and even to the medulla oblongata and the spinal cord. He endeavored to produce similar changes in the brains of young rabbits by percussion with an ordinary percussion hammer on the skull, somewhat in front of the ears. After each percussion, as is known, epileptic fits occur, continuing for some time, and if daily treated in this way the animal dies in about ten days. A microscopical examination of the brain shows less visible degeneration in the cortical substance than in the portio medullaris, the whole brain, with the exception of the occipital and temporal lobes, being involved. The connecting fibres from the brain to the medulla oblongata and the corpora rectiforma are also attacked by the degeneration.—*Universal Medical Journal*.

RESEARCHES ON TINEA CAPITIS.

Biro (*Gazeta lekarska*), after numerous and very careful investigations and experiments (as, for instance, the cultivation of bacteria on various soils, the investigation of the development of the bacteria of favus and its inoculations in men), arrives at the following conclusions: (1) That the parasite of favus, cultivated on various artificial media, manifests itself differently. (2) That cultures, apparently differing at first, after a certain series of cultures on the same soil, begin to resemble each other in appearance. (3) That there is a certain dependence between the appearance of the bacterium of favus and the soil on which it is cultivated, and that the bacterium accommodates itself to the soil. (4) In view of these facts there is no certainty that former writers had not met with one and the same bacterium, and that no proofs exist that there is more than one variety of bacteria in favus.—*Universal Medical Journal*.

BILIARY CALCULI.

Halk (*Bibliothek for Lager*), in a series of 414 autopsies upon patients between 50 and 90 years of age, found biliary concretions in 29 per cent., the percentage in the female being 40 and in the male 19. In 112 cases the stones were lodged in the gall bladder alone, in 3 cases in the bile ducts or intestines as well, and in 4 cases in the ductus choledochus only.—*Universal Medical Journal*.

Editorials.

THE INSIDIOUS READING NOTICE.

UNDER the above heading, the following appeared in *The Medical News*, September 1st, 1894 :

“We regret to see the reading notice (and of nostrums at that) creeping into the otherwise clean and interesting columns of our respected cotemporary, THE CANADIAN PRACTITIONER. It is but recently that we had occasion to congratulate THE PRACTITIONER on the elimination of interleaved advertisements from among the pages of its text. We were encouraged to hope that its example would not be without influence upon other journals, and that its action might be viewed as a promise of a finer discrimination in general in the acceptance of advertisements by medical journals.”

The editor of THE CANADIAN PRACTITIONER desires to give this editorial notice the greatest possible prominence, and to tell our readers, our contemporaries, our advertisers, and our printers that he cordially endorses the sentiments expressed by *The News*. He had hoped that the intermingling of advertising notices with ordinary reading matter in this journal was some time ago a thing of the past. He wants no more of it ; and in saying this he is speaking for the whole editorial staff, and also, he is happy to add, for the publishers. He offers no explanation, because he doesn't happen to have any material available for anything satisfactory in that direction. Carelessness is no excuse for a gross violation of legitimate and respectable methods in medical journalism.

THE BRITISH MEDICAL ASSOCIATION.

THE recent meeting of this wonderful association was quite as successful as those of previous years. We can scarcely say anything more complimentary, considering the marvellous success which has attended all the meetings for a long time. We learn from the *British Medical Journal*

that this is the third time the meeting has been held in the "capital of the west." The first meeting was held sixty-one years ago, shortly after the formation of the association. There were present 200 out of a total membership of 400; *i.e.*, 50 per cent. According to the *Journal's* estimate, there were present at the Bristol meeting this year only about 5 per cent. of the present membership of 15,000. The next meeting will be held in London, and it is expected that the attendance will be very large. The president-elect is Dr. Russell Reynolds, president of the Royal College of Physicians. The last meeting in London was held in 1873, under the presidency of Sir William Ferguson. At that time the number of members present was 3,000, and it is supposed that the meeting of 1895 will include not less than 6,000.

TORONTO AND THE ONTARIO MEDICAL COUNCIL ELECTIONS.

IT will be noticed in the report of the proceedings of the West Toronto Territorial Association that Dr. Arthur Jukes Johnson, who has represented Toronto and some outlying districts during the last five years, has decided not to be a candidate at the coming election for the Ontario Medical Council. After passing a unanimous vote of thanks to Dr. Johnson for his work in the interests of the profession while a member of the council, the members decided, without any dissenting voice, to support Dr. H. T. Machell in his candidature for the position. We think it fair to state that Dr. Johnson's course in the council during the last five years has been, in a general way, very satisfactory to the great majority of his constituents. Dr. Machell, who will probably be elected without opposition, will, we believe, make an excellent representative. We do not happen to know his views on all the *burning* questions at issue between the outgoing council and the Defence Association; but we think his level-headedness, common sense, ability, and honesty of purpose will always keep him on the right track.

Toronto was formerly a portion of the Midland and York Territorial Division, which comprised the North Riding of the County of York, South Riding of the County of Simcoe, the township of York, and the city of Toronto. According to the redistribution (the so-called gerrymander), which provides for five new territorial representatives, the city of Toronto is divided into two electoral districts, *viz.*, No. 10, or East Toronto, and No. 11, or West Toronto. As we informed our readers some months ago, Dr. Barrick received a requisition signed by a large

majority of the physicians of East Toronto, and has consented to be a candidate. We are unlikely to have any election in either division of Toronto. Drs. Barrick and Machell are practically certain to be elected; and probably the great majority of the electors will agree with us when we say that no better men could be selected for the offices.

THE MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

THE St. John meeting was a success. So say all (not many) from the west who were in attendance. The last meeting in the far east was held in Halifax, August 3rd and 4th, 1881, under the presidency of Dr. W. Canniff, of Toronto. The attendance at that meeting was not large, but those present were highly satisfied with its success. The special feature, however, which has never been forgotten by the visiting members, was the wondrous hospitality exhibited by the Haligonian doctors.

