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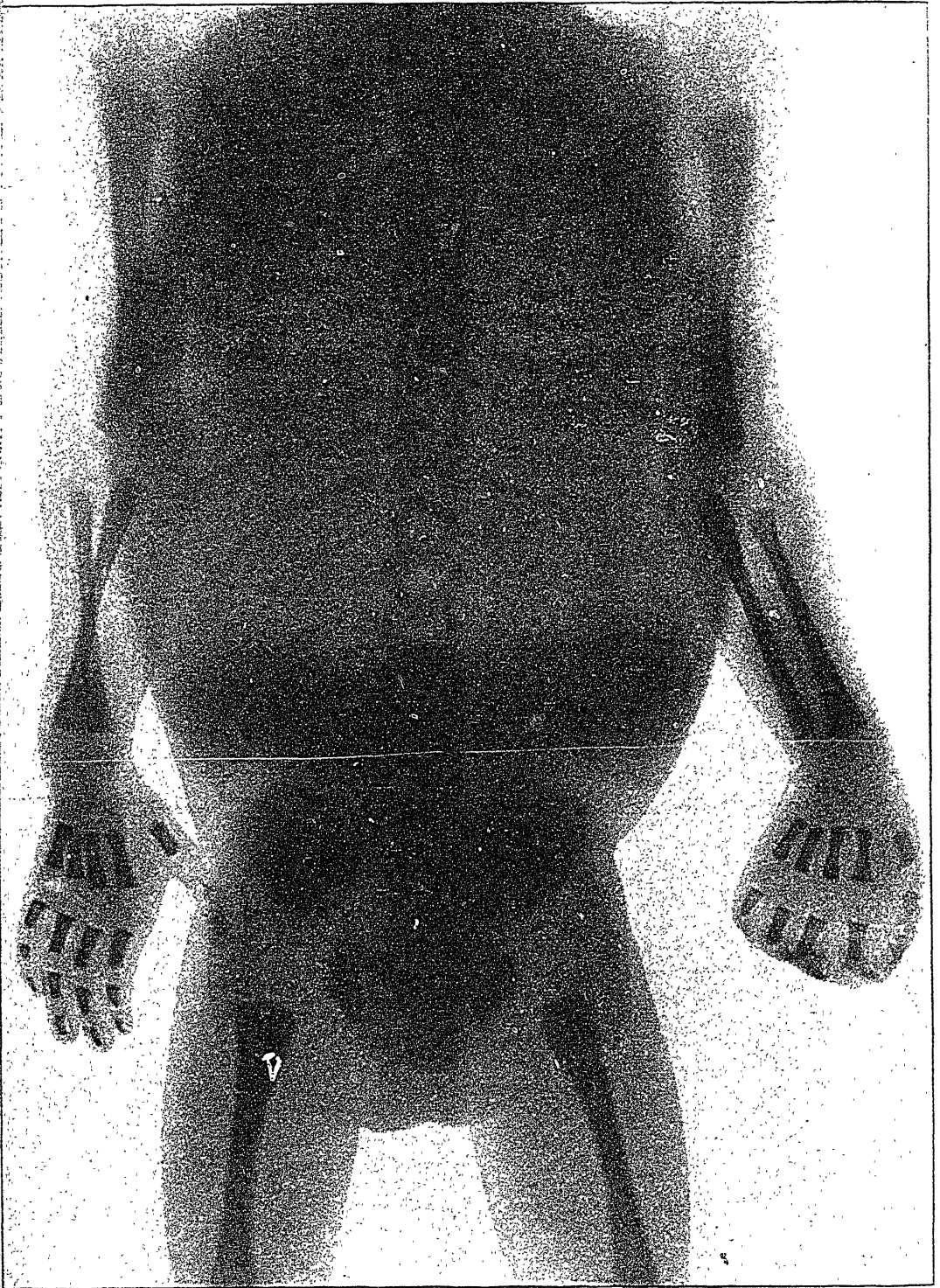
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SKIAGRAPH OF FETUS

Between seven and eight months, showing points of ossification.

Taken by EDMUND E. KING, M.D.

Time of exposure, 35 minutes.

THE  
CANADIAN PRACTITIONER

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## Original Communications.

### ADDRESS OF THE PRESIDENT OF THE ONTARIO MEDICAL ASSOCIATION.\*

FREDERICK LEM. GRASSETT, M.D.,

TORONTO.

IT is the usual custom in this association, in common with others like it, that the man whom you have elected to the honorable position of president shall deliver a presidential address. This early reminds the holder that he has responsibilities as well as honors placed upon his shoulders, sufficiently serious to interfere, in some measure, with the full enjoyment of the honor. So keenly was I alive to these responsibilities that I had very considerable misgivings as to my sufficient fitness for it. On the other hand, I had from many of the older and most experienced members assurances of their cordial support and assistance. I wish to say that these promises have not been mere empty words, and I take this early opportunity of expressing to them my warmest thanks for their loyal co-operation in endeavoring to make this sixteenth meeting of the Ontario Medical Asso-

\*Delivered at the meeting held in Windsor, June 3 and 4.

ciation as conspicuous a success as so many of its annual meetings have been. This year, owing to the kind invitation extended by the profession of Windsor, endorsed by the city council and others, the association decided, after a thorough discussion, to alter for this year the place of meeting. I confess to a feeling of doubt as to the wisdom of changing from a central point like Toronto, so readily accessible from all parts of the province, the centre of all forms of educational work in the province, to a city at the extreme western boundary ; but once the matter was so decided most of the men felt that a special effort was incumbent upon them to overcome any possible or fancied difficulty. The local committee have, I find, left nothing undone by wise thoughtfulness in their arrangements to ensure the success of our meeting. You will find, on reference to the programme, that an active committee on business and papers has provided an ample and diversified bill of fare ; let each member appropriate his own particular pabulum, giving out as well as receiving, and thus a full benefit will accrue to all.

Our association aims at bringing together men from all parts of the province (and this time a special contingent of the profession across the border, to whom we extend a most hearty welcome); men in the same profession, it is true, but yet whose paths are widely diversified, embracing the much-sought-after specialist, with difficulty dragged from his comfortable office and his large fees, as well as the general practitioner, the rank and file of our profession, in many cases an overworked, underpaid man, who finds it not easy to take even the few days necessary to attend such a meeting as this, those in official positions and those non-official, yet all animated by one spirit, and having one common object in view, viz., to battle with disease, to relieve suffering, to save life, to promote the welfare and health of the people. Noble ends, noble aims! may our discussions tend to further them, may they be mutually helpful, mutually stimulating, so that each of us, in his own sphere, may be encouraged to do all that in him lies to elevate, improve, and uphold the noble profession to which we belong. More than this, a meeting like this brings men into close and kindly personal relation, cements old friendship, lays the foundations of new ones, enables us to meet face to face those whom we have never seen, and yet by whose writings we feel as if they were not entirely strangers to us. It allows, by the comparing of experiences, and putting on record much valuable material that would otherwise be lost, the addition of something, however small, to the sum total of medical knowledge. The enduring records of medical science are slowly and laboriously aggregated together, and much sifting may be necessary in order to separate the grain from the chaff. I think we all may feel a sense of gratification that our province is not behind in this regard. In Toronto we have three flourishing medical societies. I

note the frequent meetings of various territorial medical societies, that they are well attended, thoughtful papers read, keen discussion follows. All this cannot fail to elevate the profession, to raise it in public estimation, convincing them that its members are not merely bread-and-butter earners, but scientific, enlightened men, ever seeking light, ever striving for the truth.

It is rarely that the president is not called upon to notice the decease of some prominent member of the association. This year, I grieve to say, our losses by death have been unusually numerous and sad. Only two years ago Dr. Lachlan Macfarlane occupied the presidential chair, charming us all by his manly dignity and kindliness. Struck down in the vigor of health, in the performance of his duty, by the poison of a case of gangrene, absorbed from a slight puncture with a needle, in the successful effort to save by operation the life of a poor hospital patient, his sudden removal creates a gap not easily to be filled. If, when a soldier risks his life in carrying a disabled comrade out of action, and therefore is decorated with the Victoria cross, we rejoice at the bravery that called for such reward, ought we not to highly honor the memory of one of our profession who quite as bravely lost his life in the performance of duty, by unavoidable mischance?

Two others, earnest workers and office-bearers in the past in this association also, have passed away in the full vigor of manhood and in the height of their professional career. Dr. K. N. Fenwick was another victim of blood poisoning under very similar circumstances to those of Dr. Macfarlane. A slight cut of the finger while operating on a case of septic peritonitis, and within a week the poison had accomplished its deadly work. His memory will long be cherished in Kingston and its vicinity. Dr. H. J. Sanders, also of Kingston, succumbed to an attack of septic pneumonia, the sequelæ of a septic throat. A hard worker in the actual practice of his profession, painstaking, thorough, he kept himself in touch with every advance of medicine. Much beloved by all who sought his advice and aid, in his death our association suffers a severe loss.

Turning for a brief period to medical topics specially affecting us in this province, I note two that have lately provoked a good deal of discussion. Matriculation in medicine in Ontario has lately been in an anomalous state. The Medical Council, in requiring a special certificate and none other, inflicted undeniable hardship in some cases. The growing feeling of discontent has been met by a compact which will almost certainly go into force at the next meeting of the council. Shortly, it is that the standard, which was to have been raised a good deal in 1897, remains the same as at present, and cannot be raised without the sanction of the Lieutenant-Governor in council; also the council will accept a certi-

ificate of matriculation in arts from the registrar of any Canadian university, together with proof of having passed the examination in arts at the end of the first year. Provision is also made for students to pass a preliminary examination who failed previous to entering on the study of medicine. This more liberal policy is more in accord with that insisted upon by the General Medical Council of the United Kingdom. That body accepts the matriculation certificates of a number of examining boards, nineteen at least, as equivalent to their own, thus affirming, I think, that matriculation, as a test that a candidate is fitted to enter on his professional studies, may be accepted by them when such examination is in all respects equivalent to the standard they require. Let us hope this much-discussed question is settled now for many years. The second is the proposed lengthening of the medical session, making it eight instead six months, and reducing the number of years from five to four ; also abolishing the one summer session at present obligatory. Such a plan has much to recommend it, looked at from the students' as well as the teachers' standpoint. Everyone is aware that much more work is exacted from the medical student of to-day than from those who studied even ten years ago. More work means more time ; this the students complain they cannot have in the present session of a little over five months, not that there is any desire to increase the number of lectures, but it should be so arranged as to allow methods, practical and clinical, to have fuller scope. Again, the teacher of a didactic or even a clinical course has at present to crowd all his work into too short a period. This arrangement would make a change in this, and also allow him now and then to go to other schools while in session, observe their methods, see their hospital practice, and fit himself more efficiently for his work. As at present arranged, such visits to foreign hospitals or laboratories can only be made in summer, at which time many are closed or in charge of assistants. The measure of benefit is consequently so reduced as to make it doubtful if it be worth such an effort to obtain it. Reciprocity between Canada and the United Kingdom is every now and then discussed, but has so far yielded no practical result. I understand that the Canadian Medical Association appointed at its last meeting a committee to report on the subject. It is difficult to see how this very desirable result can be obtained unless, first of all, we secure registration between the several provinces of the Dominion. If a graduate of Ontario, passing with the highest honor at the Provincial University, stamped with the hall mark of the College of Physicians and Surgeons of Ontario, cannot legally practise his profession in Quebec province, in older Canada, to say nothing of the newer and more distant provinces that comprise the Dominion, how can we ask with any reasonableness reciprocal registration from Britain ? Let us begin at home. See if the difficulties to interprovincial

registration are insuperable ; if that is overcome, I do not think there will be much trouble in securing the recognition of our qualifications, and the inscribing of the names of our men on the medical register of the United Kingdom.

