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# THE CANADIAN PRACTITIONER AND REVIEW.

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## Original Communications.

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### REPORT OF CASE OF BRAIN TUMOR.\*

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BY R. W. BRUCE SMITH, M.D.,  
Asylum for Insane, Hamilton, Ont.

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J. S. was admitted to Hamilton Asylum, September 25th, 1888, at the age of 35 years. His occupation had been that of a farmer. His history as furnished on admission indicated that he had always been of a feeble mind; he had no education, never having the ability to acquire knowledge. There was no history of syphilis or any other physical ailment. He had for some time previous to admission been possessed of various delusions; thought that he was pursued by imaginary persons, shouting at him and trying to take his life; before being detained he would ramble about the country at night taking down fences and doing much injury to property. He was reported as suicidal and dangerous to be at large. On admission to the asylum he was found on examination to be enjoying fairly good physical health, bodily functions regularly performed; he spoke freely of the delusions which had led to his arrest but which had then apparently left him. On conversation it was easily seen that he was very feeble-minded. He soon adapted himself to the regularity of asylum life, and being robust was allowed to do some light work in the garden. He continued for seven years after his admission to enjoy good bodily health, never being during that time reported sick, and always able to do a little light work outside. His mental condition remained much the same as at admission, always dull and stupid, seldom speaking, but doing his work in the garden

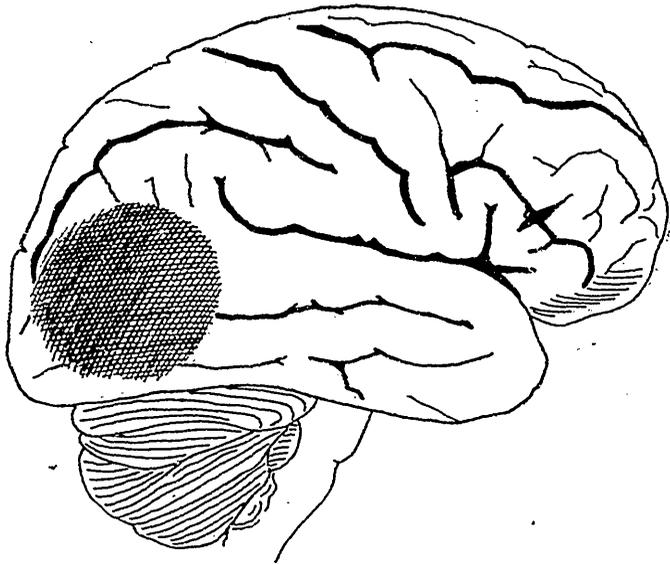
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\* Read before meeting, Hamilton Medical Society, January 3rd, 1900.

neatly and well. On October 2nd, 1895, he had a slight paralytic seizure at the noon hour after having been engaged at his ordinary work during the morning. I saw him a few minutes after the appearance of the first symptoms. His left arm and leg were quite powerless. He did not, however, lose consciousness; was placed in bed and a cathartic administered. On the fifth day the paralysis was only slightly noticeable by his dragging the left foot a trifle when walking. During the following winter he seemed to quite recover, and in the spring went back to his work in the garden. He was able to do his work as before, and there was no return of the paralysis until about two and a half years afterwards when he had a severe attack, February 14th, 1898. At that time the symptoms were more severe and he was in a semi-comatose condition for five hours. The muscles of the left arm and leg were quite paralyzed for about ten days. After the first day his speech was not affected, his voice remaining clear and distinct. He was detained in bed for three weeks, and, when permitted to get up moved about the ward with greatly impaired motion, particularly noticeable as before in the left leg. His condition did not improve, and he was transferred, July 28th, 1898, to the male ward of the Asylum hospital. His mental condition gradually became more stupid although he was able to both eat and sleep well. He gradually became more unsteady on his feet and lost control of his sphincters. During the month of February, 1899, he remained in bed and had to have assistance in taking his food. In the following month he became somewhat stronger physically, and regained some control of his sphincters. This improvement did not continue for many weeks, and from the first week in June it was necessary to keep him in bed and feed him with the care of a child. During the first week in July it was found on examination that the vision in his left eye was becoming somewhat impaired. Left pupil was contracted and right pupil dilated. This impairment of vision gradually increased when on examination it was seen that not only was he blind in the left eye but that the vision of the right eye was also slightly impaired. His pupils had become sluggish, and soon there was practically no reaction in either. On July 20th, he was unable to distinguish light from darkness. There did not appear to be any deficiency in sensation; reflex action plainly seen on tickling the feet; his face and head would become, at irregular intervals, quite flushed; at times he would appear very dull of comprehension, and would not reply to any simple question for some seconds after it had been asked him, when he would give a slow but coherent answer—a manner quite characteristic in epileptics. Although confined to bed from June until December he took nourish-

ment well and lost but little in flesh. He had no bed sores, and even up to the time of his death his flesh and skin had all the appearance of being well nourished. There was no headache nor vomiting in the history of the case.

I submit the following as the last notes in the clinical record in the case book: November 1st.—He continues in bed and quite helpless; face at times quite flushed; now totally blind; speaks sometimes with a slight pause after a question as though dull of comprehension, though the answer may be coherent; speech clear and fairly distinct; he is well nourished and quiet. November 12th.—No change except that he is gradually becoming fuller; urinary examination negative; he is quite helpless and dirty in his habits owing to loss



of control of his sphincters. November 20th.—Continues in the same helpless way. November 30th.—No change to record from last note. December 8th.—Temperature this evening was 101.3; face flushed and breathing heavy. December 9th.—Comatose condition more pronounced to-day; face quite flushed; temperature 101.2; pulse full 110; urinary examination negative; right pupil much dilated; left pupil greatly contracted. December 12th.—He did not rally from the coma which gradually became more pronounced since the 9th inst; temperature remained 101.1; pulse gradually becoming weaker and intermittent; he died to-day.

*Notes of Autopsy.*—Autopsy was made twelve hours after

death; body well nourished; considerable fat found in abdominal walls and other usual sites of fatty deposit. The abdomen presented no pathological condition; cortex of kidneys found rather thin, but organs appeared healthy; lungs somewhat adherent, but structure good; heart fairly large; muscular walls rather soft and chambers perhaps slightly large; valves appear normal except very slight thickening in points on mitral; no calcareous deposit; a few tough, well-formed clots amongst the chordæ tendineæ; the brain and membranes were congested, and the brain presented a mass of well-defined tumor, one and one quarter inch long by one inch in thickness, involving the greater extent of the right occipital lobe and extending over towards the right side, pressing on the lower parietal and middle temporal convolutions; the tumor on examination was found to be a glioma with the spindle-shaped cells characteristic of that variety of growth. The tumor seems to have given rise to much pressure in the region of vision. Death was evidently due to coma in consequence of gradual increase in the intracranial pressure.

Gower says: "It seems to have been established beyond question that hemianopia results from disease of the occipital lobe which thus constitutes a centre for the fibers from the same-named half of each retina, and thus receives the impressions from the opposite half of each field of vision." In this case it would seem from the clinical record that the loss of vision as first detected early in July was due to pressure from the tumor on the visional centre of the right occipital lobe, and that the gradual growth of the tumor slowly gave rise to pressure on the opposite lobe thus accounting for the extension of the blindness to the right eye. Hughlings Jackson, whose clinical studies laid the foundation for our present knowledge of cerebral localization, reports a case of glioma in which the symptoms lasted for ten years, and there are many other cases reported in which several years elapsed from the appearance of the first indications of the disease until death. This case has a somewhat unique history lasting four years and two months from the first symptoms—(no convulsions, and absence of headache and vomiting)—and having the rather remarkable occurrence of an abatement of all symptoms for a considerable period during which he regularly worked. On this account I have thought it might be of sufficient interest to bring before this society.

## SEPTICEMIA.

BY CHAS. JA. PAGE, M.D., C.M.,  
House Surgeon Toronto General Hospital.

The following case came under my observation at the General Hospital and I thought it of sufficient interest to report. The patient, a girl of eighteen years, was brought into the hospital suffering from this condition, which had followed an incision made to relieve an imperforate hymen. She had suffered pains every month lasting for three or four days although there was no show of blood externally. Her mother noticed that she was swelling, and as this kept increasing she took her to her family physician who found the uterus lifted up out of the pelvis, and on pressing it a bulging was caused of the imperforate hymen. This he incised and turned out a large quantity of clotted blood, introducing packing of iodoform gauze. He replaced the packing every day, and flushed out the vagina. Unfortunately at the same time he was attending a case of puerperal septicemia, which afterwards proved fatal. On the third day after operation she had a severe chill and her temperature went up to 102 degrees F. When she was admitted into the hospital two weeks after this, her temperature was 104.2, respiration 26, and pulse 110. She was ordered purgatives, rectal injections of normal salt solution every four hours and whiskey by the mouth. Bichloride douches were also prescribed, which were later changed to carbolic acid douches 1-60, but at no time was there much discharge and the odor was never offensive. Pain, too, was but seldom complained of. Constipation was very marked at first and exceedingly difficult to overcome, and there was continual nausea with occasional vomiting.

On the next day a curettement was done, the vagina being thoroughly flushed out, and the interior of the uterus swabbed with pure carbolic acid and packed. The mucous membrane of the vagina was in an immensely hypertrophied condition, the folds being many times increased in size, each presenting a dirty, sloughy appearance, from which tags of gangrenous mucous membrane hung.

Three hours after the operation the temperature was 104 degrees F. and pulse 102. During the night stimulants were freely administered and the rectal salines persisted in, although not very well retained. The patient had marked chilly feelings, which did not, however, amount to a distinct rigor. Next day the temperature was still up ( $104\frac{1}{2}$ ), but there was no suffering and she stated that she felt "all right." A subcutaneous saline, one and one-half pints in amount, was given

under the right breast, her temperature dropping two degrees after it, only to jump up to 105 at the close of the afternoon. There was no real chill. Quinine and strychnine were now given for their tonic and stimulating effect.

On the night of the 2nd of November her temperature was up to 105 $\frac{1}{2}$ , and she became quite delirious. Her condition at this time was very grave, her pulse running 110, of very low tension and poor quality, although regular, with the temperature keeping between 104 and 105 $\frac{1}{2}$  degrees. She presented, too, a typical septic appearance. The complexion had become pale and sallow, and the subcutaneous adipose tissue was rapidly lost. The pupils became dilated, though they were of equal size and reacted sluggishly to light. The breath was characterized by that indescribable sweetish odor, which is often present in these cases. Later she passed into a typhoid state, with a dry brown tongue, irritable and delirious, and the urine and feces being passed involuntarily.

On the 3rd of November a second saline was given, this time under the left breast, amounting to two pints, but there was no reaction, the temperature running up four points. She also became exceedingly irritable and restless, refusing all nourishment and stimulant and whining if anything were done for her. The bowels were kept freely open, and elimination carried on as consistently as possible, very free stimulation being given for the pulse was running between 130 and 138, of very low tension, with respirations 44.

An examination of the urine showed a trace of albumen, with the ordinary febrile characteristics. A bacteriological examination of the blood gave a pure culture of the staphylococcus pyogenes albus, the virulence of which, however, was not tested, but the plate colonies died out in three days.

On the 6th of November an antistreptococcic serum injection was given, with negative results. That afternoon, however, four pints of an intravenous saline was given, with most marked results. The median-basilic vein was laid bare by a transverse incision, and no little difficulty was experienced in finding it, for a good deal of adipose tissue still remained. Half an hour later there was a most violent chill, the temperature becoming 105 $\frac{1}{2}$  (per axilla), pulse 152, and respirations 58. That night she got another injection of antistreptococcic serum. Towards morning the temperature began to drop, and at 10 o'clock had reached 95 $\frac{1}{2}$  (per axilla). The vaginal discharge had increased, and the patient was much brighter, less irritable, and seemed altogether a great deal better. The heart sounds continued normal, but she developed a slight bronchitis.

On the 9th another subcutaneous saline was given, preceded by a serum injection, but no reaction occurred. Nutrient

enemata had to be resorted to at this time for the patient could not be made to take sufficient nourishment.

On the 10th another saline was given under the left breast, with no noticeable reaction. On the 11th the pulse was running 132 and of poor quality. A second intravenous saline of four pints was given, this time in the vein of the right arm, with no appreciable effect.

The morning of the 12th found the right arm painful, and on an examination it was discovered that the incision for the first saline had broken down, leaving a septic-looking wound, with blood suffused in the subcutaneous tissues round about and discharging a virulent reddish serum.

The incisions in the breast also did not heal, and a dirty discharge, most septic in character, was present in sometimes quite large amounts. The pulse was now very weak and irregular, the tongue brown and dry, and as she lingered on the temperature slowly dropped while the respirations and pulse rate gradually increased until her death on the 16th.

The most interesting points in the case are the unusual indication for operation, the presence of the staphylococcus albus and the characteristic breaking down of the incisions made for the salines, showing the absolute lack of the physiological healing process. In spite, too, of the presence of bacteria in the blood, as proved by culture, no pyemic chills occurred and no endocarditis could be made out.

## THE INTERNE SERVICE IN MODERN HOSPITALS: A COMPARISON OF THE CANADIAN AND AMERICAN SYSTEMS.\*

BY T. LEONARD VAUX, M.D., OTTAWA.

In presenting for the consideration of this distinguished gathering, a subject somewhat removed from the ordinary lines of medical discussion, I must confess to having no slight fear that in so doing I am trespassing upon your time. Yet on second thought I cannot but feel that you will agree with me, when I say that the subject I wish to call your attention to to-day is one of vital importance to the welfare of the medical profession, and indeed to the Dominion of Canada. For this very reason, and inasmuch as the comments which may be made are not intended to apply to any one province, I feel that the Canadian Medical Association is the one before which such a subject should be discussed.