The attendance at the recent meeting in St. John was much larger than at Halifax. The papers were not many, but good, and some of the discussions are said to have been very interesting and instructive. The visitors received right royal treatment from the local physicians. A ball given in their honor was a brilliant affair, and highly appreciated. In a private way the doctors of St. John and vicinity were exceedingly kind, as the visitors one and all testify.

The meeting of next year will be held in Kingston, under the presidency of the able and genial veteran, Dr. Bayard, of St. John. The members of the west were delighted in joining hands with their friends in the east, and electing to the post of honor this distinguished and charming man. We hope a large number from the maritime provinces will put in an appearance at the next meeting.

Kingston has had one meeting, held in September, 1883, under the presidency of Dr. Mullin, of Hamilton. The number in attendance was exceedingly small, about eighty; but the meeting was a fairly good one. Kingston is an interesting and beautiful old city, conveniently situated for both eastern and western sections. Its physicians are able and generous as shown by their very kind and cordial reception of the visiting members in 1883. The Dominion Association should receive a hearty support from all sections. There was an unusual amount of enthusiasm shown at St. John, and we hope it will not die out before next year. There should be an attendance of at least one hundred and fifty; and if there be present even a small number from each of the other provinces, Ontario surely ought to see to it that the attendance be not less than the number named.

QUACKERY AND THE COUNCIL.

ONE of the charges which has been brought against the Ontario Medical Council is that of negligence in the matter of suppressing quackery. We have watched the course of the council in its treatment of medical quacks and humbugs for some time, and we have no hesitation in saying that it has shown a very commendable zeal during recent years in its persistent efforts to repress various forms of charlatanism. We know that its efforts have not been altogether satisfactory; but, when we consider the difficulties which have to be overcome, we can scarcely wonder at it.

The "Committee on Discipline," as we have before pointed out, has done much more work during the last two or three years than most of our profession have any knowledge of. When offenders have been brought to trial they have frequently fought very vigorously—to such an extent that a verdict against them has been difficult to secure, and to enforce. The members of that committee are Drs. Day, Bray, and Logan. We believe that all have worked very faithfully in their battles against quackery, but we desire to refer especially to Drs. Day and Bray, who are the only territorial representatives on it. We believe the experience they have acquired ought to be very valuable, and regret exceedingly that both of these men will not be in the new council.

Dr. Day has declined to be a candidate for reasons which we will not discuss. We believe his decision has been a most unfortunate one, in the interests of the profession, in many ways. His retirement makes the election of Dr. Bray all the more desirable, partly on account of the experience derived from his work on this committee, but also for many other reasons, which we will not attempt to give now. We had hoped and expected that he would be elected without opposition. We think it desirable that any of the best available men in the present council be re-elected. Under present circumstances, it will not be possible to have more than six of the old members out of seventeen territorial representatives in the next council. Such being the case, it would hardly seem wise to defeat a man of Dr. Bray's ability and experience.

We have recently learned that Dr. James Samson, of Windsor, has decided to oppose him, and has issued an address to the electors announcing his candidature. We regret this, not on account of any objections to Dr. Samson, who is an able and conscientious physician, well known and highly respected in Western Ontario, but because we think, for reasons to which we have very briefly referred, that Dr. Bray ought to be a member of the council for at least one more term. Many of the mutual friends of the two candidates agree with our views, and think it would be a graceful act if Dr. Samson at once retired from the contest.

Meetings of Medical Societies.

REPORT OF THE CANADIAN MEDICAL ASSOCIATION.

The annual meeting of the Dominion Medical Association was convened in St. John, N.B., August 22 and 23, 1894. The meeting was well attended by medical men from nearly every province, the larger number coming from the maritime provinces. The association had not met in St. John before for twenty years. Fraternal delegates were introduced: Dr. J. M. Jonah, of the Maine Medical Association; Dr. Bulkley, of the American Medical Association; Drs. J. E. Graham, I. H. Cameron, and Chas. O'Reilly, of Toronto, delegates of the Ontario Medical Association. The chair was occupied in an able manner by Dr. T. S. Harrison, of Selkirk, Ont. Dr. F. N. G. Starr, of Toronto, acted as secretary. Sir Chas. Tupper, of London; Drs. Osler, of Baltimore; Marcy, of Boston; Bray, of Chatham; Mullin, of Hamilton; and Maclean, of Detroit, sent letters of regret at not being present.

The subject of the treatment of epilepsy was first taken up, the paper being presented by Dr. Hatie, of Halifax. He gave a description of the various changes that have been said to take place in the cerebral cells during fits of different kinds, and pointed out that the causation might be due to the influence of some irritant acting upon the cerebral cells which put them in a state of excitability, or which by being produced in the encephalon, and not eliminated quickly enough, the nerve explosion was nature's method of getting rid of it; that the convulsions were due to an abnormal functioning of the cells in some part of the nerve centres, the location determining the character of the seizure. This poison might be generated in the system. If this were the case, the rational treatment would be the eliminative and antiseptic one. This he had tried, by giving, in addition to the bromide of potassium, beta naphthol. The results were very gratifying, the number of fits per patient having been materially reduced.

After discussion of this paper by Drs. Cameron, of Toronto, and Wright, of Ottawa, Dr. Muir, of Truro, gave the history of a case of tuberculosis of

the arm which had been cured by erysipelas. The patient was a woman, aged 39, who had had the disease for fourteen years well marked and typical, showing the presence of the bacillus of tuberculosis when its discharges were examined microscopically. The patient had been chloroformed, and the sinuses were scraped and iodoform dressing applied, but little or no recovery took place till the end of five weeks, when quite accidentally the wound became infected with erysipelas. She became very ill, but finally recovered from the erysipelatous attack, and shortly after the tuberculous trouble disappeared entirely. Photographs were shown of the arm after the healing had taken place.