Not quite fifteen years ago Koch announced to the world his great discovery, that a specific bacillus is the primary cause of tuberculosis, establishing as an undoubted fact what many had even before thus regarded as highly probable.

All objections that this characteristic bacillus was not the cause of the disease were by the multiplicity of confirmatory evidence, in all parts of the world, completely met ; in the same way the infectious nature of the virus being completely established, not only by inoculation in susceptible subjects, but also by contact of an unprotected surface and matter holding the specific germ. If the infectious element in tuberculosis abides in the secretions of the part affected, is it not wise to control this avenue of propagation without unduly pressing on the patient and his friends? How far this is desirable, all at once, is a question ; perhaps for the present it is wiser to educate and enlighten the mass of the people on this subject, pointing out in simple, unmistakable terms the nature of the disease, how easily it is communicated, how one can best protect himself and his friends from the spread of the disease, leaving for the future any more radical action. This year sees a beginning made in measures for the sanitarium treatment of cases of tuberculosis in our own country. The National Sanitarium Association has been incorporated. A board of wealthy and influential men in different parts of the country has been chosen its directors. Before long we hope to see, not in Muskoka only, but also in Rocky Mountain sections of our Northwest, several buildings specially erected on favorable spots to relieve and benefit, and often cure, those whom without such surroundings could have nothing to hope for, but await the lingering, inevitable end. Already the association has received pledges of \$70,000 for its purposes. A most satisfactory and well-sheltered site of forty acres of bush land near Gravenhurst has been secured, with the option of purchasing thirty additional acres adjoining. Plans have been drawn, contracts let, and before long the first cottage of our Canadian sanitarium for tuberculosis will be erected. The ever-increasing mortality from tuberculosis, like a plague, marks, it is estimated, one in seven for destruction. The failure of all so-called specific treatment for this disease, and the amazing results secured by the advocates of the hygienic and dietetic treatment in these sanitariums built exclusively for consumptives, makes one glad that at last we shall have such a one at our own doors. The idea of such treatment is not new. It has been used since Hippocrates, and many places in Switzerland, Germany, England, and elsewhere have long

been used in this way. I believe it may be set down to the credit of the United States that the Adirondack College Hospital at Saranac Lake, New York, was one of the first of these institutions to open its doors to the poorer class among phthysical patients. I can myself bear testimony in my own experience to the great good my patients have received from a residence in the Adirondacks at this place. Dr. Osler recently said : " We are finding Dr. Trudeau's sanitarium in the Adirondacks a perfect godsend. Why, I can put my hand on not less than a dozen young men whom we sent there with undoubted phthisis, who were returned to us well, and who remain well." I do not wish to intrude upon the address in medicine, which deals with the treatment of tuberculosis, but I could not refrain from referring to the beginning of the sanitarium treatment in our province. Turning from things chiefly affecting us locally, and upon which, perhaps, I have spent so much time as to leave me open to the charge of being narrow and provincial, to the wider field of our profession, what do we see? Advances made in nearly every department.

The whole scientific world has lately been aroused to a high pitch of excitement by the recent wonderful discovery of Prof. Roentgen, of Wurzburg, that it is possible to produce photographic effects through opaque substances such as wood, flesh, and other dense materials, while glass, usually considered the most transparent of media, obstructed the passage of the cathode rays. Photography has long been useful in medicine and surgery, in accurately reproducing deformities and cases with marked physical characteristics; also photographs, colored, of skin affections, give a more correct idea of such cases than any of the best artists can create, but this new departure in photography is a most signal advance indeed, and may possibly be one of the most valuable aids in diagnosis that in recent years has been produced. Just consider: if these rays will penetrate the body as easily as they do the hand, we can solve problems by such aid that no amount of skill and care can now accurately settle. Thus we may hope to see calculi in the kidney, foreign bodies in any of the internal viscera, tuberculous disease in the bone, calcareous degeneration of vessels, or some equally definite results. I am glad to say a practical demonstration of this important subject is to be given at this meeting. It has been said that in the world's history the nineteenth will ever be known as the great scientific century, when the human mind first gained its great mastery over the forces of nature, and compelled her to reveal some of her greatest secrets. The sciences akin to medicine have made rapid progress, and rational medicine no longer guesses and gropes in the dark, but, helped by scientific methods of enquiry, is ever gaining deeper and broader knowledge. Among the departments of medicine surgery has ever held a foremost place. By the very nature of his art the surgeon can render greater help than the physician, fighting, as the latter does,



chiefly with internal diseases. Modern surgery can safely conduct operations that formerly could not be even entertained. Why? mainly because of the treatment of wounds, especially those produced during such operations. It was by sciences (akin to the medicine) that this was brought about. Pasteur, a chemist, studies with close attention the yeast fungus, the resolution of sugar into alcohol, and carbonic acid is found, due to its disturbing influence. Putrefaction is found to be an analogous process. Lister perceives the surgical importance of Pasteur's researches, and with the germ theory as a pole star he navigates his treatment safely through difficulties that, without this guiding light, would have been insurmountable. As his pupil and house-surgeon in Edinburgh in those early days of antiseptic surgery, it would be a labor of love to dwell on this topic, but time will not permit. Within the last few years cerebral or intracranial surgery has made more striking advances, I think, than any other. I do not wonder at our long night of ignorance in regard to the brain and its functions. It is an organ so difficult to investigate, so shut in and protected by its bony case, that it has long kept its own secrets. During the last twenty years, by close clinical observation, by experiments on animals of the higher vertebrates, much has been done to map out and localize definite centres connected with motion, or temperature, or pain or special sense. Thus has the surgeon been able to remove tumors, evacuate abscesses, and conduct operations successfully which a few years ago would have been regarded as hopeless. In this success the physician has his share. His duty is to locate the seat of mischief, in many cases to advise for or against operation, to aid in every way the surgeon in this difficult department of our art. Abdominal and pelvic surgery has so developed that no organ, however humble in that region, is passed over as unworthy of attention. Much ingenuity has been exercised in operating on the gastro-intestinal tract, and many improvements in technique, if not in principle, suggested. Perhaps to the general surgeon among the most interesting departures in operative treatment is that of Dr. J. William White, of Philadelphia, for the relief of prostatic enlargement by double orchidectomy. It is a measure of relief for that affection so completely different from anything before used in similar cases; hitherto the prevalent idea being that attention and action must be concentrated on the prostate itself; that section of it, or removal of such an amount as might be necessary for the required relief, was the proper course. This new procedure is a little startling at first, even to the surgeon. I find it more so to the patient. Yet I believe, in rightly chosen cases, it is a valuable idea, one that has passed through its probation, and has, in all probability, taken its place among recognized surgical operations. There are many interesting changes and improvements in surgical work, but time warns us to hurry on. Medicine advances steady-

ly, if not by such leaps and bounds as surgery, in some directions these advances are more readily perceived than in others. Therapeutics, ever presenting difficult problems in correctly understanding the actions of drugs, has been greatly helped by the study of the physiological actions of such drugs, as pertaining to the right understanding of their therapeutic effects. It is well that this other method of gaining such knowledge has thus been added to the old plan of observing how drugs act in disease. Had we not the advantage of physiological pharmacology, many new remedies would run the risk of being consigned to oblivion that now rank among the most valuable of recent times. It is in preventive medicine the most signal advance has been made and the greatest triumphs of modern medicine won. Prevention is always better than cure. It is better to keep the enemy from entering the fortress than to fight him, even successfully, after he has entered. Bacteriological research has greatly stimulated preventive medicine by demonstrating the absolute necessity for pure water, pure air, cleanliness, purity of nourishment—liquid and solid. But it has done much more. By showing that many diseases result from microbic affection, it indicates that the true solution of their treatment is to be sought in modifying the character of the microbes and their products, so that immunity may result by the inoculation of a weakened virus. In how slow and laborious a manner has this knowledge been acquired! Foreshadowed many years ago in the far East, in the practice of inoculation of the smallpox virus under the skin, that a milder disease might result, and immunity be secured from a subsequent attack. A gigantic forward stride was made when Jenner's observation showed that cowpox is but a mild form of smallpox, that vaccination is a safeguard against this loathsome disease; but this may be regarded as the dawning of the day of bacteriological investigation and research, a field in which many acute minds are busy workers; by whose exertions many new secrets are being almost hourly wrested from nature's jealous keeping. But, gentlemen, I feel I must no longer trench upon your patience and good nature. Ere I close, let me express the hope that many will freely discuss the papers presented. In this association free discussion has ever been our rule. Sharp, pungent criticism is often given. Equally energetic is the reply made in defence of some pet theory or view; but always the best of feeling and harmony reigns. Such discussion assists us out of any routine groove into which the best of us are liable to fall, forces upon us the necessity to occasionally examine ourselves—to compare now with the past; to see to it that we do not retrograde or remain stationary, but be ever striving to improve in our better understanding of nature and her laws. If this broadening of our knowledge is associated with a true love of our profession, devotion to our sacred and honorable duties, we are sure to be useful to our fellow-men, and in our generation.

## TONGUE-LIKE ACCESSORY LOBES OF THE LIVER.\*

BY ALEXANDER MCPHEDRAN, M.B.,

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TORONTO.

THE chief interest in this subject is in connection with the diagnosis of abdominal tumors. Unless fully alive to the great variety, as to shape and position, in which these accessory lobes of the liver may present themselves, one will often be misled in the diagnosis of abdominal tumors. In not a few cases, even with the utmost care, a positive opinion as to the nature of these tumors cannot be given.

Riedel, who first drew attention to the importance of these abnormal lobes, believes them to be due usually to pressure on the liver, as in tight lacing, and to traction, by an enlarged gall bladder. They are met with usually in women. In nine of his twelve cases the gall bladder was attached to the lower part of the process.\*

So far as can be inferred from the seven or eight cases with which I have met, tight lacing has little to do with the production of the deformity, and the position of the gall bladder at the lower part of the mass is an accident rather than a cause of its formation. In many, if not most, cases the formation of these lobes seems to be developmental, having nothing to do with either pressure or traction.

CASE I. A woman, *æ*t. 42, was admitted, under my care, to the Toronto General Hospital, October, 1894. She was very anæmic and considerably emaciated. She complained of much pain in the abdomen, and frequently vomited after meals. There were also irregular pains in various parts of the body. She was very nervous, pulse quickened and temperature normal. The symptoms were those of well-marked neurasthenia, with nervous dyspepsia and constipation. The abdomen was rather full and tender in all parts, but especially so to the right below the costal margin, where a tumor-like mass could be felt. Over this the percussion note was dull; elsewhere the abdomen was tympanitic. This mass was about four inches broad, and extended from the costal margin to about one inch below the line of the umbilicus. Its lateral and inferior

\* Read at the meeting of the Ontario Medical Association at Windsor, June 3, 1896.

margins were distinct, but the upper could not be felt, and the note over it was slightly resonant. The tumor could not be traced to the liver, the flat note of which ceased at the costal margin. The mass felt smooth, semi-elastic, and could be moved from side to side about one inch. It was very tender to manipulation. From behind its lower border, near the inner margin, a rounded secondary mass projected about an inch ; it was adherent to the main mass. The whole descended slightly with inspiration, and could not be held down during expiration. But the tenderness and the slight degree of abdominal respiration rendered it difficult to demonstrate respiratory movements in the tumor. The right kidney was not palpable. The urine was normal. An exploratory operation was

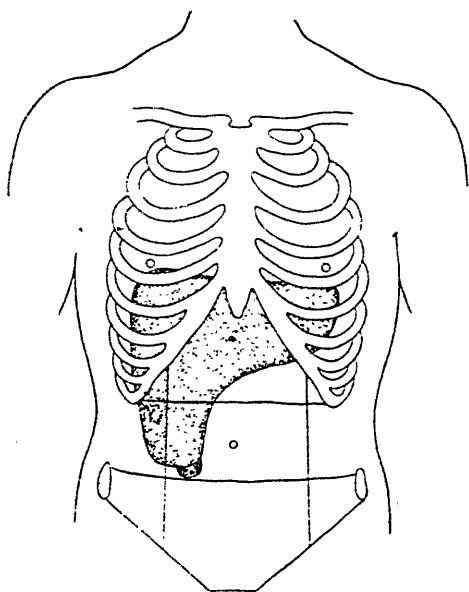


FIG. 1.

deemed advisable, and Dr. I. H. Cameron opened the abdomen, to find a broad, thin process of the liver extending down below the umbilicus, as shown in the diagram (Fig. 1). Behind this process, and adherent to it, lay the right kidney, forming the rounded mass projecting from the lower margin.