We as Canadians have for many years justly prided ourselves upon the excellence of our educational systems, and in medicine particularly we have been proud of the high standard demanded for preliminary medical education. We have rejoiced to hear Sir Dyce Duckworth tell us that the Ontario standard was fully one-third higher than that of Great Britain, and have congratulated ourselves when Dr. Clifford Allbutt, representing the best and highest in the world of medicine, has praised the Medical Faculty of McGill so highly and so publicly. But sir, without these kindly words of praise we should have to be convinced, for by comparison with the requirements of the various English, Continental and American medical institutions, we are warranted in saying that the Dominion of Canada possesses the highest practical qualifications for preliminary education. I admit that the Universities of London and Melbourne demand the B.A. before beginning the study of medicine, and this we hope ultimately will be the standard with us, but so far it has not been practicable. Nor are the curricula of our medical colleges one whit behind those of other countries; indeed, until five years ago they excelled those of American institutions. It must be admitted, however, that the large grants made in recent years to various colleges have enabled certain institutions to equip themselves for practical demonstration and work in a manner which leaves no doubt as to the ultimate outcome, unless the wealthy men of the Dominion

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\* Read before the Canadian Medical Association, Toronto, 1899.

generally emulate the spirit of generosity so nobly displayed by one or two of our leading citizens.

The foundations of our medical education have been broadly and firmly laid: every provision has been or will soon be afforded the medical student for attaining a thorough practical and theoretical knowledge of the subjects demanded for his degree. But what provision have we made for giving the ambitious clever graduate a thorough scientific training along special or even general lines? It is indeed an unfortunate but true statement, that to obtain a high-class, scientific, post-graduate training the young Canadian doctor has to go across the border or to the Old Country.

Granted that two young men, one a Canadian, the other an American, enter college together, the institutions respectively being the best that their country has, we believe that at the end of four years they will, if equally matched in application, intelligence and interest, graduate practically equal to each other, practical and theoretical work in all branches being considered. But here unfortunately the parallel ends, for the Canadian can never look forward in his own country to the hospital training which his American brother will get. Let them both enter the Interne Staff of their college hospital, and when their respective terms are completed, the Canadian will have a certain amount of practical surgical knowledge, a smattering of gynecological experience, a more or less superficial knowledge of scientific medicine, and this through no fault of his or the attending staff of the hospital. His American confrere will leave the hospital he has chosen an accomplished, scientific, skilful surgeon, able to do any operation with credit to himself, his teachers and his hospital, or a physician whose knowledge of blood work will be thorough, whose diagnostic powers have been trained and developed to the utmost, and whose therapeutic ability has been highly developed.

These statements are made freely and fearlessly, after close and critical observation of both systems, and an intimate acquaintance with men unfortunate enough to obtain only our Canadian course, or fortunate enough to have secured their hospital experience in the United States.

If they are doubted, let anyone visit the leading hospitals of New York, and see young men twenty-three or twenty-four years of age doing intestinal anastomoses with perfect results, excising a kidney, enucleating an eye, or performing panhysterectomy, and then let him ask the graduate of our Canadian hospitals to do the same work.

When on the Resident Staff of the Sinai Hospital, New York, I had the pleasure and the honor of showing the inside working of the American system to the late Dr. J. E. Graham. He took

the very deepest interest in it, and expressed himself freely to me in its praises. We feel, as we look in vain for him to-day, that he was always foremost in all that tended to advance the scientific aspect of Canadian medicine.

The theory upon which this almost perfect system has been developed is as follows: No responsibility and no privileges for an untrained man, great responsibility and great privileges for the same man when thoroughly proficient. The house surgeon or house physician is alone responsible to the governors or attending staff, as the case may be, and his subordinates are in turn responsible to him. Only one man in each service attains to the dignity of "House Surgeon" or House Physician, and he holds the position for six months, retiring then in favor of his senior assistant, who in turn makes way for another, and so on. Thus in two and a half years five men respectively hold the position.

Briefly the details of this system are these:

The hospital is divided into medical and surgical services, one or more of each. The physician or surgeon in charge of each service is assisted by a resident staff composed as has been stated of a house surgeon or house physician, with three or four assistants, whose work is confined to one set of wards or "service" as it is termed.

Each assistant has varying duties, graded in importance, but to none is responsibility ever given save to the senior assistant in the absence of the "House." Nevertheless, under the direction and supervision of the "House," every man is carefully trained to do the very work which will ultimately fall to him. The chief of the service watches the progress and notes the capabilities of the men as they near the time for promotion to "House."

Should he deem the senior incapable of properly fulfilling the duties of "House," for any reason whatsoever, he recommends that the present "House" be retained at a salary for the next six months, until the "junior" is ready for promotion. Occasionally personal animosity blocks the promotion of a really capable and brilliant man, but such instances are very rare, and in general the system works fairly and smoothly.

If, however, the senior is promoted, large responsibilities and great powers are delegated to him. He becomes, by virtue of a hospital by-law, the first assistant in all operations to his chief, is allowed to perform a capital operation in cases of emergency, and constantly operates on cases turned over to him by the attending surgeon, and, as a result of his previous training, such operations are performed skilfully, rapidly and thoroughly. To mention names or details of operations would be entirely out of place here, but I can vouch for one fact, at least, that the

house surgeon of a New York hospital, at the close of his term, is easily equal, if not superior, to the surgeon of ten years' standing who has not had this training. .

This, then, in brief, is the American system. Need it be compared with the one in vogue in our own Ontario, or even with that found in the hospitals of sister provinces?

Can one go into the operating theatres of our Canadian hospitals and see young men assisting their professor? Or is it not more than likely that he will find surgeons of eminence assuming that inferior position. One could scarcely imagine the rival chiefs of surgical service in any New York hospital taking the position of assistant. I admit that in one well-known Canadian hospital young men are given this opportunity, but here the exception simply proves the rule.

Is this condition of affairs right from a medical or even a patriotic standpoint? Is it fair to young Canadians that they should be forced to leave their own country to obtain privileges which might easily be accorded them here? I will not attempt to fix the blame for this condition, nor say whether the fault lies primarily with governors, medical superintendents or members of the hospital staff; let this be done by those who are able to raise their voice in protest far more effectually than the writer; but this I will say, that the evil is a crying one and must be remedied ere Canada ever takes her proper place in the world of scientific medicine and surgery.

Mr. President, the Canadian Medical Association has already practically succeeded in making Canadian medicine homogeneous, and will deserve the praise of the civilized world, if, through its efforts, provincial barriers are broken down and freedom to practise within the Empire ultimately secured.

The former President of this Association, Dr. Beausoliel, to whom so much is due for his efforts in this direction, has stated that he believes the accomplishing of Dominion registration means the first real entrance of Canada into the world of scientific medicine. May I be permitted to humbly express my belief that this will not be fully attained until uniformity of hospital service with proper privileges for the Interne Staff be secured. Let it not be said that this is impossible owing to local interests. The power of right and progress that has broken down provincial prejudices will find this a comparatively easy task.

But Mr. President, inasmuch as the present system is a long-established one, there will not be wanting those to rise up and defend it, claiming that it amply fulfils all demands, and satisfies those most closely concerned with the welfare of the hospitals.

Let me deal with this aspect of the case for one moment.

The system now in vogue in most of our hospitals, viz., the appointment of a certain number of graduates each year and their dismissal twelve months later, cannot be defended on scientific grounds. At best, it can claim only one feature in its behalf, and that is that it gives ten or twelve men a smattering of knowledge where otherwise four men would become masters in their work.

Sir, it is enough to mention this argument to condemn it, for the interests of our profession, our country, and of humanity itself demand that where life is at stake, only the highest interests should prevail. Our Canadian system then stands condemned from all sides.

1. *From the Standpoint of the Public.*—Because no layman can feel the same confidence in a man fresh from college as in one whom he has known for eighteen months previous to preparing to assume his present position.

2. *From that of the Patient.*—As the system at present stands head nurses are far more competent to dress wounds, especially to bandage neatly, than the newly-arrived Interne. And none are so keen to notice this as those who are to be experimented on. With no superior to instruct them each Interne must pick up his practical work, and it is often with fear and trembling that he makes his initial visits to the ward.

3. *From that of the Attending Staff.*—Time and again have I heard men who stand in the front rank of their profession, complain bitterly that no sooner has a man been "broken in" to their method of work than he is transferred to another ward or department, and thus the process has to be eternally gone over. Hence it is that they are forced to curtail privileges which otherwise they would be glad to bestow. Nor can they always get proper case reports, and in many instances the nurse is more relied on than the Interne. Moreover, the absence of a thoroughly trained assistant means an increased burden of responsibility for the attending surgeon. He cannot invariably accept his House Surgeon's report as to alarming conditions, much less can he trust him to remedy them.

4. *From that of the Interne himself.*—Volumes could be written on this, but the gist of it has already been given. Given on his entrance into the hospital work and responsibility which is really beyond him, yet bearing only this responsibility and doing no more work at the close of the year, denied the privileges of his confreres across the border, and unable to attain more than a smattering of scientific knowledge, his position is at best an unenviable one.

If it be said that he is satisfied with himself, his work, and his opportunities, let me reply that this is largely so because he has not seen the greater possibilities of work and power which

loom before him. If it be true that he have no such ambition, then possibly he is well off, for no crueller torture was ever devised than that which leads a man up to a certain point and then shuts the door in his face.

But if a young Canadian desire to perfect himself in any one branch, he is told to take himself off to the United States, England or the Continent, and there at great expense, and at a sacrifice of time attain what his native country has denied him.

Shall we not remove this reproach from our midst?

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## THE CHEMICAL RAYS OF THE SOLAR SPECTRUM AS A REMEDIAL AGENT.

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

We are indebted to Dr. Finsen, of Copenhagen, for this novel advance in therapeutics. Several years ago he announced that the treatment of small-pox patients in darkened rooms and by surrounding them with red objects was based upon scientific facts. The rationale of the treatment is as follows: The most refrangible part—ultra violet, violet, blue—of white light is known to be the most active in chemical actions, whereas the least refrangible part—ultra red, red, orange, yellow—has the greatest heating affect, but very little power in producing chemical changes. On account of this fact the former is spoken of as the actinic or chemical, whereas the latter is called the calorific part of the solar spectrum. It is the chemical rays which produce erythema calorificum, although the name applied appears to indicate that heat is the cause of the disease. It will be remembered that erythema calorificum is most frequent in the spring and in fair people. This is no doubt due to the diminished amount of pigment, which is the natural protector against the actinic rays. The increase in pigment in persons living in tropical regions is no doubt nature's method of protection against the irritation of light. Hence Dr. Finsen's contention that a small-pox patient should be placed in a room with dark-red window-glass, or with ordinary glass screened by thick red curtains, in order that the chemical rays may be absolutely excluded, is placed upon a rational basis. Moreover, clinical experience supports his assertion, as it is a well-known fact that pock-marks are most numerous on the parts of the body exposed to light, and many cases have been recorded in which very little, if any, disfigurement has followed when the patients were protected from the chemical rays. It has also been established that a faint candle-

light may be used without injury to the skin. This also supports the theory, as a candlelight is a weak chemical agent. On the other hand, exposure to sunlight, even for a brief period, produces deleterious effects. In the *British Medical Journal* of September 30th, 1899, Dr. Bie, an assistant of Dr. Finsen's, gives a further report of the pharmacological action of light and its use as a remedial agent in the treatment of diseases of the skin. It was known that sunlight had slight bactericidal power, and was shown to be due to the chemical rays. Finsen also found that rays of sunlight penetrated the skin of animals. He found that chloride of silver in sealed tubes, placed under the skin of a dog, was blackened when the animal was exposed to sunlight, but remained unchanged in the dark. He also found that light penetrates skin more quickly when it is rendered anemic, as, for example, by pressure. These facts, together with the truth that chemical rays are capable of causing inflammation of the skin, are the principles upon which the therapeutic value of light depends. In order to concentrate the light and to get rid of the greater part of the heating rays, Finsen makes use of a converging plano-convex lens, about eight to sixteen inches in diameter. The lens is not made of solid glass, but consists of a curved and a plain glass held together by a brass ring. Between the surfaces there is a space filled with an ammoniacal solution of copper sulphate. The latter has a blue color and absorbs the greater part of the calorific rays. Bright sunlight or an arc electric light may be used, but with the latter greater precautions are necessary as there is danger of burning the skin. To obviate this Finsen makes use of a hollow glass disk, through which water is constantly running. This is pressed on the part exposed to the rays of light, and renders it both cool and anemic. Finsen directs that an area of one and a half centimetres should be treated for an hour daily. As a rule, a different area is selected each day. As a result of treatment the part becomes inflamed and blisters may form, but necrosis has never been observed. So far this method of treatment has only been used in cases of lupus vulgaris, lupus erythematosus and alopecia areata. The results in lupus vulgaris are particularly good. Three hundred and fifty cases of this disease have been treated and many cures effected. In five of the cases the improvement was very slow. The results in lupus erythematosus are not so satisfactory. Seven cases of alopecia areata have been treated and the results have been encouraging.

## Selected Article.

### THE TREATMENT OF RECURRENT ATTACKS OF SPASMODIC CROUP.

BY MILTON P. CREEL, M.D.

There is no affection of childhood which excites more consternation in the breast of the average mother than to awake in the night and find her infant in the throes of croup.