The following gentlemen were appointed as members of the Nominating Committee: Drs. Hingston, Shepherd, I. H. Cameron, O'Reilly, Christie, McLaren, Tobin, Dienstadt, Macleod, and Johnson.

Dr. Harrison delivered his presidential address, taking as his subject his observations and experience in medicine during the past fifty years. He compared the diseases in existence then with those we have now. Since the clearing up of the country in his Province of Ontario, the miasmatic diseases had become things of the past. He referred to the horrible concoctions of domestic medicine, such as an infusion of sheep excrement for measles, and that of cats, which, he said, might not be considered a bad substitute for asafetida, was the "sovereignest" thing in fits. The old veteran referred to many practical points in his practice. He pointed out the danger man was in of becoming egotistical or of getting into a rut when he was so far removed from other medical men. The corrective of this he considered to be the attendance of medical associations. A considerable portion of the address was taken up in discussion of the question of inter-provincial registration. Every practitioner in Canada, he considered, should have the right of practising in any part of the Dominion, without having to submit to an examination. He believed in a high standard both as to matriculation and graduation.

The president was accorded a hearty vote of thanks for his address, and a committee was appointed to consider the matter of reciprocity discussed in his address.

The subject of appendicitis was discussed by Dr. Bell, of Montreal. He reported forty-eight cases; forty of them operated on with recovery, five not operated on, and only three deaths altogether. He classified his cases into the gangrenous, the perforative, the non-perforative, and those bound in with adhesions. These cases should be watched, he maintained, by a surgeon from the first, as little could be done for its relief medically. He advocated surgical interference in nearly all cases.

Dr. Hingston thought the operation was performed unnecessarily. No young man should attempt to enter the abdominal cavity without first

consulting one or two others. He had prevented the operation twenty-five or thirty times, and only regretted this step in one case. He was strongly in favor of conservatism.

Dr. Grant, of Ottawa, spoke of two cases he had had which appeared to be fit ones for operation, but one was in a gouty subject, the other in a rheumatic. He did not operate, and they recovered. It was very difficult to know what to do in these cases. He did not believe it was due to the presence of foreign bodies in the organ.

Dr. Shepherd pointed out that the surgeons got the worst cases, so it was difficult to say just what the number of cases was which were operated upon as compared with those that were wholly treated medically. His idea was to operate after the acute attack had subsided, in the interval. He attributed the tender point of McBurney, not to the appendix, but to the inflamed condition of the mesenteric glands; for the appendix might be found on the right side, in the pelvis, or up under the liver.

Dr. Strange was in favor of non-interference until there was the presence of a tumor and pus. He had refrained from operating during the acute stage, and had not regretted it.

Dr. Cameron, of Toronto, said he followed Mr. Treves in this matter; to wait until the pus formed, open and drain. He considered it unfortunate that the experience of a hospital surgeon of skill should determine the matter one way or the other. In a possible forty-eight cases he had had in which he had followed out the above treatment, he had had, probably, Dr. Bell's figures reversed. The interval he believed to be the time to operate.

In replying to discussion on his paper, Dr. Bell said that it was conceded by all the speakers that no man knew when to operate. Out of the forty cases he had operated on thirty were perforated, and there was abscess at the time of operation. In three the appendix was wholly gangrenous; in two the appendix was bound down by inflammatory adhesions; in other three the appendix was not perforated, but gave rise to symptoms indicating very severe appendicitis, yet there was no abscess found. He used to follow the waiting treatment, and his losses were far greater than now. The greatest mortality statistics for these operations amounted to from two to three per cent. If the patients were left, perforation and collapse might follow at any moment. The very mild, or, rather, short cases, where all the typical symptoms were present and passed away in twelve hours, need not be interfered with; they were probably cases of cæcitis. He thought the method followed by Treves not according to the true principles of surgery.

"Eye-strain Headaches" was the subject of a paper read by Dr. Morrison, of St. John, N.B. He gave an extensive list of cases where

the true cause had not been found; as a result the varied forms of treatment gave unsatisfactory results, only in so far as they gave rest, unconsciously, to the eyes, and supported the general bodily health. A schoolboy had Wednesday headaches. Resting Saturday and Sunday from study, the eyes stood the strain till Wednesday, when he was obliged to lie off. Suitable glasses, directed to the correction of the astigmatism and hypermetropia, effected a cure. Often the patient was treated for a long time for some other disorder altogether. The eye should, in the headache cases, be taken into consideration; for he affirmed that ninety per cent. of all cases were due to eye-strain. Treatment must be directed to a correction of the mechanical defects in the cornea; to strengthen the delicate muscle of accommodation by tonics and massage; and, for young ladies, he recommended gymnastic exercises.

The subject of diseases of the ovaries and tubes was gone into by Dr. Smith, of Montreal. In gonorrhœal salpingitis, the clinical history of which he went into, the only safe treatment was extirpation; this was also the course to pursue in the tubercular form if the general constitution were not too much infected with the poison. He advised medicinal treatment for the functional disorders of the appendages. The paper was illustrated by a number of interesting cases, and the presentation of tubes and ovaries that he had removed.

THURSDAY MORNING.

The Nominating Committee brought in the following report: President, Dr. Bayard; General Secretary, F. N. G. Starr, M.B., Toronto; Treasurer, Dr. Small, Ottawa; Vice-Presidents: Drs. Shaw, of Hamilton, Ont.; Armstrong, Montreal, Que.; McLaren, New Brunswick; McKean, Nova Scotia; Blanchard, Manitoba; Haultain, Northwest Territories; Maclaren, Prince Edward Island; Edwards, British Columbia; Provincial Secretaries for the above provinces, named in order: Drs. Fenwick, of Kingston; Campbell, of Montreal; McNally, Hattie, N.S.; Nelson, Manitoba; Macdonald, Northwest Territories; McNeil, Prince Edward Island; Richardson, British Columbia.