CASE 2. A woman, aged about 45, with symptoms much like the foregoing. As shown in the diagram (Fig. 2), the liver process was narrow and extended down close to the umbilicus. It was very freely movable from side to side. In this case also the lower part lay in close contact to the abdominal wall, while the upper part receded, and could not be traced

to its connection with the liver. From the inner part of the lower end projected slightly the gall bladder, which was normal and could not have had anything to do with the formation of the process.

CASE 3. A woman with process closely resembling that in Case 2. The gall bladder was not seen ; if attached, it was situated behind.

CASE 4. Mrs. F., the wife of a physician, was never robust. Her menses were painful and often profuse. She became ill in January, 1895. The flow was so free that it was thought that she had possibly miscarried. In a few days the temperature rose slightly, and tenderness and slight fullness were found to the right and behind the uterus, down close to the cervix. There was not much change in the symptoms for some days, then she

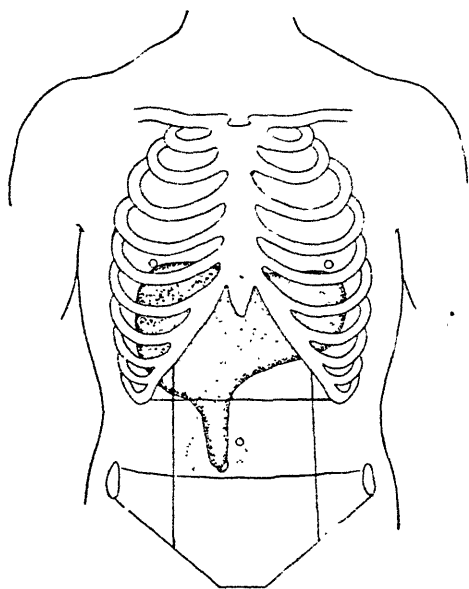


FIG. 2.

improved, the tenderness and fullness gradually disappeared with the discharge of a little pus beside the cervix. The temperature became normal, and she improved somewhat for a few days. Then fever returned again ; nothing could be found in the pelvis to account for it. The urine had been normal. In the right lumbar region there was some tenderness, and a fairly well-defined mass could be felt extending down nearly to the crest of the ilium. A few days later the urine contained some albumin, with a few pus cells. The temperature remained variable, but not high. Her condition was very unsatisfactory, and caused much anxiety. Two days later there was a copious discharge of pus and blood in the urine. There

were many clots and yellowish-black masses of thick pus and blood, due undoubtedly to the discharge of a fairly large abscess into the urinary tract. The mass in the right lumbar region remained unaltered. There was tenderness along the course of the ureter, and possibly some thickening. No signs of abscess in the pelvis could be found. The urine became increasingly clear daily, but the amount of albumin remained high, apparently more than would be accounted for by the amount of pus present. The inevitable conclusion seemed to be that there was an abscess in connection with the right kidney, and that the mass situated there resulted from it, yet its mobility and unaltered size and shape seemed to negative that opinion. As improvement was not satisfactory, an operation for the

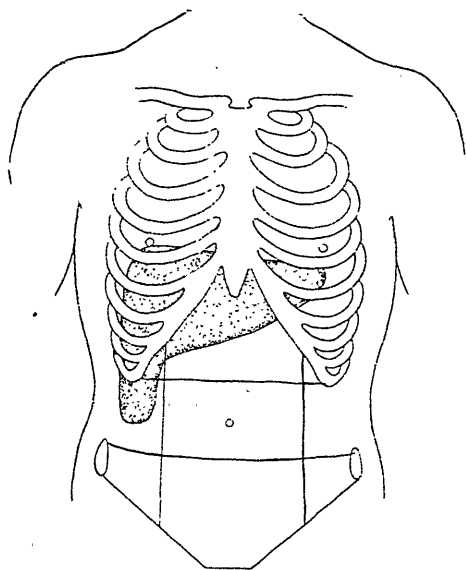


FIG. 3.

purpose of exploring the mass was done by Drs. I. H. Cameron, Uzziel Ogden, and Alexander Primrose. When exposed the mass was found to consist of a tongue-like lobe of the liver (Fig. 3), behind which lay the right kidney, which was to all appearance healthy. The situation of the abscess was not ascertained, but was probably somewhere about the pelvic brim. There was gradual improvement after the operation, and in a month the urine was normal. Her health improved very slowly, and even yet is not very satisfactory.

CASE 5. Babe G., aged eleven months, the child of a physician. Took ill on Wednesday with disturbed digestion. Improved, but became ill

again on Saturday, and grew rapidly worse. The temperature was high, and bowels could not be made to move even with strong purgatives. I saw the child, with my friend, Dr. Machell, on Saturday evening. The child was then in great distress, had vomited some, was very pallid, tossing about, and crying out. He was very thirsty. The pulse was very rapid and weak. The abdomen was not much distended. There was no specially tender part. There was a small motion of green mucus with a little faecal matter in his napkin. He was straining a good deal from time to time. Examination of the abdomen revealed nothing unusual, except a small elongated mass in the region of the ascending colon. It extended from the costal margin down nearly to the iliac crest. It moved with

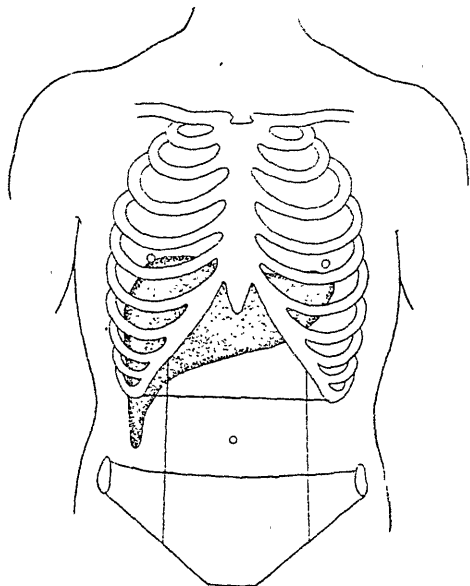


FIG. 4.

respiration, was firm and dull on percussion. The abdomen was everywhere else tympanitic. The possibility of an intussusception occurred to us, although the absence of blood, the very slight amount of mucus in the stool, and the slight tenesmus seemed to negative that opinion. As there appeared to be no other hope of relief, an operation was advised, an opinion in which the father acquiesced. Dr. George A. Peters operated, and the finger-like mass was found to be the edge of an accessory lobe of the liver (Fig. 4). The abdominal organs appeared healthy. There was no exudation in the peritoneal cavity. The child seemed none the worse of the examination. Death occurred next day,

and it was suggested that the case was one of hæmorrhagic pancreatitis, a diagnosis that was confirmed by the autopsy.

CASE 6. Wm. H., æt. 36. A builder. Consulted me in October, 1895, complaining of flatulent dyspepsia. He had pleural adhesion with considerable retraction on the left side of indefinite but recent occurrence. Careful examination showed a dull resistant mass in the epigastric region, over the situation of the pylorus. The abdominal muscles were so tense that the exact shape and character of the thickening could not be determined at first. Examination of stomach contents after a trial breakfast was made; the residue was large (120 c.c.'s) and contained no free hydrochloric acid; there was a good deal of gas in the stomach. There was no

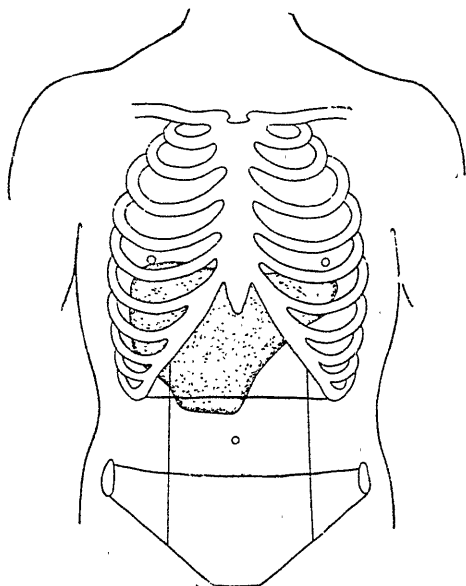


FIG. 5.

nausea or vomiting. There was uncomfortable distress and some pain after food, relieved by belching gas. He had lost a good deal of flesh. In the result of examination, as given, was sufficient ground for anxiety, as the existence of carcinoma was a grave possibility. The result of treatment was not very satisfactory for some weeks, as there was little improvement, and this strengthened the possibility of malignant disease. Three months later he was some better, however, and the abdomen was quite relaxed. The mass in the epigastrium was found to be broad, smooth, and with a sharply defined liver-like edge on its right and lower margins, but lost to the left under the rectus muscle, where there was stomach resonance, while the right part was dull on percussion (Fig. 5). The mass moved freely with



respiration. There was no doubt that this was a process of the liver. This gentleman's health has since then greatly improved, and he was in very fine condition last month, when he left for Europe.

CASE 7. Laura R., æt. 21. She was never robust. She had what seemed to be typhoid fever last September, followed by a protracted convalescence. A month later on being seen there was some exudation in the right pleura, probably chiefly plastic. The general prostration was more in keeping with pneumonia, very possibly of tuberculous origin. Her sister had died the previous year of acute miliary tuberculosis. She again recovered very slowly, and in February a copious ascitic exudate was found to exist. It interfered with her comfort and respiration ; otherwise she was fairly well.

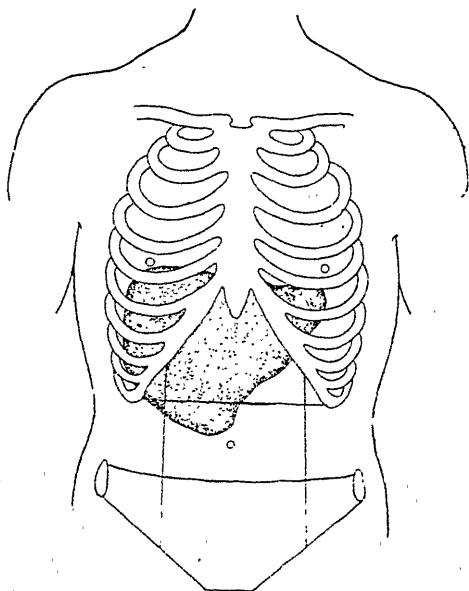


FIG. 6.