These cases form a large share of the physicians' burdens during the winter months, and the best means at the disposal of the profession for handling them should be brought to bear in every instance. The treatment I have thought best to consider under two heads, the treatment of paroxysms of croup, and the institution of such means as will tend to prevent a recurrence of another seizure. The administration of an emetic, one which acts quickly, affords us a safe and satisfactory means of overcoming the paroxysms of croup. Terpeth mineral, alum and honey, ipecacuanha and the other emetics are all valuable. Often these are slow, however, and the physician is tempted to give an anesthetic. These are safe only in those cases where the heart and respiration are not embarrassed. A patient seen before the dyspnea is very marked, however, may be relieved by having him inhale chloroform to the point of narcosis. Giving the patient a warm bath has been to me a means of overcoming the paroxysms that has seemed of great value. It tends to relax the patient, and expedite the action of emetics, and sleep and freedom from further attack the remainder of the night generally follows.

To prevent a recurrence of these attacks is a matter of the greatest importance.

A study of these cases, covering a very large number, has convinced me that the spasmodic tendency of the larynx is due to existent bronchitis, and when this is removed we shall have no further seizures.

My success in treating these cases, in bringing about a cessation of these nightly visitations of croup, has been secured by treating the accompanying bronchitis.

This treatment consists of the administration of remedies which the case in hand may suggest. I have found that in these cases the patients have a bronchitis attended with copious mucous discharge. When these patients vomit we are often surprised at the secretion of mucus that has gone on.

If these patients are poorly nourished they must have cod liver oil, and even the hypophosphites. When, however, there is no trouble on this score we should not give the remedy.

One agent which has been most beneficial to me has been the balsam of copaiba. This agent has been depended upon by me for a number of years and has not failed to bring me the most satisfactory results. I give it in doses of one to three drops four times daily to a child five years of age. I give it in an emulsion, which is sweetened and flavored, and children take it without any reluctance.

This remedy is continued as long as there is any evidence of bronchitis present.

Conjoined with this remedy I have the mother burn a vapo-cresolene lamp in the bedroom of the patient every night. This vapor is antiseptic and exerts a curative action on the inflamed tubes, and I have come to value it, and make it an essential part of my treatment.

The clothing of these patients should be warm, and the chest and neck must be thoroughly protected.

One point I never fail to emphasize is that these children's feet must be adequately protected; not only during the day must this be looked after, but if there is no fire kept in the bedroom then we must have the feet covered at night. This can be done by pinning the bedclothes, or keeping stockings on through the night.

A great many mothers provide their children with long nightgowns which are heavy enough to protect the feet, and are so long that they cannot be kicked off.—*N. Y. Med. Times.*

# Society Reports.

## PATHOLOGICAL SOCIETY.

The usual monthly meeting of the Pathological Society was held in the Biological Building, Queen's Park, on November 29th, at 8.30 p.m., Dr. J. J. Mackenzie in the chair.

Present: Drs. Mackenzie, McPhedran, Anderson, Hamilton, Fotheringham, Wilson, Pepler, Rudolf, Goldie, Parsons Primrose, Nevitt, Thistle, Oldright, Wishart. Visitors, Dr. Langstaff, Mr. Tanner.

Minutes taken as read.

It was moved and carried, that the Executive Committee should prepare a list of corresponding members to date, and suggest names for appointment.

Dr. Goldie was elected member of the society and appointed to the committee.

*Re* open meeting: Moved by Dr. Anderson, seconded by Dr. H. J. Hamilton, that Executive arrange for open meeting at suitable date. Carried.

### Carcinoma of Lung and Pleura with Occlusion of Superior Vena Cava.

K. B., female, aged 51. She entered the Toronto General Hospital on Saturday, October 21st, 1899, complaining of pain in the right side of the chest and great weakness. Her family history was unimportant. She was married and had passed the menopause six years previously. The history of her previous illnesses was of no importance except the fact of her having been troubled with chronic bronchitis for the past sixteen years.

In November, 1897, she was troubled with pain in the region of the right scapula and in the right arm and right side of the face. She attended the out patient clinic of Dr. Thistle at the Toronto General Hospital, and her condition was then thought to be one of commencing tuberculosis of the apex of the right lung. In February, 1898, this pain was still present, and in addition there was severe nocturnal cough and perspirations with a slight pulmonary hemorrhage on one occasion.

On the 2nd of February, 1899, she entered the General Hospital with symptoms of great effusion into the right pleural cavity. The cardiac impulse was displaced to beyond the left mammary line and the margin of the liver readily palpable

two finger-breadths below the costal margin in the right mammary line. Paracentesis was performed and 38 ounces of clear serous fluid were obtained, but the dulness was not removed by the operation. A second operation was performed on February 27th, and 80 ounces of clear serous fluid were obtained. Bacteriological examinations of the fluids and injections into guinea pigs were made, but no results were obtained. After the second operation she remained quite weak until April 26th, when she left the hospital in a poor condition. Her temperature averaged about  $100^{\circ}$  during this time, ranging from  $100\frac{1}{2}$  to  $98\frac{1}{2}$ . Examinations of the sputum for tubercle bacilli were negative.

Her history from the time of leaving in April until her return in October was that she always had some difficulty in breathing and was very weak, having quite a few fainting spells. During July a pain developed in her right side which continued from that time. Occasionally she spat blood. Three weeks previous to her return to the hospital she became slightly cyanotic during a faint, but this condition was only temporary. Her fainting spells then became more frequent, often as many as three per day. On October 20th the exertion of shaking a feather bed brought on a faint accompanied with cyanosis which was permanent. After that date she was very weak.

*Condition on admission to Hospital, October 21st 1899.*—In bed in a semi-recumbent position. The facial expression was not anxious. Her face was cyanotic and swollen to an extreme degree. The chest, arms and hands were also cyanotic and swollen, but not to such a degree as the face. The cyanosis extended to the costal margin, but not below. There was no respiratory movement of the right side of the chest. The movements of the left side were rapid but the breathing was not at all distressed. The cardiac impulse was neither visible nor palpable. Above the second interspace of the right side the vocal fremitus was distinct; below that level it was absent; on the left side it was distinct throughout. The percussion note was dull on the right side above the second interspace, below which it was absolutely flat; on the left side it was resonant throughout. The breath sounds above the second interspace on the right side were loud and blowing, but below that level they were faint and distant and gradually became inaudible; on the left side they were rude. Percussion of the heart showed no displacement or enlargement. The heart sounds were weak; no murmurs were heard; the pulmonary second sound was much louder than the aortic second sound. The liver edge was readily palpable two finger breadths below the costal margin. There was no ascites; no enlargement of the spleen. There was no edema of the lower limbs. Examination of the back

showed a long curvature of the spine towards the left, which gave a fuller appearance to the left side, and a retracted appearance to the right side.

Paracentesis was performed on October 23rd, and 21 ounces of a blood-coloured fluid were obtained. The fluid had a specific gravity of 1.020, contained an abundance of albumin and red blood corpuscles. Neither epithelial cells nor tubercle bacilli were found on microscopic examination. A guinea-pig was given 5 c.c. of the fluid intraperitoneally, but it did not develop any symptoms of tuberculosis. The edema increased and caused some slight diminution of the cyanosis. The weakness was extreme and there were signs of rapid reaccumulation of the fluid. She died November 5th, 1899.

*Post-mortem Report.*—The examination was made by Dr. J. Cavan, 36 hours after death. The usual *post-mortem* signs were present. The nutrition was poor. There was cyanosis of the face and edema of the face, neck and arms. The edema was more marked in the left arm. The omentum was normal. There was no excess of fluid in the abdomen. The diaphragm was thickened and many nodules, which varied in size up to some half inch in diameter, were observed scattered through the muscle. The diaphragm was considerably depressed on the right side. The liver weighed 46 ounces and showed signs of atrophy. There were adhesions between the upper surface of the liver and the diaphragm. The liver was depressed, its lower border being  $1\frac{1}{2}$  inches below the costal margin in the mammary line. There were no nodules observed in the liver. The gall, bladder and ducts were normal. The kidneys showed passive congestion and adherent capsules. There was a small fibro-myoma on the posterior wall of the uterus; several smaller ones on anterior wall. The ovaries were atrophied. The stomach, intestines, spleen, pancreas, supra renal bodies, bladder and ureters were normal.

The tissues of the anterior mediastinum were strongly adherent to the sternum. The pleura was strongly adherent to the right body of the sternum. The pericardium was adherent to the posterior surface of the sternum; it was thickened in its right portion and presented numerous nodules similar to those in the diaphragm; no fluid in the pericardial sac.

The heart was displaced downwards and to the left. It was small and showed brown atrophy of the muscle. The valves and coronary arteries were normal. There were no adhesions of the left pleura. There was a considerable quantity of clear serous fluid in the left pleural sac. The right pleura was greatly thickened throughout its extent. There were strong adhesions to the costal cartilages and to the right border of the sternum. There were many nodules, similar to those found in the

diaphragm and pericardium, scattered through the right pleura. The right pleural cavity contained a large amount of blood-coloured fluid. The left lung presented many nodules scattered throughout its substance. The nodules beneath the visceral pleura were frequently umbilicated. The right lung was completely collapsed towards the apex and median line. The visceral pleura is greatly thickened and adherent at the apex and posteriorly. Many nodules were seen in the pleura and substance of the right lung. No cavities were observed in either lung. Behind the second right costal cartilage the adherent mass of pleura, pericardium and nodular growth compressed the right innominate vein. The vessel wall seemed involved in the growth and there was an anti-mortem clot present. The clotting extended up into the subclavian and jugular vein and down into the superior vena cava and into the left innominate vein. The clot was tough end fibrous.

*Microscopical Examination of Tissues.*—Sections of nodules in right visceral pleura showed the pleura to be greatly thickened and the nodules formed by a cellular growth of an alveolar character. The alveoli were irregular and were lined by irregular epithelioid cells; many of the alveoli were filled with these cells. The alveoli seemed to correspond to the lymphatic vessels and the cells were apparently a proliferation of the endothelial lining. The cells were polymorphous; many true columnar epithelial cells arranged on a basement membrane; many polygomal cells; many flattened cells. There was no definite intercellular substance. There were many areas of leukocytic infiltration about the alveoli. Sections from the apex of the right lung were negative as regards tuberculosis. The thickening of the pleura was of a fibrous character. The nodules in the other tissues were similar to those described and the thickening of the tissues was due to fibrous tissue. Sections treated by Macallum's method for demonstrating iron gave a marked iron reaction in the cells of the growth. Sections of the thrombosed veins showed commencing organization of the clot.

Discussion: Drs. Fotheringham, Anderson, Rudolf, Thistle.

Dr. Fotheringham, discussing Dr. McPhedran's paper, reminded the society of a similar case of carcinoma of right pleural cavity reported by him in 1897. Points of resemblance were the fact that both were right-sided; that the fluid was sanguineous in each, as usually seen in malignant pleuritis; that the adhesion between visceral and parietal pleura was mainly at the anterior border, in the first case back as far as the anterior axillary line, in Dr. McPhedran's case for two inches only or so. Points of difference were that effusion was much greater in Dr. Fotheringham's case, aspiration being necessary

three times within three weeks from dyspnea and 217 ozs. in all being withdrawn; after which till death occurred, four months later, the case ceased to be one of pleurisy with effusion and became one rather of unresolved pneumonia with cirrhosis of lung, so far as clinical symptoms went. No nodules were found in the lung, either right or left, as in Dr. McPhedran's case, but in the upper surface of the liver, the diaphragm in each case was nearly identical, filled with cancerous nodules.

Dr. Anderson, discussing Dr. McPhedran's paper: The microscopic examination in Dr. Fotheringham's case differed from the one under discussion in that the collections of cells were in long, slit-like alveoli, were round or oval and flattened, presenting the characters of an endothelioma, originating from the lymphatic spaces.

Dr. Rudolf, discussing Dr. McPhedran's paper: Had seen the patient several times during life, and the distribution of the cyanosis showed well the area which the sup. vena cava drains. The carnified condition of the right lung would explain the accentuated second sound in pulmonic region. Would like to have known the condition of the thoracic duct.

Dr. Thistle, discussing Dr. McPhedran's paper: Patient came under my care at the out-patient department considerably more than a year ago. Symptoms then were cough and blood-stained expectoration. On examination the right apex showed signs of consolidation, limited movement, increased vocal resonance, increased vocal fremitus, dulness over apex, bronchovesicular breathing. I looked upon the case as one of tubercular consolidation of the right apex. I am not able to recall whether tubercle bacilli were found, although my impression now is that they were, and that creasote, etc., was given without much relief following.

### Spina Bifida.

Dr. Primrose presented a peculiar case of spina bifida operated upon by him.

### Case of Pyemia.

Dr. Rudolf gave the clinical notes and *post-mortem* report, and Dr. Goldie reported the bacteriology and minute pathology of the case, as follows:

H. S., aged 14, admitted October 31st, 1899. Continued fever and pain in knee. Four days before admission he complained while at school of pain about left knee; next day he stayed in bed, and that night had high fever. Next day his head ached very much. Several bleedings from the nose, some delirium, and endeavored to get out of bed.

On November 1st (day after admission), the notes say that

he was delirious all night and endeavored to get out of bed. Facial expression suggests typhoid. Spleen slightly enlarged. Pain on pressure over cecum. Pulse slow and full.

On November 2nd, he had retention of urine, and since then involuntary passage of both urine and feces.

November 4th, chest examined at 5 p.m., as breathing was much embarrassed. His pulse was rapid and weak. Nothing found. "Expiration seemed forced and was accompanied by a grunt." Temperature running very high all day.