Dr. Kirkpatrick, of Halifax, took up the subject of nasal cauterization, in which he uttered a warning note against entering the nasal cavity with strong caustic without discrimination and care. He had seen entire destruction of the membrane and other serious consequences follow the abuse of these remedies, which were of so much value if properly used.

Dr. Bayard delivered the address in medicine, taking for his subject the influence of the mind on the body. The paper outlined the anatomy and physiology of the nervous system, specially referring to the nerve route of pain. Instances were given where emotions of various sorts caused contraction or dilatation of the terminal arteries, with hyperæmia

and secretion in glands, or anæmia and checked secretion. The various nervous diseases were referred to, their causation discussed, and their prevention recommended through a reformation in our educational and social systems.

As an outcome of one of the points referred to in the address, at the suggestion of Dr. Hingston, Dr. Bayard moved, seconded by Dr. Hingston, that the system of education generally pursued in the Dominion of Canada draws too largely upon the brain tissue of children, and materially injures the mental and bodily health. Drs. Cameron, of Toronto, and Powell, of Ottawa, thought the terms of the resolution were too sweeping; that there was no specific statement as to what department of the school system was at fault, nor to what portion of the Dominion it more especially applied. Our young people, Dr. Cameron thought, were not suffering, nor the older people either, from too much education. The educational system had been the subject of the best thought of our best men, and he considered the motion too condemnatory. A resolution was then passed that the matter be referred to a committee consisting of Drs. Powell, Hingston, Graham, and Bayard.

The committee appointed to report on the president's address reported on the matter of inter-provincial registration. It was adopted. Dr. Daniel moved, seconded by Dr. Powell, that a committee be appointed in which each of the provinces shall be represented to draw up a form of medical act, which, after being adopted by this association, shall be presented to each provincial legislature, to be by them passed into law; and that the committee that brought in the report be asked to name such committee.

Dr. Buller moved, seconded by Dr. Laphthorn Smith, that a committee be appointed, with power to add to their number, to consider the best means of obtaining a uniform standard of medical education for the Dominion of Canada, and that said committee report at the next meeting of the association. This carried.

The discussion over the above question was long and animated, and taken part in by several of the men from the different provinces represented at the association.

"Some Functional Derangements of the Liver" was the subject of a paper by Dr. J. E. Graham, of Toronto. He reviewed the history of the physiology and pathology of the liver, and showed there were other and no less important functions of the organ beside its biliary function. He then outlined the complete work that the liver performs in the human economy. Its importance as a blood-elaborating and fat-forming organ in the foetus must be great when it was equal in weight to all the rest of the body at the end of the first month, in the proportion of one-third at the end of the third, and one-sixteenth at the end of the fifth. The doctor then dis-

cussed the question of "hepatic inadequacy," a condition induced by the action of certain poisons upon the hepatic cells. The hepatic cells stored up the glycogen till needed by the economy, and when this function was impaired various clinical phenomena were observable. Their work as manufacturers of urea was also disturbed. As to treatment, the exact cause of the "biliousness" or kindred trouble should be found out in order to treat successfully. The diet should be most carefully attended to; starchy foods should be interdicted. Milk, on account of its easy assimilation and diuretic action, was valuable. To assist the circulation certain forms of exercise were recommended. Massage over the region of the gall bladder was helpful, promoting the egress of bile from it, and free purgation was very essential. The drugs, calomel, euonymus, podophyllum, and others, were then discussed. Where the manufacture of urea was incomplete, treatment directed to increase of metabolism was recommended, massage, bathing, drinking of mineral waters. The great point to aim at was to secure the integrity of the hepatic cells.

Dr. Graham discussed the question of treatment in a full and scientific manner.

Dr. Hingston, of Montreal, reported four cases of brain operation, two of which were for epilepsy. A third was for the relief of a young man who had received a skull injury some twenty years before, which had resulted in paralysis of certain muscles of the arm, and spasm of certain of the muscles of the face. Operation afforded almost complete relief. The doctor showed the kind of trephine he used, being one of two inches in diameter. He pointed out its advantages over the smaller ones.

Dr. F. J. Shepherd, of Montreal, reported a case of "Interscapular Thoracic Amputation," the first, he believed, that had been performed in Canada. It was in a stout woman for a chondro-sarcoma surrounding the shoulder joint, which was causing serious pressure symptoms and inability to use the arm. The doctor described the technique of the operation. The principal point of difficulty was in reaching the sub-clavian. He left the scapula intact. He also reported the removal of a large enchondroma of the pelvis, which appeared as a continuous growth with the ilium. He (the patient) had been refused operation in New York and Philadelphia. Upon dissection it was found to be subgluteal, and only having two attachments. Its removal was comparatively easy. The reader of the paper presented photographs of the cases. He also reported the removal of a cirrroid aneurism which gave him a great deal of trouble in trying to check the bleeding.

Dr. Buller read a paper on "The Present Status of Asthenopia."

"The Prevention of Tuberculosis" was the subject of a practical

paper by Dr. Inches, of St. John, N.B.. He cited numerous cases to go to prove the infectiousness of tuberculosis, and said that, while it was not infectious just in the same way that smallpox and typhoid fever are, yet he believed it was time that steps were taken towards preventing its further alarming spread. This reformation could not be effected in a day, but the matter could be agitated, and it was the duty of the medical man not only to keep himself posted on the subject, but to be prepared to advise his patients of this class, and their friends as to the best plan of looking after the trouble. Some thought that notification, registration, and isolation should be taken in all cases. This was, perhaps, at present impracticable; but there might be a rule made that all cases should be reported in which preventive measures were not carried out when advised and instructed by the physician.