The temperature was normal ; appetite, fair. The fluid increasing slowly, a small trocar was inserted and six pints of serum withdrawn. It reaccumulated, and in April Dr. Alexander Primrose did a section in order to explore the peritoneal cavity. It was thought probable that the condition was tubercular, but the peritoneum was healthy. A broad, thin lobe was found to descend from the anterior margin of the liver to the crest of the ilium (Fig. 6). It presented a healthy appearance. It had not been discovered before because the abdominal wall was rather thick. This lobe of the liver can have nothing to do with the occurrence of the ascites. On May 22 she required to be tapped again, 5½ pints being withdrawn. Her general health has, however, improved very fairly.

## Selected Articles.

### THE TREATMENT OF THE HÆMORRHAGES AND URTICARIAS WHICH ARE ASSOCIATED WITH DEFICIENT BLOOD COAGULABILITY.

BY A. E. WRIGHT, M.D. DUBL.,  
Professor of Pathology, Army Medical School,  
NETLEY.

I HAVE in previous communications\* directed attention to the fact that the coagulability of the blood can be increased (1) by calcium salts, (2) by carbonic acid, and (3) by solutions of cell nucleo-albumins (Woolridge's tissue fibrinogens). I propose in the present communication first to amplify certain statements I have made upon these subjects; secondly, to direct attention to a simple method of administering carbonic acid; and, thirdly, to suggest that calcium chloride may prove useful in the treatment of urticaria, wherever the urticarious eruption is associated with a condition of diminished blood coagulability.

The following cases may be of interest as showing the increase of blood coagulability which can be obtained in hæmophilia by the internal administration of calcium chloride:

Patient.	Age	Date of antecedent blood examination.	Coagulation time in standard tube (temp. 18.5°C.).	Amount of Ca Cl <sub>2</sub> administered.	Date of subsequent blood examination.	Coagulation time in standard tube (temp. 18.5°C.).
Boy (very severe hæmophilia)	9ys.	April 13, 1894	Exceeds 54 minutes.	Two 2 gm. doses	April 14, '94	25 minutes
		Sept. 28, 1894	14 minutes	Two 2 gm. doses	April 15, '94	13½ minutes
				Two 0.6 gm doses	Sept. 29, '94	6½ minutes
Brother of above (less severe hæmophilia)	7ys.	April 13, 1894	7 minutes	Two 2 gm. doses	April 14, '94	4 minutes
		Sept. 28, 1894	9½ minutes.	One 0.6 gm. dose	Sept. 29, '94	5½ minutes

\* (1) Brit. Med. Jour., Dec. 19, 1891; (2) Proceedings of the Royal Society, vol. lv., 1894; Brit. Med. Jour., July 14, 1894.

It is to be noted that the augmentation of coagulability which is here recorded was not in either case a permanent augmentation of coagulability. In these, as in all other cases of hæmophilia which have come under my observation, a continued administration of twenty to thirty-grain doses of calcium chloride resulted in a diminution of coagulability below the original norm. There is evidently in the hæmophiliac, just as there is in the normal, patient a maximum of lime addition which ought not to be exceeded. For the purposes of the arrest of hæmorrhage this subsequent diminution of coagulability may, however, generally be left out of account, for when the maximum of coagulability is reached hæmorrhage will generally be arrested by the sealing of the wound by clot. I have seen this result follow upon the internal administration of calcium chloride in several cases of hæmophiliac hæmorrhage. I am also indebted to Dr. Newcombe, of Gateshead-on-Tyne; to Mr. Horace Potts; to Dr. A. H. Jones, of Northampton; and to Surgeon-Lieutenant J. N. Macleod, I.M.S., for notes of cases in which hæmophiliac hæmorrhage was arrested by the internal administration of calcium chloride. The less soluble calcium salts may also be usefully applied in the form of local applications to the bleeding surfaces. I have obtained very satisfactory results from the application of finely-powdered chalk mixed into a paste with a  $\frac{1}{2}$  per cent. solution of calcium chloride. Dr. N. F. Surveyor had previously been good enough to send me the notes of a case under his care in which an arrest of severe hæmophiliac bleeding from the gums was obtained by an application of calcium phosphate. In Dr. Surveyor's case escharotic styptics had previously been applied with unsatisfactory results.

Hypodermic administration of calcium chloride is a method which I have forborne to apply upon man, as I have seen extensive (apparently aseptic) sloughing to result from a subcutaneous inoculation of calcium chloride upon a dog. I have also, in a hæmophiliac boy, seen scars of extensive sloughing which had been produced by a hypodermic injection of calcium chloride employed for the arrest of hæmorrhage.

Before dismissing the topic of the effect of calcium salts in hæmophilia, it may not be out of place to put upon record the fact that I have been able to convince myself of the truth of Dr. Wickham Legg's statement that hæmophiliac children are not infrequently addicted to eating plaster, mortar, and similar substances. For instance, the sole surviving maternal uncle of the two hæmophiliac boys who have already been dealt with in this paper spontaneously volunteered the statement that he had in his boyhood a constant craving for lime and plaster. This man is the subject of moderate hæmophilia, and has an ankylosed joint. Again, I was informed that a maternal first cousin of these same boys "could not be kept off from eating plaster." This boy, a child aged four years, who is the subject of

severe hæmophilia (blood coagulation—time, twenty-nine minutes), used to pick out the mortar from between the bricks when he was sent out of doors to prevent his eating plaster off the wall. I was shown a large portion of wall denuded of plaster as evidence of the child's plaster-eating propensities, and I was informed that his craving for plaster was most marked before his hæmorrhagic attacks.

I will now pass on to consider the other means which are at our disposal for combating hæmophilic hæmorrhage. The internal and external administration of calcium salts does not always result in the arrest of hæmorrhage. Even so large an increase of blood coagulability as that which I have recorded in the case of the first boy (*vide* table, *infra*) would not necessarily have resulted in an arrest of hæmorrhage. A blood coagulability of  $6\frac{3}{4}$  minutes (normal blood coagulates in from two to four minutes in the standard capillary tube at a temperature of half-blood heat) is no bar to the occurrence of very severe capillary hæmorrhages. In cases of severe hæmorrhage it will, therefore, always be judicious to supplement the treatment by calcium salts by the inhalation of carbonic acid. I have employed this treatment upon two occasions in the treatment of hæmophilic hæmorrhage. Upon both occasions I obtained a comparatively prompt cessation of hæmorrhage. I have also obtained very satisfactory results from the application of the method in the case of a patient in the Royal Victoria Hospital, Netley, whose blood coagulability was seriously diminished by prolonged tropical fever, and who was reduced to an extremely precarious condition by perpetually recurring epistaxis. In the case of this patient all the ordinary methods of arresting hæmorrhage had been resorted to unavailingly. He had been treated successively with ferric chloride, with turpentine, with calcium chloride, with hypodermic injections of ergot, with alum insufflations, and with ice applications. His coagulation period varied during the whole of this period of treatment between eight and four and a half minutes. The number of his white blood corpuscles, though increased under the influence of the turpentine, often fell below 1000 per cubic millimetre. Under these circumstances administrations of carbonic acid were resorted to whenever the epistaxis recurred. The administration of the gas was invariably followed by a prompt arrest of hæmorrhage. The method of administration which was adopted consisted in leading a stream of carbonic acid into the nose through an india-rubber tube passed up well into the nostril. The carbonic acid was supplied from an ordinary Kipp's gasogene, such as can be purchased at any chemical apparatus dealer's for a few shillings. The patient was directed to hold his head forward in order that the blood should run out of the nostril along the india-rubber tube instead of trickling down the posterior nares. The coagulative effect of the carbonic acid was gauged.

by noting the rate at which the blood dripped from the tube. On several occasions this treatment was supplemented by a previous syringing out of the nostrils with  $\frac{1}{2}$  per cent. calcium chloride solution. In the case of epistaxis it is not necessary that the patient should inhale the gas; the local effect of the gas at the seat of hæmorrhage will suffice. The same statement would hold good of a possible treatment of metrorrhagia by an administration of carbonic acid. It is, however, necessary to insist upon the fact that an excess of carbonic acid must be avoided if the method is to be effectual. My experiments upon animals have shown that the accelerating influence of carbonic acid gas upon blood coagulation is manifested only in presence of a sufficiency of oxygen. When this fact has been realized, it becomes evident that the inhalation of carbonic acid gas would be applicable to the treatment of hæmoptysis. It is not necessary that the patient should be in any degree asphyxiated. Asphyxiation would militate against the efficacy of the method. The stream of gas should first be turned on very gently, so as to induce anæsthesia of the mucous membranes. As soon as this has been effected very large quantities of the gas can be tolerated without discomfort. I have not had an opportunity of testing the method in a case of hæmoptysis; it would appear, however, to be deserving of a trial, for it is a method which might result in an immediate arrest of hæmorrhage. If the administration of carbonic acid were not effectual by itself, its coagulative effect might be enhanced by a previous administration of calcium chloride. It might, for instance, be applied an hour after the administration of thirty grains of calcium chloride by the mouth.

Finally, before dismissing the subject of the arrest of hæmorrhage, it may be well to advert to the employment of solutions of cell nucleo-albumins as local applications to bleeding surfaces. The employment of physiological styptics of this kind would appear to be especially indicated in the treatment of hæmophiliæ, for I have convinced myself by a somewhat extensive series of observations on the blood of hæmophilic families that the blood of hæmophilic patients and of their female ascendants is characterized by a notable paucity of white blood corpuscles, and especially by a relative paucity of the polynuclear white blood corpuscles. In other words, hæmophilic blood is deficient in the cellular elements which contribute the nucleo-albuminous element to the formation of fibrin. An addition of nucleo-albumins is, therefore, essential to the formation of a sound clot. The practitioner can always readily obtain a supply of these by mincing up a thymus gland, a testicle, or (if these cannot be obtained) a piece of gastric mucous membrane, in a little  $\pi$  in 500 solution of carbonate, and by filtering off the infusion, either immediately or after the lapse of a few minutes, through a piece of calico. I have employed such solutions of cell nucleo-

albumins in two cases of hæmophilic hæmorrhage; in both cases the hæmorrhage was taking place from cuts upon the hand. The result of the application of this physiological styptic was in each case the formation of an enormous mass of clot round the wound. In one of the cases bleeding continued for days under the clot (this was no doubt due to some dislodgment of the clot), and the skin became extensively macerated. I had in this case to clear away the clots and to arrest the hæmorrhage by inhalations of carbonic acid combined with an application of lime salts. It is, perhaps, not too much to say that with these three methods of arresting hæmorrhage at our disposal very few, if any, cases of hæmophilia ought to be allowed to succumb to their capillary hæmorrhages.

I have now to deal very shortly with the question of the treatment of urticarias which are associated with deficient blood coagulability. It is probable that most urticarias fall under this category. Instances in point are the urticarias which result from eating unripe or acid fruit. These, as I have elsewhere pointed out, may almost certainly be attributed to a diminution of blood coagulability due to the abstraction of calcium salts from the blood by the vegetable acids. Again, the urticaria which supervenes upon the eating of certain molluscs and crustaceans is, if one may judge by the analogy of what happens in animals, associated with a diminution of blood coagulability. There is yet another example of the association of diminished blood coagulability with urticaria in the case of the urticarious eruption which, as Shore first showed, occasionally occurs in dogs whose blood has been deprived of its coagulability by an injection of peptone. I was led by the analogy of these facts to inquire whether the urticaria which frequently supervenes upon an injection of anti-diphtheritic serum is also associated with a diminished blood coagulability. In the few cases which have come under my personal observation I have found that the blood coagulability is really notably diminished. A practical point in the treatment of urticaria would appear to result from these considerations. Whenever we are dealing with an urticaria which is associated with a diminished blood coagulability any method of treatment which will augment blood coagulability will, in all probability, exert a favorable influence upon the course of the eruption. Acting upon this assumption, I have treated the few cases of post-antitoxin urticaria which have come under my notice with 15 to 30 grain doses of calcium chloride. This treatment was apparently very successful. In one typical instance the coagulation time of the patient who was suffering from acute urticaria stood at eight minutes. Within a few hours after the administration of the calcium chloride it had come down to four minutes, and the rash had entirely disappeared. This method of treatment would appear, therefore, to deserve investigation at the hands of those who have frequent opportunities of observing this form and other

forms of urticaria. The treatment of urticaria by carbonic acid inhalations would hardly appear to be a practical method. Its results would, however, have a certain theoretical interest, as it seems probable that the nocturnal supervention of urticaria, like the nocturnal supervention or aggravation of hæmophiliac hæmorrhages, must have some relation to the diminished nocturnal output of carbonic acid.