November 5th, "Signs of pneumonia and pleurisy are present. No definite dull areas on percussion, but there is increased resistance on both bases." Friction sounds and many moist rales heard at bases. The left knee, which presented only a small bruise on the internal tuberosity of the tibia on admission, is much swollen and fluid can be made out. The skin is hyperæmic and œdematous. The skin on the left elbow shows similar changes. A similar condition in a spot over left ulna at wrist. At 3.30, 10 c.c. antistreptococcic serum injected into right thigh: 5.30, comatose; 6.00, blood cultures and smears made. Smears, nil; culture, coccus; 8.55, perspiring freely. Lips rather cyanosed. Died quietly a few minutes later, the heart continuing to beat for a short time after respiration ceased. Smears from fluid from knee yielded abundance of leucocytes and some staphylococci.

*Post-mortem.*—November 6th, 10.30 a.m. (fourteen hours after death). *Rigor mortis* well marked in limbs, absent in neck. Left knee swollen and a few papuli and vesicles over the inner aspect of head of tibia here. *P.-m.* lividity more marked around this joint than elsewhere. A small sinus is seen over head of tibia and from it a sinus leads up to near the joint cavity but not into it. No fluid in joint, but around it the tissues are edematous and infiltrated, the fluid being seropurulent. The femoral set of glands are somewhat enlarged. Chest: Recent pleuritic adhesions on both sides and the pleura studded with many suppurating foci, and these extend into lungs. No fluid in pleural sacs. The lungs deeply congested and edematous posteriorly. On section numerous abscesses varying in size from pin heads to peas all through lungs. Round them some pneumonia. Signs of acute bronchitis. Pericardium contained some 3 ozs. of seropurulent fluid, and surface is dull and in parts shaggy and posteriorly are a few recent adhesions. Heart cavities: Right contains a little fluid and a *p.-m.* clot; left empty. Muscle pale and one small abscess found in left ventricle wall. Valves: Mitral normal; aortic somewhat congested. No ulceration. Liver slightly enlarged, very pale and extremely friable. Spleen a little large, capsule wrinkled, congested. Kidneys: caps. ad. adherent at points. Parenchyma

pale and in cortex numerous small suppuration points. Microscopy and bacteriology was carried out by Dr. Goldie. Case shows an acute infection from a trivial wound. Little local reaction and glands not much affected and no suppuration here. Evidently multiple thrombi from veins. The brunt of the pyæmic invasion, as usual, has fallen on the lungs and kidneys. The liver affected by the toxæmia and the bile was extremely poisonous, as Dr. Goldie will tell us.

#### BACTERIOLOGICAL REPORT.

Six hours before death cultures were made from blood obtained from median-basilic vein, and coverslip preparations made.

Coverslip preparations showed 85 to 88 per cent. of the polynuclear leucocytes; examined fourteen coverslips for bacteria without result.

Cultures from blood showed yellowish-white colonies of a coccus, staining by Gram's method, which on potato grew with a brilliant lemon-yellow color.

Shortly after death smears were made of pus obtained from cellular tissue around the left knee. These showed cocci, staining by Gram's method, occurring in pairs and clusters within the cells especially, very few to be found free.

At time of *post-mortem*, cultures, smears, and quantities of different fluids were obtained.

Cultures from mediastinum, pericardium, pleuræ, bile, liver, spleen, kidney, and from cellular tissue around left knee and left wrist, all showed a coccus, with staphylococci appearances, staining by Gram's method, liquefying gelatine in twenty-four hours, and giving a brilliant lemon color. From the spleen and kidney were obtained bacilli closely resembling the colon bacillus, that from the kidney being most typical. Smears from pericardial fluid showed the cocci occurring mainly within the cells. Pleural fluid: cocci mainly within cells. Cellular tissues: cocci mainly within cells. Bile: cocci occurring within cells but most of them free.

#### *Inoculation of Animals:*

1. Rabbit received 40 minims of pus from cellular tissue intravenously; no sign of depression, a slight abscess formed at point of inoculation, which gave the same coccus.

2. Rabbit received intravenously 30 minims of bile—it died in 35 minutes, uttering a loud cry a few moments before death. N.B. Bile was brownish in color, perfectly fluid, with no flocculent masses; clusters of cocci could be found under the microscope, but no collections of cells; there was no marked reaction for bile pigments.

3. Rabbit received intravenously 10 minims of bile and died in five days with marked loss in weight. Coccus was obtained in cultures from the blood, but could not be found in smears of blood, nor was abscess formation to be found.

4. Rabbit received intravenously 20 minims of one-day culture in bouillon; at end of third day weight increased and is eating well.

Blood reactions: no reaction with the typhoid bacillus. Solution of blood obtained before death was added to bouillon cultures of the coccus with very varying results; some became granular within three hours, others were not affected.

*Microscopical Examination of Tissues Preserved in Orth's Fluid at Time of Post-mortem:*

1. Cellular tissue from around left knee, supposed to be the point of infection. Infiltration of leucocytes along certain planes, the adjacent fibre strands slightly swollen. Infiltration was not wide-spread, cocci staining by Gram's method occurring within the leucocytes chiefly.

2. Lymph gland from femoral chain very slightly enlarged, nodes easily made out, cocci staining by Gram's method seen to be in both afferent and efferent lymph vessels either within leucocytes or in small clusters. In the reticulated channels they were also easily demonstrated, while in the node proper very few could be found.

3. Lung: nodules show beginning abscess formation, no liquefaction having taken place; throughout the necrotic areas clusters of cocci to be found in the blood vessels, the tissue as a whole markedly hyperemic.

4. Liver: very cloudy, staining of nuclei very faint, protoplasm granular and inclined to retain the nuclear stain, fatty degeneration in some parts. Here the cocci were found within the leucocytes and endothelial cells of the capillaries; none could be found in the liver cells nor in the small bile ducts.

5. Kidney: very cloudy, granular degeneration not so well marked as in the liver. Cocci existed in clusters in the abscesses, and few pairs were to be found within leucocytes in the capillaries (not of the tufts).

6. Spleen: cocci very few and found within the leucocytes.

7. Heart: muscle cells slightly granular; a few cocci in the capillaries and pericardium show many cocci in leucocytes even deep down.

8. Aorta just above valves showed a short yellowish-white streak in the intima. This showed hyaline and granular degeneration, no cocci to be found in the intima or other coats.

Dr. J. J. Mackenzie, discussing Drs. Rudolf's and Goldie's paper, called attention to the interesting virulence of the

staphylococcus pyogenes citreus, and the peculiar lack of resistance in the lymphatic gland. The whole points to a peculiar lack of immunity to the staphylococcus in the individual. The peculiar toxicity of the bile was remarkable. His own experience with staphylococcus was that the soluble toxins were not usually very virulent. He gave an account of some experiments to isolate a toxin from a virulent staphylococcus, which were not successful. The filtered bouillon cultures gave only loss of weight in rabbits although inoculated up to 1 per cent. of body weight.

Dr. Anderson, discussing Dr. Goldie's paper: He knew of no similar instance in literature, though cases of general infection by the *S. pyogenes albus* had been reported. It illustrated the importance of the individual element in infections, as in this case an organism, which was very slightly pathogenic to rabbits, produced the most intense general infection in the child. Therefore it showed that the child's resisting power must have been very slight, rather than that the organism in question was very virulent.

Dr. Parsons spoke of the relation between local reaction and general infection. This case illustrates well how, when there is little local reaction, there is frequently severe general infection.

Dr. Primrose, discussing Drs. Goldie's and Rudolf's paper: Referring to the fact that in cases of severe pyemia resulting in general infection, there is frequently almost an entire absence of any local reaction at the point of inoculation of the virus. This absence of local reaction may be due to one of two factors, either the virulence of the virus or the fact that the power of resistance of the tissues is feeble.

Drs. McPhedran and Pepler also discussed.

Dr. J. J. Mackenzie read short papers on rabies and tuberculosis:

#### Spinal Cord in Rabies.

Sections of the cervical cord of a dog which died of rabies, also sections of the cord and medulla of a rabbit inoculated from the dog.

The sections show the breaking up of the Nissl granulations of the nerve cell, in some cases changes in the cell seem to indicate damage to the axone process.

There are many hemorrhages in the gray matter, and at various points thickening of the endothelium of the blood-vessels with a perivascular leukocytic infiltration.

One can see, also, a proliferation of the glia cells; in some instances mitotic figures may be seen in the glia cells.

**Specimen of Tuberculosis of the Liver of a Turkey.**

The history of the case indicates that the animal suffered from the disease for at least eighteen months, finally dying in a much emaciated condition.

Stained smears show the bacilli, but culture tubes inoculated remained sterile.

Cut and stained sections show the conditions usually found in avian tuberculosis; but are specially interesting on account of the extensive amyloid degeneration.

Dr. McPhedran showed a specimen of traumatic cerebral hemorrhage.

Dr. Anderson—"Secondary Sarcoma of Heart; Primary in Scarpa's Triangle; also, Nodules through Peritonea Line," etc.

Meeting then adjourned.

HAROLD' PARSONS,

*Recording Secretary.*

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MEETING OF DECEMBER 28TH.

The annual open meeting of the Society was held in the Biological building, Queen's Park, December 28th. Mr. J. J. Mackenzie in the chair.

Dr. Thomas S. Cullen, of Johns Hopkins Hospital, Baltimore, was guest of the evening. About sixty-five members and visitors were present. Meeting called to order at 9 o'clock p.m.

**Necrosis of the Skull.**

Dr. W. Oldright presented a man with Necrosis of the Skull. The following notes are from his case book:

J. B., aged 54, born in Ontario, admitted August 21st, 1899. Married. Family history: negative. Habits: patient has been a heavy beer-drinker; also uses tobacco.

*Previous illnesses.*—About thirty-five years ago contracted syphilis, had a hard chancre on prepuce just behind corona glandis; had at the same time a discharge from the penis. Under treatment both chancre and discharge disappeared in five or six weeks. Patient continued the anti-syphilitic treatment for about three months. About eighteen years ago he was troubled with severe pains in his head. These were dull, aching in character, and lasted for about a year. He has never had rash or other secondary manifestations.

*Present illness.*—In November, 1897, the patient fell down stairs striking his head, cutting the scalp and rendering him unconscious for about half an hour. The wound of the scalp healed up readily. In August, 1898, an area of the scalp cor-

responding to the seat of the wound became itchy and soon the skin broke down and a discharge of a yellowish color made its appearance. Last March he first noticed that the bone was black in color and that the discharge had a very fetid odor. This discharge has continued up to the present time.

*Treatment.*—Potassium iodide has been given in doses of 35 grains three times a day; this has been alternated from time with mercurals. Patient was operated upon on September 13th, 1899. Under ether anesthesia both tables of the skull were chiselled through in the middle line just anterior with point of junction of the parietal and occipital bones. The dura mater was found to be covered by granulation tissue. An oval area of about 2 by 2½ inches was exposed. Various local applications have been made—mercuric bichloride, also pepsin and hydrochloric acid of digestive strength. Since the first operation portions of the skull have been chiselled away at three separate sittings without anesthesia; these chisellings caused no pain, but only the disagreeably loud noise of the hammering. Both tables were cut through near the edges of the first made opening, but further away from it only the outer table was removed, the pieces as they were chiselled off exposing beneath bleeding living bone. The bone cut away at all operations was of a dull grey color beneath the black surface, and was hard notwithstanding its friability. Upon this, anteriorly and laterally, granulations are springing up; these are here and there interspersed with necrotic areas. The granulation tissue first referred to as being exposed upon cutting through both tables, contain new osseous tissue giving the feel of firm bone under the probe and not giving way to pressure under the finger. At the posterior edge of the wound to the right there is a hiatus between the blackened skull and the dura, into and along which the little finger can be inserted. At this point the pulsations of the endocranium can be seen. This pulsation has always been visible in pus in the interstices of the bone. Three days before this meeting a probe passed under the scalp having revealed the probable limit of the necrotic area, an incision was made down to the skull and an examination with the finger nail and tip of the finger determined that the incision had crossed the boundary between the hard, corrugated, diseased bone at its upper end and the smooth bone surface at its lower end.

Dr. Oldright stated that the case was unique in his experience by reason of its extent and progress. The future of operation procedure could hardly be taken up in the meetings of the Pathological Society, but any discussion as to its pathological present and future would be of interest in itself and also in its bearing upon the clinical aspect.

*Discussion.*—Dr. Sweetnam had seen a similar case following an injury to the top of the head. An open sore resulted and extensive necrosis of the skull. The odour, as in Dr. Oldright's case, was exceedingly offensive.

An extensive operation was performed; recovery in 15 months.

The President read a telegram from Dr. L. F. Barker, regretting his inability to be present.

Dr. Cullen, the guest of the evening, was introduced. The subject of his discourse was "Pathological Findings in Uterine Hemorrhage."

The various causes of uterine hemorrhage were first referred to in general. Then the questions of carcinoma myoma and endometritis were taken up in detail.

The greatest stress was laid upon carcinoma of cervix and body of the uterus with the results of numerous examinations of uterine scrapings and the diagnosis made therefrom.

The normal mucosa of the vaginal portion of the cervix, the cervical canal, and of the cavity of the uterus were carefully described, and illustrated by most life-like drawings, the work of Messrs. Braedel and Becker of Baltimore, and similar illustrations were shown of all the cases referred to.

By reason of its many helpful and practical hints the paper was greatly enjoyed by the meeting. The subject is a very large one, but the speaker culled from it all the useful and practical points and presented them in a most delightful manner.

Dr. Reeve moved a vote of thanks to Dr. Cullen for his instructive paper, and spoke of the conscientious and valuable work the essayist had done the branch of Gynecological Pathology, of the pleasant memories he had left amongst us as Student and House Surgeon, and of the name he is making for himself in his present position.