“Some Practical Points in Treatment of Diseases of the Skin” was the subject of a paper by Dr. Bulkley, of New York. He emphasized the necessity of the most careful examination and note-taking in these cases at every visit of the patient, and the necessity also of continued patient treatment. In eczema, he said to be careful about the use of new remedies. He was much amused at the indiscriminate use of arsenic. He recommended the use of alkalis to combat the acid state of the blood found in eczema. Acetate of potash was what he used. Externally, the custom was to use the irritating ointments. One of his favorite prescriptions was :

Ac. carbol.....	ʒss.
Calamine preparata.....	ʒi.
Zinci ox.....	ʒii.
Glycerine.....	ʒiii.
Aq. calcis.....	ʒiv.
Aq. rosæ.....	ʒiii.

But he had found that the correction of some fault in diet or habit of the patient, and the administration of hygienic and tonic treatment, of the greater importance. The doctor also went into the subject of acne and other common trouble, and gave the members present some very valuable points.

Dr. Laphthorn Smith gave a very interesting exhibition of the use of the galvano-cautery, in which the street lighting current is used. He showed how simple it was, and how far superior it was to the old battery arrangement. The cost was trifling.

THURSDAY EVENING.

The report of the committee appointed at the last association to consider the matter of the establishment of a pharmacopœia was received and

adopted. On motion of Dr. Starr, seconded by Dr. Macdonald, it was moved that the same committee be requested to correspond with the different medical and pharmaceutical associations with regard to the advisability of publishing a pharmacopœia, taking the British Pharmacopœia as a standard. Carried.

“The Prevention of Consumption” was the subject of a paper by J. F. Macdonald, Nova Scotia. He advocated the bringing the matter of the contagiousness of this disease before the people by means of the secular press, by the establishment of philanthropic societies for the discussion of the matter, and the adoption of practical measures for the treatment of the cases. He advised the system of registration, a careful system of disinfection, government inspection of infected places, the establishment of sanitarium, and the enactment of laws to prevent the infected from spreading the infection.

Dr. H. D. Hamilton read a paper on “The Adhesions of the Soft Palate and Their Treatment.”

Dr. K. N. Fenwick then read a paper on “Hysteropexy.” It was discussed by Dr. Cameron, of Toronto, and Dr. L. Smith, of Montreal.

Dr. J. T. Steeves, of St. John Lunatic Hospital, read a paper entitled “A Medico-Legal Romance.” It was discussed by Drs. Muir, Macdonald, Morrison, Christie, Hattie, and Travers.

The association then adjourned to meet next year at Kingston, Ontario.

WEST TORONTO TERRITORIAL DIVISION MEDICAL ASSOCIATION.

A largely attended meeting of the above association was held in Broadway Hall on Thursday, September 6th, with Dr. Johnson in the chair.

After the meeting had been called to order, and the minutes of the last meeting held in April read, Dr. Johnson stated that on account of a visit he was about to make to the Pacific coast he would not again be a candidate in the approaching council elections.

With Dr. A. Macdonald, the first vice-president, in the chair, the following resolution was carried unanimously: Moved by Dr. McPhedran, seconded by Dr. Cotton, That in view of the retirement of Dr. Johnson from the Medical Council, the thanks of this association be tendered him for his services during the past five years as member of the council.

Dr. Johnson thanked the members for this resolution and assumed the chair.

The following resolution was then carried unanimously: Moved by Dr. N. A. Powell, seconded by Dr. Spence, That in view of the retirement

of Dr. A. J. Johnson from the contest for the representation of this division in the Medical Council, the West Toronto Territorial Division, and the members here assembled, most cordially endorse the candidature of Dr. H. T. Machell, and hereby express the hope that he may be returned without opposition.

After a discussion upon the subject of lodge and contract practice, and prescribing by druggists, the association adjourned to meet on Saturday, the 13th October, next.

As a result of the discussion on prescribing by druggists, the following committee was appointed to consider counter prescribing and repetition of prescriptions by druggists, and report at the next meeting: Drs. Powell, Machell, Hunter, Macdonald, Fotheringham, and Young.

GEO. H. CARVETH, Secretary.

Correspondence.

FRACTURE OF THE SPINE.

To the Editor of THE CANADIAN PRACTITIONER :

DEAR SIR,—Following Dr. Welford's interesting paper on "Fracture-Dislocations of the Spinal Vertebræ," published in your last issue, I submit the report of a case which came under my observation three years ago.

S.K., æt. 35, carpenter, fell from a scaffold some thirty feet, striking upon his head and shoulder, and rendering him unconscious. Saw patient three hours after accident. Consciousness had returned. He expressed himself as feeling comfortable, with the exception of slight pain at the back of the neck. Pulse full, regular, without variation; breathing wholly diaphragmatic; motor paralysis complete from level of sixth cervical vertebræ; sensation normal to about seventh cervical, impaired for a few inches, and totally lost at level of second dorsal. Upon extension of spine with gentle rotation, crepitus was distinctly manifest, but no improvement of paralysis could be detected. Operative procedure was then suggested, as affording the only possible hope of relief.

A post-median incision showed the spine of the third cervical depressed and to the left of the median line, with fracture of the pedicle. The opposite lamina was then divided and the piece removed, revealing collapsed dura and complete laceration of the cord. No dislocation of the bodies of the vertebræ could be detected, nor any additional fracture. The closure and dressing of the wound completed our duty towards the patient, who expressed himself as being grateful for the exact prognosis which the operation enabled us to give. Death ensued in nine hours.