In all cases of urticaria associated with diminished blood coagulability, just as in all cases of hæmophiliac bleeding, it is of the utmost importance to avoid diminishing the blood coagulability by the administration of wine. Wines, especially the more acid ones, diminish blood coagulability by virtue both of the alcohol and the free citric and tartaric acids they contain, which abstract lime salts from the blood. In a case which came under my notice incidentally even the smallest quantity of any wine, except port wine, produced a slight œdema of the fingers and an urticarious eruption. The urticaria in this case was a mere unregarded incident in a case of incipient tuberculosis which was being treated with creasote. If, however, the urticaria was really referable to a deficiency of lime salts in the blood, it was a therapeutic indication of the utmost importance, for the supervention of the urticaria would be the equivalent of a call for lime. Now, a demand for lime on the part of a tuberculous organism is a demand which ought to be carefully attended to, for Metchnikoff has shown that one of the methods of defence which is employed by the organism is the encapsulation of the intracellular tubercle bacilli in capsules of lime.—  
*The Lancet.*

## RECENT ADVANCE IN GYNÆCOLOGY.

By WILLIAM R. PRYOR, M.D.

### THE TREATMENT OF PUS IN THE FEMALE PELVIS.

**E**VEN a comparatively short experience in the practice of medicine will have sufficed to enable one to see great changes in the treatment of suppurative pelvic diseases of women. The opinions of learned and careful men have undergone almost revolutionary changes within the past five years, due more especially to improved methods of sterilization, and more careful anatomical study. Procedures which a few years ago seemed beyond hope of successful application are now commonly employed. Greater precision in the classification and analysis of cases has made it possible to formulate definite rules of action, and from the careful assignment of each case to its proper class sounder generalizations have been reached.

We may safely divide all cases of pelvic suppuration into two great groups: (*a*) Abscess of the ovary or of the tube, where the pus remains, contained within the walls of the diseased viscus; and (*b*) cases of diffuse pelvic suppuration, in which the pus has escaped from its original seat and has forced its way between coils of intestine and plates of lymph effusion. In this latter class must be included true broad ligament phlegmon.

The treatment of unilateral disease, including ovarian abscess and pyosalpinx, seems a simple problem. But here we find opinion diametrically opposed. Most American surgeons prefer the clean, straight abdominal incision, the removal of the diseased adnexa and closure of the abdomen without drainage. But in certain quarters the vaginal route is given precedence, some preferring to make the incision anterior to the cervix uteri, and others giving preference to the incision into Douglas' pouch. It would seem that the traumatism attendant upon the anterior incision is greater than that incident to an abdominal section, and is devoid of the attractiveness which attaches to open work where every step is seen. Of the abdominal route it may be said that every phase and variation is well known through long experience; that every possible complication has been met, and the method of dealing with it is known; and, above all, that the probability of entering a hollow viscus is so slight that it may be omitted from our calculations. Although we can fairly well cleanse the



vagina by means of preliminary antiseptic tampons, curettage, and brushes, still must this cavity be classed among the hollow viscera, an entrance into which is undesirable.

Furthermore, all who have attempted vaginal section for unilateral disease must admit that the traumatism of the genitalia is less with cœliotomy, that a more elaborate differentiation of conservative work can be applied through the abdomen, and that the mortality from cœliotomy in this class of cases is practically *nil*. To-day, at least, those who seek removal of *unilateral* purulent adnexa through the vagina are not supported either by experience or force of argument. The weight of both are with him who does cœliotomy.

The treatment of *bilateral* suppurative disease also finds advocates for both the suprapubic and vaginal routes ; furthermore, we are all confronted here with the question of the advisability of removing the uterus. If the surgeon be one who leaves the uterus after he removes both adnexa, he will elect the abdominal route undoubtedly. But if he belongs to the camp of those who always remove the uterus when both adnexa are taken away for pus, and who never remove the adnexa unless the seat of purulent degeneration, he has presented to him two lines of procedure, the result of which immediately are the same and remotely identical. The abdominal route leaves a scar as an ever-present reminder of a grave operation, and there is a breach in the abdominal parieties with a remote chance of subsequent hernia through it. These are absolutely the only objections to the abdominal route.

There is little risk of wounding the bladder or bowels in the operation, and what damage is done to either can be easily repaired. The ligation of the vessels can be made either *en masse* or in continuity, and there is no secondary hæmorrhage to be feared. The vaginal route is much the more difficult. Accidents of the hollow viscera occur in a too considerable percentage of cases ; ligation of vessels in continuity is never possible ; ligation *en masse* seldom practicable. The arteries are better secured by means of forceps, which produce nasty sloughs. There is no disagreeable abdominal scar, there is no possibility of ventral hernia ; the discomfort immediately after the operation is about the same as after laparotomy ; but undoubtedly the general shock is less. How is the surgeon to decide between these two nearly equally attractive methods? Nowadays the patient will often demand vaginal operation. This is especially true in our large cities, where some operators take their patients into their confidence as to the beauty of the vaginal method and the disadvantages of the other. There are fashions in surgery as well as in dress. But a careful consideration of the possibilities of each procedure, its ultimate results, the accidents attending it, will lead the man who is unhampered by

extraneous matters to elect the abdomen rather than the vagina as the place of his incision. In considering this statement the reader must bear in mind that reference is made to the class of cases which are designated as bilateral, but in which the pus has not escaped from the wall of the affected viscera. When we come to consider those complicated cases of *diffuse* pelvic suppuration all hope of local conservatism is abandoned, and that broader conservatism alone is to be considered which seeks the preservation of the general economy.

When such a condition is approached from below, very often the uterus only can be removed, the ovaries and tubes being so firmly attached and so high up as to be beyond the reach of the operator for removal. The vaginal operation is then surgically incomplete, although the pus foci can be opened widely and a large pelvic Mickulicz tampon employed. Even though such an incomplete operation be done, it is an open question whether the results, both immediate and ultimate, are not better than those resulting from a complete abdominal section which necessitates the use of Mickulicz tampons. In America, at least, very often a suppurating appendicitis is associated with pus tubes, and not infrequently there are fistulous openings into the intestine above the pelvic brim. These cases are to be considered as demanding cœliotomy rather than vaginal section; for the intestinal lesion is of paramount importance and requires a careful manipulation. By vaginal section, in some cases, such a condition can be discovered, but in very many it cannot. It is to be found in all cases where the pus foci on the right side are attached at the pelvic brim.

But there is another side to this question of the treatment of pus in the pelvis; the woman's side. No man who has watched his cases can deny that most unfortunate is the woman whose menses have been stopped before she is thirty years old. Too often is her neurasthenia and melancholia painfully in evidence. The greater her intelligence and refinement, the more active her mind, the more distressed she is. The women of lower cast, who have hard manual labor to perform, suffer mentally less. So that, in certain cases, especially in young women, many surgeons content themselves by widely opening the cul-de-sac, emptying the pus sacs and packing them with iodoform gauze. This procedure must not be confounded with the blind vaginal puncture. The object sought is the obliteration of the pus sacs, but the preservation to the woman of her menstrual functions free from genital atrophy and the distress of a premature menopause. So deeply averse are some surgeons, men fully capable to do any required work, to the mutilation of women that they always lay before those afflicted in this way the possibilities of the cul-de-sac drain.

This whole subject may be summarized in this way: In diffuse pelvic suppuration, hysterectomy is always indicated, because drainage behind

the uterus will be insufficient. In simple bilateral tubo-ovarian suppuration, the cul-de-sac incision and a large pelvic Mickulicz tamponade of iodoform gauze into the opened pus sacs will symptomatically cure the vast majority of cases. If it fails to cure relief is temporarily afforded, and a radical operation can be done at the *elective time*. The possibility of the latter is the glory of the vaginal section. Surgeons are to consider whether it is not their imperative duty to first apply this procedure, which so often cures and which always benefits; which carries with it no accidents, and which preserves to the woman her menstrual functions.—  
*William R. Pryor, M.D., editorial in Medical News.*

# Progress of Medicine.

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## MEDICINE

IN CHARGE OF

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### TYPHOID FEVER WITH UNUSUAL SEQUELÆ.

Simpson (*Edinburgh Medical Journal*, January, 1896) reports the case of a female, aged forty-five years, who was perfectly healthy until she was twenty-eight years of age, when she contracted typhoid fever. During convalescence she suddenly became unconscious without any scream or aura; face was pale and did not become livid; limbs were stiff and rigid; and the patient did not pass through any clonic stage before resolution. She would have as many as five such seizures daily. The tongue was sometimes bitten, and there was some involuntary micturition, but there was no frothing at the mouth, nor embarrassed respiration. The patient was dazed and stupid for a time after each fit. The true cataleptic condition gradually became more marked; the patient was never in an actual trance, though sometimes in a state similar to the "status epilepticus." There never was opisthotonos, and fits were always worse when attention was paid to her. For nine years she was confined to bed in this helpless state. At the end of this time she began to get up for a short time, but regularly once a week—Sunday, the day of the occurrence of the first fit—she was confined to her bed by a constant recurrence of the fits. At intervals there occurred severe attacks of vomiting, and inability to retain food for several days at a time. Subsequently, suddenly, while speaking she would pass into an unconscious state with muscular rigidity of the lower limbs and head. There was no scream nor clonic spasm at any time; respiration and heart's action quiet and calm, face pale, no involuntary urination or defæcation. Condition lasted usually about fifteen minutes. Just before

coming out of an attack she would move her head slowly from side to side, go through writhing movements, take a few rapid respirations, groan, and the seizure was over. These attacks occurred frequently the same day. Speech, while always peculiar, was much more so since illness. Voice had a peculiar cracked tone, the words were half stammered or stuttered out, but there was no absolute aphonia or aphasia. On the whole, the case seems to be an instance of several nervous sequelæ of typhoid fever, compromising not only the dysarthria, but also the incomplete cataleptic condition with a degree of dementia, combined with a strong hysterical element. The condition improved somewhat after the reposition of a retroverted uterus.—*American Journal of the Medical Sciences.*

THE EFFECT OF PEPPERMINT INHALATION ON EXPERIMENTAL  
TUBERCULOSIS.

A clinical trial of the peppermint treatment of phthisis, as described by Carasso, has been carried on at the Adirondack Sanitarium, while at the same time experiments under the direction of Dr. Fendreau have been undertaken at the laboratory, with the view of testing (1) the effect of the vapor of peppermint oil upon pure cultures of the tubercle bacillus; (2) its influence on the course of the disease in animals inoculated *per tracheam* and kept in an atmosphere charged with the vapor. The results obtained appear to warrant the following conclusions: (1) Although oil of peppermint may prevent the bacillus from growing in a test tube, its growth in an animal is not hindered by even constant inhalation of the strong vapor of peppermint; (2) although the peppermint oil has a high power of diffusion, its local antiseptic action in the respiratory tract is probably slight, both on the tubercle bacillus and on other bacteria.—*Baldwin, New York Medical Journal.*

THE QUESTION OF LEUCOCYTOSIS IN TUBERCULOUS PROCESSES.