Dr. Wm. Oldright seconded the motion.

Dr. Cameron also spoke of Dr. Cullen's work, and observed that the "genius of taking care" was evident in all his undertakings.

Dr. Anderson, speaking of the examination of uterine scrapings, referred to the many questionable cases that came under one's notice. As in everything else, the positive cases are easily recognized, but there is the large class of cases which show a transition stage from the normal to the abnormal, always so difficult to decide upon.

The President put the motion. Carried unanimously.

Dr. Cullen, in replying, thanked the meeting. He spoke again of the varieties of new growth occurring in the uterus. He agreed with Dr. Anderson regarding questionable cases, and

laid stress upon the currettement, that every corner of the uterus should be curretted, and most systematically, that no error be possible.

The meeting then examined a large number of card specimens and microscopic preparations, and adjourned for refreshments.

HAROLD PARSONS,

*Recording Secretary.*

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### TORONTO CLINICAL SOCIETY.

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At the third meeting of the year, December 6th, 1899, the President, Dr. Bingham, occupied the chair, and the following Fellows were present: Drs. Boyd, W. H. B. Aikins, Chambers, Parsons, Bruce, Baines, Greig, Badgerow, Mellwraith, Small, Orr, Hamilton, Thistle, King, Macdonald, Fotheringham, McCollum, Britton, Pepler, Leslie, Lehman, Anderson, Elliott.

Visitors: Drs. J. M. Cotton, Page, Spence, and Dean, the three latter of the house staff, Toronto General Hospital. Also Dr. Archibald (Children's).

#### **Malaria, with Microscopical Specimens and Patient.**

Dr. W. B. Thistle presented this patient and spoke of the conditions present when seen by him. The patient, a boy aged eight years, came to Toronto about two years ago from New York. He was first seen by Dr. Thistle at the termination of a severe chill, his temperature then being 104 2-5. On examination an immensely enlarged spleen was found. He was quite well the day before and would be well again in a very short time after the attack. The first examination of the blood failed to show any parasites, although they were looked for. Shortly afterwards, however, they were discovered, and eventually found on every slide examined. Drs. Anderson, Archibald, Goldie and Mackenzie, all found them in samples of blood submitted to them for examination. The parasites were usually to be found at the stage where they almost completely filled the corpuscle and pigment about the periphery. White blood cells showed an extreme quantity of pigment and evidences of phagocytic activity. On one occasion only a somewhat crenated corpuscle was noticed. The patient has had one chill only since entering the hospital, which was quite typical, followed by a temperature of 105, and this succeeded by the sweating stage. Since then no more chills; but the temperature chart showed moderate elevation every alternating day, which was taken to indicate that this parasite was of the

tertian variety. There was no disturbance of the bowels or hemorrhage of any kind. The patient was put on treatment of two grains of quinine three times a day, and disappearance of the parasites was reported in three days; also rapid reduction in the size of the spleen. Dr. Thistle explained the several ways in which this parasite obtained admission to the system.

#### Larva Migrans.

Dr. Graham Chambers stated he was unable to present the patient, as a cure had taken place, but showed a photo of the lesion, which was situated on the pectoral regions. It first appeared on the back and took the form of a serpiginous line about one-eighth of an inch in diameter. This line increased in length from one-half to three and one-half inches every day. A fly-blisters was ordered to be applied about an inch beyond the advancing lesion, and the child was completely cured. In this condition the larva of some insect burrows in the skin producing the lesion. In Central and South America the disease is caused by some species of the genus *Cestrus* or bot-fly, and it is supposed that this form of fly deposits the ovum under the skin and this develops into the larva. The larva was not demonstrated in this case. Authorities say it has to be cut out, but in this case the fly-blisters cured it.

#### Kocher's Excision of Elbow.

Dr. George Bingham presented this patient, a man aged thirty-four years, upon whom he had performed this operation. About the middle of the year 1896 the man met with a slight accident, at which time the elbow was struck with a small piece of coal. He paid no attention to it at the time, but a little while after pain developed in the neighborhood of the elbow joint. For two years he continued at his work and during all that time the pain was quite severe. The arm gradually drew up and extension became more and more difficult. In August, 1898, blisters were applied with temporary relief. He was operated on in January of the present year, although at that time he was scarcely a favorable subject for operation on account of the marked anemia and emaciation which had developed. There was no sinus; pain was quite severe. The slightest effort at either flexion or extension produced agony. The operation was that advised by Kocher, and the result has been as absolutely perfect as one gets in these operations, although not quite to the same extent in this case. Dr. Bingham considers this operation superior to the old operation and at some length described the operation as performed. The only danger is that the surgeon may not remove enough bone. The man has good control in that arm although

the biceps is not at all developed, yet he can do almost anything with it except when required to use it for pushing movements; then a defect is noticed.

Dr. Bruce discussed the case and instanced a somewhat similar case of his own and emphasized the importance of excising enough bone in these operations.

#### **Amputation for Crushing Injury.**

Dr. H. A. Bruce exhibited a specimen of severe injury through railway accident, in which amputation was considered absolutely essential, and which he had performed on that day. The owner of the leg was a brakeman, and during the backing of a train composed of an engine, tender and eight freight cars upon a "Y" in the town of Teeswater, he fell under the train and was extricated from between the tracks, the train having come to a standstill just as the fire-box was about to pass over him. The injured member was presented to the Fellows and examined minutely. Both bones were severely comminuted at about the junction of the middle and lower third of the leg, there being probably a dozen pieces of small bones in the wound, many of them completely stripped of their periosteum. There was also considerable laceration of the surrounding tissues, but the foot was warm and the patient could move his toes. The skin was lacerated in several places and a large bruise appeared on the posterior aspect of the injured region. A consultation of several surgeons had been held and it was decided that the leg should be amputated.

Drs. Bingham and E. E. King, in discussing the case, considered from the appearance of the injury that the surgeon had performed a wise operation.

#### **Pathological Specimen of Atheroma.**

Dr. H. C. Parsons stated that he showed these specimens in order to bring out one point of interest clinically, and that was the condition of the radial pulse as an indication of the rest of the arterial tree, and, in particular, the coronary arteries. The specimens were from a woman of seventy-six years of age. Her pulse was always soft and it was quite evident that the wall of the radial artery was quite healthy, as also in the others that could be felt. The woman died of gangrene beginning in the great toe of the left foot. The bones were quite gangrenous and the joints completely disorganized. There was complete disorganization of the ankle joint, with other lesions over the malleoli and sacrum. In examining the heart the valves were perfectly normal, but on removing we found the most extreme degree of atheroma in the coronary vessels, as though a button surrounded their orifices. There was a

slight degree of myocarditis in the heart muscle. The anterior tibial vessels were perfectly normal even on the side where the gangrene was most marked. The kidneys showed a marked condition of sclerosis. Dr. Parsons quoted Gibson on the subject, who says, that when there is a general arterial sclerosis, that is, where you can find it peripherally, usually the coronary artery is involved. Dr. Parsons exhibited a portion of the radial vessel which was perfectly sound, and you could hardly feel it at all when you felt for it through the skin. Showed a portion of the brachial artery, apparently perfectly good. There was also a marked condition of sclerosis in the left lobe of the liver. The patient had also an old inflammatory condition in the gall-bladder, which was almost entirely obliterated, and the common duct was dilated.

Adjournment and refreshments.

GEORGE ELLIOTT,  
*Recording Secretary*

## Editorials.

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### THE CHICAGO DRAINAGE CHANNEL.

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From a lengthy Associated Press despatch we make the following clipping which announces the completion of one of the greatest sanitary works of our day, and one which has taken ten years to arrive at its consummation: "Water was turned into the \$33,000,000 drainage canal at 9 o'clock this morning and began to flow toward Lockport, where it will fall into the Desplaines River, and thence through the Illinois and the Mississippi Rivers to the Gulf of Mexico. . . . For some time a fifteen-foot wall of earth, with two sluice gates behind it, has been all that has kept the Chicago River and Lake Michigan out of the canal. At 10 o'clock on Monday night a steam dredge began to cut away this wall of earth, and a few minutes before 9 o'clock to-day the water in the collateral channel was against the sluice gates, and only a few inches of lumber remained to be removed before Chicago was to realize her dream of years and see the great canal in actual operation. When the water began to back up against the sluice gates, the timbers were knocked away and the first water from the Chicago River ran into the canal."—*Globe*, Toronto, 3rd inst.

Through the courtesy of the officials one of the members of our staff has had the privilege of seeing this gigantic sanitary work at various points of interest along its whole extent.

Chicago is in the phenomenal position of having, during the life-time of persons still with us, grown from a frontier fort and trading post to a city with a population close upon two millions.

The primitive settlement was located on the banks of a sluggish, branching river on flat and swampy ground, little raised above the surface of Lake Michigan, into the south-western curve of which the Chicago River empties. An idea of the flatness and want of fall may be obtained from the fact that the surface of the ground between Lake Michigan and Lockport, about thirty-seven miles to the south-west, does not rise higher at any point than about sixteen feet above what is called the "datum" or low level of the lake in 1847, and by

driving out some ten miles from the lake one can reach the Desplaines River, the waters of which finally find their outlet in the Gulf of Mexico.

The Chicago River consists of the north and south branches which unite to form the main river, all three running through densely populous districts and receiving for miles the discharges of sewers. These latter partake of the same sluggish character as the river, and it requires constant attention to keep them free from silt. It can readily be seen that this sluggish sheet of decomposing sewage, extending throughout a flat, populous district, is a constant factor of deterioration to health and a menace in case of any epidemic outbreak.

Furthermore, the extension of this sewage into the lake is a danger to the water supply, which is brought by tunnels from points in the lake some miles distant from the city front. This danger is increased by the action of west winds.

Three plans for the disposal of the sewage were originally proposed: (1) treatment on a large tract of land to the south of Chicago; (2) forcing the sewage into Lake Michigan south of Chicago and removal of the water intakes to the north; (3) diverting the sewage by a combination of natural and artificial waterways connecting Lake Michigan with the Gulf of Mexico, and reversing at the outset the direction of the Chicago River.

A slight mitigation has for some time been obtained by pumping sewage from the river (south branch) into the Illinois and Michigan Canal, a portion of the sewage being thus started on the journey to the Mississippi. We learn from the Health Commissioner that "the amount so disposed of varies from 30,000 to 45,000 cubic feet a minute, depending upon precipitation and lake level." If any of our readers have the curiosity to work out the sum they will find that this will give an average of 338,500,000 gallons per diem, which will represent the sewage of the district diluted with about one and a half times as much water.

The last of the methods referred to was resolved upon ten years ago, and its execution handed over to a body known as "The Board of Trustees of the Chicago Sanitary District." Construction has been going on for seven years. A channel has been cut extending from the south branch at the intersection of Robey Street to Lockport, a distance of over twenty-eight

miles. The width of this channel varies from 110 to 202 feet, and its depth below "datum" (report of 1896), about 24½ feet at Robey Street and about 29 feet at its termination near Lockport, the south branch of the Chicago River being deepened to 20 feet. The explanation of the variation from 110 to 202 feet is that where rock or other very hard material occurred the size was at once made to provide for an ultimate population of 3,000,000. One-half of this number was the count in 1896, and now it is estimated at 1,800,000. The softer sections can be enlarged by dredging "whenever the needs of the city require it." The total fall in the 28 miles is nearly 5 feet, and it is variously estimated that between 300,000 and 360,000 cubic feet per minute will roll through the channel with its present dimensions. This will fulfil the requirements of the law. A board of commissioners appointed on behalf of the State of Illinois has been looking into this to safeguard the interests of the rest of the State. The law requires that 200 feet per minute shall pass for each 1,000 of population in the district contributing to the sewage output. We find on calculating the proportions that this will make the mixture about 1 part of the average sewage of cities to 25 parts of water drawn principally from Lake Michigan. The contents of the Chicago Main Drainage Channel will empty into the Desplaines River, passing through Joliet, down the Illinois River, and so to the Mississippi.

The above work, large as it may seem, is by no means all that had to be done. Through the Desplaines Valley, in which the Drainage Channel had to be constructed, there run also the Desplaines River and the Illinois and Michigan Canal. The Desplaines is a meandering stream. "During some seasons its whole discharge would pass through a six-inch pipe," and at others a volume of 800,000 cubic feet per minute "rolls majestically along, flooding the whole valley." It had to be controlled by the building of the "River Diversion Channel" at a cost of nearly \$1,100,000; about thirteen miles of new river channel had to be excavated parallel with the Drainage Channel, and about nineteen miles of levee built between the two, thus piecing out the river here and there where the natural bed was defective. In order not to send down through Joliet the whole flood water plus the contents of the Drainage Channel

(the volume of the latter increased at times by fluctuations in the level of Lake Michigan), provision had to be made for carrying over some of the flood water into the Chicago River and re-establishing the old flow towards Lake Michigan when the flow at the head of the River Diversion Channel exceeds 300,000 feet per minute. This is done by a "spillway"—with a concrete and masonry dam at the head of the River Diversion Channel. And at the lower end of the Main Drainage Channel are the controlling works, near Lockport, to prevent too much flood water rushing down the steep descent and flooding Joliet. These controlling works are a large and interesting object-lesson in civil engineering. The Main Drainage Channel ends in a large "windage" basin in which vessels can lie and turn around, for it must be borne in mind that the Westerners are looking forward to a large navigation scheme—commerce as well as sanitation. It is closed at the end by massive walls and embankments. On the side of the channel, to the right as one looks down it, are a number of sluice-gates in solid masonry, and an immense dam, consisting of two leaves hinged together, the down-stream leaf hinged at the bottom of the fall to solid masonry by an immense steel cylinder, and at the top of the fall hinged to its fellow, which, by being raised or lowered, presents a higher or lower (vertical) barrier to the outflow. It can be regulated by hydraulic apparatus, and then works automatically. A variation of 13 feet can be obtained by this dam. The water flows over into a tail-race, forming a wide river, and this joins the Desplaines River at Lockport, and lower down is joined by the Illinois and Michigan Canal, all flowing on together to Joliet. The windage basin will permit of a certain amount of sedimentation if desired.