With the resources of modern surgery at our command, it appears that our duty is clearly indicated by the tone of the article previously referred to, and I cannot do better than repeat Dr. Welford's words: "Exploratory incisions in abdominal operations are to-day countenanced. . . . The operation could relieve any compression by removal of the posterior arches, and if laceration were present we would not be in any worse condition than before, with a great deal of doubt as to the prognosis removed."

Victoria, B.C.

ERNEST HALL.

LODGE PRACTICE.

To the Editor of THE CANADIAN PRACTITIONER :

DEAR SIR,—Although the “lodge” question has already received a considerable share of adverse criticism, at the risk of being tiresome, I desire to add a few more words in defence of a practice which, in itself, I have not yet found inconsistent with professional honor or dignity.

I believe it is the right of every citizen—physician included—to arrange his business engagements, to make and fulfil contracts, whether profitable or otherwise, without the necessity of consulting his business opponents, or of explaining his motives; and I further believe it is the province of jealousy, and of jealousy alone, to question either the one or the other.

So long as contracting parties confine themselves strictly within the limits of their obligations, which are of mutual interests alone, no third party can have any moral right to interfere, especially if that interference be prompted by interests of a mercenary nature. But interference with the lodge contract on the ground that “they (lodge physicians) lessen the incomes of the members of the profession” is a scandalous confession of selfishness, unsuspected in the majority of our medical confrères. The above quotation, however true it may be in practice, will probably afford a startling theme for the reflection of the general reader; but as a premiss in the contention against lodge practice, it is neither flattering nor over-creditable to the author whom I quote from the June PRACTITIONER.

My own contention is entirely for the principle embodied in the right to engage in business, whether under contract direct or implied, without the necessity of concurrence by a trades union, or a professional corporation, which is of itself a limitation of the rights of the individual, and any insinuation that I am engaged in the defence of unworthy conduct is as gratuitous as it is wide of the question involved. The multiplication of cases in point either real or fancied, when applied to lodge practice, has no greater weight against the principle than the same cases would have against the fundamental principles underlying the practice of medicine in general, and it is absurd to single out the “lodge” contract as if it were distinct from other contracts. Moreover, it is begging the whole question to assume that the “lodge” system constitutes a special field of practice outside the limits and uncontrolled by the ethics of general medicine.

For more than a year it has been the habit of certain peevish writers to assail lodge practice as “pernicious,” “unprofessional,” and the like, on the sole ground that this particular system, when put to the test of a trial, has proved to be a financial failure, antagonistic to the general profession, and open to the grossest abuses. Because the “lodge” has become the

synonym for disagreement, through the "pernicious practices" of certain reckless practitioners of medicine, it does not follow that the contract system is responsible for the trouble, nor that all other lodge physicians should be held equally guilty of unprofessional conduct. It would be quite as logical to assume that all medical men are felons because some members of the fraternity have been inmates of the penitentiary; equally so to say that because the statutes are daily transgressed, therefore our social system is at fault and every citizen a malefactor.

Failure! Antagonism! Abuses! are objections which apply to the whole field of medicine, but no one will probably be rash enough because of these conditions to desire the summary suspension of all medical practice. Ought not the lodge physician himself, who is chiefly concerned, to be considered the best judge of his financial success or failure? And may not uninvited enquiry into his private affairs, instead of convincing him of a determination to save him from pecuniary loss, be rather accepted by him as evidence of that selfish interest which in other spheres is justly set down to impudence?

That lodge practice is antagonistic to the general profession is indisputable on the same grounds that every physician is a business antagonist to his neighboring physician, but no amount of business antagonism justifies one in abusing the other, or ascribing to him unworthy motives for his conduct. That such unhappy conditions do, however, obtain is scarcely the fault of our medical system, but it is rather to be set down to a faulty breeding of some members of the profession, for which we cannot generously hold them personally responsible. Nor is business opposition alone responsible for all the abuses of lodge practice, for if, as "M.A., M.D.," has intimated, two or more medical men cannot meet in the same house without unseemly wrangling, there is certainly something more seriously involved than the system of medicine practised.

But the practice of medical science, however profound, cannot be satisfactorily conducted in direct opposition to the acknowledged rules of common politeness. And because some physicians unfortunately lack the instincts of gentlemen, it does not logically follow that their system of medicine is at fault, much less their medical confrères. Disregard by lodge physicians for the ethics of general practice, as applied to lodge work, ought rather to bring discredit upon themselves than upon a profession which, from defects of culture, they are not qualified to adorn.

The extreme, though possible, case drawn by "M.A., M.D.," is not a flattering commentary on the professional qualifications of medical men under his own observation, but it cannot prejudice lodge more than general practice, because no physician can become a lodge physician until he has first become a registered general practitioner. Strictures, therefore,

which apply to lodge practice apply equally to general practice, and any corrections which hope to reach the abuses of the lodge must necessarily be applied to the broader code of general medicine. Every physician being responsible to the College of Medicine for his professional conduct, gross irregularities of practice may be dealt with under the provisions of The Ontario Medical Act, and I believe any attempt to shift the onus of such irregularities upon inoffensive members of the profession ought in itself to be considered an infringement of professional rights as greatly to be denounced as any other abuse of professional privilege. Therefore I submit to all reasonable men that it would better accord with our ideas of medical ethics to hold individual members of the profession responsible for the abuses of their practice than it would by sweeping generalizations to maliciously stigmatize unoffending persons. From my own experience, I am unable to agree with Dr. Bibby that the lodge system is, in principle at least, a "modern outrage" or a "silly institution." That is wholly a matter of opinion, and of no concern to me or to the point for which I contend, though I half suspect the real outrage to consist in the doctor's reckless disregard for those professional amenities which are the acknowledged due to every physician, though he differ from us both in theory and practice.

