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THE
MONTREAL MEDICAL JOURNAL.

A Monthly Record of Medical and Surgical Science.

EDITED BY

GEORGE ROSS, A.M., M.D.,

Professor of Practice of Medicine, McGill University; Physician to the Montreal General Hospital.

T. G. RODDICK, M.D.,

Professor of Surgery, McGill University; Surgeon to the Montreal General Hospital, etc.

AND

JAMES STEWART, M.D.,

Professor of Clinical Medicine, McGill University.

VOL. XXI.



Montreal :

PRINTED & PUBLISHED BY THE GAZETTE PRINTING COMPANY

1893.

LIST OF CONTRIBUTORS TO VOL. XXI.

ADAMI, J. G., M.D.
ALLOWAY, T. J., M.D.
ARMSTRONG, GEO. E., M.D.

BALFOUR, J. G., M.D.
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MONTREAL MEDICAL JOURNAL.

VOL. XXI.

JULY, 1892.

No. 1.

Original Communications.

THE ADDRESS ON MEDICINE.*

BY JOHN L. BRAY, M.D., CHATHAM, ONT.

Mr. President and Gentlemen,—I stand before you to-day to deliver the address on medicine, and the only thing I regret is that some one more worthy and competent to perform the task assigned me had not been selected. However, I take it as one of the highest honors that could be conferred on any member of the Association to be asked to deliver this address before the profession of the Dominion in this its chief city, and can only attribute my being thus honored to the great kindness of your president, and to his limited knowledge of my capabilities, and must crave your indulgence for any shortcomings on my part in the performance of this duty. I will endeavor in a very plain manner to give you my views and experience on malaria, instead of going over the whole domain of medicine, which, if I were equal to the task, would only worry and bore you; and further, I feel that it will better serve the object and interests of this Association to give a few practical points for discussion in order to bring out the opinions of the members present to-day, as I consider we have too many papers and too little discussion in this and every other medical society. Most medical journals are full of papers which only represent the author's ideas, while a short practical paper, which I trust you will find this to be, elicits criticism and the flaws are pointed out

* Read before the Canadian Medical Association, at Montreal, September, 1891.

and condemned, while the good things (if any there be) are approved and endorsed by men of experience and ability.

Perhaps on no subject connected with medicine have more theories been advanced or divergence of opinion expressed than that of malaria, and I must confess that I know very little of its etiology after reading most of these theories, aided by an experience of nearly thirty years practice in a malarious district; but scientists and investigators of the present day are approaching more nearly the solution of this knotty question.

It is a generally recognised and acknowledged fact that three things are necessary for the production of malaria, viz. : heat, moisture and vegetable decomposition, and unless these three causes combine we can have no malaria.

Modern research has shown that vegetable decomposition of organic matter in the soil is due to the vital activity of living organisms, and we are indebted to such men as Laveran, Carter, Councilman, Sternberg, Osler and others for their original investigations and untiring efforts to solve this problem, and it is owing to them, particularly the former, that something like a conclusion has been arrived at, that micro-organisms in the blood, if not the cause of malaria, have an etiological relation to it, and are beyond doubt a diagnostic mark of its presence in the system.

Laveran's theory has come to be the one generally accepted by the profession, as communicated to the Paris Academy of Medicine in 1881 and 1882 and afterwards published in 1884. He found, as characteristic elements of the blood of persons attacked with malaria, first, crescentic pigmented bodies; second, pigmented bodies in the interior of the red corpuscles which underwent changes in form described as amoeboid; third, a pigmented flagellate organism.

The following brief summary of the important facts relating to these organisms I take from a monograph by Osler:—First, in acute forms of malaria there exists within certain of the red corpuscles amoeboid bodies, usually pigmented, which undergo a definite evolution, increasing in size, gradually filling the entire corpuscle, and which, prior to and during the chill, undergo a

remarkable segmentation. To this form the term "*plasmodium malarix*" has been given. There are also in some cases free pigmented bodies. Occasionally in acute forms flagellate bodies are seen free in the blood presenting from three to eight long actively moving cilia; according to Councilman, these are much more common in blood withdrawn from the spleen. Second, in more chronic cases, particularly in the forms of remittent fever which are so apt to be taken for typhoid, the corpuscles do not often present the intercellular forms, but these are remarkably ovoid rounded and crescentic bodies deeply pigmented. These are in all probability related to and developed from intercellular forms. From certain of these, particularly the ovoid and rounded forms, the flagellate bodies may be seen to develop.

We know these organisms are in the blood, but how they get there and from whence come they, is a question that to my mind is difficult of solution. Do they exist as an element of the blood and are only developed when persons are exposed to certain influences supposed to be of a malarial character? or are they, on the other hand, given off from the soil, the result of the decomposition of organic matter, and taken into the blood directly through the lungs? or are they taken into the stomach through the saliva or otherwise and thence to the intestines, where they undergo changes and enter the circulation through the lymphatics, there to develop as has been demonstrated in the red corpuscles?

I cannot but think that these malarial germs or organisms or whatever they are enter the system both by the lungs and stomach, or why do they produce as they often do diarrhoea and dysentery in place of the typical intermittent or remittent fevers. My idea is that when this occurs, the germs are carried directly into the stomach through the water we drink, or the saliva we swallow, and thus reach the intestines. In proof of which I quote Sternberg who says: "The human intestine has a microscopic fauna and flora almost equal to a city gutter, the mouth with its uniform temperature, free access of oxygen and constant supply of pabulum (the salivary secretion) is an admirable culture apparatus, hence therefore there is constantly going

on a struggle for existence among a number of minute parasites, most if not all of which are harmless, and the same may be said of the bacteria which habitually infest the human intestines." Then why should not other species whose normal habitat is external to the body in swamps or elsewhere, when introduced into the intestines as they often must be in large numbers, give rise to special kinds of fermentation, and to the production of special products which are not harmless.

Now, I am of the opinion that the malarial germ often takes this route, and this is why we have diarrhoea and dysentery that can only be cured by clearing out the intestines and giving quinine. Other remedies such as ipecac, opium, etc., have had no curative action in my hands in the endemics of dysentery, undoubtedly malarial, that we sometimes have in the western district late in the season after a hot and dry summer and the well water very low.

This is one very strong proof that these germs or organisms are carried to the intestines and there undergo changes which make them dangerous.

Again, on the other hand I think it clearly demonstrated that the germ which produces this plasmodium as found in the red corpuscles of the blood is taken directly into the lungs through the air we breathe, and enters the circulation, causing those typical cases of intermittent pneumonia, and aggravating and often producing periodical attacks of asthma.

Now, I am not going further into the consideration of the origin and development of these organisms, as if I did I would only be giving you the opinion of others, as I have not investigated this part of my subject to such an extent as would warrant me in inflicting my views on you, and your time can be much better employed by looking into the works of Laveran, Councilman and Osler, which are well worthy of perusal.

Before considering the different types of malaria I would ask, why do we have malaria in winter when the temperature is very low, if it depends on vegetable decomposition due to heat and moisture as no doubt it does. I have seen no theory advanced to account for this, and shall give you my own as expressed in

a short paper read before the Sanitary Convention in London in November, 1883. It is this, there are three great receptacles for the malarial poison, viz. : the earth, water and the human body that have a supply in store as it were laid up for the winter, which under favorable circumstances manifests itself in the shape of intermittent or other forms of malaria. The water in the wells is perhaps the greatest source of supply, particularly when the ground is frozen hard for a long time and the water gets low. The second reason is, the poison escapes from under houses and spots of ground protected from the frost, and the third source is that some persons living in a malarious district have a continual supply in the system, only waiting to be developed when it finds a good opportunity, such as exposure, sudden changes of temperature, over fatigue, loss of rest, mental strain or any thing else that will cause the system to run down, thus reducing and impairing the vital resistance of the nervous system; one very strong proof that these organisms are latent is that a man may have lived for fifteen or twenty years in a malarious section without ever having had ague or any other form of malaria, but let that man cross the Atlantic or go where malaria is unknown and he is liable to an attack of it. I have known many such instances, which to me is a very strong proof of the latency of this germ in the blood or some of the organs of the human body.

'Tis true the type of malaria is milder in winter, and for the reason that the sources of supply are limited in comparison to summer, and is principally confined to localities where it is endemic; in other words, there are not enough escapes for the winds to carry it to any distance in sufficient quantities to produce its pathological effects, if indeed it could survive the frosts it would have to encounter on its journey. This, then, is my theory as to why we have malaria in winter. It may be erroneous, but I think the investigations of Laveran and others as to the organisms found in the blood corpuscles give strength to this view, and, if this is correct, go to show that these organisms are not only a diagnostic mark but also a factor in the production of malaria. Another reason that convinces me that these are

stored up in the blood or organs is this: speaking from personal experience a sudden fall of temperature in hot weather invariably brings on in me symptoms of malaria, such as lassitude, stretching, yawning, aching of the muscles, particularly of the back, and neuralgia, which a few doses of quinine will relieve in a short time; the same thing occurs in cold weather on a sudden rise of temperature, and I can only account for this by having stored up somewhere in my system a supply of these, I was going to say, infernal germs or organisms. I speak feelingly, and I think with some weight, as I have been a sufferer in this way for over a quarter of a century.

Now, as to types of malaria, we have the quotidian, tertian, quartan and intermittent forms. Why these different types should occur is hard to explain, nor has it hitherto been satisfactorily accounted for, and is a field well worthy for further study by our pathologists.

By some it is claimed to be due to individual idiosyncracies, and they offer as proof of this that, a number of people exposed to the same malarial influences, we find one having quotidian, another tertian, and a third quartan ague, as is exemplified in individuals exposed to cold under identical circumstances, one will have pneumonia, another rheumatism and a third diarrhoea. There may be some truth in this theory, but I think that temperature as well as the intensity of the infection has more to do with the different types than has individual peculiarities.

My experience and investigations have led me to believe that early in the summer we have the tertian and quartan forms; when the heat is great and the emanations from the soil reach their maximum intensity we have quotidian, double quotidian and remittent; later, when the temperature is lower and decomposition has almost ceased, we go back to the quartan and tertian varieties, and still later, when the temperature gets much lower, we have dysentery, the reason for which I will presently endeavor to explain.

My conclusions are then that it is more to the temperature and date of intoxication that these different types are due than to individual idiosyncracies, in proof of which it is well known

and shown by statistics that in India and other tropical countries, persons that go there who have hitherto been free from malaria will have the quotidian or remittent type, while those who have lived there for years and have been exposed to and poisoned by malaria, will have relapses at longer intervals, and then only when subject to exposure or sudden change of temperature. This is, I think, important, and goes to prove that date of infection and temperature have much to do with the character and type of malarial attacks, and my own observations bear out this view. Thirty years ago almost the only form of malaria prevalent in the western district was of the quotidian and remittent variety, the latter being called bilious or bilious remittent fever, and the reason I assign for this is that the low country was almost constantly covered by water, undrained, and was being settled by emigrants who hitherto knew nothing of malaria, the land was being cleared and tilled, allowing the germs to escape for the first time, so that those people got the full effect of the poison liberated from the virgin soil, which had accumulated from the decayed and decaying organic matter, and as a consequence were attacked with regular old-fashioned shaking ague that made the dishes on the table and the tins on the walls clatter. So much was this the case that it was no uncommon occurrence to find whole families laid up at once, and at the same hours, leaving no one to give another a drink of water. All this is now changed, and we rarely if ever see a case of shaking ague, but have instead chill fever or dumb ague, intermittent neuralgia, diarrhoea, dysentery, malarial cough, lassitude, anæmia, heart murmurs, albumen and œdema simulating Bright's disease, hæmaturia, enlarged spleen, rheumatic pains and congestions of nearly all the organs, besides many other affections, obscure in their nature, but undoubtedly due to malarial organisms. Now, how is this change in the type of malaria to be accounted for? For nearly thirty years I have been a close observer of the changes that have taken place in the forms of malarial diseases that are endemic to this section, as well as of the climatic influences which affect the character of the poison, and to my mind there are three reasons.

for the change. The first and chief one is better drainage. The second is that the forests have been cut down and the country cleared up, lessening the amount of organic decomposition, and the third one is that nearly all the virgin soil has been cultivated over and over again, thus liberating and getting rid of nearly all the organic matter that had been accumulating and stored up under the sod.

I said I would try and explain why dysentery should be produced by malaria after vegetable decomposition had ceased, and will now endeavor to do so. My explanation is this: continued exposure to malaria engenders a cachectic state of the system by reducing the globular richness of the blood, perverting the nutritive processes of the tissues, and impairing the vital resistance of the nervous system, thus rendering its victims especially liable to attacks of specific febrile diseases, and to splenic, hepatic, intestinal and other local congestions. One of the structures most liable to be affected is the mucous lining of the intestinal canal. Taking, then, the perverted state of the blood and tissues, the congested condition of the intestines, together with the malarial germs infesting the canal, undergoing changes by fermentation and acting locally on the mucous lining as well as constitutionally through the blood, and we have made plain the reason why dysentery follows continued exposure to malarial influences, and why the mortality from this disease at such a time is far above what it would be if the malarial element had not existed. We hear and read of typho-malarial fever. Now I do not believe there is such a disease, and the name is a misnomer.

A person may have malarial organisms in the system and at the same time be attacked with enteric fever; as a consequence there may be and often is a chill followed by a greater rise in temperature and then a remission, but never an intermission; on examining the blood of such a patient the plasmodium will be found; by giving a few good doses of quinine the chill is arrested but the fever goes on and runs its regular course. Again, a person living in a malarious district having typhoid, when convalescing may be attacked with malaria owing to the per-

verted condition of the blood and impaired state of the nervous system due to the long illness, and after the enteric fever proper has run its course, but in neither of these cases can this be properly called typho-malarial fever. The bacillus of typhoid and the organisms of malaria are separate and distinct poisons and are not produced from the same causes, although they enter the body by the same channels, but it has yet to be proved that the germ that produces malaria will cause typhoid, or that the bacillus that attacks the mesenteric glands and Peyer's patches will induce malaria in any form, and I think the sooner we recognize this fact the better.

My observations have taught me that if we have a continued form of fever, withstanding quinine and mild laxatives, lasting over seven or ten days, we are safe in pronouncing it typhoid, and just here let me say that the examination of the blood corpuscles in this class of cases is one of the most valuable diagnostic marks we possess. At the same time this alone cannot be relied on, particularly where malaria is endemic, for I have seen numbers of cases undoubtedly typhoid where in the early stage the characteristic plasmodium was found in the blood, but after giving quinine for a few days they disappeared, but the fever continued and proved to be enteric, and I would impress strongly on the profession the necessity of caution in giving a diagnosis in these cases. It is much better for the physician to say I cannot tell for a few days what course this fever will take, than to give a snap diagnosis and say that this is typhoid, when in the course of a week the patient will be well and at work, or on the other hand say, Oh! this is only a case of malaria when it turns out to be typhoid. In this case he will try to square himself with the friends by saying it was malaria but has run into typhoid, or in the former instance take to himself great credit for cutting short and curing a case of typhoid in a week. I have met with examples of both cases more than once.

One more point and I have done; it is this, malaria I am convinced is not confined to certain localities as it was twenty or thirty years ago, but it is spread over nearly all parts of the Dominion and is much more general than is usually supposed,

and this is a very important point that must not be overlooked. Why, you may ask, is this the case when you have already proved or tried to prove that in the home of malaria, by drainage and other means before mentioned, malarial diseases have greatly decreased. My answer is this, the very means (or some of them) taken for lessening the supply at the fountain-head has, while accomplishing this object to a certain extent, caused it to be carried by wind, water and rail to the homes of thousands who before were strangers to this disease.

The country having been cleared of its forests (themselves great consumers of these emanations), allows the winds to have free sweep, wafting the germs miles and miles from their original lair. The water in the new made drains carries the poison to streams and rivers to be used in many a household. The railways, conveying as they do thousands of passengers long distances from the source of malaria, many of whom have these organisms latent in the body, which are only developed on reaching their destination owing to climatic changes or other causes, are great distributors of this disease, introducing it in this way to localities where perhaps hitherto it had been entirely unknown; and while the types of malaria are not so well marked as was the case when confined to certain districts, (the poison being less concentrated), it only makes its diagnosis more difficult and often accounts for the seeming obscurity of many affections that puzzle and perplex the busy practitioner.

POINTS OF CLINICAL INTEREST IN PULMONARY TUBERCULOSIS.

By J. D. THORBURN, M.B., L.R.C.P., L.R.C.S., EDIN.

Late Medical Superintendent of Manchester Hospital for Consumption and Diseases of the Throat, etc.

Mr. Chairman and Gentlemen,—My recent connection with the Manchester Chest Hospital has afforded me ample opportunities of making observations on cases of chest disease, and I trust this may be sufficient excuse for venturing to bring before your consideration the following clinical notes:—

In his work on the causes and prevention of phthisis ("The Milroy Lectures," page 3), Dr. A. Ransome writes as follows: "Dr. C. T. Williams gives as the result observed in private practice that a cure was effected in 4.6 per cent. of the cases; great improvement in 38 per cent.; the disease was stationary in 13.4 per cent., but in 43.5 per cent. there was more or less increase."