(*Deutsche Archiv für klinische Medizin*, vol. lvi., Nos. 3 and 4, 1895.)  
Stein and Erbmann.

Having first reviewed briefly the literature and shown the very contradictory opinions held by different authorities, the authors describe a modification of the latest method suggested by Thoma for the estimation of the number of leucocytes. This method is admirable, and deserves to be given *in extenso*. The slide having been prepared in the usual manner and focussed under the microscope, the draw-tube is moved up and down, until the edges of the field of vision exactly include a square of a definite side length =  $s$ . Then the area of the square is to the area of the circle

$S^2 : r^2 \times \pi$ ; or as  $2r^2 = S^2$ , then the ratio is  $S^2 : \frac{S^2 \times \pi}{2}$ , or  $2 : \pi$ . The

area of the included square, therefore, equals  $\frac{2}{\pi}$  times the area of the circle. If this contain a unit of small squares, then each of these equals  $\frac{1}{a}$  part of the large square, and the area of the circle in these units equals  $\frac{2}{\pi \times a}$ . It requires four thousand of these to contain one cubic millimetre of liquid; therefore to estimate the number of corpuscles in this body of liquid,  $Z$ , the number counted, must be multiplied by twice four thousand times the dilution ( $d$ ) and divided by  $\pi \times a$  times the number of fields counted ( $m$ ), or  $x = \frac{Z \times 2 \times 4000 \times d}{\pi \times a \times m}$ . A dilution of 1:10 is recommended, and the counting of twenty-five fields, giving a constant formula  $\frac{Z \times 80,000}{\pi \times a \times 25}$ , or  $\frac{Z \times 3200}{\pi \times a}$ . Tables are now given for fields containing twenty-five, thirty-six, and sixty-four small squares. The use of tables is, of course, a disadvantage at first, but even without them the calculation is but slightly more complicated than that of the ordinary method, and the fact that all the corpuscles in a field are counted without regard to the lines, after the field has been set, is a great relief to the eyes.

By this method, making several mixes from each case for greater accuracy, a number of cases were examined, and from the results obtained certain conclusions drawn. The counts were always made at 11 a.m., four and a half hours after the ingestion of food. In ten cases of commencing tuberculosis the number of leucocytes was normal, ranging from two thousand five hundred to nine thousand. In ten cases of advanced pulmonary tuberculosis without the formation of cavities or extension beyond the apices the result was the same. In five of seven cases of hæmoptysis, a leucocytosis ranging from twelve thousand to twenty thousand existed during or immediately after the hæmorrhages. In two, despite severe hæmoptysis, the white blood cells were not increased. There now follows a tabulation of forty cases in which the tuberculous process was either advanced or increased very considerably during the observation. The results of the autopsies are recorded in a number of the cases.

The authors now consider the results of their investigations, and conclude that the leucocytosis occurring after hæmoptysis cannot be distinguished from ordinary post-hæmorrhagic leucocytosis. This, they believe, is due to the stimulation of the lymphatic glands by anæmia, and urge in confirmation of their theory the fact that the leucocytes were chiefly large (?) and small lymphocytes. They also call attention to what they call the peculiar functional activity in the lymphatic system in tuberculosis.

The forty tabulated cases are now critically considered. Of these, five presented slight, if any, increase in the number of leucocytes; all were

cases of chronic pulmonary tuberculosis, extremely emaciated, with fatty degeneration of the organs, and either no cavities or very small ones. Thirteen cases had moderate leucocytosis, reaching twenty thousand. In these there were few or no cavities, but usually other conditions existed, such as anæmia, lymphadenitis, pleurisy, pneumothorax, sufficient of itself to account for the increase in the number of white blood cells. A number of cases of rapid development with large cavities, or tuberculosis of other organs, had a marked leucocytosis, reaching from thirty thousand to sixty thousand. One case had fibro-purulent peritonitis, another carries off the vertebræ, and in others other secondary conditions existed.

From this analysis they conclude that leucocytosis occurs under the following conditions :

- (1) When extensive cavities exist.
- (2) During inflammatory processes occurring just before death.
- (3) In chronic suppuration resulting from carious processes.
- (4) In hyperplasia of the lymphatic glands, even when the pulmonary process has not led to extensive destruction of tissue.

The possibility that the leucocytosis is due to infection by staphylococci or streptococci is discussed, and the virulence of many of the forms found in phthisical lungs offered as an argument in favor of this view ; but as the investigations showed that when, in a case with cavities, the process ceased to advance, the number of leucocytes diminished, and when the destruction of lung-tissue was rapid it increased, the authors conclude that "the leucocytosis is not merely the result of a mixed infection, but corresponds to a secondary infection proceeding from the cavities, and to a chronic septicæmic fever.

Destruction of tissue, therefore, is the immediate course of leucocytosis, as thereby pus cells and leucocytes are absorbed into the blood channels, and increase of the number of the white elements occurs.

And, further, that the number of leucocytes is normal—

- (1) In beginning phthisis.
- (2) In advanced cases limited to the apices, or, at least, without cavities.
- (3) In cases of chronic infiltrating tuberculosis with little or no destruction.
- (4) And that it is slightly increased after hæmoptysis.

The inferences to be drawn clinically are—

- (a) Increase of the number of leucocytes in cases in which no suppurative or exudative process exists is evidence of destructive action.
- (b) A sudden increase indicates the beginning of a distinctive process.
- (c) A normal number of leucocytes excludes cavity or destructive process.—*International Medical Magazine.*

# OBSTETRICS

IN CHARGE OF

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## VOMITING IN PREGNANCY.

For obstinate vomiting during early pregnancy, Dr. Baer (*Phil. Poly-clinic*) recommends the following :

R Bismuth subnitrate . . . . . 2 drams.  
Saccharated pepsin . . . . . 1 dram.  
Sodium bicarbonate . . . . .  $\frac{1}{2}$  dram.  
Sugar of milk . . . . . 1 dram.

Mix and make twelve powders. One every three hours.

In addition to the above, the following prescription will be found to be most pleasing and effective :

R Diluted nitrohydrochloric acid . . . . .  $1\frac{1}{2}$  fl. drams.  
Spirit of lemon . . . . . 1 dram.  
Simple syrup . . . . . 2 ounces.

Mix. Give one teaspoonful in a wineglass of ice water three times a day.—*Buffalo Medical and Surgical Journal.*

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## PUERPERAL ECLAMPSIA.

Zweifel (*Centralblatt für Gynakologie*, Nos. 46, 47, and 48, 1895) reports his experience of 129 cases of puerperal eclampsia treated in the Leipzig Clinic, and contrasts those treated by the expectant method (before 1892) with those treated actively by Dührssen's plan of emptying the uterus as soon as possible. Forty-nine cases were treated by the former method, with a mortality of 32.6 per cent.; eighty by the latter method, with a mortality of 15 per cent. After a careful study of the 129 cases, Zweifel concludes by advocating the principle of immediate delivery by



operation in every case of eclampsia, by dilatation with elastic bags, and when the cervix is already taken up slight incisions into the os, or, in cases not so far advanced, by making extensive incisions into the cervix. As the amount of blood that may be lost after these incisions cannot be estimated, venesection, which is very useful when the fits persist after the child is born, especially when the pulse is of high tension, is, unless under the same condition of the pulse, hardly advisable before delivery, although the older authorities are agreed as to the surprising effect it has in accelerating dilatation. While nothing should be given to an unconscious patient to swallow, a proper sound may be used to introduce liquid nourishment, to siphon out the stomach when desirable, or to administer weak solutions of acetic, tartaric, or citric acid, which in extreme restlessness are most beneficial. Zweifel does not consider ether contraindicated as an anæsthetic. Either this or chloroform may be employed. Finally, he insists that a rigid asepsis is the more necessary, as infection favors the recurrence of the fits.—*University Medical Magazine.*

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#### CAUSATION OF ECLAMPSIA.

James P. Boyd (*Bulletin Médicale du Nord*, Lille, November 12, 1895) reviews the theories of the causation of eclampsia, and emphasizes the facts that it is not common in women the subjects of chronic kidney disease before pregnancy; that where kidney symptoms are present they usually develop suddenly; that kidney lesions may be absent; that albuminuria is in many cases the effect and not the cause; that we must remember that the kidneys are not the only excretory organs whose failure to perform elimination properly may produce eclampsia; that ptomaine poisoning should not be forgotten.—*University Medical Magazine.*

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#### INTRAPERITONEAL HÆMATOCELE.

Mr. Mayo Robson, in an article on the "Relations of Pregnancy to Surgery" (*British Medical Journal*), speaks as follows about the "dreadful accident of intraperitoneal hæmatocele, which practically always depends on the rupture of a pregnant tube.

A case of this kind once seen is never forgotten, and in no class of cases is the value of early surgical treatment brought home so forcibly, both to the patient and her friends as well as to the medical attendants themselves, as in this. I have had the privilege of saving several valuable lives after this accident, and in only one out of a number of cases has death followed on operation, and in that instance the patient had lost blood to an enormous extent and died of pulmonary thrombosis the night

subsequent to operation. I will relate only two examples, but they will serve to illustrate my remarks.

About 11 o'clock one morning a medical friend called and asked me if I would see his wife, who had been taken suddenly ill at breakfast, and had been carried to bed in a fainting condition; she was only recently married, and had missed one period a fortnight before.

I found her only partly conscious, and pulseless, looking as pale as the sheet on which she was lying; the history of a sudden pelvic pain, followed by faintness and the presence of a fluid thrill in the lower abdomen, at once rendered the diagnosis clear, and within a very short time I had the abdomen opened, and a ruptured tube still bleeding ligatured and removed. Several pints of blood and clot were washed out of the abdomen, and drainage was adopted. Recovery was speedy and the patient is to-day in good health.

In another case my friend, Dr. Drake, asked me to see with him a young married lady, who had been suddenly seized while at the railway station with pelvic pain, followed by faintness, and on arrival at home by repeated fainting attacks. The same history of a missed period and the presence of fluid in the abdomen led to a diagnosis which an abdominal section verified. After removal of the ruptured tube, and after clearing the abdomen of blood, speedy recovery ensued, and that lady is now in good health.

The important point to bear in mind in these cases is that delay is worse than useless, it is positively dangerous; and though in a case I saw with Dr. Husband, at Ripon, we succeeded in saving life by operating on the second day, there may be no second day reached, and if we want to be certain of saving life we must interfere at the earliest possible moment.

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#### PROLONGED INTRA-UTERINE RETENTION OF AN OVUM.

Orloff (*Prag. med. Wochenschr.*, xx. 22, 1895) records the case of a pluripara, aged 43, who in November, 1893, five years after the birth of her tenth child, suffered from jaundice and amenorrhœa; in February, 1894, from melœna and hæmatemesis and enlargement of the abdomen; she was tapped three times for ascites, and died on November 9th, 1894, from cirrhosis and rupture of a branch of the coronary vein of the stomach near the cardia. In the right horn of the uterus were the remains of a spherical ovum about 1.5 cm. in diameter, consisting of the chorion with many calcified villi; the amnion and embryo had apparently escaped through a tear in the lower part of the ovum, which had no organic connection with the uterine wall. Under the microscope the mucosa showed

where the ovum had been attached. Orloff estimated the development of the ovum at from two to three months, that the retention had lasted about a year, and that there had been no uterine hæmorrhage. Resnikow (*Centralbl. f. Gynak.*, xlii., 9, 1895) records the following case: A patient who had been twice confined (of twins the last time), when again seven months gravid had a severe illness with fever, during which labor pains came on, but only for a short time. She afterwards had a purulent discharge and rigors, followed by amenorrhœa. After four years the uterus was dilated, and the bones of a seven months' fœtus removed, and she recovered her health. Two similar cases are quoted.—*British Medical Journal*.