I have neither the time nor the inclination to defend the extreme instances of "M.A., M.D.'s" imaginary creation. Every man professing the dignity of a name would be willing to assume responsibility for his own "dirty mess"; and though even that nameless gentleman may be congratulated on the elegance of his higher literary training, the cowardice of his concealment under a professional *nom de plume* is not less to be condemned than is that practice the defence of which he so much deploras.

A. C. BOWERMAN, M.B.

Picton, Ont., Aug. 27th, 1894.

Book Reviews.

INTERNATIONAL CLINICS. A quarterly of clinical lectures on Medicine, Surgery, Gynæcology, Ophthalmology, etc. Edited by J. M. Keating, Colorado; Judson Daland, Philadelphia; J. Mitchell Bruce, London; and David W. Finlay, Aberdeen. Vol. III, Third series, 1893. J. B. Lippincott Co.

This volume contains about fifty clinics on various subjects, by professors and lecturers in the leading medical colleges of the States, Great Britain, and Canada. The illustrations are good, and the general clinics quite up to the average.

The subject of myxœdema, taken up in the former volume, is renewed in this by A. T. Davies, London. He reviews the history of the disease, and discusses the various methods of administering thyroid glands of sheep as treatment. The thyroids have been found to give good results when cooked and given by the mouth, the quantity varying from one-fourth to one-half a gland every day.

J. F. Goodhart, London, believes the usual method of treatment for empyema might be changed with advantage. He thinks the incision should be made more with regard to the site of the greatest quantity of pus than to the most dependent part of it. The cavity may be irrigated at first if there are any lymph clots, but frequent and prolonged irrigations tend to retard recovery. Excision of the ribs should be rather the exception, and drainage tubes should not be very large, or left in for a very long period.

Chronic urethritis and its consequences is the subject of the clinic by Dr Tuffier, Paris. He cites cases in which salpingitis, metritis, sterility, or the enforced removal of diseased parts of the utero-ovarian apparatus has followed coitus with men the subjects of a chronic urethral discharge. In most cases gonococci can be demonstrated in the discharge, and these set up the inflammations which are so harmful. He has come to the conclusion that a man should not marry who is the subject of such a discharge.

Dr. F. P. Henry, Philadelphia, thinks gonorrhœal rheumatism might better be termed urethral arthritis, since it may arise from non-specific urethral irritation, and because it differs, in certain important respects, from articular rheumatism. It is mostly seen in the male sex, and is not amenable to ordinary anti-rheumatic treatment. Potassium iodide seems to be the only useful drug, and the rest of the treatment must be of a surgical nature, such as the use of splints and bandages, and paracentesis of the joint when necessary.

Cataract is very fully described by Dr. F. B. Tiffany, Kansas City. Several plates, many of them the full size of the page, are given, illustrating the parts of the eye concerned in the change, and showing the various forms and degrees of cataract. Descriptions of each plate are given, besides the general diagnosis, prognosis, symptoms, and treatment of the disease.

INTERNATIONAL CLINICS. A quarterly of clinical lectures on Medicine, Surgery, Gynæcology, Ophthalmology, etc. Edited by Judson Daland, Philadelphia; J. Mitchell Bruce, London; and David W. Finlay, Aberdeen. Volume IV., Third Series, 1894. J. B. Lippincott Company, Philadelphia.

This quarter's list numbers about forty clinics, taken from the clinics given in various hospitals and colleges in Canada, England, and the States by the attending professors. They are practical in all their details, and are well illustrated throughout.

Diabetes mellitus is the subject of three clinics. Dieting the patient seems to be the principal method of treatment adopted, especially in early cases, sugars and starches being cut off as completely as possible, and the patient living on meats, fresh vegetables, and milk. Levulose, a new preparation of sugar, manufactured by Schering & Glatz, Germany, has been used in many cases with good results. Solis-Cohen, of Philadelphia, and Saundby, of London, speak very highly of it, they having found it supply the place of sugar in the animal economy, without increasing the amount of sugar in the urine. Tyson, Philadelphia, recommends soya-bean and gluten flour as substitutes for ordinary flour, and all prescribe opium, generally as codeine, in the more acute cases.

F. B. Tiffany, Kansas city, finishes his clinics on cataract in this volume. He describes the steps usually followed in performing the two principal modes of operation, and his remarks are illustrated by several engravings of instruments and plans of operation.

Chronic laryngitis is taken up by G. Macdonald, London. He believes that more attention should be paid to the setting right of any troubles in the nasal passages first, since until that is done the laryngitis will probably be incurable, or will recur in a short time. He also thinks that instruction as to the proper use of the voice would lessen the strain on the inflamed parts, and so hasten recovery. He advises steam inhalations, with tinct. benzoin co., oil of cæbebs or eucalyptus, or the application by brush or spray of zinc chloride gr. xx.-xxx. to 1 oz. water. Ferri perchlor. 2 drs. to 1 oz., or argenti nitrates gr. xx.-xxx. to 1 oz., or insufflations gr. ss. of freshly-ground matico leaves, catechu powder, or alum. Cold compresses, or hot ones, when less irritating to the throat, are mentioned as useful adjuncts to the above remedies.

Medical Items.

DR. W. O. STEWART has been appointed physician to the Ontario Agricultural College, Guelph.

DRS. W. BRITTON, John L. Davidson, A. McPhedran, and John Caven returned from Europe to Toronto early in September.

DR. CHAS. E. COCHRANE, of Omemeë, has removed to Vancouver, B.C., where he has formed a partnership with Dr. Metherell.

DR. H. A. BRUCE (Tor., '92) has returned to Toronto, after spending a year as surgeon on the C.P.R. steamer, Empress of India.

AT the recent annual meeting of the College of Physicians and Surgeons, Dr. Jones, of Winnipeg, was elected president, and Dr. Gray, of the same city, secretary.

DR. L. MACKECHNIE (Tor., '92), who has been practising in Victoria, B.C., has recently gone to Philadelphia, where he will take a six months' post-graduate course.