Dr. T. Harris, of Manchester, has found that at least in 39 per cent. of the autopsies at the Manchester Royal Infirmary there was evidence of cured phthisis. Consumption is curable, and that it is to a great extent preventable, is clearly shown by the mortuary statistics of the various armies and navies, as well as those derived from other sources.

In making a physical examination of a diseased chest we must not be surprised at the vagaries indulged in by the adventitious sounds, such as being one time present, and then absent. Inasmuch as the majority of these sounds are of bronchitic origin, the explanation is easy why crepitations over one or both of the apices heard at the beginning of the examination disappear after a few deep inspirations; or in other cases are only audible upon coughing or deep inspiration. Then again, the comparatively frequent absence of all abnormal physical sounds in a lung which was, or is, at the time of examination the seat of a hæmorrhage. A well developed patient of ruddy countenance is apt to be doubted if he informs you he has had hæmoptysis a few days previous, when upon examining

the patient's chest no abnormal physical signs are discovered. In referring to hæmoptysis I wish to draw your attention to a hitherto, so far as I am aware, undescribed sound, which is frequently present within a few minutes after cessation of bleeding. Placing the ear near the apex beat of the heart, within an inch or so of the chest wall, a sound is distinctly audible, not sharp, but dull and booming in character, a sound very similar to that heard when a submerged bottle is filling. This sound is not synchronous with either the heart's beat or with that of the respiratory murmur. It begins about five minutes after the hæmorrhage, disappearing again after a short time; occurring from ten to fifty times within the minute, and is limited to the præcordial space. Probably the reason of this sign having been heretofore overlooked is, no doubt, owing to the reluctance with which a physician makes an examination of a patient's chest during a hæmorrhagic attack.

Among other anomalies of abnormal physical signs may be mentioned the change in locality and intensity of sounds, influenced by various causes, such as change of bodily posture, etc., and again the ease with which an impaired resonance can be detected when the patient is lying down, whereas, while standing, no difference of sound is apparent, both apices seemingly giving the same note. At rare intervals is found a tympanic note over an area of consolidation. The right explanation of this is that there is an island of healthy lung tissue embedded in a zone of consolidation.

Cavities must of necessity precede their physical signs. No more valuable assistance is afforded in clearing up a difficult diagnosis in a case of suspected phthisis than the height of the suspected lung. Given an instance, a pale, anæmic, poorly nourished girl presents herself with a history for some time past of having had a slight cough, anæmia and a feeling of general weakness. Upon examination, exaggerated breathing is heard, in right handed people, over the right apex, and in left handed people over the left apex. The breathing is jerky in both, and the absence of sputum removes another factor in the diagnosis. Now, are these conditions owing to organic changes in the lung,

or merely manifestations of general debility? If the apices are carefully marked out (the lightest percussion being used) and indicated on the chest wall by some coloring fluid, if the levels are equal, then it is strong presumptive evidence that we are dealing with a functional condition rather than an organic change. It is also of great value in assisting our diagnosis in those obscure laryngeal cases in which there is a well marked stenosis or ulceration either of tubercular or syphilitic origin. Auscultation of the chest is always very unsatisfactory in these patients since the laryngeal stenosis so modifies the pulmonary breathing that we are at times unable to detect any breath sounds at all. Here, again, the position of the suspected apex is our sheet anchor. Sometimes, however, this physical sign is of uncertain value; for instance, where there is an emphysematous condition around a solid apex. Secondly, where a diseased condition exists in both lungs; and, thirdly, in those cases where the disease begins in the base of the lung.

BODILY WEIGHT.

There are several points of interest to be noticed in connection with the bodily weight of phthisical patients. So far as possible, every patient under treatment should be weighed once a week, but special care must be exercised in selecting the same hour of the day. The reason for doing so is that I have noticed in a large number of hospital patients, and in a few private ones, that almost invariably the evening body weight of a patient exceeded that of the morning from one-half to three, and in one case as much as three and one half pounds. This cannot be explained by the quantity of food consumed, for the hospital patients partook of as much during the night as the day, and the quantity of waste material gotten rid of, practically speaking, was the same during the night and day. Since the temperature usually begins to rise about noon, and continues doing so until late in the evening, the above statements are in direct contradiction to the time-honored theory, "The bodily weight, all things being equal, is in direct ratio with the height of the bodily temperature." But, clinically, it is a fact that in many

instances patients take on weight at the time of highest temperature, but early in the morning begin to lose it, and by 10 a.m. have come back to their weight of the previous morning. The body weight is not always a true indication of what changes the lungs are undergoing; there may be an increase of tubercular process, and at the same time an increase in weight; again, the contrary holds good. An improvement in the condition of the diseased lung and a decrease of body weight.

A rapid increase in weight warns us of a liability of returning hæmorrhage in those subject to hæmorrhagic form of the disease, and calls for a depleting rather than a stimulating plan of treatment. A gradual increase in weight justifies a favorable prognosis being given; whereas if there be a gradual decrease in weight the prognosis is grave.

THREE ATYPICAL TYPES.

I.—*Asthmatic.*

This is the name selected for a certain percentage of cases characterized by the following clinical features, in addition to the ordinary ones found in a patient suffering from an ordinary peri-bronchitic consumption. Without warning and not influenced by pre-exertion the sufferer is suddenly seized with a severe attack of asthma of prolonged duration and alarming severity, the temperature being either febrile or subnormal in character. These attacks present a few almost pathognomonic peculiarities. The patient during the attack does not seek the bent forward or semi-erect posture, but rather the prone position, which seems to favor the embarrassed breathing. The face, although drawn, does not bear an anxious expression; the alæ of the nostrils remain passive, and there is to a great extent an absence of facial congestion. The patient generally has a good family history as regards pulmonary disease, but there is, as a rule, an hereditary neurosis, which demonstrates its presence in repeated neuralgic attacks, both facial and abdominal, accompanied in females by phantom tumors. There is always a neurotic temperament, and night sweats are not marked, although day ones are. The tissues over the turbinated bones

are usually engorged and swollen during the attack, and although the local application of cocaine at times modifies the severity, still it must be administered with great care, as these cases do not bear the drug well. Antipyrine acts much better, and there is not the same danger in its use. The drug giving the best result in the general treatment of this type is undoubtedly potassium iodide.

II.—*Melancholic.*

Jules Mickle, in one of his most interesting and able papers, "The Relationship of Insanity to Phtthisis," speaks of six classes, but does not mention the clinical type now under our consideration.

These patients are middle-aged, usually of a dark complexion, greasy skin, hair straight and coarse, and are by no means insane, but are those tuberculous victims who from the very onset of the bacillary disease lapse into a state of marked melancholia, the mental condition being increased by, and in turn influencing unfavorably, the ravages of the bacilli. In contradiction to "Neuralgics," the "Melancholics" are free from neuralgic and other pains, but if subject to them, bear them manfully and without complaint, preferring to be alone, and when spoken to about their health give an abrupt, if not a rude, reply. Their one topic of conversation seems to be the welfare of their families, if any, after the speaker's death. Medicine is looked upon with suspicion and is only taken under protest; usually atonic dyspepsia, complicated with vomiting of food, within a short time of swallowing, is present. Next in importance to the melancholia is the marked insomnia. Natural sleep obtained at rare intervals is broken into by hideous dreams. The patient knowing this strives to keep awake.

When induced sleep is secured by administering paraldehyde or some other drug, an undisturbed refreshing rest is secured, and if this be repeated for a few nights the clinical history of the case is changed for the better, and this favorable change lasts for a considerable time.

A tuberculosis of the kidneys complicates the majority of the melancholic type. The prognosis in these cases is bad. Not

only for the patient himself, but their offspring are very liable to take on a rapid tuberculosis.

III.—*Basic Tuberculosis in Children.*

The little patients coming under this head are generally between the ages of seven and fourteen, living in filthy houses, mostly in overcrowded cities and frequently in want of food. They are brought to the doctor by their mothers, because "she won't work or even play like others of her own age. She is very short of breath, refuses solid food, but partakes of liquids in large quantities. The child is peevish, has a slight cough, and at times diarrhoea, and is losing weight." When combined with the above history we find a peculiar dry harshness of the skin, thin, pinched, old features, our attention should be attracted to the bases of the lungs, even although the examination of the apices fail to discover disease. Upon examination, we frequently find a large secreting basic cavity of tubercular origin, and owing to the cavity being in the dependent portion of the lung there is no chance of natural drainage, hence the importance of surgical interference.

Upon comparing the prognosis of this "Basic type" with that of an "Apical variety," it is found that although the disease is of longer duration the patient's general condition is much worse.

Laryngeal tuberculosis is seldom present, probably owing to the inability of the patient to cough up infective masses into the laryngeal box. Then, again, children are not as a rule subject to laryngeal tuberculosis.

MODE OF TRANSMISSION.

The atmosphere conveys the bacilli to the air passages. The chief source of the bacilli is from the dried sputum of phthisical patients. Then, again, bacilli are to be found in the expired air of those suffering from consumption. This latter source is denied by some few authors, the most noted being Cordet. But that they are present has been proven by Dr. C. T. Williams, of Brompton Hospital, London, and by Dr. Arthur Ransome, who

carried out a series of experiments in the wards of the Manchester Hospital for consumption and diseases of the throat at Bowden, England.

I cannot do better than give you his own words, which are as follows: "Some doubt has been cast upon the possibility of bacilli being found in the breath, especially by Dr. Cornet, of Paris. He adduces as grounds for this belief that nonvolatile substances could not be exhaled, that many competent observers have failed to find them, and that errors have crept into the observations. To these objections I would reply that any one who will examine microscopically the condensed aqueous vapor of the breath may soon convince himself that it contains much non-diffusible organic matter, such as epithelial scales. But there is nothing surprising in the fact that such negative results have been obtained. I found no bacilli in some cases in the deposit of several drachms of condensed aqueous vapor, and very few in any case. The fact that the bacilli were so few in number is of itself a tolerably sure proof that no contamination by sputum had taken place, owing to the precautions taken to prevent this accident."

These remarks of Dr. Ransome will emphasize what I am now about to bring forward.

Great care is often exhibited in washing and even disinfecting the pillow cases of phthisical patients' beds, but the pillows themselves are left severely alone. Now, the aqueous vapor contained in the expired air does contain bacilli; therefore, some of the bacilli must of necessity be conveyed through the covering into the pillow. Clean slips are put upon the infected cases, and there is a condition analagous to an infected floor covered only by a porous carpet. A healthy person using these pillows is very liable to contract the disease, as shown by the frequency with which the wife contracts the disease from the husband and the husband from the wife, and children from their parents. It is, therefore, the physician's duty to see that the pillows are disinfecting as well as the slips.

Knowing how hydrophobia has been practically stamped out by muzzling dogs, why cannot a similar precaution be taken

with men, using instead of a muzzle a handy portable spit cup? If this were done and more care exhibited in the selection of food, all suspected cattle destroyed, and mixed milk rather than that given by one cow used; combining this with better sanitary arrangements would have the effect of saving thousands of useful lives yearly.

A COMPOUND COMMINATED FRACTURE OF THE SKULL FOLLOWED BY ABSCESS OF BRAIN.*

By J. A. HUTCHINSON, M.D.,
Assistant Surgeon, Montreal General Hospital.

On Sept. 21st, 1891, I went out on a wrecking train to St. Madeleine to a railway accident, and found a man unconscious, having fallen on his head in jumping from the moving train. The accident occurred at about 3 o'clock A.M. On examination, a large depressed fracture, with protrusion of the brain substance, was found. The whole wound was filled with mud and gravel. He was completely unconscious; pulse weak, rapid, but regular; respiration slow and regular; pupils moderately contracted, no reaction to light. The right foot was badly crushed. No other injuries.

I removed as much of the dirt as possible from the wounds, covered them with gauze, and administered some stimulants. During the return to the city, after some vomiting, the patient suddenly collapsed, both pupils becoming dilated, the right more markedly. At about 11 o'clock he was taken to the General Hospital, under Dr. Armstrong. The following is a sketch of the hospital report:

Patient taken to operating-room and examined under ether by Dr. Armstrong. A compound comminuted, depressed fracture of skull was found at the junction of the frontal and parietal bones and a portion of the brain protruding, supposed to be the ascending frontal convolution, which was loose and easily removed by the fingers. A number of small pieces of loose bone resting on the brain were removed, and one circular piece half an inch in diameter, which was buried deeply in the brain tissue,

* Read before the Medico-Chirurgical Society of Montreal.

was also removed. The shape of the fracture was circular, about the size of a fifty-cent piece. The pieces of bone were entirely separated from the table of the skull, the wound carefully cleansed and packed with iodoform gauze, and a small incised wound at the back of the head was stitched and dressed. The patient's condition not permitting of an immediate amputation of the foot, it was dressed and he was put to bed.

The same night he showed some signs of consciousness, but was unable to speak or swallow. Temperature 99.5° ; pulse 120. On the second day he was able to take nourishment, and answered "yes" to all questions, but he could understand what was said to him.

3rd day—Improvement marked. Temperature 98° ; pulse 86; respirations 20.

6th day—His condition permitted operation on the foot, and it was removed after Pirigoff's method.

7th day—Very restless and sleepless, but says he has no pain. This passed off the following day, and improvement continued until Oct. 5th, the

15th day—Signs of delirium developed; wound was washed out and dressed again, and delirium passed off.

20th day—Up till which time improvement has been marked and temperature always about normal. At 2 P.M. he suddenly complained of a general headache and became delirious; in about ten minutes a severe chill came on, and temperature ran up. At 4 P.M. the temperature was 104.5° ; an ice-bag was applied and opium given hypodermically. Later, wound was carefully irrigated and packed with iodoform gauze.

The following day, temperature remaining high and no general improvement having taken place, also a marked flushing of the face and neck being observed and distinct aphasia, Dr. Bell, in the absence of Dr. Armstrong, carefully probed the brain in the neighbourhood of the wound; some sloughy-looking material was found, a drainage-tube was introduced, and parts dusted with iodol.

22nd day—Temperature in morning normal, in the afternoon $101\frac{3}{8}^{\circ}$. Patient feels no discomfort.

23rd day—Temperature in morning normal, at 4 P.M. 104° , and at 5 P.M. patient became excited and restless ; at 8 o'clock temperature $105\frac{3}{4}^{\circ}$, and he became wildly delirious.

25th day—Temperature normal ; patient quiet ; Leiter's cap applied to head, and wounds dressed daily. From this day patient steadily improved until he was discharged, Nov. 21st, being just two months in hospital. Drainage still in wound, but greatly shortened.

He again came under my care and had wounds dressed from time to time until healed.

About the middle of March, 1892, patient asked to be allowed to return to his engine as a fireman, and was allowed to go. About the middle of April he complained to me of a pain in the right side of the head, which passed off in a day or two. Again, on April 23rd it returned, and I saw him in the morning ; temperature normal, general condition good, but severe pain continued and was only controlled by morphia.

The following day he appeared well, but during the night the pain returned, and on the 25th, at my visit, temperature was normal, but pulse 48, and a slight twitching was noticed in the right arm and hand. In the afternoon Dr. Armstrong saw him with me ; pulse was then about 70, and it was decided to remove him to hospital for careful observation, but while preparing to go he was taken with a severe convulsion, followed by loss of consciousness and death a few hours after, at midnight, on April 25th, about seven months after receipt of injury.

Retrospect Department.

QUARTERLY RETROSPECT OF SURGERY.

By FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S., ENG.

Surgeon to the Montreal General Hospital; Professor of Anatomy and Lecturer on Operative Surgery, McGill University.

Appendicitis.—In a paper read before the New York Academy of Medicine (*N.Y. Medical Record*, April 16, 1892) on "Appendicitis," Dr. C. McBurney reported six cases operated on within the short space of fifteen days, all of which recovered. In the course of his remarks on these cases Dr. McBurney emphasizes the fact that the honour of first developing the operative treatment of appendicitis must be awarded to American surgeons. They fearlessly and successfully opened the peritoneal cavity to reach deep-seated abscesses connected with the appendix. He recommends, before such a deep-seated abscess is opened, the road to it should be lined with sponges; and if a small opening be made, the pus may be caught in the abscess almost *guttatim* and harmlessly removed. In difficult cases the discovery of the appendix may baffle the most careful search, and he thinks it best first to introduce the finger and the appendix may be immediately found; if not, the caput coli should be exposed and the appendix carefully searched for. As regards time for operation, he begs to differ from Mr. Treves, who says that "surgical interference should not be undertaken before the fifth day except in the presence of very emphatic symptoms." It is no comfort to be assured that few cases die before the fifth day, for those who die on the fifth day have begun to die on the second or third. Dr. McBurney has noticed that cases operated on after long delay and numerous consultations are frequently fatal or extremely hazardous. Cases of acute appendicitis operated on at the right time, before the disease has progressed too far, are nearly invariably successful; out of some fifty such cases Dr. McBurney has seen only *one* die. He considers examination through the rectum of no value whatever in the early stages of appendicitis, and thinks that our attention had better be devoted to learning the signs of suppurative appendicitis before the abscess has threatened the rectum. In conclusion, he stated

that in these cases the surgeon and physician should work together. Dr. McBurney's cases are very instructive and well worth perusal. The fortunate ending of all the operations was due, no doubt, to his careful surgery. but still I am of opinion that there are certain cases septic from the first, and which no operation will relieve. Such a case I had last winter, where operation was performed within forty-eight hours. The patient was already profoundly septic, as evidenced by his black vomit. The appendix was found gangrenous, as was also the cæcum, but not a drop of pus was found; the operation did not relieve in the least, and the patient, a boy of 18, died twenty-four hours later. In this case the appendix was seven inches long and bound down by strong adhesions, the result of previous attacks. In some cases the virulence of the infective pus is much greater than others, for it is well known that some bacilli are much less dangerous than others. I am surprised that Dr. McBurney did not mention the method of finding the appendix, which is so well known to anatomists—viz, by tracing down the anterior longitudinal band on the cæcum, it leads directly to the appendix.