A great deal of work has been required to adapt the river from Lockport to and through Joliet and the bridges of the latter to the changed conditions, and much controversy has been caused thereby. The fall in the  $4\frac{1}{2}$  miles from Lockport to Joliet is about 42 feet.

In connection with this work has all along been kept in view by various interests, the more remote—perhaps not very remote—scheme of a large ship channel from Lake Michigan to the Gulf of Mexico. It has had the effect of making some localities less averse to having a not unreasonable amount of sewage pass

their doors. Some carrying corporations have been antagonized, but their objections have been too visible to have much influence. In the meantime bridges for a navigable stream have been insisted upon by the one set, and the railroad companies, on the other hand, have been quite alive to the necessity of not having, at any rate, *worse* roadbeds, bridges, etc., to replace those removed where the Sanitary District Board has had to disturb their lines. Other claims for right of way, etc., etc., have given the Board and the various departments—notably law and engineering—plenty of work.

In a medical and sanitary journal we cannot go very far into engineering statistics and commercial and geographical problems. One item will give a little idea of the engineering work. We are told that the excavated material would form a block 1 mile square and 48 feet high.

It will also be of interest to our readers to remind them that this is the scheme which a short time ago gave rise to great controversy as to the effect which making an additional outlet from Lake Michigan may have on our eastern canals and waterways. We are glad to be assured in the report of December, 1895, that "competent engineers who are thoroughly conversant with hydraulic questions, believe and assert that the effect of taking 5,000 cubic feet a second through our channel would be small compared with the 225,000 cubic feet which passes every second through the Detroit River, coming from the three upper lakes, Superior, Huron and Michigan."

But who can assure us that these "I will" men are going to stop even at the twice "5,000 feet per second" for which their rock sections are now devised. There is no knowing what Chicago men "will" do!

In the meantime we have to thank some of them heartily for the courtesy they have shown to our representative already referred to; and to assure them that if we ever have a "big thing" on hand we will be glad to show it to them, and in the meantime will be equally glad to show them our Queen City and its environs, and to endeavor to convince them that "a thing of beauty is a joy for ever."

Amongst these gentlemen we desire to name Dr. A. R. Reynolds, Commissioner of Health (a Canadian by birth and

education), Isham Randolph, Chief Engineer, Samuel M. Dickson, law department, and Mr. Adams, civil engineer.

We wish we could, before leaving the south branch of Chicago River, present to our readers a picture with odoriferous accompaniment of a spot which brought to mind some of the scenes of Dickens—the haunts and some of the avocations of the Rogue Riderhoods, Hexams, Quilps and Boffins, modernized and transformed to suit this rapid city. Amidst refuse dumps, which wait the discriminating industry of the “dustman,” stands a wooden domicile with two or three outhouses. On the Stygian stream (about one-third sewage and two-thirds water) are moored some row-boats; near by, an inscription, made of whitish stones set in a greenish bank, proclaims this to be “Our Happy Home.” We must leave the optimist and the sanitarian to decide between them as to the desirability and suitability of such a label.

W. O.

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### MEDICAL HEALTH OFFICERS.

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We have received a copy of the *Echo*, of Essex County, which contains a very sensible editorial on the subject of “Medical Health Officers.” It will be remembered that recently there was an outbreak of small-pox in North Essex. It is said that if the first case which was detected had been promptly isolated the disease would not have spread. It happened unfortunately that disastrous results ensued on account of the time occupied by the various local health officers in consulting as to what should be done. On account of this delay the disease became prevalent in a goodly portion of the county. The *Echo* thinks that if there had been a competent County Medical Officer, with power to act promptly, he could have prevented the spread of the disease.

It is also thought by many that one good officer for a county would do his work more thoroughly and fearlessly than a number of local officers, because the latter frequently dislike to interfere with certain menaces to public health through a dread of offending certain individuals or corporations. In the recent small-pox outbreak in Essex it was evident that the ordinary physicians had no desire to look after those afflicted with

the disease; consequently the patients were likely to be neglected. To add to the confusion, there were many cases of chicken-pox which were correctly diagnosed, but other cases of veritable small-pox were mistaken for chicken-pox. In one way and another the serious disease spread to a very alarming extent. We have been informed that there were about 250 cases of small-pox in the County of Essex. We believe that Dr. Bryce, the Secretary of the Provincial Board of Health, has for some time advocated the appointment of County Health Officers, and most of the members of the Board, if not all, agree with him.

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## Personals.

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Dr. Murray McFarlane, of Toronto, was recently married to Miss Walton.

Dr. Wm. Goldie, of Toronto, spent a few days in New York during the holidays.

Dr. Norman MacLeod Harris (Tor. '94), of Baltimore, spent his Christmas holidays in Toronto.

Dr. Morley Currie, of Picton, has been appointed an associate coroner in Prince Edward County.

Dr. W. J. McNichol, of Hamilton, has been appointed an associate coroner in Wentworth County.

Dr. T. H. Rotch, of Boston, delivered an address on "Infant Feeding" at a meeting of the Toronto Medical Society, November 16th.

Dr. John McCrae (Tor. '98) goes to South Africa with the Second Canadian Contingent as Lieutenant of the Guelph Field Battery.

Dr. T. H. Whitelaw (Tor. '94), formerly of Guelph, now practising in Edmonton, N.W.T., spent a few days in Toronto in the latter part of December.

Dr. Farrell, of Halifax, who attended the Congress on Tuberculosis, at Berlin, last summer, as the representative of Nova Scotia, has published a very interesting report of the proceedings.

Professor Wm. Osler, of Baltimore, and family, took their Christmas dinner in Toronto. After spending a few days they went to Hamilton, and thence home. Dr. Osler's many friends in Toronto are always glad to meet him.

Dr. Donald Armour (Tor. '94) passed his primary examination for Fellowship in the Royal College of Surgeons, England, in November last. He had previously passed the final examination for Membership in the Royal College of Physicians London.

Dr. James L. Turnbull (Tor. '89), formerly of Clinton, who spent about a year abroad, visiting the hospitals of London, Berlin and Vienna, returned to Canada in December. When he was in Toronto he was uncertain as to where he would locate.

Dr. Thomas Agnew (Tor. '94), who went abroad with Dr. Turnbull, has also returned to Canada. He did not go to the Continent, but remained in Great Britain, being engaged in hospital work, chiefly in Edinburgh and London.

Dr. Thos. S. Cullen (Tor. '90), formerly of Johns Hopkins Hospital, now practising in Baltimore, paid a short visit to Toronto during the holidays, and read a very interesting paper on "The Pathological Tendency in Cases of Uterine Hemorrhage," at an open meeting of the Pathological Society, December 28th.

## Obituary.

### HENRY HUTCHISON REEVE, M.D.

Dr. H. H. Reeve, died at his home, Lanark, November 25th, 1899. He graduated from the University of Queen's College, Kingston, in 1880.

### VICTOR MCGANNON, M.D.

Dr. V. McGannon, a clever and bright young physician, of Brockville, died of typhoid fever, after an illness of four weeks, December 6th, aged 30. He graduated from McGill University in 1897, and went at once to Brockville, where he very soon acquired a large practice.

### SIR JAMES PAGET.

Sir James Paget, the silver-tongued orator of the profession in England, and one of her greatest surgeons, died December 29th, aged 86. He was President of the College of Surgeons in 1875, had been a Surgeon to the Prince of Wales since 1863, and Sergeant-Surgeon to the Queen since 1877.

**WILLIAM THOMAS HOLDCROFT, B.A., M.D.**

Dr. Holdcroft, a graduate in Arts and Medicine of Queen's University, died in the General Hospital, Woodstock, December 11th, aged 35. He became M.D. in 1890, and after practising for some years in Deseronto, he removed to Tweed. His death resulted from an accident, December 8th, when he fell from a railway train a few miles from Woodstock.

**NEIL McKECHNIE, M.D.**

Dr. N. McKechnie died December 15th, at Holdridge, Nebraska, aged 41. He received his medical education in the Toronto School, and graduated from the Universities of Toronto and Victoria College in 1880. He then went to Great Britain, and spent some time in London and Edinburgh. After receiving the double qualification from Glasgow and Edinburgh he returned to Canada and practised for some years in Thorndale, Ontario. He then went to Ottumwa, Iowa, and subsequently to Holdridge. His widow and one daughter survive.

**WILLIAM IRA ALLAN CASE, M.D.**

Dr. Case, a resident of Hamilton for ninety-two years, died at the old homestead in that city on Saturday, December 2nd, aged 95. His father, Dr. Wm. Case, was one of the many United Empire Loyalists who settled in Canada in the early part of this century. After a long tedious journey, made with oxen and horses, the Case party rounded the little neck of land that is now called Burlington, and camped there in the fall of 1807. In the party was baby Case who, ninety-two years after, died in his home near the site of the old camp. In the battle of Stoney Creek, fought eighty-seven years ago, young Case, then a lad of eight years, helped to pull down the fences surrounding certain wheat fields to enable the defenders better to fire at the attacking force. He also assisted his father after the battle in dressing the wounds of the injured in the beds of the temporary hospital in his father's house. As the boy was in the habit of assisting his father in his profession from this time until he went to a medical college, we recognize the remarkable fact that Dr. Case was engaged in the study and practice of medicine and surgery for a period of eighty-seven years. He was engaged in active practice after graduating for nearly seventy years. He never touched intoxicating liquor or tobacco, and was a vegetarian. His son, Dr. Case, and a daughter survive.

# Progress of Medical Science.

## THERAPEUTICS.

IN CHARGE OF GRAHAM CHAMBERS AND J. T. FOTHERINGHAM.

### Treatment of Scabies.

S. Sherwell (*Jour. of Cutan. and Gen.-Urin. Diseases*) describes his method of treatment as follows: Usually several members of a family are infected; each one is directed to take a bath the same evening, and adults should use a sand soap over the tougher portions of the body which are involved. The body and limbs are then rubbed lightly with a little sulphur lotion; a half teaspoonful is an excess for each individual; no excess of friction is required at all. The bed linen and underclothing should be changed, and between the sheets a few spots of sulphur should be placed in each bed, and the sheet shaken, so that the sulphur is disseminated over the whole internal surface. By repeating the powdering of the bed, and by bathing and changing clothes in about the same way every other night for a week, the cure is effected in ordinary cases. An exaggerated case will take longer, as the one takes a longer time than that to develop. One ounce of sulphur lotion is a great excess of what is needed in the ordinary treatment of a family of five. Besides being more cleanly and less irritating than the other methods usually followed, sulphur in and of itself has a direct and potent inhibitory action on other parasitic diseases, both animal and vegetable.

### Iodid of Potassium in the Treatment of Acne Vulgaris.

F. S. Levisieur (*N. Y. Med. Rec.*) observed that if patients with normal renal functions, having acne vulgaris, take gr. v. of iodid of potassium three times a day, in a glass of milk, symptoms of what might be called acne iodism appear as early as after two or three doses, and not later than on the third day. These symptoms consist in the appearance of a metallic taste, running from the nose, and a feeling of pressure in the frontal region. The local symptom consists of the appearance of nodules in the skin of the face, slightly redder than the surrounding parts, and moderately painful on pressure. At the same time acne lesions, if present, show a sudden increased inflammatory reaction, resembling the reaction occurring in and around lupus nodules after the injection of tuberculin. In fifty cases treated in this way the iodid was given in milk. A case is cited, which illustrates the manner of treatment. On

the third day of the administration of the iodid, acne nodules which were present showed increased redness, swelling and pain on pressure; a number of new lesions were also present. The iodid was stopped, and the face treated locally with a mild sulphur salve and ichthyol soap, 10 per cent. At the end of the second week the patient's face had greatly improved, and the iodid was again given as before. The local reaction in the face was less intense; after three days the iodid medication was stopped, and local treatment instituted as before, and under this local treatment, which had before been inefficient, the patient could be pronounced cured at the beginning of the fifth week. Treatment must be promptly stopped.

#### Treatment of Posterior Urethritis.

Dalton (*The Therapist*) recommends the use of urotropin in this troublesome affection. We have found the drug so efficacious in several forms of cystitis that we are compelled to look favorably upon the recommendation.

#### Treatment of Alcoholism.

Dr. Charles J. Douglas (*N. Y. Med. Jour.*) states that about one-thirtieth of a grain of apomorphine injected hypodermically will produce sleep in patients suffering from alcoholic delirium. The drug should be used in sufficient quantity to produce slight nausea. The craving for alcohol is also frequently relieved. After the patient has recovered from the acute symptoms, he should receive tonic treatment for several weeks. At this stage nitrate of strychnine administered subcutaneously is the most potent drug.

#### Painless Lithotripsy under the Influence of Rectal Injections of Antipyrin.

Du Chastelet (*Annales des Maladies des Organes Génito-Urinaires*, No. 7, 1899) calls attention to the fact that rectal and vesical irrigations or injections of antipyrin have long been recognized as potent means of lessening vesical sensibility. In the subject of his present report the following solution was injected into the rectum three-quarters of an hour before beginning the operation of lithotripsy, which was performed by Guyon:

Antipyrin.....	24 grains.
Laudanum.....	10 drops.
Water.....	3 ounces.