DR. HERBERT JAMES HAMILTON (Tor., '86) has recently returned from Europe, where he spent two years at post-graduate work in England and on the continent.

DR. S. G. PARKER, 234 Carlton street, Toronto, who had been taking a holiday in Great Britain, was married in Edinburgh, August 20th, and has returned with his bride to Toronto, and will reside at 539 Sherbourne street.

A STATUE to Claude Bernard will be unveiled at Lyons on October 26th. The French Academy has appointed MM. J. Bertrand and Brunetière to represent it on the occasion. The Académie des Sciences will be represented by MM. Chauveau and Bouchard. As the first French Congress of Internal Medicine will be in session in Lyons at the time, it is expected that the ceremony will be exceptionally brilliant.

THE SEMMELWEISS INTERNATIONAL MEMORIAL.—On September 2nd, prior to the session of the International Congress of Hygiene at Buda-Pesth, in the afternoon, Professor Huppe, of Prague University, delivered an oration on Semmelweiss at the Academy of Sciences, after which carriages in waiting conveyed the guests to the site of the memorial, and Professor Kezmarszky, the Chairman of the Committee, unveiled the statue. Dr. Duka was

requested, in the absence of Sir Spencer Wells, to place a laurel wreath upon the statue, and to deliver an address in English.

FOSSIL MICROBES.—In a recent communication to the Académie des Sciences, M.M. Reynault and Bertrand stated that, in examining sections of coprolites of the Permian period, they noted the presence of a considerable quantity of microbes of different kinds—isolated rodlets and diplo-bacilli, strepto-bacilli, vibrios, and filaments. There were also mucedinea, with mycelium and detached spores. The Permian bacterium is said not to resemble any of the forms known to exist at present. M.M. Reynault and Bertrand throw out the suggestion that possibly these may be only one species of bacterium which is polymorphic.

ANTIVACCINATION FALSEHOODS.—We have received a circular letter of invitation, which is being widely distributed, to a demonstration to be held “under the auspices of the . . . London Society for the Abolition of Compulsory Vaccination,” at Mile End, on September 4th. The following data are given as regards Leicester in respect of the smallpox outbreak of 1892-93 :

Per Million Living.			
The death rate from smallpox of the	revaccinated	was	270
“	“	“	vaccinated 159
“	“	“	non-vaccinated 109 only.

These data are absolutely and scandalously false and misleading. There were no deaths in the period stated among “revaccinated” persons. We fail to see, therefore, how there can be alleged a death rate at all, much less 270 deaths per million in “revaccinated” individuals. The deaths among the “non-vaccinated” to give the above rate have been taken *on the whole population over 10 years of age*, and those on the “vaccinated” on the *population under 10 years of age*. The results are perfectly absurd, and once more wilfully misleading. In regard to the further fabricated falsehoods as to Leicester, as a matter of fact the death rates per million of the three classes, on the total estimated population of Leicester in 1893, were as follows :

Revaccinated	0.0 per million.
Vaccinated	5.4 “ “
Non-vaccinated	102.7 “ “

The circular goes on to show that the infantile death rate in Mile End in 1893 was below that of London as a whole. What has that to do with the matter at issue? What of Portland Town, Lisson Grove, and Mr. Wynter Blyth’s demonstrations of the need and value of vaccination?—*British Medical Journal*.

NON NOCERE—HARM NOT.—Professor A. Jacobi delivered an address having the suggestive title of “Non Nocere.” There was a neglect in the study of special branches at the expense of progress in general medicine. Many of the so-called specialists were untrained men, and others calling themselves scientific men were given to accepting and even advocating proprietary medicines and food nostrums, encouraging fads of sensational treatment of tuberculosis, cholera, and senility. Harm was also done by rash surgical and gynecological interference, while overdosing was just as bad, as well as the

so-called expectant treatment. The latter was often a convenient cover for incompetency and ignorance. Harm was often done by neglecting intubation and tracheotomy at critical junctures. Diseases like pertussis, which could be shortened, must be treated to prevent complications; eruptive diseases be watched and treated to avoid mental disturbance or collapse. Pneumonia may require venesection to save life. In convalescence strong stimulants and great care are needed, and so-called maximum doses were safeguards more for the physician than the patient. The over- and underfeeding of infants, the evil effects of excessive sugar in their foods, associated with acid catarrh, were discussed, and sterilized milk as the only food was characterized as highly objectionable. The neglect of asphyxia neonatorum led to cerebral disease and idiocy, and by want of care in a sepsis wound-infection in the newborn often occurred. The so-called chronic constipation in infants was due to extra length of the sigmoid flexure. Unless this was correctly treated, enteritis and auto-infection with fever followed. The difficulty corrected itself during the sixth or seventh year. Harm was done in diphtheria by forced applications to struggling children. He had collected thirty-three cases of craniotomy for idiocy and macrocephalus, and found that results were always negative. A skull in Sach's possession proved the existence of contraction rather than enlargement of cranium as the result of operation.—*Provincial Medical Journal*.

RESUSCITATION FROM ASPHYXIA.—While the drowning season is "on," it may be useful to familiarize one's self with Dr. Laborde's method of restoring the respiratory reflex. It is so simple—using an ordinary tongue forceps, such as is on hand during chloroform or ether inhalation, the tongue is well pulled forwards and regular rhythmical movements are given to it—that it is proposed to issue some plain directions that can be posted in every hospital and be in the hands of every midwife, or any one who may be liable to see asphyxia, such as those who give anæsthetics and those called to cases of drowning, etc. It has been tried a great deal in France in the last two years in all sorts of cases of asphyxia, by drowning, electric shock, lightning stroke, and in the cases of apparent death in the newly-born. Some sixty-three cases are given where patients were recalled to life by this method.