Partial Resection of Cæcum for Gangrenous Typhlitis; death years after from angulation intestine.—Tillman of Sweden reports the case of a patient, aged 30, operated on on Aug. 2nd, 1885, for violent symptoms of intestinal obstruction. Operation revealed gangrene of anterior portion of cæcum and ascending colon. Resection was performed with difficulty, the operation taking $1\frac{1}{2}$ hours. Patient recovered and remained well for five years. On Oct. 10, 1890, symptoms of obstruction again appeared, and operation was performed. No resection was made, but an intestinal fistula was established in the right iliac region. Patient died on the third day. Autopsy revealed general peritonitis, and the occlusion was found to be due to kinking of the bowel at the splenic flexure of the colon.—(*Nordiskt. Med. Arkvs.*, Bd. ii, Aft 1; quoted in *Annals of Surgery*, June, '92.)

Acute Intestinal Obstruction; Operation by Short Circuit.—Mr. E. Atkinson of Leeds reports a case of obstruction (*Lancet*, May 7, 1892) in a man, aged 22, for which he operated. On opening the peritoneal cavity a quantity of clear fluid escaped,

and distended coils of small intestines appeared at the wound joined together by broad bands, and the bowels were so matted together that search for the cause of obstruction was impossible. On the advice of Mr. Littlewood, Mr. Atkinson opened the colon as much above the cæcum as he could reach, and after inserting a bone plate of Senn's, selected a coil of ileum, opened it and did the same, and thus performed anastomosis. The operation lasted one hour and a quarter. Twelve hours after the patient had two large liquid stools, and got well rapidly.

Abdominal Section in cases of Ruptured Spleen and Liver.—

At a meeting of the London Clinical Society, held March 11th, 1892, Mr. Page related three cases in which abdominal section had been performed for ruptured viscera. These were cases without external wound, in which peritonitis began soon after the accident, and was due to the presence of large quantities of extravasated blood in the peritoneal cavity. In one case the spleen was ruptured, and in two the liver. In the case of ruptured spleen the abdomen was opened forty six hours after the accident, and the complete washing out of blood from the peritoneal cavity gave marked relief, lessened the evidences of peritonitis, and seemed to come very near to saving the boy's life. The injury in the first case of ruptured liver was more severe, and several ribs were broken; here, also, the peritonitis was unquestionably relieved by peritoneal flushing twenty-seven hours after the accident. In the second case of ruptured liver the injury was complicated by slight laceration of one kidney, and the amount of hemorrhage had been enormous; operation gave no relief. Although the results were so bad, still Mr. Page said he thought the proper treatment of ruptured viscera was early abdominal section and washing out the stagnant blood, which was the cause of peritonitis.

In the discussion which ensued many cases of abdominal section for ruptured viscerae were related, but no recoveries were reported. The general opinion also seemed to be that blood itself did not cause peritonitis, but that when the liver was ruptured and bile extravasated then peritonitis nearly always ensued.

Radical Treatment of Prostatic Hypertrophy.—Eigenbrodt

of Bonn (*Beitrag zur Klin. Chir.*, No. 8, 1891) reports five cases of enlarged prostate operated on by Prof. Trendelenburg, and comes to the following conclusions:—

(1) It has been shown by experience that a radical operation is possible in almost every case of obstructive enlargement of the prostate.

(2) The prospects of prostatectomy are better the earlier the operation is performed, and operations done early and before the development of cystitis are to be recommended in all cases in which the surgeon may avoid setting up inflammation by the operation itself.

(3) Even in far advanced cases much relief may be afforded by operation, and the patient may regain the power of voluntary micturition.

(4) Patients who have been apparently cured by the radical operation are apt to be subsequently affected with persisting weakness of the bladder and accumulation of residual urine.

(5) In obstructive hypertrophy of the prostate, the hindrance to the flow of urine does not consist so frequently, as is generally supposed, in a valvular occlusion of the internal meatus by a prominent lobe of the gland, or by a displaced portion of the vesical wall. The hindrance is more frequently the result of a regular and general enlargement of the vesical portion of the prostate associated with the formation of a cul-de-sac of the bladder. In such cases the surgeon should attempt to promote the free discharge of urine by making a deep wedge-shaped incision at the posterior border of the internal urethral orifice.— (Quoted in *Sup. to Brit. Med. Jour.*, Nov. 9, 1891.)

Norton (*Med. Press and Circular*, vol. civ, No. 4) describes a prostatome which is similar in mechanism to a lithotrite, but both blades have cutting edges that do not overlap, the female blade being so shaped that it will easily glide back over the enlarged prostate after introduction into the bladder, and so hollowed that it will retain within itself the section when cut. He reports four cases, in three of which this instrument, passed by median perineal section, removed a sufficient amount of the prostate to procure complete relief and cure, and says it is his

intention to further perfect this instrument so that it may be passed per urethram.—(Quoted in *American Jour. Med. Sc.*, June, 1892.)

Suprapubic Cystotomy for Tumour of the Bladder.—Guyon (*Annales des Maladies des Organes Genito-Urinaires*, ann. x, No. 2) reports the case of a patient who was brought to him in a very anæmic condition, having had frequently recurring attacks of hæmaturia with polyuria for twelve years. Taking into consideration the anæmic condition of his patient, he made no instrumental examination, basing his diagnosis of vesical neoplasm on the constant polyuria with distension of the bladder and the recurrent attacks of hæmaturia. This diagnosis was confirmed by the condition found present at the operation, in which he removed epitheliomata weighing together seven ounces, the patient making a perfect recovery in twenty days. In his remarks on these anæmic cases, he says the first duty of the surgeon is to avoid all methods of diagnosis that will in the least increase the loss of blood, and that, furthermore, he is to guard his patient during the operation from the ever present danger of syncope; he advises Trendelenburg's position in these cases, believing it to have, in threatened syncope, prophylactic advantages as well as those originally claimed for it.—(Quoted in *Amer. Jour. Med. Sc.*, June, 1892.)

Surgery of the Spine.—M. Chipault (*Revue de Chirurgie*, No. 7, 1891), in an article on the surgical treatment of Potts' disease of the spine, describes three cases in which operation for the removal of tuberculous disease was performed. All three cases were paraplegic. The first case, a boy aged 9, had suffered for some months from caries of upper dorsal vertebræ, and suddenly became paraplegic after falling down stairs. Suspension was of no benefit, so operation was performed. An incision was made over the transverse processes of the 2nd, 3rd, 4th, 5th and 6th dorsal vertebræ; the periosteum was reflected outwards and the arches resected. The dura mater was found healthy, but at the 4th vertebra there was found a projection and a compression so marked that the spinal cord seemed altogether wanting. Numerous fungous projections into the canal were scraped

away, a large abscess opened and the projecting ridge of bone completely removed, and the cavities in the diseased vertebrae carefully cleaned out. The destruction of the bodies was enormous, and the removal of the disease certainly incomplete. Notwithstanding this the wound healed and the progress was excellent for some time, but a month after the operation the child succumbed to an attack of broncho-pneumonia. At the autopsy the wound was found firmly closed by a mass of osteo-fibrous tissue, but a large cold abscess connected with the other vertebrae was found. In the second case, a girl aged $4\frac{1}{2}$ years, the same region was affected, but not so extensively. The paraplegia was one produced by gradually increasing pressure and not one suddenly produced by displacement. A similar operation was performed. The principal focus of infection was in the posterior of the body of the 4th dorsal vertebra. A drain was inserted into it and brought out across the vertebral canal, between the 4th and 5th dorsal nerves. The cut muscles were sutured and antiseptic dressing applied. Excellent recovery followed; on the fifth day patient could lift the head from the bed. A third case gave similarly good results. M. Chipault formulates his conclusions as follows:

(1) The operation is anatomically possible. It requires skill, but it is easy to avoid injury of the meninges or of the spinal nerve-roots. Drainage and irrigation of the diseased centres through the vertebral canal do not give rise to even transitory disturbances of the medulla.

(2) By direct treatment of tubercular foci we may hope to obtain a result not merely palliative but curative, a result impossible with the methods hitherto employed.—(Quoted in *Dublin Med. Jour.*, June, 1892.)

Removal of Spinal Tumour.—Dr. W. Jones reports a case (*N.Y. Med. Record*, March 12th, 1892) of removal of an extradural spinal tumour in a woman aged 31. She had suffered for seven years, and for three years there had been angular curvature between the scapulæ. At the time of operation there was complete muscular paralysis from the waist down, and anæsthesia from the 9th rib. An incision was made from the 6th to 10th

dorsal vertebræ, the laminæ of the 9th, 8th, 7th and 6th were removed, and a tumour loosely connected with dura below, but more closely above, was found extruding from the 5th to the 8th vertebræ; it covered the cord for about $1\frac{1}{2}$ inches, and was the size of an index finger. The patient rallied well from the operation, and the wound healed without suppuration. Sensation began to return on the 9th day, and was present everywhere by the 54th. Seven months later the husband reported that sensation was perfect everywhere, that she walked on crutches, and that her general health was excellent. The tumour was thought to be tuberculous.

Inflammatory Cervical Swelling communicating with the Common Carotid Artery and Internal Jugular Vein.—At the meeting of the Royal Medical and Chirurgical Society of London held Jan. 26th, 1892, Mr. Croft read the details of the case as follows. A young man, aged 22, was admitted into St. Thomas' Hospital, under Mr. Croft's care, on June 4th, 1891. A small swelling had appeared on the right side of the neck, opposite the thyroid cartilage, after a sore throat, eight weeks before admission. At the time of admission the swelling was about the size of a pullet's egg, and situated over the bifurcation of the common carotid artery. No pulsation was observed. During the evening of the second day the swelling rapidly enlarged, and this was accompanied by great pain and a little difficulty in swallowing. The next morning the tumour was found to be strongly pulsatile, with distinct expansile movement, and it was at once decided to explore the swelling. The common carotid trunk, below the swelling, was first exposed; next, the swelling was incised and shown to be in communication with a large artery. It was found necessary, in order to arrest all hemorrhage, to tie the common and external carotid arteries and jugular vein. No pus was found or any definite abscess. Silk ligatures were used. Recovery was complete, though interrupted by a congestion of the left lung. In the discussion which followed, Mr. Timothy Holmes remarked that Mr. Croft's case illustrated the old surgical adage that suppuration around a vessel might lead to communication with that vessel. He had seen an abscess communicating with

the popliteal artery. Many cases of simultaneous ligature of the common carotid and internal jugular vein were on record.

A Successful Case of Ligature of the Internal Jugular Vein and Trephining the Lateral Sinus in an Ear case, in which the symptoms of Pyæmia were well pronounced.—Mr. Clutton reports this case (*Brit. Med. Jour.*, April 16, 1892), which was that of a boy aged 10, who was seized with acute pain in head and right ear November 27th; afterwards he had a temperature of 103.4° , with severe rigors and suppuration of middle ear. No tenderness over mastoid or optic neuritis. There was an inflammatory swelling at right angle of lower jaw. Judging from these symptoms that there was probably a suppurative thrombosis of the lateral sinus, it was determined to expose the internal jugular vein as low as possible in the neck, and cut off its connection with the general circulation. The vein was found to have very thick walls, and to be quite collapsed and empty. It was carefully freed, then tied with two ligatures, and divided. The upper end was still further separated and brought out at the upper end of the wound, in order to be able, at a later stage, to syringe through from the lateral sinus. The weak condition of the patient precluded further operative procedures, and at the end of two days, being stronger, the lateral sinus was trephined (one inch behind and a quarter of an inch above the centre of the right auditory canal). As the bone was divided pus began to well up, and on removal of the disc it was seen to come from the occipital side of the opening and from beneath the dura mater. The lateral sinus which occupied the centre of the trephine opening was found, on puncturing with the trocar, to contain pus; it was therefore slit up and washed out. The ligature was now removed from the upper end of the divided jugular in the neck, and the nozzle of the syringe in the sinus directed downwards. A full stream issued from the opening in the neck, carrying with it broken down clot and pus. A swelling in left forearm, which had been steadily increasing, was incised, but found to contain no pus. Two days after the operation the temperature again went up to 104° , and on examining the ankle on left side it was found to be much swollen and very painful,

so it was freely incised and found to contain a quantity of pus. After this the boy made a slow and uninterrupted recovery.

Hemorrhage from the Middle Meningeal Artery from Fracture of Skull; Trephining; Recovery.—Bland Sutton reported the above case to the meeting of the London Clinical Society held Jan. 8th, 1892. The patient was a man who was brought to the Middlesex Hospital in an insensible condition, due to falling upon the pavement and striking his head when drunk. Soon after admission the right arm and leg became completely paralysed. The left side of the skull was trephined, and a very large clot of blood found between the dura and skull. To secure the torn artery the bone was removed freely. By means of an electric search-light a fissure in the bone was found to run from the left limb of the lamboidal suture downwards into the tympanum and across the petrous portion of the temporal bone. At this spot the dura was lacerated and the subdural space was opened. After the operation motor power returned, and although cerebrospinal fluid escaped for four days the patient quickly became conscious and made an uneventful recovery. In the discussion which followed, Mr. C. Symonds said he had operated on three cases. In the first case, bleeding was from a deep source and he had controlled it with forceps. After removing a quantity of bone the bleeding ceased, but the man died. In the second case the patient had universal convulsions, and recovered after trephining. In the third case, the patient, a boy, was almost dead. He was rapidly trephined and also recovered. Compression of the common carotid might sometimes be necessary after trephining.

Gangrene after Ligature of the Femoral Vein and Artery.—Mr. Herbert Allingham reported to the meeting of the London Clinical Society, held January 22nd, 1892, the case of a man, aged 28, who was admitted into the Great Northern Hospital for stab-wound of the thigh, near the apex of Scarpa's triangle. The man had lost a great deal of blood, but when he reached the hospital the bleeding had been arrested by pressure. An exploratory operation was immediately undertaken as there was no pulsation in the tibials and the leg and foot were cold and

pale. The patient's general condition was bad : he was blanched, had swimming in the head, complained of thirst, and was restless. After applying an Esmarch, the wound was enlarged and the tissues were found much infiltrated with blood and the sartorius cut. On turning out a large blood-clot at the bottom of the wound it was seen that both the femoral artery and vein were completely divided. The vessels were tied, the wound closed, and the leg and thigh enveloped in cotton wool. The patient was then placed in bed and the leg kept warm with hot bottles. Two days after the operation the foot began to have a waxy appearance and the calf became swollen and painful. Next day the foot was gangrenous and slowly spread up the leg to the middle of the calf. For three weeks the leg remained in this condition, then it became moist, and the temperature rose to 105°. Amputation was at once performed through the knee-joint. The interest of the case lay in the facts (1) that the gangrene, when pronounced, did not extend for three weeks, and (2) amputation was performed through the knee-joint. Mr. Harrison Cripps said that the practice should be the same whether due to wound, ligature, or embolism of the artery. The portion of limb which died was usually the foot, with the lower half of the leg. The line of demarkation which should be waited for was usually about four inches below the knee, and amputation should be performed immediately above it.

Ligature of the Carotid for Hemorrhage after Removal of Tonsil.—At a meeting of the London Clinical Society, held April 21st, 1892, Mr. Arbuthnot Lane gave the details of a case of very severe hemorrhage following removal of the tonsil, and for which the common carotid was tied. The patient was 21 years of age, and had his tonsil removed at the Throat Hospital Dec. 16th. At the time of operation and during removal home he lost about half a pint of blood ; on Dec. 19th he lost another half pint. Bleeding recurred on the evening of the 20th and continued steadily in spite of local applications. Mr. Lane saw him on the 22nd, when, as he was evidently dying, his friends consented to his removal to Guy's Hospital. As he was in a very collapsed condition, 3½ to 4 units of normal salt solution

had to be introduced freely into the circulation before any operation could be done. He reacted at once, and Mr. Lane proceeded to tie the carotid. The patient left the hospital quite well in a few days.

In the discussion which followed, Mr. Cripps said it was bad surgery to tie the carotid for such cases, as half the patients died from brain symptoms or softening, and a considerable number perished from recurrence of the bleeding. The chief blood supply of the tonsil was from the external carotid, and this vessel should be ligatured between the superior thyroid and lingual; after its ligature recurrent hemorrhage is very rare. Mr. Lane, in reply, said the reason he did not tie the external carotid was because the branches from it arose all together, and he was obliged to tie the common. He had had no cerebral trouble after tying the vessel, because in the cases in which he had done so he had always injected salt solution, and he believed that if a similar practice were carried out in all cases of ligature of the common carotid it would abolish the complication.