# SURGERY

IN CHARGE OF

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## LATE SUTURE OF DIVIDED TENDONS—RESTORATION OF FUNCTION.

At a meeting of the New York Surgical Society, Dr. R. H. M. Dawbarn presented a man, twenty-six years of age, who, about ten weeks before he saw him last fall, had sustained an injury of the left hand, resulting in complete division of the flexors of the index and middle fingers at the palmar junction. He had no power of flexion of the phalanges supplied by the long flexor tendons. Dr. Dawbarn made an incision, and had no trouble in finding the distal portion of the tendons, but had to go up nearly to the anterior carpal ligament to find the proximal portions. By strong traction he was able to approximate the two ends to within an inch and three-quarters of each other. Each tendon was united by four distance-sutures of silkworm gut, which spanned the space of an inch and three-quarters. The hand was kept flexed about five weeks. The result had been excellent, the man had probably as strong a flexor power in those fingers as in the others, and evidently new tendon had formed among the sutures. He could not fully extend the two fingers, but ability to do so would probably come with use. Perhaps it would have been better not to have kept the hand flexed so long, but as he was a laboring man Dr. Dawbarn had chosen the safer side.—*Annals of Surgery*.

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## THE OBJECTS AND LIMITS OF OPERATIONS FOR CANCER.

(Abstract of Mr. Watson Cheyne's paper, continued from April issue.)

As regards the limits for cure in breast cancer, therefore, I would exclude from operation :

(1) Cases of cancer *en cuirasse*.

(2) Cases where there is a large mass in the axilla involving the nerves.

(3) Cases where large glands may be felt above the clavicle.

(4) All cases where secondary cancers already exist elsewhere.

In none of these instances is there any reasonable prospect of cure ; and there will be but little to be gained by subjecting the patient to the elaborate operations to which I have referred. Short of these conditions, however, I think the patient ought to have the chance of operation. Even when the operation fails to cure, the prolongation of life is often marked, much more so after those thorough operations than after the ordinary imperfect procedure. In this list I have not included cancerous cachexia, as is usually done, because it seems to be due to absorption of products from the cancerous growth, and does not necessarily imply a general internal infection. I have repeatedly seen patients with marked cancerous cachexia improve immensely after operation.

In considering the result of former and recent methods of operation for cancer of the breast, we may look either at the question of cure or at that of local recurrence, and the most satisfactory conclusion is, I think, obtained when we take both together ; indeed, since the most recent views have influenced practice, the time is too short for the accumulation of any large statistics as regards cure, and one must, therefore, judge of the effect to some extent by considering the question of recurrence.

As regards cure, I have adopted Volkmann's three-year limit, and include under cures all cases which for a period of three years or longer after the operation have had no local recurrence, and have shown no sign of internal cancer.

Although this three-year period is not absolutely accurate—for a certain, though small, proportion of patients who have been alive and well at the end of three years have yet died of cancer—nevertheless it is near enough for all practical purposes ; and even if we only secured the patient three years of complete freedom from disease, such a gain would fully justify the most radical operation.

As regards the question of local recurrence, it will be seen that a very marked change has been produced by recent methods of operating. Formerly, and even now, local recurrence was extremely frequent (Gross puts it at 68.8 per cent., and that is not including the cases which have been lost sight of, probably many of which have also recurred). In considering this question of local recurrence it must also be remembered that up till recently half these local recurrences took place during the first three months after the operation, and over eighty per cent. during the first year. In my own statistics I speak of two sets of recurrences, namely, external recurrences in the wound, its vicinity, or the glands, and internal or metastatic deposits.

The prolongation of life by the old method of operating is variously

estimated at from eight to thirteen months, but this is really longer than it should be, by reason of the fact that some of the patients have lived several years, and have thus raised the average. Excluding cases which have passed beyond the three-year limit, I do not think that the prolongation of life by the old imperfect operation is, on an average, more than from six to eight months, though at the present time, where recurrence takes place after the more thorough operation, the prolongation seems to be considerably increased.

In looking back over old literature, one is very much struck by the great rarity of cure, and the very desponding view which surgeons took of the chances of permanent freedom after operation.

I need not recapitulate here the details with regard to various statistics, but I have in the second table put together results which I have worked out from papers published from various clinics; and in the first table I publish all the cases on which I have myself operated since the beginning of 1890, at which time I obtained beds at the hospital and began to operate in this thorough manner. I would lay stress on the fact that my cases have been in no way selected, only cases of the kind previously referred to having been refused operation. Many of them were very advanced, and would have been refused operation by those who select their cases; and I may add that in all of them I have found disease in the axillary glands. I may say also that all my cases were subjected to microscopical examination, so that there is no question as to the diagnosis in these cases.

The study of the second table fully justifies, I think, what I have said as to the necessity for extensive operation, and the advantage to be derived from it. Contrast the older results, from Trendelenburg's four per cent. of cures to Fischer's fifteen per cent., or, taken altogether, an average of about ten per cent., with the more recent results, varying from sixteen per cent. in Küster's practice up to fifty-seven per cent. in my own, and we see that, as the result of greater care in operating, the chances of cure have been largely increased, and the recent results in this table ought to be really better, for a little study of the methods employed by some of the surgeons in the more recent period shows that even there the operations were not so complete as could be wished. The value of even an imperfect improvement is well shown in Esmarch's results, where, during the first period up to 1863, the old plan of operating was employed, with only four per cent. of cures; while afterwards the axilla was cleared out more or less thoroughly, with a jump at once to eighteen per cent., a result more than four times better.

Looking at my own results, it will be seen that the effect of thorough removal of the disease is very marked, indeed. If it be objected that

twenty-one is a small number to argue about, I would point out that twelve cures is more than can be shown by many of the older surgeons, although their cases exceed one hundred.

I need not enter at length into the objections which have been urged to these thorough operations. They are usually brought forward by those who operate with the hope of adding a few months to the patient's life, and not of curing the disease. I may, however, refer to the one question of mortality. Formerly the mortality was great, and was much increased by opening the axilla, and this was due to sepsis. As that is avoided nowadays, we may safely conclude that when the argument of mortality is brought forward the arguer does not keep his wounds aseptic. Shock is the only risk, practically, that we have to face, and there is no question that the patients do suffer a considerable amount of shock in some cases. As regards the question of functional disability, which is also sometimes brought forward, there is really comparatively little. Even if the arm were permanently useless, it would be a comparatively small price to pay for life.

TABLE I. (ABSTRACT.)

All cases of cancer of the female breast since 1890 (verified by microscopical examination), in which the first operation was performed by Mr. Watson Cheyne.

A. Cases in which three years at least have elapsed since the operation.

Total, 21 cases. No deaths from the operation.

12 cured—that is, well, for more than three years.

9 recurred	{	5 external recurrences, three of them with metastatic deposits as well.
		1 recurrence (external?).
		3 metastatic deposits, without external recurrences.

In percentages, 57 per cent. cured; 42.8 per cent. recurred.

The patients cured have lived 6 years, 5 years and 9 months, 5 years (2 cases), 3 years and 10 months, 3 years and 1 month, 3 years: one died—well, 3 years and 5 months after the operation.

B. Cases in which three years have not elapsed since operation.

Total number of cases where three years have not yet elapsed since the operation = 40. Of these

- 1 died of the operation.
- 2 have been lost sight of.
- 27 have had no recurrence as yet.
- 10 have shown further disease.
- 6 recurred locally: in one (No. 29) visible disease was left behind.
- 4 had metastatic deposits alone; one of these (No. 56) was really an inoperable case, and in one case (No. 24) I only assume that there was an internal deposit.

In percentages, 67.5 per cent. remain well, 25 per cent. recurred.

The total is 61 cases. In 39 no recurrence—63 per cent. In 19 recurrence or metastatic deposits—31 per cent.

Excluding the cases operated on during 1895, which may be said to be too recent, we have 40 cases, of which

21 remained well—52 per cent.

16 have shown further signs of cancer—40 per cent. One of these (No. 29) really inoperable; and in one I am not sure (No. 24) whether there was a deposit or not.

2 lost sight of.

1 died after operation.

One other interesting calculation is to follow those cases which lived for a year after operation without further signs of cancer, thus showing the chances of a patient where a year passes without recurrence—25 (including two recurrences about which I am not sure). Of these

20 remain well.

1 died—well, after more than three years.

4 showed further signs of cancer (Nos. 7, 12, 17, 20), but in two of these (Nos. 7 and 17) the recurrence may have been noticed before the end of the first year.

This shows that the chance of recurrence is very slight if a patient is absolutely well after a year.

TABLE II.—STATISTICS OF BREAST OPERATIONS.

Operator.	Total cases.	Mortality.	Known recurrences or deaths from metastases.	Cures.	Cases done more than three years before this report.				No. of cases Cured.
					Total.	Mortality.	Recurrences (or Metastatic Deposits.)	Cures.	
		p. c.	per cent.	per cent.	p. c.	per cent.	per cent.		
Fischer (Henry).....	147	20	55	8	86	22	59	15	13
Esmarch (Oldekop).....	229	10	44	10	171	13	(?)	14	25
before 1863.....			..	..	47	..	..	4	2
after 1863.....			..	..	124	..	..	18	23
Rose (Fischer).....	61	26.3	(?)	6	..	..	..	..	4
Billroth (Winiwarter).....	143	23.7	62	5	89	22	68	9	8
Trendelenburg (Neuendorff).....	97	11	54	2	50	12	68	4	2
Lücke (Dietrich).....	110	7.6	(?)	9	69	8	60	13	9
Czerney (Schmidt).....	150	4.4	..	5	82	6	46	8.5	8
Kronlein (Horner).....	144	4	58	18	121	4	68	20	25
Küster (Schmidt).....	222	10.8	(?)	9	132	14	(?)	15	20
König (Hildebrand).....	135	..	..	17	118	9	61	20	23
Bergmann (Eichel).....	114	4.3	62	11	43	7	62	30	13
Mitchell Banks.....	82	12	26.8	21.9	..	..	..	..	18
Halsted.....	50	0	43	4 or 8	11	0	54	18 or 36	2 or 4
Watson Cheyne.....	61	1.6	31	19.9	21	0	42.8	57	12

### CONTINUOUS SUBMERSION IN THE TREATMENT OF INFECTED WOUNDS OF THE EXTREMITIES.

We take the following from a paper read by Dr. Fred. J. Hodges before the recent meeting of the American Academy of Railway Surgeons :

The patient had an infected wound of hand which had been poulticed, incised, and drained. The forearm was infiltrated, swollen, and sodden;



it had been freely incised, and through and through drainage practised without improvement. The wrist joint was involved; patient delirious and refused food. Temperature  $104^{\circ}$ . Pockets had all been opened. Amputation considered too severe in patient's condition. Arm was placed in a continuous bath of boric acid solution. In twelve hours the man's temperature had fallen from  $104^{\circ}$  to  $99^{\circ}.5$ , and in twelve more he was perfectly rational and eating well. His further improvement was rapid and uneventful.

In what is known surgically as "infected wounds," there is usually present a "mixed infection." That is to say, there are present, besides the pus organism, the common putrefactive germs, which, working in the field prepared for them by the pus organism, add sapræmia to the septicæmia already existing. In either event the germs themselves are only the starting point, the seeds of the harm which the host suffers.