The crushing and evacuation of the stone was absolutely painless. The bladder seemed non-sensitive to touch and tension. The operation lasted more than half an hour, and the only

inconvenience experienced was that incident to the repeated passage of instruments along the urethra.—*Thera. Gazette.*

### Recurrent Spontaneous Epistaxis.

Natier (*La Parole*) holds that the hemorrhage always takes place from the septum, and by predilection from the cartilaginous septum, about four-fifths of an inch behind the free border and an equal distance from the floor of the nose. The seat of epistaxis can often be perceived by lifting the tip of the nose and allowing light to fall in without the use of the speculum. It is rarely bilateral. It is often persistent, recurring without treatment for many years. The immediate treatment of these cases consists in packing with antiseptic cotton or gauze. The curative treatment, designed to prevent recurrence, consists in transformation of the ulcerated and friable mucous membrane from which the blood flows into cicatricial tissue. This is accomplished by cauterization. The author prefers the galvano-cautery, the region having previously been anesthetized with cocaine.—*Thera. Gazette.*

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## OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, JAMES F. W. ROSS, ALBERT A. MACDONALD,  
H. C. SCADDING AND K. C. MCLWRAITH.

### Ventro-Fixation of the Uterus.

In the November number of the *St. Paul Medical Journal*, Ground has a long and able article on "Uterine Deviations," in the course of which he makes the following remarks:

"Operations then for ventro- or vesico-fixation except in rare instances are contra-indicated, because they are unnatural and unsurgical.

"They institute a condition that is pathological. It is admitted that adhesions are abnormal when restraining the uterus in a backward position, and I would ask what makes adhesions not abnormal when confining the uterus in an anterior position? It is conceded too, that there is no fixed normal position for the uterus, but that its normal condition is that of mobile equilibrium, and that it is only when its mobility becomes restricted and when it becomes adherent that it produces symptoms and requires relief.

"Adhesions are always pathological whether arising from the natural evolution of the disease process or from the misguided efforts of the surgeon, and these menacing bands would be considered proper subjects for operative procedure had they originated otherwise than by his own voluntary act. I will not.

stop to enumerate the deleterious effects of fixations on the function of the uterus, the bladder, etc., but will leave it to your own common-sense and reasoning. Suffice it to say, many obstetric complications have followed ventro-fixation, as cases collected by Milander, Noble and W. A. Newman Dorland show. Serious or fatal complications accompanying parturition have been reported by Oishausen, Mackenrodt, Gottschalk, Veldi, Strassman and Gubaroff in Europe, and by Norris, Noble, Krom, Michales and Edebohls in this country, while Bidone, of Italy, recommends opening the abdomen and relieving the adhesions in every case of ventro-fixation followed by pregnancy. Besides, many cases of intestinal obstruction have been reported after ventro-suspension. Rufus B. Hall, of Cincinnati, has operated on three cases of ileus caused by the bands of a ventro-suspension. A mortality of 5 per cent. has been shown by Fehling to accompany these operations, besides, of course, the usual sequelæ after abdominal section. Perhaps the reason why bad consequences do not oftener follow is owing to the fact that the fixation does not always fix (and this is the only redeeming feature I can see about the whole set of procedures), so that the rate of recurrence of the deviations is very high."

#### Physical Diagnosis in Obstetrics.

Dr. Edward A. Ayers, of New York, is writing a series of admirable papers in *Obstetrics*, on the subject of "Physical Diagnosis in Obstetrics." In the September number he deals with the question of "Sepsis in Relation to Anti-partum Examinations," from which we subsume a few extracts:

"The most generally accepted views of leading investigators on this subject are: First, that the secretions of the vagina are normally aseptic, in so far as the pathogenic germs of puerperal infection are concerned; and, second, that they are even germicidal, and will render a septic vagina aseptic in from nine to twenty hours. Third, that the vulva and introitus vaginae are not to be relied on as aseptic, nor are they germicidal.

. . . These conclusions point in the clearest manner to two practical applications in clinical obstetrics: First, that the entrance to the vagina, during pregnancy, should be cleansed on making digital examinations; and, second, that the inner portion of the vagina should not be cleansed, *i.e.*, douched.

"The gonococcus is not killed by the vaginal secretions, nor, in all probability, by vaginal douches.

"The nurse should thoroughly wash the pubic and outer labial regions with warm water and soap, then take fresh sterilized cotton, and wash the inner labiæ, and ostium vaginae, first with warm water and soap, endeavoring to expose and cleanse all crevices in the region of the meatus and clitoris,

doing all so gently as to avoid causing any abrasion, and then wash all with fresh cotton and bichloride solution."

The physician's hands are to be treated as follows:

1. Cut the finger nails.
2. Scrub vigorously the hands and forearms up to the elbows with nail brush, green soap and hot water, for at least five minutes by the clock. The water must be changed at least once. After changing it, remove the dirt from beneath the finger nails with a nail cleaner, or pen-knife, and then renew the washing. Rinse off the soap and water and
3. Scrub the hands for three minutes with a nail brush and bichloride solution 1-2000. Then, before examining,
4. Dip the fingers in a 5 per cent. solution of lysol (as a lubricant).

"Every physician should be accustomed by habit to keeping his cleansed hand from contact with anything, even the sheet, before making the vaginal examination. This last clause covers the cause of more failures in asepsis than all others together. In introducing the finger within the vagina, we should seek to avoid contact with the hair and outer labiæ."

#### Grippe during Pregnancy.

Drs. Bar and Boullé (*l'Obstétrique*), basing their report on fifty observations, find that, while the pulmonary organs are affected in most cases, the nervous system or the gastro-intestinal tract may suffer. Most pregnant women affected make good recovery, some go on to have pneumonia. Labor does not seem to be materially influenced by the intercurrent affection, and hemorrhage is rarely severe. Serious complications may be encountered in the puerperal state, and mixed infections are apt to give trouble.—*Buffalo Med. Jour.*

#### Orexin in Persistent Vomiting of Pregnancy.

When instead of, or in addition to, the characteristic morning sickness, which does not affect the appetite or digestion later in the day, there is a persistent rejection of food, impairing the general nutrition and threatening to exhaust the patient's strength, orexin in 5 grains (0.3 grammes) after each meal is recommended by Dr. F. Hermanni (*Therap. Monatsch.*, 1899, H.i.s. 24), who reports nine cases so treated with great success, the vomiting being quickly relieved, and the appetite returning, mostly within a few days.—*The British Physician.*

#### Tubal Gestation Unruptured for Seven Months.

Mrs. B., aged 34, married nine years, never before pregnant. Last normal period in April, 1898. In June, a slight bloody

discharge followed by excruciating abdominal pain, lasting eight hours. A week later another exacerbation of pain; for the next six weeks there were attacks of pain every two or three days, completely disabling her. The flow continued for *five months*; the greater part of the time as a muddy discharge. In November a severe uterine hemorrhage occurred, followed by a profuse flow, lasting two weeks. In the following months the periods were practically normal. The patient finally came under the observation of Dr. J. M. Brown, of Philadelphia, who made the correct diagnosis. On examination a large solid tumor was felt to the right of the uterus and adherent to it. When the abdomen was opened there was no trace of intraperitoneal hemorrhage, and the gestation sac showed no evidence of rupture. The abdomen was closed without drainage, and the patient made an uncomplicated recovery. The interest of this case lies mainly in frequent exacerbations of severe and characteristic abdominal pain, without rupture of the sac or intraperitoneal bleeding. In the complete notes of thirty-five cases in my case-books, while pain is often the predominant factor and does not always indicate a rupture with hemorrhage, there is no other case of pure tubal pregnancy in which so many exacerbations over such a long period of time, showing tremendous strain on the tubal wall, were not followed by actual laceration and some bleeding. In this particular, I think, the case must be a very rare one.—*Brooklyn Med. Jour.*

### The Stemming of the Tide of Criminal Abortion.

Dr. Henry T. Byford (*West. Med. Rev.*, July 15th, 1899) refers to the two classes of women who approach the physician in the hope of having abortion procured—viz., the married and the unmarried. In the former class there can be but rare occasions when operation is justifiable, and these have been well defined, and the operation should never be undertaken save as the result of a consultation. Of the latter class the author says:

“But the other far more interesting class of unmarried woman, with whom it is make or break, do or die, can not be disposed of in an offhand manner. Those who have loved not wisely but too well, those who have been thoughtless and reckless because they were young and uninstructed, yet who have social relations that would make a disgraced life more unbearable than death, can not be dismissed with the words: ‘You have done wrong and you must take your punishment. Do not expect another to kill the offspring of your sin for you.’ She can not do this for herself, but she does expect some one to do it for her; and some one else usually does. How much shall we blame her? If she can not get rid of her disgrace,

she may, if courageous, kill herself. How much shall we then blame her? The world does not blame men very much who have yielded to less temptation. She may not have an opportunity, nor the means, to go away and safely and secretly bear her child. Her life must be ruined or an abortion must be produced. She will go to a charlatan or the professional hypocrite, and will have a sound passed, and run considerable risk of life. I now remember two cases in which girls of good morals, if we except one lapse, died in their father's houses of septicemia due to abortions produced at physician's offices, in which cases the fathers knew nothing of the cause of the illness. I remember a hired girl brought to the hospital dying of septicemia from abortion, because she had not dared to tell of her trouble and employ proper treatment. I was called to see a case at the house of an abortionist, in which I found the intestines hanging out of the vagina. At the *post-mortem* a catheter was found under the liver. The posterior wall of the uterus had been curetted nearly all away, and the intestines had been mistaken for fetal parts.

"Such deaths are constantly occurring in our larger cities and only one or two interested parties usually know the facts. Many a sterile wife is going about to-day because of pelvic disease caused by abortion before or after marriage. But when, after wasting much strength and valuable time in trying to arrange some way with such a patient of avoiding an abortion, and after preaching to her, frightening her, and refusing to help her get rid of her disgrace, I send her away, I feel as if something was wrong with myself or with the world, that her wrong could not in some way be righted, that she must go and put her life in the hands of a man who makes abortion a business because he has not the education and skill to make a living without becoming an abortionist.

"If public opinion can not be changed, if there is no way of infusing any mercy or tolerance into it, then public opinion should wear blue glasses that it may not distinguish all that is going on. One of the greatest possible charities would be endowed hospitals in various parts of the country where such cases could be secluded and their children be taken care of, that there might still be preserved to them a chance of enjoying life. I remember when one of our largest and best known hospitals in Chicago, supported by a religious institution, refused to take illegitimate cases of labor. I sincerely hope that the ministers will have some helpful suggestions to give us who are the first to see such cases, and I sincerely wish that in imitation of Christ of the New Testament they would preach tolerance and mercy to this class, for I have found that they can not be influenced by fear, and can only be helped by

mercy. They keep away from the clergyman, and he practically knows them not; they conceal themselves from the world, and the world regards them only as strangers, and smiles and gossips when it discovers one of them. If all cases were treated publicly, the conditions would be better than they are now, for not only would the victims be saved physically, but I imagine that so many families would have the record of a black sheep at some time or another that they would forgive others that they might themselves be forgiven."—*N. Y. Medical Journal*.

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## LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF J. PRICE-BROWN.

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### The Diagnosis and Treatment of Chronic Empyema of the Frontal Sinus.

W. Milligan (*Jour. Lary., Rhin. and Otol.*, November, 1899) gives a valuable contribution upon frontal sinus disease. In addition to the ordinary symptoms, he lays great stress upon the presence of pain or tenderness, when pressure is made directly under the supra-orbital arch over the floor of the sinus, as a diagnostic sign. To elicit this symptom, the finger must be introduced well within the supra-orbital arch, and not merely under the arch, bringing the pressure to bear upon the floor of the sinus at its thinnest part. In some cases tenderness may be found in this situation, when none can be induced by pressure or tapping over the anterior wall. To make the diagnosis certain, a comparison of the two sides must be carefully made.

In reference to treatment, when there is no actual pain, but persistent fetid discharge from the region of the infundibulum, he advises securing free intranasal drainage, by anterior middle turbinectomy, cauterization of polypoid and granular tissue, and the free use of appropriate sprays, including sprays of cocaine or ichthyol. He thinks that attempts at washing out the sinus intranasally by the use of Lichtwitz's cannula should be discouraged.

When cases of frontal sinus disease are accompanied with recurrent attacks of pain, indications of cerebral irritation, failure of general health from septic absorption, obstinate neuralgic pains about the head and back of the eye, or failing vision, a radical operation becomes necessary. Whichever way the sinus is opened, great care should be taken: 1. To scrape away all edematous, polypoid, or hypertrophied mucous membrane. 2. To establish a free communication with the interior of the nose.

3. To fix within the sinus a drainage tube which is sufficiently large to keep potent the large opening previously made into the nose.

#### The Use of Suprarenal Extract in Rhinology.

McLeod Yearsley (*Jour. Lar., Rhin. and Otol.*, November, 1899). The solution used was at first one of 5 per cent., and later of 8 per cent. It was applied by the writer to the nasal chambers on cotton-wool tampons. The effect upon comparatively normal noses was to produce a considerable degree of ischemia. As an aid to diagnosis, this ischemia was useful in revealing causes of obstruction otherwise hidden. As a hemostatic the author considered the drug to be most satisfactory. He claimed having secured good results in three cases of hay-fever.