Hypodermic Injections of Carbolic Acid in Tetanus.—Strazzeri and Titone report (*Rif. Med.*, Nov. 10, 1891) a case of tetanus cured by Baccelli's method of hypodermic injections of carbolic acid. The patient was a boy aged 9, who, eight days after receiving an injury, developed well marked symptoms of tetanus. He was treated with injections of a two per cent. solution of carbolic acid repeated every six hours, opiates being given internally. On the 15th day the patient recovered power of mastication, and after four weeks treatment he was completely cured.—(*Supplement Brit. Med. Jour.*, Jan. 2nd, 1892.)

The Operative Treatment of Bronchocele.—Of late years operations for the removal of the thyroid gland have become common and no longer attract much attention. Since the appearance of Kocher's well known paper in 1883, total extirpation of the thyroid has been placed on the list of operations to be performed under very special circumstances, and where no other means of relief is available. The isthmus has been divided for relief of pressure symptoms, and success has attended the various injection methods in cystic disease of the gland. For solid

growths, enucleation is rapidly taking the place of extirpation. Prof. Reverdin (*Revue de Chirurgie*, No. 3, Mars, 1892) gives a table of fourteen cases in which he has operated with one death. In seven of these, enucleation was performed without a death. He does not at once proceed to operation, but first uses iodoform internally, gr. i three times a day in pill form. Then "when iodoform or any other treatment considered efficacious has been fully tried, and there is, notwithstanding, an increase in the symptoms, gradual but continued enlargement of the gland, persistence or exaggeration of the pain, and interference with the respiration, operative intervention is indicated." He says that the further we progress the more clearly we see that enucleation is the true method, and its application is much easier than was at first sight apparent. By a straight incision over the tumour the thyroid tissue must be carefully laid bare, gradually and slowly incised layer by layer, and at a variable depth from the surface the tumour proper will be exposed to view. "So long as you are doubtful, you are not on the growth," which will be immediately recognized by its brownish-grey colour and its smoother surface. The incision must now be enlarged, and with the aid, preferably, of the finger, the tumour is rapidly enucleated out of its bed of thyroid tissue in which it is lying, to the walls of which it is sometimes adherent. Rapidity is here the order of the day, for it is now the hemorrhage, often alarming, begins, and till the growth is removed it cannot be mastered. The tumour is sometimes covered by thin-walled vessels, which have to be tied as they are easily torn. Reverdin has not yet met with fatal results from this method. The merits of the operation are rapidity of performance and rapidity of healing, and no chance of myxœdema. Socin first brought this method into prominent notice.—(*Dublin Medical Journal*, June 1892, and *London Lancet Editorial*, April 16th, 1892.)

Ununited Fractures in Children.—Mr. D'Arcy Power (*Am. Jour. Med. Sciences*, May 1892), in an article on *Ununited Fractures in Children*, says that they are undoubtedly rare. He himself has collected 71 cases: 7 of clavicle, 9 of humerus, 12 of femur, 42 of leg, and 1 of forearm. They are more com-

monly met with in boys than girls. Operative measures frequently fail to relieve them. In the 71 cases only 6 obtained bony union. Some received slight benefit from treatment, whilst others submitted to amputation. Mr. Power thinks the causes of non-union are always local, the chief cause being want of rest due to errors in diagnosis or carelessness. The difficulty in fixing the two ends of the bone in a very fat child is very great, but with care the task may be successfully accomplished. Mr. Power lays down the following rules: Diagnosticate the fracture as early as possible, and in every case keep the fragments in perfect apposition. After the fragments have been secured, see that the apposition is maintained by exercising careful supervision and, when necessary, by readjustment of apparatus. In cases of non-union, the prognosis as to subsequent union is bad. In such cases the ends of the bones may be resected and the fracture treated by securing perfect immobility of the bone for a long period; if, however, there be much wasting of either end of the bone, resection will be found useless. In the lower extremity, amputation alone affords the patient relief from his miserable condition.

Stricture of the Œsophagus.—Newman (*Lancet*, vol. i, No. 5, 1892), in an article on the above subject, says organic stricture can be diagnosed without difficulty. History of injury followed by painful deglutition, which passes off in a few days or weeks, and which is followed at some remote period by a constantly increasing dysphagia, without pain, hemorrhage or lymphatic enlargement, would point to organic stricture. The history of an injury is not always clear, and, on the other hand, carcinoma may develop in a case where there is a clear history of traumatism. In carcinoma, the age of patient, the hemorrhage, pain and enlargement of the glands will point to the character of the disease. In carcinoma the prognosis depends on the seat of the disease, whether it is in a position where surgical intervention is possible. If operation is not done, death will ensue sooner or later from starvation. If the disease begins in the upper part of the gullet it is usually rapidly fatal; on the other hand, carcinomatous growths of the lower end of the œsophagus may run a

very slow course. Dr. Newman has collected statistics of 556 cases of carcinoma of the œsophagus in which the mode of death was given : 390 died of collapse and exhaustion ; inflammation of lung and gangrene, 91 ; pleurisy, 53 ; peritonitis, 17 ; perforation into the heart and blood-vessels, 15. In benign tumours of the œsophagus the prognosis will depend upon the location, size and rapidity of the growth, and whether or not their removal by operation is possible. If situated high up, they may be cut off or ligated, or if pedunculated and soft the parasol probang may dislodge them. Organic strictures, if seen early, may yield to bougies. If a bougie can be passed the prospect of recovery is good, but if no instrument can be passed then gastrostomy should be performed.—(Quoted in *Amer. Jour. Med. Sciences*, May 1892.)

Surgery of the Œsophagus.—Gerster (*N. Y. Med. Journal*, vol. iv. No. 6) presents the following conclusions. If a foreign body becomes lodged in the œsophagus and cannot be displaced downward into the stomach or extracted without the employment of much force, it is imperative to perform external œsophagotomy at once. This operation is comparatively safe, its mortality in all cases being 20 per cent. (*Fischer*). The operation may be difficult if there is a goitre or tumour present. An early operation is safe, a late one dangerous and often useless. Delay should not be more than twenty-four hours. If impaction has existed for more than twenty-four hours, frequent and persistent efforts at dislodgment are apt to be more dangerous than œsophagotomy. In performing œsophagotomy the incision should be made large enough to permit of comfortable manipulation without much traction. The line of incision should be in front and parallel to the anterior border of the sterno-mastoid, beginning a little below the cricoid cartilage and extending to the sternal origin of the muscle ; the omohyoid is drawn aside and the lateral margin of the thyroid gland is exposed to act as a guide. The great vessels are drawn out with the sterno-mastoid. Care should be taken not to injure the recurrent nerves. The œsophagus is recognized by its longitudinal fibres ; if there is doubt, a urethral sound may be introduced through the mouth

or the œsophagus incised on the point of the instrument. When the incision is made into the tube the edges should be held aside with silk sutures. After removal of the foreign body the edges of the cut œsophagus should be brought together with fine silk and the outer wound packed loosely with iodoform gauze. A few silkworm gut sutures should be introduced, but not tied until after the removal of the packing. Feeding by mouth is permitted at once, only small quantities of liquid substances being given. Where ulceration and sloughing has occurred, suture is not practicable and rarely safe. The wound should be packed and allowed to heal by granulation. The stomach tube will be necessary in these cases, and may be inserted into the wound or the mouth.—(Quoted in *Amer. Jour. Med. Sci.*, May 1892)

Retro-Pharyngeal Abscess in Infancy.—Mr. Pollard discusses this subject in a paper recently published (*Lancet*, Feb. 13, 1892), and gives a report of four cases. In each of the four cases the abscess had no relation to spinal caries, and was evidently an entirely local affection. He says two views have been advanced to explain the occurrence of these abscesses—one, that they depend on an acute phlegmonous inflammation induced in a similar manner to acute abscesses elsewhere, and the other, that they are dependent on an adenitis, which is secondary to inflammation of one of the neighbouring mucous surfaces. Dr. Edmund Simon has described lymphatics in the retro-pharyngeal region which terminate in glands situated on each side of the median line, between the pharynx and the aponeurosis of the prevertebral muscles. These glands disappear about the third year of life. There is much in favour of this view, especially the fact that nearly all the cases of retro-pharyngeal abscess occur in young children and are unilateral. When the abscess appears, the question arises, should it be opened from the mouth or by an external incision in the neck. The latter method is advised by Mr. Pollard after the manner recommended by Mr. Chiene for retro-pharyngeal abscess connected with spinal caries. This method of operating is well known to surgeons, and was not introduced by Mr. Chiene, but by the late Mr. Hilton, and it is described in full in his lectures on "Rest and Pain," which

were published thirty years ago. I do not know how it is that this method of operating is always attributed to Prof. Chiene. I quote from Mr. Hilton's book his description of opening a post-pharyngeal abscess. "I carefully made an incision, about half an inch in length, with a lancet through the sterno-mastoid muscle, thus exposing the fascia underneath it; I then thrust a grooved probe or director through the fascia towards the back part of the pharynx, when a little stream of opaque fluid came trickling down the director. I then ran the dressing forceps along the grooved director, made an opening into the deep abscess and let out three or four ounces of pus. The exit of the pus was aided by passing the finger into the child's mouth and pressing upon the posterior wall of the pharynx." I have frequently pointed out this passage to surgeons and others who have quoted Mr. Chiene in this connection, and have myself opened retro-pharyngeal abscesses in this way for more than fifteen years. One of the first cases I operated on was in a child aged 9 months, a patient of Dr. Geo. Ross'. Here there was no cervical disease. I have operated on many cases since, and always with the happiest results. The operation is a simple one, and entails not the slightest risk, especially when performed after modern aseptic methods.

I can testify also to the presence of these post-pharyngeal glands, for I have removed them from children when operating on the neck for the removal of strumous glands. I removed these glands a few weeks ago from a boy aged 10, a patient in my wards at the Montreal General Hospital who was the subject of strumous enlargement of all the glands on both sides of the neck. I have opened retro-pharyngeal abscesses in infants only a few weeks old, and never had the slightest trouble operating after Hilton's method.

Nerve-Grafting.—At the meeting of the London Clinical Society held March 11th, 1892, Mr. Damer Harrison read a paper on a case of *nerve-grafting*. The patient, a boy *æt.* 13, eleven weeks before, cut the median nerve, together with all the flexor tendons, at right wrist with a piece of glass. On admission to hospital, June 4th, 1891, the fingers were immovably fixed

in the flexed position, paralysis of both motion and sensation being complete in the parts supplied by the median nerve. Trophic changes were also present, the hand being blue and cold and the skin glossy. On exploring the site of the injury the tendons were found matted together and two inches of the nerve destroyed. After uniting the tendons the nerve-ends were freshened, thus increasing the separation to two inches, and a graft two inches and a quarter in length, taken from the sciatic nerve of a recently killed kitten, was fixed in position by one fine catgut suture passing through the ends of the graft and the cut nerve. Sensibility began to return at the end of forty-eight hours. At the end of three months the nutrition of the hand began to show great improvement, but there was no signs of returning motion for five months, and now patient could oppose finger and thumb, and was still improving. The reader of the paper quoted ten cases in which grafting had been employed, three of which had been completely successful, six partially successful, and only one proving a failure.

Surgery of the Gall-bladder.—Dr. Ivanhoff has collected the particulars of 278 cases of surgical interference with the gall-bladder on account of gall-stones or distension from obstruction; 30 cases were in males and 185 in females, and the majority occurred between the ages of 40 and 50 years. In 64 cases the diagnosis was not made out, in 13 it was doubtful, and in 24 it was mistaken, being correct in the remaining 177. In the 24 cases the diagnosis was: in 7, movable kidney; 6, hydatids of liver; 3, tumour of omentum; 1, ovarian tumour; 1, cancer of gall-bladder; 1, cancer of stomach, and 1, acute peritonitis. In 120 cases there was a perceptible tumour in the region of the gall-bladder. In 48 cases jaundice was present, due in 10 cases to malignant disease. In 40 cases impacted stone was found, and stones found in some part of the biliary passages in 140 cases. Empyema of gall-bladder was found 16 times. Of the whole 278 cases, 36 (13 per cent.) were fatal. The immediate causes of death were: collapse, 9; uræmia, 1; peritonitis, 8; hemorrhage, 6; cancer, 7; pulmonary tuberculosis, 7; pulmonary embolus, 1; and in 3 cases the proximate cause of

death could not be made out. The resulting fistula took from five weeks to three years to heal.—(Quoted in *London Lancet*, April 30, 1892.)

Treatment of Suppurative Cholecystitis.—H. Snider records an interesting case of gall-bladder surgery (*Berlin. Klin. Woch.*, No. 11, 1892) in a patient, aged 28, who had some time previously suffered from perityphlitis, which had yielded to treatment. She now had a train of symptoms which pointed to supuration of the gall-bladder, so an incision was made along the outer edge of the right rectus muscle and the gall-bladder exposed. It was found enormously distended, and on incising it a quantity of pus and a fair-sized calculus escaped. The gall-bladder was fixed to the abdominal wall, thoroughly washed out and drained. In a few days the discharge of pus gave place to a discharge of bile, and the patient made a speedy recovery, leaving hospital in five weeks with a biliary fistula. Three months later she returned, with colic and other symptoms as bad as before. The fistula still discharged bile. On enlarging the opening the finger passed into a canal which extended upwards and backwards in the direction of the liver, and ended in a *cul-de-sac*. Here a calculus was felt, separated from the canal by a membrane, which was apparently the thickened wall of the bladder. The liver and gall-bladder were exposed by an abdominal incision, and it was then found that the latter was divided into two compartments by a band of cicatricial tissue, and that the return of the trouble was caused by the impaction of the calculus in the opening of communication between the two compartments. The stone was removed with great difficulty, but the patient made an excellent recovery, with subsequent closure of the biliary fistula.—(Quoted in *Dublin Medical Jour.*, June, 1892.)

QUARTERLY RETROSPECT OF GYNÆCOLOGY.

PREPARED BY T. JOHNSON-ALLOWAY, M.D.,
Instructor in Gynecology, McGill University.

A Case of Double Pyosalpinx in a child one year and nine months old.—Dr. A. H. CHEATTLE of London reports a case of this rare nature in the *Lancet* of November, 1891. The little patient was under treatment for tubercular disease of the right lung and died. At the post-mortem examination a large, irregular cavity, containing an ounce and a half of thick pus, was found in the superior lobe of the right lung, surrounded by tubercular consolidation. Tubercular deposits were also found scattered throughout the middle and inferior lobes, the liver and right kidney. The peritoneum, especially that of the pelvis, was studded with yellow tubercles. On removing the sigmoid flexure some thick pus was observed at the left pelvic brim, which was found to be exuding from an abscess in the left broad ligament. Both Fallopian tubes were coiled and distended with pus. The left tube was apparently in communication with the broad ligament abscess. The proximal ends of both tubes were healthy. The uterus was also healthy.

General Emphysema following Laparotomy.—Dr. A. P. DUDLEY of New York reports a most unfortunate case of death from the above cause. He states that from the beginning the patient took ether badly, and that hypodermic injections of morphia had been administered. The case was one of double pyosalpinx, and on the patient recovering from the effects of the ether she began to fight and scream at the top of her voice until she died. She resisted all efforts to comfort her. There was no rise of temperature throughout, nor evidence of intra-abdominal trouble. From the beginning the lung contained a large amount of mucus, and the heart's action ran high (130). The patient was now given $\frac{1}{100}$ grain each of glonoin and atropin hypodermically, and tincture of digitalis and strophanthus, ten minims each every two hours. The atropia produced such dryness of the throat and thirst that the patient broke away from her attendants and helped herself to a large quantity of water.

On the night of the fourth day a puffy condition made its appearance on the right side of the neck ; this increased and gave a crackling sensation to the touch. The patient had now smuggled a quart bottle of water into her bed and been quietly drinking the contents whenever opportunity afforded. Violent vomiting now came on, and the swelling in the neck began to spread over the face. The patient became very violent, screaming at the top of her voice, thus increasing the emphysema until it had passed almost over the whole body. She died on the evening of the fifth day from cardiac compression.

[The reviewer, in giving a short abstract of the above case, would say that Dr. Dudley has really overlooked the most interesting part, viz., that it was apparently a case of acute mania following operation, and should have been so styled. The emphysema was not of so much interest, as it was a mere accidental incident in the maniacal affection, but was undoubtedly the immediate cause of death. The point of greatest interest, however, was omitted. Dr. Dudley should have inquired carefully into the family history of the patient, for it has been proved that patients who became victims to mania after operation had a strain of insanity in the family history. The reviewer would also note that it is not good practice for a surgeon, after operation, to dose his patient with strong and uncertain drugs with the view of relieving intercurrent symptoms which do not really mean any danger to the patient, and which will pass if sufficient time be allowed.]

Vermiform Appendix and Fallopian Tube—Associated Streptococcus.—Dr. HUNTER ROBB reports a case in the *Johns Hopkins Bulletin*, from which he draws the following conclusions. The case is a very unique and interesting one in several aspects, and suggests many important considerations :

(1) The unusual condition of pyo-salpinx of one side with appendicitis, salpingitis, and ovaritis of the opposite side, both the right tube and appendix containing the streptococcus pyogenes.

(2) The duodenal ulcer as a possible sequela of the cauterization of the pedicles and appendix. The ulcer, though recent, appears to be rather too far advanced to be regarded as due to

the operation, and there are no observations which show that gastric or duodenal ulcers follow burns of this character.

That the death was immediately due to the hemorrhage from the ulcer is clearly shown by the anæmia of all the tissues, the large amount of blood in the intestines, and the eroded vessel in the ulcer.

(3) The presence of the segment of a tape-worm in the intestine and vermiform appendix, which might possibly have acted as a foreign body and had some connection with the appendicitis.

(4) Although it cannot be definitely stated that the infection extended from the appendix to the tube, the presence of the streptococci in and about the appendix and in the tube, on the same side, and its absence in the other tube, speaks for this view.

(5) It demonstrates the uselessness of a drainage-tube in the presence of virulent organisms, which, on the contrary, would diminish the resistance of the tissues and do harm by its presence. In this case it would not have drained, as the greater portion of the purulent fluid was walled off from the peritoneal cavity, the infection being thereby limited, and not of itself producing the fatal issue.

The Indications for Total Extirpation of the Uterus through the Vagina.—Dr. SCHAUTA (*Müch. Med. Wochenschr.*) records sixty-five cases operated upon by himself, of which but five resulted unfavourably. The best results were reached by the extra-peritoneal fixation of the entire pedicle and complete closure of the peritoneal cavity and supra-vaginal wound space. The cases operated upon for carcinoma show an immunity from recurrence for the space of two years, to the extent of 47.3 per cent. of the entire number. The indications may be briefly summarized as follows:

(1) For uterine carcinoma, all cases, whether of body or cervix, should be submitted to this procedure at once. The occurrence of infiltration of neighbouring parts need not necessarily serve as a contra-indication, the operator being only guided by the extent of this. In any event, healthy tissue must be reached, if the operation is undertaken. The surface of the

vagina, for instance, may be invaded, while its deeper structure may have escaped. Anæsthesia and curetting are especially recommended as aids to diagnosis. Carcinomatous infiltrations are rigid, non elastic, and diffused; inflammatory exudates are yielding, elastic, and more distinctly circumscribed.

(2) Under certain circumstances the operation may be performed for prolapsus uteri, where other measures of relief have failed, and in which the pelvic floor has undergone marked atrophy, as well as in cases in which the prolapsus is complicated with myoma, or becomes irreducible from any cause. In addition to this, cases of uterine myomata complicated by pain and hemorrhage, and in which the uterus body is not developed beyond the size of a fist; cases of large myomata, after enucleation of the same by means of laparotomy; and finally, for recurrent glandular endometritis in which there is a suspicious tendency to malignant degeneration of the endometrium.

(3) Contra-indications to the performance of the operation, in addition to those mentioned above, relate to absolute narrowing of the pelvis, in cases where the uterine cavity cannot be reached from below nor drawn down. In cases of narrow or cicatricially stenosed vagina, the latter may be incised laterally in its entire length and sufficient room thereby obtained.

The Ultimate Results of Operations for the Removal of the Uterus or its Appendages.—Dr. HOWARD A. KELLY (*Brooklyn Medical Journal*) says:—The surgeon and patient are often mutually engaged at cross purposes, the surgeon operating for a tumour or inflammatory mass, while the patient simply requests relief from pain. The removal of the tumour does not always remove the ache; and consequently the patient complains that the result is bad, and the surgeon affirms that it is good. We should therefore use the word *results* to define the condition of the patient after an operation, both in regard to the operation performed and to the measure of relief attained from those subjective disturbances which have apparently been caused by the disease. The *result* is, then, the condition in which the patient finds herself at any time after the operation, which can in any way be attributed to or connected with the operation, positively

or negatively. *Proximate* results are those immediately following upon the operation. *Remote* results are either the immediate consequences which persist, or those new features which develop after months or years, as issues of the operation. The time value of the word remote varies greatly. In case of an operation for cancer, a few months often determines the remote result in the recurrence of the disease, while after removal of the tubes and ovaries, several years are often needed to determine the remote results. I will therefore discuss, in a general way, the results of operations in :

(1) Nervous diseases, which include all those affections in which local and reflex disturbances are pronounced, without any, or with but slight demonstrable pathological changes, such as ovaralgia, neuralgia of the ovary, so called chronic ovaritis, peri-öphoritis, with slight adhesions. The immediate and remote results of radical operations in these cases are almost uniformly bad. The patients continue to complain indefinitely of all their old symptoms with the aggregation of a horde of new ones peculiarly trying to weakened nerves. Thus are added all the symptoms of the menopause, artificially induced and greatly exaggerated; the flushes are worse and more frequent, the sweatings profuse, the headaches severe, peculiar giddy feelings often arise, palpitations and shortness of breath are common, digestion is disturbed, abdominal pains, the patients say, are worse than before, the back aches, defæcation is painful, and walking difficult, on account of the pains down the thighs; and if there are any more symptoms in the category of female complaints, add them to the list, for the patient will immediately recognize each ailment, and claim it as her own.

(2) Simple cystic diseases. The ultimate results are good in these cases, such as a large cyst of a Graafian follicle, sometimes as large as an orange, or a cyst of a corpus luteum, half as large. The pains which hung around the pelvic girdle, and centered in the diseased organ, are definitely removed; and that without the distressing phenomena of an artificially induced menopause, because the fellow ovary is usually free from disease, and is not removed.

(3) The ultimate results, in the severe grades of pelvic inflammatory disease, are of the best—enough to fill the gynecologist with enthusiasm for his work. The remote result is a senile condition of the uterus, hernia occasionally, cramps from bowel adhesions, and irritating vaginitis are the unpleasant results which may persist or arise. The one great common result in these cases is complete restoration to health.

(4) In myomatous uteri the results are a simple removal of the distress occasioned by the tumours. Hernia sometimes follows suspension of the stump.

(5) As to the results in malignant disease of the ovaries or of the uterus, including ovarian cystomata, where the infection has not spread to neighbouring structures, infecting the pedicle in sarcoma, or the peritoneum in papilloma or carcinoma, the result is a lasting recovery. It is important to assure such a result by making the pedicle as far from the disease as possible.

When epithelioma attacks the cervix the problem is a difficult one. Recurrence is almost invariably the rule. The patients have from a few months to a year of respite, and then, slowly, the disease returns, choking the pelvis, producing the peculiar cancerous marasmus, and the patient dies of exhaustion or nephritis.

Curetting Early in Puerperal Infection.—M. CHARRIER discusses (*Archives Générales de Médecine*, Aug. 1891) early curetting as a prophylactic and therapeutical measure in puerperal infection. It is only of recent years that the uterus after delivery has been looked upon as a wounded surface; and the difficulty of keeping this wound healthy and aseptic is shown by the not inconsiderable number of women in whom delivery, and more especially abortion, has been the starting-point of a number of more or less serious accidents. The fever may be of short duration, and the infection an attenuated one, but as soon as the patient returns to her ordinary life the trouble begins. Most often the operation of early curetting is one of urgency, and there is little time for preparing the patient. M. Pozzi looks upon repeated shivering, a temperature of over 39°C. in the axilla, the general state of the patient, the pulse, etc., as afford-

ing pressing indications. The curetting is done in much the usual way, with strict antiseptic precautions, and with gentleness; a blunt and non-cutting instrument being used. The uterus is washed out, and the cavity tamponed with iodoform gauze. Anæsthesia is not necessary. The amount of foetid *débris* brought away may be extraordinary. The author says that this treatment is indicated in cases of slighter infection, when abdominal tenderness, less marked fever, and foetid lochial discharge are present. Antiseptic injections may render the *débris* powerless from a bacteriological point of view, but such patients do not thoroughly recover. The objections raised against this treatment are that intra-uterine washing out is most often sufficient; and secondly, the supposed gravity of curetting the uterus after delivery. But if anything remains behind in the uterus these injections cannot be counted upon; and again, if the operation is done with care, it is never followed with evil consequences. Puerperal accidents, rare now-a-days, will no longer be feared if washing out the uterus and curetting be used. If this treatment of puerperal infection has not as yet passed into practice, it is because it has been adopted too late in the case, or has not been carried out with the necessary precaution. If this be done, the maladies of the uterus and appendages appearing later will be diminished in number.

Hospital Reports.

MONTREAL GENERAL HOSPITAL.

CONDENSED REPORT OF MEDICAL CASE UNDER THE CARE OF DR. WILKINS.

(Reported by Dr. H. J. Wasson, House Surgeon.)

Pneumonia Treated by Cold Baths.

Richard B., aged 20, admitted to the General Hospital May 7th, 1892, complaining of pain in the back and left side, with headache. Present illness began three days previous to admission, with pain in the left shoulder, cough and expectoration. These symptoms becoming worse next day, he had to stop work and go to bed. He had several chills during the day, but no rigor. Saturday evening, on entering the hospital, temperature was $103\frac{1}{2}^{\circ}$, respiration, 30; pulse, 90.

Personal History.—Habits good; occupation, brass polisher. He had pneumonia eighteen months ago; otherwise he has always enjoyed good health. Family history negative.

Patient is a medium sized man, well nourished; muscular system fairly well developed; skin moist, but very hot; face slightly flushed; pupils moderately dilated; alæ nasi dilate with expiration; lips dry; tongue covered with a thin white fur, which becomes brown towards the centre. Patient lies on the right side and complains of a continuous pain just below the left nipple becoming severe on deep inspiration. Respirations 30, costo-abdominal in character; expansion markedly diminished on the left side, especially over the front of the chest. Percussion note and vocal fremitus not altered; breath sounds slightly weakened on the left side. Back of the chest: there is diminished resonance on percussion over the left side, most marked in the inter-scapular region; breath sounds and vocal resonance diminished in the same area; no adventitious sounds are heard. High in the left axilla there is bronchial breathing, bronchophony, and a mucus click on inspiration. Cough is troublesome; expectoration free, consisting of frothy mucus mixed with tenacious, viscid, rust-colored mucus; heart normal; liver and splenic dulness not increased; urine clear, rather dark in color, acid in

reaction; sp. gr. 1025, slight trace of albumen present, no sugar; chlorides are slightly but not markedly diminished. The case was diagnosed as one of pneumonia of the left upper lobe, and he was put on sulphate of quinine gr. iv. every six hours and a bath ordered to be given whenever the temperature rose above $102\frac{3}{4}^{\circ}$; temperature of baths 85° , reduced to 68° . The first bath was given on the 8th, the day following his admission, at 2.30 p.m. Before bath, temperature was 104.2° , respirations 32, pulse 100. Duration of bath twelve minutes. Temperature in bath $101\frac{1}{2}^{\circ}$; 30 minutes after, temperature was 99° , respirations 24 and pulse 84.

His temperature remained down until the following morning when it began to rise, and at 9.30 a.m. another bath was given. Patient's temperature then was 104.2° , respirations 36, pulse 116. He was kept in the bath 11 minutes; temperature on removing was 100.5° ; half an hour after, temperature was $99\frac{2}{3}^{\circ}$, respiration 32, pulse 88, but it immediately afterwards began to rise, and at 2 p.m. temperature was $104\frac{1}{3}^{\circ}$, respirations 40, pulse 100; a bath was given lasting $12\frac{1}{2}$ minutes, on removal temperature was $101\frac{1}{3}^{\circ}$; half an hour after, temperature was $100\frac{1}{2}$, respirations 26, pulse 88; at 4 p.m. temperature was 104.2° , and at 6 p.m. temperature was 104° , respirations 28, pulse 120; a bath was given lasting $12\frac{1}{2}$ minutes, temperature on removal was $99\frac{1}{3}^{\circ}$; half an hour after, temperature was $99\frac{1}{3}^{\circ}$, respirations 28, pulse 78. His temperature did not remain down, but rose steadily, and at 9 p.m. temperature was 104° , respirations 30, pulse 108; a bath was given lasting 12 minutes, on removal his temperature was 101° ; half an hour after, temperature was $99\frac{1}{3}^{\circ}$ respirations 26, pulse 90. Patient slept well during the night, his temperature remaining below 103° until the afternoon of the following day (the 10th) when it began to rise, at 4 p.m. it reached $103\frac{1}{2}^{\circ}$, and at 6 p.m. when his last bath was given temperature was 104° , respirations 32, pulse 92; duration of bath was 12 minutes, temperature on removal was 100° ; half an hour after, temperature was 98° , respirations 26, pulse 78. At 8 p.m. patient was asleep and slept until 4 a.m.; his temperature was then 102° , respirations

24, pulse 90 ; it continued falling, and at 10 a.m. reached 98° , and since that time it has been below $98\frac{1}{2}^{\circ}$. The average fall after the bath was temperature 5° , pulse 6, respirations 21.7. Cough and expectoration were, as a rule, increased during and after the baths ; headache was relieved and he usually slept for one or two hours. On the 11th, the fifth day after entering, and seventh of his illness, physical examination shows expansion to be increasing on the left side, dulness diminishing and large crepitant râles are heard both in front and behind over the affected area ; no albumen present in the urine. On the 18th patient allowed to sit up and was put on full diet. Physical examination reveals only a little harsh breathing over the left side of the chest. Patient was discharged on the 23rd, the sixteenth day after admission, feeling perfectly well.

CONDENSED REPORTS OF SURGICAL CASES UNDER THE CARE OF
DR. RODDICK.

(Reported by Dr. J. R. Spier, House Surgeon.)

I.—*Ununited Fracture of Femur.*

J. A. J., aged 24, was admitted Feb. 6, 1892, suffering from an ununited fracture of the thigh, the result of a railroad accident on May 22, 1891. He is a native of British Columbia and has always lived there in a healthy district ; is a trainman ; has had none of the diseases of childhood ; has had gonorrhœa and soft chancres several times, but there is no history of syphilis. Uses liquor moderately, but tobacco to excess. No history of rheumatism or gout. Family history negative.

Present trouble dates from May 22nd, 1891, when, while working on an engine, it was wrecked. He was jammed in the wreck, his right leg being twisted about a post. He was taken to the Kamloops Hospital and a compound fracture of the thigh found at about the middle. The limb was put in a double inclined splint and extension applied, which, however, was shortly discontinued. At the end of a month the external wounds had healed, and in another month the splints were removed. Partial union had occurred, but the fragments were overriding each other considerably. The union was broken up and the fragments

readjusted. Coaptation splints and extension were applied and kept on for two months, when they were removed and some union found, but separation and riding of fragments soon reoccurred. The leg was again put up, extension being obtained by the use of Liston's long splint, but no favorable result being obtained patient was sent here. During his confinement to bed he had an attack of renal colic, relieved completely after several days by passage of a small stone.

Present Condition.—A healthy looking young man; appetite good; bowels constipated; lungs show no sign of disease; pulse 86; irregular in rhythm and volume. Heart's action irregular; no adventitious sounds. Urine normal.

Examination of Limb.—Right leg from the anterior superior spine of ilium to the inner malleolus is $2\frac{1}{2}$ inches shorter than the left, and the whole limb is considerably atrophied. At the middle of the thigh the following signs are to be noticed: A large mass of callus can be felt partially surrounding the ends of the fragments. On manipulation considerable antero-posterior and slight lateral movement of the fragments can be made out. This is attended by no pain. There is well marked deformity of the limb, the upper fragment being drawn forward and outward and rotated outward, while the lower is drawn backward and inward. On each side of the thigh at this point are the scars of the old wounds. The movements of the knee and ankle are much limited.

Treatment.—Feb. 11th, patient etherized and parts thoroughly cleansed. A straight incision was made over the hard prominence on the front and to the outer side of the thigh reaching the bone. By now bending the leg (convexity outward) the upper fragment was easily protruded through the wound and the lower fragment with some difficulty. The periosteum having been dissected up, the ends of the fragments were sawn off obliquely in such a manner that when the leg was straightened they accurately fitted on to one another. The ends were now fastened together firmly by two strands of heavy silver wire introduced through small bradawl holes made for the purpose. The ends of the wire were left hanging out of the wound. A

counter opening was made in the lower and outer portion of the thigh and a drain (rubber) introduced. All bleeding having been stopped and parts washed, wound was closed with catgut sutures and a small rubber drain introduced into the upper angle. A light dressing of gauze and absorbent cotton was applied; outside this, four coaptation splints of hard rubber, and outside this the usual dressing of teased gauze and a rubber. An extension of 4 oz. weight by means of pulley was applied.

February 12th.—Temperature normal. General condition good and is not suffering much pain.

March 10th.—Patient's condition has remained good. No bad effects following the operation. During the last week has had an attack of tonsillitis. To-day the dressings were removed for the first time. Wound found in a healthy condition and united in its whole course. Tubes were removed. Light dressing and the coaptation splints reapplied. The wires were untouched and extension was not reapplied.

March 25th.—Patient complaining of some irritation; the dressings were removed and parts washed and dressings reapplied in the same way. Union has taken place between the fragments. General health remains good.

April 23rd.—Dressings removed and parts washed. Patient was etherized. A small incision was made down upon the wires, which were cut and removed; a simple dressing was applied, and a dressing of plaster of paris applied. Union was quite firm. No ill effects followed the operation.

II.—*Gonorrhæal Synovitis of Left Knee—Excision.*

X. G., aged 30, coachman, entered the hospital Oct. 20th, 1892, complaining of a fixed and swollen left knee joint.

Personal History.—Uses liquor and tobacco moderately. No history of any illness before last April. In April, 1891, a few days before the trouble started in his knee, he noticed a yellowish discharge from the urethra. This was accompanied by the usual signs of gonorrhœa. Family history negative.