#### Chronic Musco-purulent Catarrh of the Antrum of Highmore, Simulating Post-nasal Catarrh.

A. J. Brady, New South Wales (*Jour. Lar., Rhin. and Otol.*, November, 1899). In his article upon this subject, the writer expresses the opinion that there is a form of chronic suppuration of the antrum which is not generally recognized, even by expert specialists, and that it manifests itself only by post-rhinal discharge, never appearing upon examination in the anterior naris. To establish his theory, he gives the history of a case of antral disease which remained unrecognized by well-known rhinologists in London and Australia, and which he, finally, by operation through the canine fossa, proved to be severe abscess of the antrum. He attributes the discharge of the pus backwards and its appearance below the posterior end of the middle turbinated, and not below the anterior end, to its thick, mucoid character, uninfluenced by gravitation, together with the presence of shelf hypertrophies of the septum, etc.

[May not the direction of the discharge be entirely due to anatomical and pathological formations, such as abnormal ostium, septal deviations, etc., and not to character of discharge, gravitation being alike in all?—Abstracter.]

#### On the Importance of Nose-bleed as an Early Sign of Softening of the Brain, with Consideration of the Relations of Both Diseases to Arterio-Sclerosis.

Carl Kompe (*Fraenkel's Arch.*, ix., 2, p 181.) Softening of the brain, encephalomalacia, is generally ascribed to local anemia of the brain tissue, caused by occlusion of arteries by thrombosis or embolism. The etiological factor is either arterio-sclerosis or endarteritis. Sometimes premonitory symptoms, such as nose-

bleed, give warning of the early approach of softening due to arterio-sclerosis. Cardiac hypertrophy with aortic changes, tense radial artery, tortuous temporal arteries, are also early signs. Sclerosed blood-vessels always rupture in front of the thickened and stenosed portion of the vessel. Some part of the vessel gives way, but it is not severed, only opened on one side; consequently, the hemorrhage may be dangerous. Spontaneous nose-bleed in individuals over forty years of age, which cannot be traced to one of the ordinary causes, is always a suspicious sign of general arterio-sclerosis. If the ophthalmoscope confirms this, advanced sclerosis of the brain vessels may be suspected; and from it incipient softening of the brain.

#### **Angina and Acuter Gelenkrheumatismus.**

E. Knonenberg (*Munch. med. Woch.*, No. 27, 1899). Report of a case where angina followed operation for nasal obstruction on one side, papillomatous growths being removed from the inferior turbinated with a cold snare. The angina ran a favorable course. A month later the same procedure was carried out in the other nostril. Six days later patient had a rigor; next day knees, ankles, elbows and shoulders were swollen and painful. No sore throat, no discomfort in nose. Swelling, pain and fever disappeared under salicylate of soda. Shortly afterwards there was a relapse with heart complications. Patient died. The writer refers to lacunar tonsillitis following nasal operation, and discusses the etiology of rheumatism, and its connection with tonsillitis, and the role played by organisms.

#### **Treatment of Nasal Stenosis Due to Deflective Septa, with or without Thickening of the Deflected Side.**

Six papers read before the Section of Laryngology and Rhinology, New York Academy (*Laryngoscope*, June, 1899).

Posworth. This author upholds the superiority of the saw operation, and among others claims the following advantages: 1. The operation can be performed at an office sitting. 2. It does not involve confinement to house or bed. 3. It practically does not interfere with the daily occupation. 4. Hemorrhages are rarely severe.

Asch. The vital point is the destruction of the resiliency of the cartilage, so that the result, without loss of tissue, would be a straightened septum. Asch's operation is done under complete anesthesia. His special scissors are introduced with the blunt blade over the line of the greatest convexity, and the sharp blade in the other nostril. The cartilage is cut through by closing the scissors. They are then again introduced, more

vertically, crossing the centre of the previous incision. With the finger placed in the convex nostril the four fragments are pressed into the concave side, effectually breaking them at their base. Septal compression forceps are also used. After cleansing by sprays, hollow vulcanite tubes are inserted. The patient is put to bed for four days. Iced cloths and cold antiseptic sprays are used. The tube for the concave side should be removed in twenty-four hours; the other, taken out and cleaned after forty-eight hours, should be used for four weeks.

Roe believes that in the majority of cases, the anterior portion of the bony septum, which is nearly always involved in the deviation, should be broken without laceration of the tissues. For this he recommends fenestrated comminuting forceps. For the elastic cartilaginous septum he uses vertical and horizontal incisions, and places the septum in position by the use of flat-bladed forceps. His splints are metal covered with cotton.

Watson. Any operation to be successful must eliminate redundant tissue. There are two general angles of deflection—one or both being present in any case—the horizontal running low down from before backwards, the other perpendicular and situated well forward. Under cocaine anesthesia a bevelled incision is made with a tenotome from behind forward, just below the horizontal angle. If a perpendicular angle exists, another bevelled incision is made from above downward in front of it. When the angle is thick a wedge-shaped piece is removed. The whole upper portion of the septum is then pushed over into the opposite nostril and retained by a piece of gauze. The incision should not penetrate the opposite mucous membrane.

Gleason. Redundancy and resiliency are the factors that interfere with the success of operations. This author's operation utilizes septal redundancy as a splint, resisting the spring action from the neck of a U-shaped flap, and is best adapted for vertical deviations. On account of the narrowness of the flap and the consequently small tension, no support is needed in these cases after operation. Cocaine anesthesia is required. A thin saw is used below the deviation, cutting in horizontally and deeply; then it is turned upwards, cutting vertically. The flap so formed is next thrust with the finger through the septal perforation.

Douglas. Unless deflection shows symptoms, it should not be treated. When operation for deflection becomes necessary, all existing exostoses, enchondroses, and turbinal enlargements, on either side, should first be removed. Then under ether, the septum is perforated with a special spear-knife at the point of greatest convexity, and cut along the lines of deflection with a

blunt-pointed bistoury, with a slight sawing movement. After destroying elastic bands produced by previous inflammations, next bend the septum away from the obstructed side, and with the finger passed into the obstructed nostril, force the edges of the cartilage to overlap. A splint is next put into each nostril. The one on concave side is removed permanently in four days; the other not till later.

All these operators agree that, if obstructive lesions are still found to exist after deflection has been cured, they are to be removed on the principles of the well-recognized rules of nasal surgery.

#### Hyperplasia and Tuberculosis of the Pharyngeal Tonsil.

O. Piffi (*Prag. med. Woch.*, No. 19, 1899). This report is based upon the examination of one hundred cases of hypertrophy of the pharyngeal tonsil. He does not believe that tuberculosis is the cause of the hypertrophy; but that a lymphatic constitution and family predisposition tend toward the development of the hyperplasia. Diagnosis of tuberculous affection of the pharyngeal tonsil can only be made after microscopic examination. Swelling of the glands of the neck was present in 27 per cent. of the cases. In only three of his one hundred cases were tuberculous nodules found. Still, with this small percentage, thorough extirpation of all adenoids becomes imperative, where there is the slightest suspicion of the presence of tuberculosis.

#### Lipoma of the Tonsil.

A. Onodi (*Archiv fur Lar. und Rhin.*, Bd. ix., Heft 2). In 1895 the author was the first to report a case of lipoma of the tonsil. Since then Haug published one of lipo-myxo-fibroma, and Avellis one of fibro-lipoma. Onodi now reports another case of lipomatous fibroma.

In his first case the patient was a child. The growth in the tonsil had been increasing in size for a year. It measured 1 centimetre by  $\frac{1}{2}$  centimetre, was pale yellow, and attached by a pedicle. It was removed by cold snare. On microscopic examination the whole mass was found to consist of fat.

The second patient was a girl, aged 12. On the right tonsil, a pale, yellow, polypoid growth was attached by a small pedicle. It was removed by cold snare, and measured 1 by  $1\frac{1}{2}$  centimetres. Microscopically, the greater part consisted of sclerosed connective tissue. Groups of fat cells were scattered about the middle of the tumor. There was also small-celled infiltration.

## Book Reviews.

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*Transactions of the Medical Society of the State of North Carolina.* Forty-fifth annual meeting held at Charlotte, N.C., May, 1898. Carolina Publishing Co., Winston, N.C.

This report contains about 200 pages. The book is gotten up in a plain, but readable form. The subjects discussed are numerous and important, such as the tobacco habit, meddlesome gynecology, the chemistry of the stomach, excision of the gall-bladder, typhoid fever, tuberculosis, osteosarcoma, etc. The papers are good, and will repay their perusal.

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*A Laboratory Manual of Physiological Chemistry.* By ELBERT W. LOCKWOOD, B.S., M.D., Professor of Chemistry and Toxicology, University of Iowa. Philadelphia, New York, Chicago: The F. A. Davis Company, publishers, 1899.

This little work has been written for the purpose of supplying a concise text-book for students pursuing the subject of physiological chemistry. The author has arranged the work in a series of experiments, followed by explanatory notes, wherever it has been deemed necessary. We quite agree with the writer that the practical method of teaching this subject is much superior to the didactic and believe that his book will be favorably received by students in medicine.

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*Manual of Chemistry: A Guide to Lectures and Laboratory Work for Beginners in Chemistry.* A text-book specially adapted for students of medicine, pharmacy and dentistry. By W. SIMON, Ph.D., M.D., Professor of Chemistry in the College of Physicians and Surgeons of Baltimore, in the Maryland College of Pharmacy, and in the Baltimore College of Dental Surgery. Sixth edition thoroughly revised, with forty-six illustrations and eight colored plates, representing sixty-four chemical reactions. Philadelphia and New York: Lea Brothers & Co.

This text-book of chemistry is so widely known that a review of it appears almost unnecessary. All the divisions of the subject, namely, inorganic, organic, analytical and physiological, are dealt with in the one volume. Necessarily the subject is treated in a superficial manner. Although this edition is more complete than the fifth, the chapters on organic and physiological chemistry might be extended with great advantage to the student. The work, taken as a whole, is well compiled, and is one of the best books which we are acquainted with for students pursuing the subject of chemistry without an instructor.

*A Treatise on Surgery.* By American Authors. For Students and Practitioners of Surgery and Medicine. Edited by ROSWELL PARK, A.M., M.D., Professor of Surgery and Clinical Surgery in the University of Buffalo, N.Y. Condensed edition with revisions. With six hundred and twenty-five engravings and thirty-seven full-page plates, in colors and monochrome. New York and Philadelphia: Lea Brothers & Co. 1899.

We welcome a second and condensed edition in a single volume, of that very excellent book on surgery, by American authors. It will answer the needs of students as well as of those who desire a comprehensive and practical single volume work on modern surgery. The single volume has the advantage of providing, at a very much lower price, all the important matter which was contained in the two-volume edition. A very instructive chapter on the surgical pathology of the blood will be found of much value to all surgeons. In addition to the usual subjects found in a treatise on general surgery, we have in this work several chapters on special branches. There is a very excellent chapter on plastic surgery, by Dr. Gerster. The surgical diseases and injuries of the eye and orbit are ably set forth by Dr. Bull. The surgical diseases and injuries of the ear are dealt with in a very concise manner by Dr. Blake. A chapter dealing with the history of skiagraphy or the application of the Röntgen rays to surgery, is very nicely written by Dr. Park. A very brief and clear account of the surgical diseases and injuries of the female reproductive organs is given by Dr. Etheridge, of Chicago. Amputation and orthopedic surgery are each given sufficient prominence. The photographs and illustrations used throughout the work are of considerable merit, and altogether the character of the work is such as to commend it to all those requiring a thoroughly up-to-date surgery.

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W. A. FRASER, whose short story, "The Home-Coming of the Nakannies," is published in the January *Ladies' Home Journal*, is known as the "Rudyard Kipling of Canada." The parallel is found in the vigor of his style and the scenes of his stories, the American wilds—a modified India jungle. At a dinner during Kipling's visit to America a few months ago, Mr. Fraser told the story of "The Home-Coming of the Nakannies," which so impressed the creator of "Tommy Atkins," that he insisted upon Mr. Fraser's writing the story just as it was told. "And don't forget what the engineer said," he added, emphasizing his demand that so good a story of Indian life and tribal customs be given to the public.

*A Compend of Gynecology.* By WILLIAM H. WELLS, M.D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic, etc. Philadelphia: P. Blakiston & Co., 1899. Price, 80c.

One of the Quiz-compend series, much information is given in a short space. In speaking of antisepsis in gynecology we do not consider it correct to speak of stitching up the anus to prevent an unforeseen action of the bowel during an operation; neither do we take it as a matter of course that gloves are to be worn by the operator.

The preparation of ligatures, sutures, dressings, etc., is well given. The paragraphs on gynecological positions and methods of examination are practical and valuable, and the illustrations are good.

The body of the work contains a good synopsis of the diseases of women and their treatment. The injurious effects of compression are, we think, evident in many places. We do not, for example, think that students are sufficiently warned about the danger of the use of branched steel dilators; nor of the danger of the after effects of ventro-fixation; or of the use of the sharp curette. Under pelvic hematocoele no attempt is made to differentiate between the etiology and symptoms of intra- and extra-peritoneal hemorrhage.

The index is good and makes the work a handy book of reference.

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### Extra-uterine Pregnancy.

The differential diagnosis in the early months must be from:

1. Simple abortion.
2. Intra-uterine pregnancy complicated with pelvic tumour.
3. Retroflexion of a gravid uterus.
4. Antelexion of a gravid uterus.
5. Pyo salpinx.
6. Myoma.
7. Twisted pedicle tumours: (a) Of the tube; (b) of the ovary.

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### Ointment of Yellow Oxide of Mercury.

Schanz (*Lyon Médical*) recommends the following formula:

R.	Yellow oxide of mercury, recently prepared, from.....	15 to 30 grains;
	Lanolin.....	15 "
	Distilled water.....	15 "
	American vaseline.....	150 "

M.

—*N. Y. Med. Jour.*