Present Illness.—On the evening of the 29th of April, while walking about the house, the left knee joint suddenly became

stiff and painful, with shooting pains up and down the leg and thigh. The patient at once took to bed, the joint commencing to swell. The joint continued to swell and reached its maximum at about the end of three weeks. The leg became semi-flexed, the contraction increasing with the swelling and pain. The pain was constant, of a shooting character, but increased in severity at night. Towards the end of July the knee had assumed a flexed position. He was sent to Notre Dame Hospital and treated by extension by weight and pulley. This straightened the limb considerably, but it remained painful. He was discharged Sept. 28th, 1892, but in a short time his leg became as badly flexed as ever, and he entered the Montreal General Hospital Oct. 20th, 1892.

Present Condition.—Apparently healthy, well nourished man; appetite good; bowels regular; lungs, heart and urine give no sign of disease.

Examination of Part.—The joint is fixed. The leg semi-flexed upon the thigh. There is swelling chiefly confined to the lower end of the femur. Patella is fixed and immoveable. Attempted moving of the joint causes great pain. Measurement over patella shows a slight increase in size. No difference in temperature of two joints.

Treatment.—For the first week hot fomentations of lead and opium were applied and limb kept at rest.

October 31st.—Patient etherized and adhesions in the joint broken up by forcibly flexing and extending the leg. A McIntyre splint was then applied and an ice bag on the knee.

November 7th.—A good deal of inflammation followed above treatment, but quickly subsided. To-day commenced extension and flexion of the knee by means of the splint. This caused great pain. Ice bag still continued.

November 16th.—Patient is able to flex and extend the limb by aid of the splint to a slight degree without much pain. Ice bag discontinued.

December 3rd.—Condition of the limb not having improved any further, excision of the joint was decided on, and to-day Dr. Roddick performed the operation as follows:—A curved

incision was made passing slightly below the centre of the patella. The flap was dissected up, the patella sawn across the centre, and the joint opened. The articular surfaces of the three bones were firmly united by large quantities of fibrous adhesions. The articular surfaces of the femur and tibia were removed after the plan suggested by Professor Fenwick, leaving a convex surface on femur fitting into a concave surface on tibia. The articular surface of patella being removed, the two fragments were sutured by heavy chromicised catgut and the wound closed after thorough irrigation. Two McKeown's nails were driven upwards and inwards through the head of the tibia into the femur, holding the limb firm. Catgut drains were introduced on each side. A posterior splint prepared from Gooch's splinting and accurately fitting the whole leg was now adjusted, also an anterior iron splint with a bracket opposite the point, as suggested by Dr. Watson of Edinburgh, all held firmly in place by plaster of paris bandages, leaving a window exposing the whole extent of the wound. The usual dressing of gauze, absorbent cotton and rubber was now applied.

December 8th.—To-day the dressings were removed, the splint not being interfered with and union by first intention found to have taken place; every second suture removed; parts thoroughly washed and dressed as before.

December 18th.—Dressings removed and wound found to be healthy. Some suppuration (causing occasional slight rise in temperature) occurring about the nails, they were removed, as also the remaining sutures, and parts dressed as before.

December 30th.—Since the last dressing the temperature has continued normal. Dressings removed and a simple gauze dressing applied. Firm union of bones.

February 8th.—The patient was discharged to-day on crutches, flannel bandage only applied to prevent swelling.

May 1st.—Patient is quite well and able to walk without the aid of a stick, and has resumed his work as coachman.

CONDENSED REPORT OF SURGICAL CASES UNDER THE CARE OF DR. SHEPHERD.

(Reported by C. F. Martin, M.D., House Surgeon.)

I.—*Umbilical Hernia—Radical Cure.*

Michael O'G., aged 61, entered the Montreal General Hospital on May 25th, 1892, complaining of a small painful swelling in abdomen, situated near navel; also of vomiting, syncopal attacks and great weakness. In March, 1892, he first noticed this swelling, which was unaccompanied by any other symptoms until about May 10th, when it became obviously larger and caused slight pain when patient coughed. From this time on tumor increased in size, becoming more and more painful up to day of admission. On May 23rd he for the first and only time vomited, but the other symptoms becoming alarming he entered on May 25th.

Condition on Admission.—Much prostration; pulse small and rapid; respirations labored and painful; abdomen very painful and exquisitely tender just above and to right of the umbilicus, where a tumor is seen about size of an egg, soft and movable, and dull on percussion. In addition, patient has a double inguinal hernia which has existed for a number of years, and for which he wears a truss. Patient was examined, and after trying for a moment to reduce the mass by manipulation, Dr. Shepherd decided to operate, suspecting an omental hernia. Accordingly after the usual preliminaries, an incision $2\frac{1}{2}$ inches long was made above the umbilicus in the median line and the skin and subcutaneous tissues divided. Immediately the omentum was reached and found protruding through the *linea alba* and constricted by the dense aponeurosis beneath; no bowel accompanied the omentum. The protruding portion was tied and cut away with scissors and the pedicle returned into the abdomen. The ring was next closed with three silkworm gut sutures and the skin incision similarly sutured, no drain being employed.

Patient, who was an old alcoholic, recovered poorly from the ether and for several nights suffered from delirium. On the third day, however, he resumed his normal condition and continued thenceforth to improve. Severe coughing spasms

for a few days occasioned much abdominal pain, but were finally controlled by suitable remedies. On the eighth day the stitches were removed showing a clean and perfect union.

On the fifteenth day patient sat up in a chair, and on the twenty-first day left the hospital quite well. He returned June 27th and stated that he suffered no trouble of any kind and had resumed his occupation on the messenger service.

II.—*Congenital Inguinal Hernia in a Child—Radical Cure by a Modified Bassini's Operation—Satisfactory Result.*

Ernest G., aged 6 years, was admitted to hospital in April, 1892, complaining of swelling in left groin, which disappeared on lying down. Two weeks after birth the swelling was first observed by parents and recognized as a hernia; a truss was worn for several years, but failed to keep up the hernia, so patient entered hospital for operation.

When admitted, child was in good general health with no evidence of disease in any of the organs. The swelling in the groin presented all the symptoms of inguinal hernia and Dr. Shepherd decided upon operation for radical cure.

Operation, May 6, 1892.—The primary incisions were made in the usual manner, but the sac was found to be unusually large and the cord very difficult to isolate. The latter after being finally separated from the sac and the canal slit up, was transplanted to the outer end. The sac itself was cut off above the testicle and closed with continuous catgut sutures so as to form a new tunica vaginalis. The upper end of the sac was separated well up to the abdominal cavity and tied off, the ligatures being fastened to the abdominal wall, as recommended by Barker, of London. The ring was closed with silkworm gut by suturing the conjoined tendon to Poupart's ligament, the superficial structures being separately sutured. As mentioned above, the cord was transplanted to the outer angle of the wound and covered by skin and fascia and the aponeurosis of external abdominal oblique. The wound was drained at its inner end with a few strands of catgut and dressed with sterilized gauze and absorbent cotton, the whole being covered with crinoline.

Recovered well from the ether and with the exception of transient œdema and temporary orchitis, he had no untoward symptoms.

Dressings were removed on thirteenth day and showed good union, though the catgut sutures had evidently proved less satisfactory than the silkworm gut under similar conditions. A fortnight later patient was well enough to sit about and walk around the ward with care, and a few days later, when bandages were finally removed, no signs were left of the hernia except a slight inflammatory exudation beneath the skin at the site of the operation.

Reviews and Notices of Books.

Transactions of the American Dermatological Association. Fifteenth Annual Meeting. G. T. Jackson, M.D., Secretary.

This volume of Transactions is decidedly improved by having abstracts of all the papers introduced before the discussion. Formerly only the discussion was reported and no account given of the paper, and the result to the reader was on this account very unsatisfactory. The most important papers are those on Cutaneous Tuberculosis by Drs. J. C. White, Bowen and Fox. This subject is treated clinically and pathologically by the first two, and its treatment is fully discussed by Dr. G. H. Fox. We notice papers by Drs. Duhring, Morrow, Bulkley, Taylor, Hyde and others. Molluscum Contagiosum is discussed in two papers by Drs. J. E. Graham and A. B. MacCallum of Toronto. Dr. Shepherd of Montreal reports an interesting case of Sarcoma, involving the skin of the arm. Dr. Bronson of New York gives one of his valuable contributions on Pruritus. In all, twenty-seven papers were read and discussed. We should like to see fuller reports of the papers, but many of them are published elsewhere.

BIBLIOGRAPHY.

Twenty-eighth Report of the Trustees of the City Hospital of the City of Boston. Jan. 1, 1891—Jan. 31, 1892.

Beitrag zur Operativen Behandlung der Trigemini-Neuralgien,

von Arthur Flach. Inaugural Dissertation. Karl Stämpfli & Cie., Berne. 1892.

The Bullous Form of Iodic Eruption. Prince A. Morrow, M.D., New York,

Some Differential Points in the Diagnosis of Syphilis and Tuberculosis, with illustrative cases. Prince A. Morrow, M.D., New York.

The Use of Morphine and other strong sedatives in Gynæcological Practice. Hunter Robb, M.D., Johns Hopkins Hospital, Baltimore.

L'Otite Grippale Observée à Paris en 1891. Dr. Loewenberg.

Beitrag zur Statistik der Rectum-Carcinoma, von Dr. C. Arnd, of Berne. (Reprint from *Der Deutschen Zeitschrift f. Chirurgie.*) 1891.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 27th, 1892.

F. BULLER, M.D., PRESIDENT, IN THE CHAIR.

Contracture of the Muscles of the Calf of the Leg following Injury.—DR. ARMSTRONG showed a man who, two years ago, had fallen from a scaffold producing a hemorrhage into the spinal cord. There had been paralysis of motion for five weeks and of sensation for seven weeks; control over the sphincter of the rectum had not been lost, but he had to be catheterized. An after result had been the permanent contraction of the calf muscles producing talipes equinus with a slight varus. Dr. Armstrong three weeks ago divided the tendons and put the feet up in plaster of Paris splints, these had just been taken off and the man can now walk pretty well, the feet being placed flat on the ground.

Malignant Disease of the Rectum.—DR. ARMSTRONG showed a man upon whom he had operated twice for malignant disease of the rectum. The patient came first to him in September last with a small mass in the wall of the rectum and which was freely movable on the surrounding parts. A partial excision was then performed; the wound healed well. This spring a return of the disease was observed and Dr. Armstrong removed three and a half inches of the whole circumference of the rectum after a careful separation of the prostate and surrounding parts. Three weeks ago the patient began to develop peculiar nervous symp-

toms, he had a convulsive seizure very like that of epilepsy, the spasms would begin in the right hand run up the right arm and affect the whole of the right side and slightly the left. He had a second seizure in the course of a week and last week had two more. An examination of the eyes at first proved negative, but on two subsequent occasions there was found evidence of slight optic neuritis. These peculiar symptoms are probably due to secondary carcinomatous deposits in the periphery of the brain, thus producing the Jacksonian epilepsy by irritation of the motor tracks.

Abscess of the Brain following a Compound Comminuted Depressed Fracture of the Skull.—DR. FINLEY exhibited a portion of the brain in which the abscess was situated. An opening in the left frontal bone was present, and a depressed fracture involving both tables at each extremity of the opening. The abscess was situated in the substance of the left frontal lobe in front of the depressed bone, beneath the first and second frontal convolutions, containing about six drachms of fetid pus. The wall of the abscess cavity was formed by a thin layer of lymph, and microscopically showed an abundant small round celled infiltration.

Dr. J. A. HUTCHISON gave the history of the case (see page 18.)

DR. BELL referred to the sudden bad change spoken of in the report; the patient had a severe chill and became maniacal, he was in a dazed condition and could not or would not speak, there was extreme dilatation of the veins of the neck and ears on both sides which symptom had not been observed before and passed off in forty-eight hours. This dilatation was so marked that Dr. Bell thought that there must have been some obstruction to the venous flow in the sinuses. As the man was semi-unconscious ether was not administered, the wound was reopened and a quantity of sloughy grumous looking material escaped, after which there was marked relief to the symptoms.

DR. ARMSTRONG asked for more full particulars as to the cause of death. If the abscess did not rupture into the ventricles, were there any anatomical or pathological lesions that would account for the sudden termination?

DR. FINLEY in reply said that judging from the condition of its walls, the abscess was recent and had enlarged rapidly, which he thought was sufficient to cause death. The sinuses were not obstructed. He referred to a case of abscess in the cerebellum which had died suddenly, no further cause of death being found.

DR. SHEPHERD thought that the intense flushing was due more to a disturbance of the sympathetic than to stoppage of the sinuses.

Left-sided Paralysis following a Depressed Fracture of the Skull.—DR. HINGSTON showed a young man who had entered the Hotel Dieu Hospital three weeks ago suffering from paralysis of the left side. He gave the history of having been struck on the head by a falling ladder twelve years ago. On recovering after a long period of unconsciousness, the whole of his left side was paralyzed. He, in time, regained the use of his leg, but his face and arm, especially the flexors, have remained paralyzed. On examination a marked depression was seen on the right side of the skull. A large horseshoe-shaped incision was made through the scalp and a crucial incision through the periosteum, a piece of bone about the size of a fifty cent piece was removed, and as the opening did not extend the length of the depression another piece was removed with powerful bone forceps. Two pieces of bone projecting five lines were thus removed, leaving a cup-like depression in the membranes. The wound was carefully closed and on recovery from the chloroform the hand assumed an almost natural position, the face did not look as if it had been paralyzed, and on whistling one could hardly distinguish any difference between the two sides.

DR. ELDER asked if there had been any absorption of brain substance due to the prolonged pressure, he thought that if such had been the case the paralysis would have continued and that it would have been more localized.

DR. HINGSTON said that there was some loss of substance; the flexors of the wrist were the muscles most markedly affected, but the whole motor area had been pressed upon. There had been no loss of sensation.

The PRESIDENT thought that it was a most remarkable physiological fact that a man should recover immediately after twelve years loss of function.

Epithelioma of the Hand.—DR. FINLEY exhibited a hand over the back of which was a large fungating ulcer which presented all the characters of a typical epithelioma.

Dr. ARMSTRONG stated that the patient from whom the specimen had been removed was a woman aged 45. An interesting feature of the case was the long duration of the growth, ten years ago a small papule appeared on the back of the hand, this was scratched off and became crusted over and has since been slowly progressing until it presented the large ulcerated surface now seen. The point of interest in the case is whether this was simple and had changed its character or had been epitheliomatous from the beginning. Another interesting fact was that the patient had an epithelioma on the lower lip half an inch from the mucous membrane.

DR. BELL asked if it was possible to make a definite diagnosis between epithelioma and chronic tubercular or lupoid ulceration of the skin. He had worked at the question and thought that it was extremely difficult to distinguish between these two conditions. He had seen one case of multiple epithelioma, but such a condition is very rare.

DR. RODDICK said that it was very important to know whether an ulcer of comparatively simple character will become malignant in later years. In some cases of burns the ulcer may last for years, having all the characters of a simple ulceration, but suddenly take on a malignant action. He did not think that this case was malignant from the beginning. Epithelioma often lasts a very long time without the glands becoming involved.

DR. JOHNSTON called attention, when such a diagnosis is difficult, to the great importance of making inoculation experiments with rabbits, guinea pigs or other animals susceptible to tuberculosis. In lupus the microscopical examination for bacilli is very tedious, for they are very hard to find. The histological elements are very similar in the two conditions.

Perforation of the Bowel in Typhoid Fever.—DR. FINLEY exhibited a specimen of a typhoid ulcer with a small round perforation in the centre. There had been a small quantity of fluid in the peritoneum, but no general peritonitis. The spleen was remarkably small, weighing only 95 grammes. The attack had set in suddenly and ran a mild course until the thirteenth day when she was seized with sudden pain in the abdomen with a fall of temperature to 95°F., a weak and feeble pulse, vomiting and abdominal distention. The temperature never rose above normal after its sudden descent, and the patient survived the perforation for nearly four days.

Total Extirpation of the Uterus for Myoma.—DR. WM. GARDNER exhibited a large myomatous uterus removed by total abdominal extirpation. The patient had been under his care for seven years; two years ago the ovaries had been removed for hemorrhage but without benefit. The operation was difficult on account of the adhesions which in places were so dense that thin slices of the tumour had to be left on the intestinal surfaces. The patient made a good recovery. The case illustrates the fact that removal of the appendages sometimes fails to induce the menopause or to check hemorrhage. This is the third case that Dr. Gardner has operated on by this method and all have been successful, showing that with careful antisepsis it is not the formidable undertaking it was when first proposed by Freund.

Cancer of the Body of the Uterus.—DR. GARDNER exhibited the specimen removed from a patient about 50, menstruation having ceased three years before. As the parts were lax, the uterus movable and not very much enlarged, it was a very favorable case for removal through the vagina. Dr. Gardner thought the chances for non-recurrence were very good.

Three Cases of Abdominal Section.—DR. LAPHIORN SMITH read the following report of these cases:—

Case 1.—Mrs. E., aged 29, began to menstruate at 15; never regular, sometimes skipping eight or nine months and sometimes a year; was married at 24. She had her first and only child on the 19th March, 1891. She made a good recovery without

any fever, but nursing her baby caused such excruciating pain that she was obliged to wean it about a week after its birth. For the next three or four months she remained perfectly well, but about the middle of July she noticed a pain in her right side, which kept growing steadily worse until one night she was taken so bad that she had to send for Dr. Hutchinson, who attended her for some time. As the patient was having a high fever, night sweats, and very weak, he called me in consultation, when he informed me that he had detected a swelling in the right vaginal fornix. On examination I found this swelling, but by that time it had extended down by the side of the rectum and behind the vagina. It seemed so hard that I thought it would be safer to wait two or three days before opening it, by which time I hoped some soft or pointing spot would be found. That was on a Saturday, and we intended to open and drain on Monday, but on Sunday afternoon she was taken so ill with attacks of fainting and partial unconsciousness that Dr. Hutchinson wisely decided that it was not safe to wait any longer. He sent for me to come at once, but as I was not in town Dr. Gardner was called, and made an opening in the right vaginal vault. The pus was under great tension, for it spurted out with much force and was very foetid. A drainage-tube was inserted and kept in until the last week in August, when she went to the country, where she remained till the 1st of October. All the time she was there the discharge continued very profuse and bad smelling, and the pain was so great that she partly lost the use of her right leg. On the 30th of April, 1892, she walked into my office and begged that I would, in her own words, "either kill or cure her." She stated that she soiled as many as two dozen napkins a day, that the odour from the discharge made herself and her husband sick, and that she was growing weaker and weaker every day. On examination I felt a hard cicatricial ring where the opening had been made and above that a tensely fluctuating mass filling up the right two-thirds of the pelvis and pushing the uterus over to the left. By the bimanual this mass was found to be slightly movable in the pelvis, but very intimately adherent to the uterus. She informed me that the discharge was constant, but at times

there were profuse gushes of matter. I explained the serious nature of the operation to her, but she urged me to undertake it at once, so I admitted her to hospital, and on the 7th May, with the assistance of Drs. Perrigo, Lockhart, Spendlove and Goltman, I performed one of the most difficult operations that either my colleagues or I had ever seen. The omentum was adherent to the tumour and the tumour was so adherent to the uterus, to the wall of the pelvis, and to the broad ligament, that after half an hour's digging at the adhesions without making much impression on them, both Dr. Perrigo and I had almost come to the conclusion that it was in the broad ligament, and that there was no possibility of removing it. A coil of small intestine was separated from the top of the pus sac, to which there was an adhesion about two inches long and which bled profusely, necessitating the application of the thermo-cautery to the bleeding surface. At this point the bowel was considerably thickened. At last I was able to introduce the tip of my finger into a crevice between the pus sac and the floor of the pelvis, and after half an hour's more dissecting with the finger I succeeded in cutting through the firm adhesions to the cicatricial ring around the opening leading to the vagina. When we reached the wall of the pelvis I had to exercise great caution lest I should tear through the large veins, but with Dr. Perrigo's help I succeeded in freeing all the tumour except the part attached to the broad ligament. Although we spent another quarter of an hour on this, it was found absolutely impossible to separate it, so I proceeded to tie the broad ligament near the uterus and cut it off. During the manipulations two distinct sacs were ruptured; the first allowed about two ounces of clear serum to escape, the second about four ounces of dirty pus, both of which were quickly sponged away. The broad ligament was tied with chain sutures and a part removed with the abscess sac. The abdomen was then flushed out with hot water, the omentum drawn down, a long drainage-tube passed into the bottom of Douglas' sac, and the incision closed with silkworm gut. The patient has made an uninterrupted recovery, although for a few days at the end of the first week the distension of the abdomen caused me great anxiety. It caused very

severe torminæ, which were hardly relieved by fomentations, turpentine internally and externally, salines, assafœtidæ by the mouth, and by enema. I consulted the work of that experienced old operator, Skene, and found that he strongly recommended a prescription of Keith's in such cases—namely, an enema of eight grains of quinine. This acted almost at once, and in a few hours tremendous quantities of flatus were passed and the patient experienced such relief that she begged to have the quinine injections continued long after the abdomen had become quite flat. The temperature never rose above 99°, and then only for one night, when it reached 100½°. Most of the time it has been below 98°. The drainage tube was removed on the nineteenth day, but it was cut off from time to time as it was pushed up from below by the granulations in its track. During the first week there was a good deal of discharge from it, but it has nearly ceased now, the eighteenth day. The patient is on full diet and is looking and feeling remarkably well. The day before the operation she soiled twenty-four napkins, but did not loose a drop by the vagina since.

This case is of interest, because it throws some light on the very mooted question whether there is such a disease as pelvic cellulitis, or whether all so-called cases of cellulitis are not really pyo-salpinx. I have had abundant proof to convince me that there is such a disease as cellulitis, but I admit that it is much rarer than is generally supposed. It occurs mostly after a confinement accompanied by a tear of the cervix into the broad ligament and subsequent infection of the cellular tissue contained therein and separating the pelvic floor from the vaginal roof. The majority of cases of what has in the past been called cellulitis were really cases of pelvic peritonitis due to a leaking pus tube. In the light of subsequent events the course of the disease in this case seems to me quite clear. First a pyo-salpinx with slight oozing into the peritoncum and conservative local peritonitis glueing up the fimbriated end of the tube. Then the pus accumulated in the tube, distending it until it was ready to burst, followed by conservative adhesions to the pelvic floor, just over the vaginal roof. Then thinning of the former and bursting of

the pus tube into the cellular tissue immediately under the peritoneum, forming the floor of Douglas. Then collection of pus in, and infection of the cellular tissue, from which it was partly removed by the incision and drainage. The pus sac being there all the time, there was a continual filling up and emptying it, accompanied by fever and wasting, which could only be stopped by the total removal of the abscess cavity. The first sac which broke during the operation was doubtless a cyst of the ovary, and the second the pus tube very much distended, as it was fully as large as an orange. At the first consultation the question of abdominal section was raised, but at that time the symptoms pointed so clearly to cellulitis that there was no decided evidence to show that there was anything wrong above the peritoneum. This case, however, will do much towards making me consider all pelvic inflammations as intra-peritoneal until I have proof to the contrary, which can only be obtained by exploratory incision of the abdomen. There is no doubt the removal of this pus tube by abdominal section would have been a comparatively easy matter if it had been performed when I first saw her.

Case 2.—Miss X. consulted me at the Montreal Dispensary in Feb. 1892, for a pain in her right side. She had been delivered of a child two months before, and this had been followed by a high temperature lasting for a week or more. On examination, I found a slight laceration of the cervix on the left side, which had been deep enough to extend into the vagina, although it had healed up itself, leaving a cicatrix in the vagina, but very little eversion of the lips of the womb. I could not make out anything on the right side to explain the pain. After treating her for a few weeks at the dispensary I took her into the Women's Hospital and treated her with rest, counter-irritation, etc., until the end of my term on the 1st of April. Dr. Cameron then took her over and continued the same treatment with considerable benefit, until the 18th May, when he handed her over to me, and my attention was called to a round hard mass very closely connected with the uterus on the right side, but the one moving slightly without the other. After consultation with the staff, abdominal section was decided upon, and on the 24th May,

assisted by Drs. McConnell, Reddy and Springle, and in the presence of Drs. Hingston, Perrigo and Armstrong, and several visiting physicians, I performed the operation without much difficulty, beyond the separation of the adhesion of the omentum to the tumour and the adhesions of the tumour to the back of the broad ligament and to the floor of the pelvis. I was fortunately able to deliver it without rupturing it, for it was found to be an ovarian abscess, the pus from which is exceedingly virulent. Just before separating it, after having tied the pedicle, a few drops of pus exuded, which were quickly caught on sponges which were discarded. The peritoneum was cleaned and the incision closed with silkworm gut; no drainage-tube was inserted. No opiates were given, and no food or drink allowed for twenty-four hours. At the end of that time the administration of Rochelle salts every four hours was begun until a thorough passage was obtained after the third dose. The patient was allowed to turn freely in her bed, and is doing very well, the highest temperature recorded so far being 99° on the third night.

An interesting point in this case is the advisability of aspirating these ovarian abscesses before manipulating them. At a meeting of the Gynæcological Society of New York, at which I was recently present, Coe, Boldt and Krug all urged the importance of this preliminary step, several cases being referred to having terminated by peritonitis owing to the peritoneum having been infected by this very virulent pus. I think, however, by surrounding it with a flat sponge, so that, should it burst, the pus will not touch the intestine, the danger can equally well be averted. The second point of interest was that I intended to perform the operation with the head lowered and the feet raised, but was obliged to raise her to the horizontal position owing to her colour turning dark; my portable table was used, which easily enabled the position to be changed in a moment. The third point was that the tumour seemed much larger a few days before the operation than it actually proved to be. The house surgeon, who was watching it from day to day, perceived a considerable reduction in its size after the free purgation which we always give for a day or two before the operation. I have no doubt that pelvic tumours generally do.

Case 3.—Annie —, aged 31, cook, was operated on three years ago by Dr. Perrigo for two ovarian cysts, from which she made a good though somewhat tedious recovery. I was called to see her on the night of the 18th May. She seemed to be in great pain, and had vomited some corned beef and cabbage which was thought to have disagreed with her. On closer inquiry, however, I found that her bowels had not been open for ten days, but this was a regular thing with her, and she attributed no importance to it. The temperature and pulse were normal and the abdomen rather full. On inspecting the vomiting matter closely I found that it consisted of the above-mentioned food and a considerable quantity of bile, but there was no faecal odour to it. As I have two or three cases a week at the Montreal Dispensary alone who tell me that their bowels are only moved once a week or ten days, I thought that this was a case of slight intestinal obstruction due to faecal accumulation, which I generally succeed in curing by means of mild laxatives and intestinal tonics, such as rhubarb and soda, and nux vomica. In the meantime I ordered a tablespoonful of castor oil by the mouth every four hours, and a copious enema of soap suds by the rectum, to be followed by a Dover powder to allay the pain. Next morning I perceived that her skin had the dirty look common to patients with chronic constipation. I learned that both doses of oil had been vomited, and that the enema had not been given for various reasons. The pulse and temperature were still normal, but she was in great pain. The abdomen was also slightly distended. I suggested that she should go to the hospital, as it was difficult to have orders carried out, but she begged me not to send her. I ordered two cathartic pills and an enema of soap-suds with a little turpentine in it, and also turpentine stupes to the abdomen. On calling that evening I found her much better, her bowels having been moved and the distension relieved. She had vomited very little during the day. I ordered her milk and lime-water, and as a beverage small doses of citrate of magnesia, which she found settled her stomach. Next morning I found her so much better that I thought the danger was over, there being little or no pain in the abdomen. I was sent for again, however, that night, and found her in great pain and looking very ill. I at once ordered

her to the hospital, and directed the nurse to give her copious enemas of linseed oil. I also arranged for a consultation with the staff. When they arrived, however, at 12 o'clock on the 21st of May she had had two large fæcal movements; she was not much distended, and was feeling very comfortable, so that no consultation was held. I, however, introduced my finger into the rectum and found only a little soft fæces. I saw her again at 5 P.M. of the 22nd, and her pulse and temperature being normal, and there being no vomiting, and as she was complaining bitterly about being starved, I allowed her a cup of tea and a little bread and butter. At my visit on the 23rd I was shocked to find her dying, her pulse being almost imperceptible and the nervous system in a state of profound shock. Four of the staff happening to be in the house a consultation was held, the majority thinking that perforation had taken place, and that it was my duty to open the abdomen and if this was found, to close the hole and wash out the peritoneum. I was not anxious to add another to my death rate of two in seventeen, which was quite high enough, as I was perfectly certain would be the case if I operated on a patient so near death; but, on the other hand, we have no right to shirk operations for fear of spoiling our statistics, and I therefore consented. The gravity of the situation was explained to the patient, who readily consented, and she was quickly placed under ether. The abdomen was opened and a few minutes was spent in turning out the small intestine, which was distended and dark purple, almost slate-coloured. By picking up the ascending colon, which was collapsed, the cæcum and appendix were found; the latter, being adherent, was tied and cut off. The small intestine was then followed back from the cæcum, and was collapsed and healthy until we came to the back of the uterus, where the obstruction was found. Above that the small intestine was two or three inches in diameter; below that it was collapsed. The intestine was so adherent that my finger nail made no impression on it, and I was obliged to cut through a sort of cicatricial union between it and the uterus with the point of the director, involving a half hour's hard work. In spite of the greatest care two small tears were made in the in-

testine, which were closed with Lembert sutures. The bowels, which had been kept wrapped up in towels wrung out of hot, boiled water occasionally changed, were returned to the abdomen, which was then flushed out with hot water. But just as the last sutures were being placed the patient ceased to breathe, the heart continuing long enough for her to become cyanosed.

The lesson I have learned from this case is this: not to be misled by any apparent cessation of the symptoms in a case of obstruction of the bowels. The movements which were obtained before and after her entrance to the hospital were merely the contents of the large intestine, which, at the ante-mortem autopsy, were found collapsed. As has been pointed out many times in this room, the cessation of pain in obstruction of the bowels is a bad sign, for it generally means that they have gone beyond feeling and beyond help. It is even doubtful whether it was not already too late when I first saw her, but, at any rate, I should have taken her into hospital and been prepared to operate the very next day. An exploratory incision would not have added at all to the gravity of the situation, while without it it was impossible to say in what condition the bowels were. Another lesson I have learned from that case is the necessity of putting the future career of the intestines into the balance when weighing the arguments for and against abdominal operations. This had been a very simple operation performed by a very successful operator, and yet the intestine was not only so firmly adherent to the fundus uteri, but there were also dense bands of adhesions between neighbouring coils. This case will make me more than ever careful in every case of abdominal section in the future, as in the past, to keep the bowels on the move for the first twenty-four hours. Obstinate constipation is a frequent sequence of abdominal operations.

Selections.

A Hawthorn Twig in a Man's Ear for Thirty Years.—Dr. A. O. Stimpson, of Thompson, Pa., reports the following interesting case:—

John Nickels, aged 74 years, came from Parkham, England, to this country some eighteen years ago, and gives the following history of himself: "In the month of January, 1844, while forcing his way through a dense hawthorn hedge the end of a hawthorn twig entered his ear and broke off, causing him considerable pain at the time. After he had returned home it had bled quite freely, but on examination nothing could be discovered in the ear. In the course of time, however, he became quite deaf, the ear commenced to pain him considerably, attended more or less with a purulent and fetid discharge. Shortly previous to this, he had been to several reputable surgeons and submitted to a thorough examination, but they claimed that no foreign object could be found in the labyrinth of the organ. When the amount of discharge from the ear became diminished in quantity the pain and discomfort became sensibly aggravated, and gradually the sense of hearing on that side became seriously impaired. His wife says that at times he has acted as if he were partially insane, and she noticed that he felt worse when the discharge became diminished in quantity. The pain has continued to be very severe at times, especially after any extra amount of labor or exertion in his daily occupation as a farmer and agriculturist, and, as he describes it, 'crackling sounds were heard in his head.'" With the exception of this infirmity and the resulting semi-deafness, his general health has been very good. On Monday, the 16th day of January, 1879, he came to my office and requested me to examine his ear and see if nothing could be done for his relief, claiming all the while that he felt as if there were something in his ear. After introducing a silver bivalve speculum in his ear, with the aid of a strong artificial light I discovered a dark hard looking substance projecting through the internal meatus. With a pair of long narrow-bladed forceps I succeeded in getting hold of the object,

and by careful manipulation finally extracted it. There was very little bleeding attending the operation, but a profuse discharge of very offensive purulent matter. The substance extracted was the budded end of a twig a half inch in diameter and one and a half inches long by actual measurement, which was somewhat flattened on two sides. It consisted of tough, hard, woody fibre with the adherent bark. Mr. Nickels took the substance home with him and unfortunately lost it, so that afterwards I could not obtain it to exhibit as a specimen. He persistently claimed that the substance entered the right ear, while it certainly was extracted from the left ear. I am confident, however, that he certainly must be mistaken in regard to it as the broken end of the twig presented first. It seems almost incredible that this broken piece of a hawthorn twig could have remained in this man's head for over thirty years without giving rise to more serious symptoms; but both his wife and himself at the time persistently attest to the truth of the aforesaid statement.—*Med. and Surg. Reporter.*

A Blow Upon the Ear followed by Death in a Week.—Heiman (*Arch of Otol.*, xx, 1) reports the following interesting case:—A soldier, aged twenty-one, had been struck on the left side of his face and ear, which caused severe vertigo. The blow caused severe hemorrhage from the ear, which, however, came on forty hours after the blow. The ear had previously at times discharged pus. The patient died delirious on the seventh day after the injury. The autopsy showed pachymeningitis interna purulenta diffusa, numerous small subarachnoid hemorrhages, hyperæmia of the substance of the brain and its membranes, and circumscribed basilar meningitis. A decolorized thrombus was found in the superior longitudinal sinus, and dark-red thrombi were found in the transverse sinus and internal jugular vein. Three small openings were found on the inner surface of the pyramid which led to the tympanum. The upper surface of the mastoid was found sclerosed, and here there were several small softened areas containing pus and particles of bone. The tympanum and mastoid process were filled with thickened pus. In the

mastoid were several large cavities containing pus. Pseudo-membranous bands were found in the middle ear, and the mucous membrane was ulcerated. There was a small perforation in the anterior part of the drum-head.—*N. Y. Med. Journal.*

Iodoform Dermatitis.—A well marked case of this affection is recorded by Legiehn. The patient was a man suffering from purulent catarrh of the right middle ear, for which syringing with warm water and insufflations of iodoform were prescribed. The discharge, which had lasted five weeks, ceased in three days, and the hearing power considerably improved. In order to be on the safe side, the patient continued to use the iodoform, until one evening he experienced immediately after an insufflation a feeling of warmth in the ear, and in the morning found to his astonishment his face swollen. The right ear and right half of the face and neck were reddened, much swollen, and œdematous; and the cheek was covered with eczematous bullæ. There was moderate itching and marked feeling of heat complained of in the inflamed parts; and there being a possibility that the iodoform had something to do with it, the powder was discontinued, and ichthyol ointment used, under which the eczema rapidly healed. Two weeks after, the patient noticed a return of the otorrhœa, and although convinced that the insufflation of iodoform was the cause of the previous swelling of the face, he again employed it, hoping to receive marked improvement of the discharge. About an hour after, he perceived a hot sensation in the outer ear; and in the course of the night, the ear and face had assumed the same appearance as before. The former treatment sufficed to make it disappear as rapidly as before. Legiehn thinks there cannot be the least doubt that the dermatitis depended upon the iodoform, as on the first examination there was nothing in the ear passage that could possibly cause it, and its recurrence on the second occasion confirmed this fully. [*Practitioner*, xxxvii. p. 271.] (*Therap. Monatshefte*, No. 4, 1892.)

Polyuria and Sciatica.—At a recent meeting of the Medical Society of the Paris Hospitals, Drs. Debove and

Rémond announced certain phenomena which they had observed in their cases of sciatica. In the first case they found that polyuria was present, the amount of urine passed daily, varying from 2 to 4.25 litres. Inquiry elicited the fact that the same thing had occurred three years before when the patient had suffered from an attack of sciatica. This led to further investigation and three other sciatic patients were found in whom a like condition was present. In one of these cases azoturia was found in addition to the polyuria. Dr. Mathieu, having heard of these facts from his confrères, was led to make investigations on his own account and he also found polyuria present in two patients suffering from sciatica. Dr. Desnos thought that he had found this condition present in other painful affections, as for example in hepatic colic.—W. F. R. in *Journal of Nervous and Mental Disease*.

Most Favorable Time for Conception.

—Pozzi (*Centralblatt für Gynakol.*) reports fresh studies of this familiar subject. His observations were conducted with great care upon the newly married sailors' wives (in whom the time of fruitful coitus was known), and in cases of artificial impregnations. Twenty-seven cases were analyzed, from which it was found that conception is most likely to occur just after the cessation of the menstrual flow. This is also the most favorable time for successful artificial impregnation. The writer has established the fact that spermatozoa deposited in the vaginal fornix remained active for seventeen days; hence fruitful coitus may occur before menstruation.

The Uses of Bromide of Strontium.—

Professor Germain Sée says of pure bromide of strontium (Paraf-Javal) that "it never produces any disastrous effect on the stomach even in large doses. It may be taken in doses of four grammes (sixty-two grains) at each of the three daily meals. Out of thirty-two patients suffering from gastric dilatation, several have been improved, and some altogether cured. I believe that the bromide of strontium (Paraf-Javal) will advantageously take the place of bromide of potassium, and especially the polybromides, in the treatment of epilepsy."—*Académie de Médecine*, Oct. 1891.

THE

Montreal Medical Journal.

VOL. XX.

JULY, 1892.

No. 1.

THE CORONER'S COURT AND ITS REFORM.

Mr. Archambault's recommendation to the Government regarding the coronership deserves earnest consideration, and has, in some respects, our hearty approval. It is our opinion that the coroner should have had a legal training, for his functions are much more judicial than medical. As regards the recommendation for the appointment of two medical experts to perform autopsies, we are of opinion that one would suffice, as the salary divided between two would not be sufficient to attract good men. One good man trained in all modern pathological methods, and whose opinion would have the respect and confidence of the profession, is all that is needed. It does not matter whether he is French or English, provided he is a competent man. The appointment of a political hack to this position will not satisfy the medical profession, which has long ago learnt to receive with suspicion the verdicts of coroner's juries founded on erroneous pathological evidence. In one of our medical museums are several specimens showing death from violence where the verdict has been death from natural causes, serous apoplexy, pneumonia, etc. It is a disgrace to our 19th century science that such a state of affairs should exist, and the sooner an improvement takes place the better. The profession as represented by the Montreal Medical Chirurgical Society has done its duty, and it now remains for the Government to perform its part.

OPERATION FEES.

The profession and laity in Chicago have recently been much disturbed about the question of fees for operations. It appears that a rich man's child took diphtheria and a specialist had to be called in by the family doctor to perform intubation. The child recovered and the specialist sent in a bill for \$2,000, with an explanatory letter stating that the skill and experience necessary to perform this formidable (?) operation had been gained only by years of most arduous work, and at the risk of health and life itself. The rich man thought the bill extortionate, and, after consulting with some medical friends, sent a cheque for \$400, which was declined. It was finally decided to submit the case to the arbitration of three doctors—one to represent the patient, one the specialist, and a third. They decided that the charge was a reasonable and proper one, and the rich man immediately sent his cheque for \$2,000 to the specialist. The feeling of the community, however, was that the charge was excessive, and that in future not only was operation to be dreaded but the bill that came after. Now, it is doubtless true that operations are performed most frequently on the poor, and that no adequate recompense comes to the operator, but some limit ought to be placed on the amount an operation is worth, and the rich man should pay to the fullest amount; but there should be a limit, and the amount should be lessened according to the means of the patient. We take it that few even of the most difficult operations of modern surgery, such as resection of intestines or stomach, excision of spleen, etc., are worth \$2,000, at least few of the greatest operators in the world get this amount; some get it, and even more, from the wealthy, but it is freely given as an honorarium and not as a fee, nor is it demanded by the operator.

We fail to see that such an ordinary proceeding as *intubation*, which can be done by any medical man of ordinary intelligence and skill in the use of instruments, should be worth \$2,000. We question whether it can be classed as an operation at all any more than catheterization of the urethra for stricture, a proceeding often vastly more difficult. Tracheotomy, on the other hand,

is often a very difficult operation, requiring coolness, skill and surgical experience, more so than many larger operations, but intubation is quite another matter. Specialists are apt to exaggerate the importance of their speciality and to think that the operations they perform require such skill and intellect as are required in no other branch of the profession.

PUERPERAL INFECTION.

Fochier, of Lyons, observed that in cases of severe puerperal infection, when multiple abscesses formed, the patients recovered more frequently than when such was not the case. This led him to endeavor to produce such abscesses artificially, hoping by those means to favorably influence the course of the disease. He experimented with various substances and finally employed spirits of turpentine. This he injects into the subcutaneous tissue preferably about the upper part of the extremities. The irritation thus produced seems to offer a suitable nidus for the pathogenic microbes and they concentrate their action at these points and so relieve the general system. In a few days the abscesses can be opened, but Fochier advises not to open them too soon. He says:—"Regarding the mode of action, it is probable that all about the purulent centre soluble products are secreted which vaccinate the system. This appears to me so true that I hesitate to open an abscess, because, the pus evacuated, the beneficial properties disappear; and I advise, before opening the collection of pus, to make another in the vicinity." The actual injection is not more painful than one of morphia, but after a few hours the pain becomes severe. If the injection is made deeply beneath the tissues the swelling is not apparent for several days. About the third day the redness of the skin becomes pronounced and then sometimes the abscess runs an acute and sometimes a chronic course. The turpentine does not appear to be absorbed since the odor is perceptible at the end of a fortnight, although the separate drops cannot be distinguished amidst the pus.

An objection may be made to provoking suppuration in an organism already too liable to suppurate. To this Fochier an-

swers: "The day on which a means of repressing this tendency is brought forward I will no longer provoke it."

Again, it may be said that this method is not new. It is only the old method of revulsion or derivation, and the vesicant, the cauterly and the seton do, at least in part, what is done by the injections of turpentine. To this it may be replied that the injections give better results.

Following this communication, which was made to the *Société Obstetricale de France* in April last, three cases of pneumonia have been reported treated by this method. These cases did not resolve and threatened to suppurate, but under this treatment they all recovered. One was reported by Lépine, of Lyons, the second by Dieulafoy, of Paris, and the third by L. Bard, of Lyons. It was remarked that as the inflammation at the seat of the injections increased, that in the lung decreased. The injection consisted of 1 c.c. of spts. of turpentine injected with a Pravaz syringe.

TORONTO UNIVERSITY AND CLINICAL TEACHING.

As we go to press, the "*Report of the Standing Committee*" (of the University of Toronto) "*in the Faculty of Medicine on the subject of Hospital facilities*" reaches us. It is most interesting reading, and shows that at last Toronto University has awakened to the fact that clinical teaching in the wards (not the theatre) of a hospital is a most important part of a medical education. The report leads us to infer that ward-work is not a feature of the instruction given at the Toronto General Hospital, that the students have not the advantages they possess in English Hospitals in the way of obtaining clinical clerkships and dresserships, and that thus they do not come into immediate contact with patients. Numerous recommendations are made for reform, and a system of bedside clinics after the manner of those given in the London hospitals is advocated. A reduction of the staff is also recommended,—two surgical and two medical chiefs, with assistants—one pair of chiefs to belong to the University of Toronto, and the other to Trinity Medical School. They have gone to the United States, Great Britain, and the

Continent of Europe for information, but are apparently unaware that there is a hospital much nearer home where, ever since its foundation in 1820, clinical teaching in medicine and surgery has been carried on in the most efficient manner. The Montreal General Hospital wards have always been thrown open to medical students, and bedside teaching has always been a great part of the work of the attending staff. Two physicians and two surgeons, with three assistant physicians and three assistant surgeons, besides specialists, are daily in attendance, and we venture to say that in no hospital on the American continent have students had such privileges. Clinical clerkships and dresserships are easily obtained, and every student connected with McGill University is expected to have acted as a clinical clerk and dresser in the medical and surgical wards. Reports of cases are always commented on by the attending physician or surgeon, and the students are daily examined at the bedside in rotation on the cases before them; so that each student has the privilege of coming in direct contact with patients. These facts seem to have been either unknown to the above-mentioned committee or ignored by them. In the near future, the facilities for clinical teaching will be much increased by the opening of the Royal Victoria Hospital, with 250 beds. This hospital has been specially arranged for clinical teaching, and will afford many openings for medical students and recent graduates. We believe it is the intention of the governors to place the medical charge in the hands of the Faculty of Medicine of McGill University.

—Theodore Meynert, the distinguished alienist and neurologist, died recently at Vienna, at the age of fifty-nine years.

—Sir Wm. Aitken, M.D., for many years Prof. of Medicine at Netley Army Medical School and author of the well known work on "Practice of Medicine," died recently.

—We regret to have to announce the death of Dr. Henry F. Formad, of Philadelphia. Dr. Formad was well known as a pathologist, and for some time acted as coroner's physician of Philadelphia. He was a Russian by birth and only 45 years of age at the time of his death.

Medical Items.

—H. Stillmark in the *St. Petersburg Med. Wochenschrift* strongly recommends vinum ipecac for weak pains during labor. He recommends 10 to 15 drops every hour for two or three doses. He reports a case where the results of the administration of this drug were most satisfactory.

A SENSITIVE TEST FOR ALBUMEN.—Take corrosive sublimate 8; tartaric acid 4; saccharose 20; distilled water 200. Acidulate the urine with a little strong acetic acid, filter if necessary, and add gently with a pipette an equal quantity of the reagent in such a manner that the two liquids will not be mixed. If albumen is present a white ring is formed at the junction of the liquids.—*La Médecine Moderne*.

—Burlureaux recommends the treatment of syphilis by means of subcutaneous injections of sublimate dissolved in oil of the strength of 1 in 2500. He recommends it for cases where the stomach will not tolerate mercury or where the rapid introduction of the drug is advisable. The injection is painful, and as the dose is large (5 — 20 drachms) the solution must be introduced slowly at about the rate of 5 drachms per hour.—*Abstract from the Revue Thérapeutique Medico-Chirurgicale*.

—Beclère in the *Revue de Thérapeutique Medico-Chirurgicale* reports two cases of gonorrhœal rheumatism in children. Both were girls, aged 5½ years and 20 months, and both suffered from purulent vaginitis with urethritis. The joint affections speedily recovered under treatment by immobilization and pressure by means of cotton pads. He is of the opinion that arthritis in children is more frequently due to this cause than is ordinarily supposed, and may even follow ophthalmia neonatorum.

—In France there is a cloth made from denitrated pyroxylin, which is dissolved in a suitable liquid and then manipulated so as to form threads which are woven into this tissue called *Pilou*. Several people wearing garments made from this and inadvertently sitting near an open fire, have had the unpleasant experience of their garments going off with a flash like gun-cotton. Fortunately no case of severe burn has been reported as a result of wearing these inflammable garments.—*Repertoire de Pharmacie*.

—Dr. Ortiz, of Lorre, excised the tongue of a man aged 50 years, who was suffering from an ulcerated tumor of that organ. There was no history of either syphilis or tubercle. Antisyphilitic treatment was tried, as the tumor although resembling an epithelioma presented some points of difference, but without success. Microscopical examination showed the disease to be *trichinosis* of the tongue, the cicatricial tissue about the cysts having taken on ulcerative action — *Lyon Médical—Revue des Journaux*.

—Janon, of Nantes, reports a case of resection and suture of the urethra in a man aged 67 who fell astraddle of some resisting body. A perineal abscess formed followed by a fistula. A sound could not be passed into the bladder by way of the urethra. The injured part of the urethra with the surrounding cicatricial tissue was isolated and excised. The cut ends were sutured with catgut and a sound left in the urethra. Union by first intention was obtained. The part removed measured 10 mm. above and 18 mm. below. He thinks this method useful also for non-dilatable strictures.

—M. J. Ahern, of Quebec, reports in *L'Union Médicale du Canada* a case of amputation at the hip joint by means of Wyeth's method of transfixing, with steel pins, the upper part of the thigh and applying an elastic tourniquet above them. The case was one of osteo-sarcoma of the lower part of the femur and the tumor when separated from the limb weighed 25 pounds. The sutures were removed on the 8th day, union being by first intention. He prefers this method to that of Furneaux Jordau, which he employed with success in a similar case, as very little blood is lost.

—Yver reports a case of resection of the two first pieces of the sternum in a young man suffering from tubercular osteitis. He had already incised two collections of pus, one in the right hand and the other in the left foot. Some time after an abscess developed over the upper part of the sternum. This, on being opened, showed a perforation of the sternum with a projection of the first two pieces of this bone, and behind it a cavity filled with pus. Four centimeters of the upper part of the bone were removed, the cavity well cleaned out and stuffed with iodoform gauze. The cavity healed in about three months, during which time a new abscess in the gluteal region was opened. The patient had remained well since.

—H. Huchard (*Detroit Medical Age*) in an article on the treatment of the influenzal pneumonias strongly recommends

the use of digitalis. He employs the *crystallized digitalin* of Petit under the form of solution 1: 1000. This preparation, he says, is the most easily tolerated by patients, it has an invariable and certain action, and the dosage is easy. He prescribes *one dose only a day*, of thirty, forty, and even fifty drops of this millesimal solution. Along with this he enjoins an exclusive milk diet. To combat adynamia, should it be profound, injections of ether or camphorated oil may be used. He says:—"These latter injections are so good in threatened collapse that I must give you the formula which I employ: Olei oliv. (sterilized), 10 parts; camphor, 1 part. M. Inject a hypodermatic syringe full of this solution into the arm or hip three or four times a day. These injections are not painful if you inject them deeply." Quinine is often useful and the writer gives it in the form of bromhydrate, which contains more active substance than the sulphate. Fifteen to twenty grains is given every morning divided into three doses with half an hour between each. This treatment is followed for three or four days only. In desperate cases strychnia is useful. Strychniæ sulphatis, 1 centigramme; aq. destillat, 10 grammes. M. Sig., 10 or 12 drops subcutaneously two to four times a day. This, with tonics, is an outline of his treatment.

SECONDARY SUTURE OF THE RADIAL NERVE IN THE AXILLA AND AT A DISTANCE.—Ehrmann, of Mulhouse, sutured the radial nerve in the axilla; it had been divided by a knife. Motor paralysis was complete and partial sensation remained. The nerve was exposed by an incision at the posterior margin of the axilla, one week after the accident. The cut ends of the nerve terminated in a bulb of cicatricial tissue and they were both attached to the vein. The ends were disengaged but could not be approximated nearer than 5 c. (2 inches). Ehrmann sutured them with catgut at this distance. During the 10th week sensation reappeared. The muscular paralysis persisted until the end of the 18th month. During the 19th month the movements returned almost completely. There still remains a little atrophy.—*Gazette des Hopitaux*.

ERRATUM.

In Vol. XX, page 907, fourth line, for "days," read "hours."