The rational treatment, then, of infected wounds must have as its ultimate object, (1) the prevention of bacterial growth; (2) prevention of osmosis of the ptomaines into the blood mass, commonly spoken of as absorption; and (3) such general treatment as shall counteract the pernicious effects of the ptomaines upon the vital tissues. In the past it has been attempted to secure the first results by the use in and about wounds of substances known or imagined to have a destructive or inhibitory action upon the growth of the bacteria. In the very nature of things this course could be but partially successful. Had it accomplished the desired results nothing more would have been necessary, but in point of fact, in the treatment of this class of cases in the past, the greatest dependence has been placed upon drainage and irrigation, which seek to limit or prevent ptomaine absorption. That these measures fail in a good proportion of cases, even when reinforced by stimulants and tonics, is attested by the number of deaths from infected wounds of fingers, hands, arms, feet, and legs which occur in the practice of able surgeons; and the number of cases that drag on and on until, should death not occur, the patient is dismissed broken down in body and mind. It may seem that no one but an over-confident optimist would dare present a line of treatment with the claim that it would practically always succeed in such a dismal field, but after an experience embracing scores of cases extending over several years of hospital and private practice I come before you to-day to affirm in the most emphatic manner that continuous submersion, intelligently carried out, will, in the vast majority of cases, save both the life and the limb. That submersion is a prompt and reliable measure in these cases is attested by the experience of every surgeon that has been induced to try it. How the result is produced I will attempt to explain by presenting the line of reasoning which first led to its use.

1. Many forms of bacteria will not develop at the temperature of an ordinary living room. Such as do so develop less vigorously than at a higher temperature.

2. Many bacteria will not develop in a dilute watery medium.

3. Many have not the power of developing in strong, healthy tissue, but readily do so only after its vitality has been impaired by ptomaines.

4. The group of bacterial products collectively known as ptomaines are mostly crystalloids, and all are capable of being influenced by osmosis.

5. Serum and substances dissolved in it, if not already within the blood vessel, will, as the result of a fundamental physical law, seek the "direction of least resistance," which in the case of a part that has been freely incised and submerged in a bland fluid is towards the fluid and away from the blood mass.

To these propositions personal experiment and experience have added the following :

6. Avoiding extremes, the temperature of the bath is immaterial.

7. The utility of the bath depends upon the fundamental physical properties of the fluids rather than upon any "drug effects"; hence pure water is the best fluid for submersion.

In conclusion, I beg to again formally submit these propositions :

1. Continuous submersion is harmless.

2. Continuous submersion will almost instantly limit infectious gangrene and control septicæmia and sapsræmia.

3. Continuous submersion will quickly relieve the pain and discomfort of phlegmonous inflammation or cellulitis.

4. Continuous submersion will speedily reduce temperature and pulse, and overcome the consequent depression of the patient's vital forces.

#### CONTRIBUTION TO THE PATHOGENESIS OF GANGLIA.

Until recently the most widely-accepted view concerning ganglia was that they occurred from diverticula from the neighboring tendon sheaths.

Ledderhose has studied the pathogenesis of these so-called ganglia, and has been able to completely overthrow the accepted theories as to their origin. In a communication to the *Deutschen Gesellschaft für Chirurgie*, xviii., Kongress, 1889, he asserted that ganglia were new cystic growths due to colloid degeneration of the connective tissue occurring usually about joints.

The ganglia begin as multilocular cysts, but change by breaking down of the partitions into unilocular cysts. Specimens were presented to the congress showing various stages in the development of ganglia.

The writer (Dr. A. Ritschl, Freiburg) describes a multilocular colloid cyst removed from near the knee-joint of a young man. Careful micro-

scopic examination corroborated Ledderhose's assertion that these cysts are due to degeneration of the connective tissue. The various stages of degeneration were well shown. The connective tissue was observed in various stages of mucoid degeneration. The nuclei of the cells lost their elongated form, became swollen and spherical, and finally disappeared entirely; the vessels persisted a long time, but finally underwent the various stages of obliterating endarteritis and disappeared. In this specimen there was no true endothelial lining to the cyst, but in some places there was a layer of cells about the walls. Ledderhose has observed a true endothelium in some of his cysts, but it was absent in the majority of them.

The connective tissue adjoining the cyst was apparently normal.

These cysts do not always occur near a joint. A case is reported by Stahli (*Inaugural Dissertation*, Wurzburg, 1889), in which a cyst of similar character appeared over the tibia.

We are still in the dark as to the cause of these cysts. One can usually obtain a history of traumatism for those at the knee, and of over-exertion for those of the wrist. Obliterating endarteritis is always present, but this is but one link in the chain, and does not explain the original cause.—*Beitrage zur Klinischen Chirurgie*, Band xiv., Heft 2, p. 557.—George R. White, in *Annals of Surgery*.

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#### THE EFFECT OF LAPAROTOMY ON TUBERCULOUS PERITONITIS.

In order to determine the value of laparotomy in the treatment of peritoneal tuberculosis, Gatti (*Suppl. al. Policlinico*, March 28) has experimented on dogs, guinea pigs, and rabbits. He arrived at the following conclusions: Laparotomy has little effect when the tuberculosis is quite initial. In the first three to five days after operation the tuberculosis presents no macroscopic changes, but a small quantity of reddish serum is thrown out. From seven days to nearly a month the tubercle was almost always increased in amount, but after this diminution and disappearance were noticed. Cure occurs through a degeneration of the epithelioid cells, without the intervention of wandering cells, independently of phagocytosis, and without the formation of fresh connective tissue. In the author's view the factor which stimulates these repressive processes after laparotomy is the serous fluid which is thrown out in the first few days, bathing the tuberculous mass, however thick, and having a bactericidal and attenuating action on the tubercle bacilli.

# PÆDIATRICS AND ORTHOPÆDICS

IN CHARGE OF

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## ENTEROCLYSIS IN THE TREATMENT OF MUCOUS DISEASE OF INFANTS.

Large injections of weak antiseptic solutions are advocated in obstinate cases of chronic mucous diarrhœa in children by Docker (*Rev. des Mal. de l'Enf.*, May, 1896). He uses sodium hyposulphite 5 per cent., tincture of benzoin 15 per cent., or boric acid 3 or 4 per cent., but he considers that the success of the treatment depends on the thorough irrigation which washes away accumulated débris. The child should be in the horizontal position, with the left hip a little raised, so that the cæcum is in a dependent position. A large catheter or œsophageal sound is introduced as far as possible, connected with a reservoir about seven or eight inches above the level of the patient. The fluid (temperature about 100° F.) flows very slowly, but Ojss to Oij may be introduced in a quarter of an hour. The injections may be repeated every other day.

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## SERUM TREATMENT OF SCARLET FEVER.

In the *Jour. de Med.*, March 10, 1896, Marmorek, of Paris, makes a report of the treatment of scarlet fever by injections of anti-streptococcus serum. Notwithstanding that we do not yet know the specific organism which is the cause of scarlet fever, the frequent presence of a streptococcus may be of some value. It is found in the throat and in the glands, kidneys, ear discharge, valvular vegetations, etc. On these grounds, Marmorek injected anti-streptococcus serum in ninety-six cases of scarlet fever at the Trousseau Hospital. Of these, five died—four from diphtheria, and one from pneumonia. The most marked effect of the serum was on the swollen glands, which subsided so rapidly that there was

no suppuration in a single case. In the event of albuminuria, one or two injections caused its disappearance. Not only did the serum seem to prevent grave complications, but it also caused the rapid disappearance of false membrane from the throat and the subsidence of delirium. The general state rapidly became better, the pulse slower and stronger. The only bad effects observed were transient erythemas. The writer, while admitting that the series is too small to warrant any definite conclusion, is still of opinion that the serum treatment was of considerable use in reducing the severity of the attack.

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#### RESORCIN IN INFANTILE DIARRHŒA.

Pennock (*British Med. Journal*, December 21, 1895) advises resorcin as an antiseptic in infantile diarrhœa. He gives it in doses of three grains every four hours, to infants a few weeks old, without the least toxic effect, claiming to get very decided and beneficial results after the fourth dose.

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#### TREATMENT OF EPISTAXIS.

Gillette (*Medical Journal*, 1895, lxii., 695) recommends the use of hydrogen dioxide in cases of bleeding at the nose. He uses a teaspoonful or more in full strength with any ordinary syringe. Relief is obtained immediately. In operations in the nasal cavity, when bleeding obscures the vision, inject hydrogen dioxide. Ask the patient to blow the nose, and the field is clear again.

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#### TREATMENT OF SUMMER DIARRHŒA IN CHILDREN.

The treatment of summer diarrhœa in children is discussed by Dr. Booker (in the *Journal of American Medical Association*, 1895, Vol. xxv., No. 15). He believes that arrangement of diet is much more important than the giving of medicines. The first thing to be done is to stop everything that was being taken when the child became ill. Substitute rice water or oatmeal water for the milk, and give some purgative. He has for years used calomel, and has not seen any bad results from it. It acts not only by relieving the stomach of its contents, but there is an action of the calomel upon the mucous membranes generally that we do not understand. It is his belief that this is a valuable remedy. It should be given in very small doses. To a child six months old, a sixth of a grain should be given every hour until a grain or more is taken. Calomel acts somewhat as an antiseptic. If we get rid of the fermentation, and give the child food that it will digest with the least amount of effort, and which produces the least amount of poisonous product from the bacteria, the disease can be checked very early. In the majority of cases of summer

diarrhœa, if taken in the beginning and treated as to diet, and if we administer purgatives in the beginning and gradually go back to the milk, and not be in too great a hurry about it, we can carry a child on cereal water for several days without serious results. If restlessness on the part of the parent should occur on account of taking the milk from the child and substituting cereal waters, then egg water is very good.

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#### RESECTION OF NEARLY ELEVEN FEET OF SMALL INTESTINE IN A BOY EIGHT YEARS OLD.

In *Il Policlinico*, February 1, 1896, Ruggi reports the case of a boy who was struck on the abdomen by the car of a large swing, and thrown into the water about forty feet distant. For two weeks he had some tenderness in the abdomen, but no other symptoms. He then showed signs of obstruction. The abdomen was opened, and a loop of intestine was found constricted by a band of omentum. He improved for a time, but signs of obstruction returned in more pronounced form, and the wound was reopened. The intestine was found stenosed at the point where the constricting band had been divided. This was freed, and for a time the boy again had relief, but complained, as he had before the first operation, most bitterly of hunger, crying night and day in spite of the fact that large quantities of food were given in addition to rectal feeding. Obstruction again returning, it was decided to again open the abdomen. A large mass of intestine was found adherent to the abdominal wall. On attempting to free this it was discovered that a large extent of bowel had been stripped of its mesentery. Dr. Ruggi determined to resect these portions, and removed successively those portions of gut as shown in illustration, the entire length being ten feet nine inches. The lowest incision was six inches from the ileo-cæcal valve. The ends were brought together by silk sutures. In a few days the boy was again crying for food. Gradually, however, the hunger lessened, and in five weeks he was discharged cured. At the time of report, fifteen months later, he was in perfect health.

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#### ETIOLOGY OF VACCINIA.

A short account as given in the *British Medical Journal*, May 23, 1896, of some experiments made by Dr. Klein in order to determine the relation between variola and vaccinia. The experiments were made for the Local Government Board, and are to be found in the report of the medical officer, 1892-93. Two tubes were received from Dr. Simpson, of Calcutta, which had been thus obtained: Lymph taken from a smallpox patient on the fifth day of eruption was inserted into calf No. 1. On the

seventh day lymph was taken from this calf and inserted in calf No. 5. On the sixth day lymph was taken from calf No. 5 and transferred to child No. 1. On the fifth day lymph was taken from child No. 1 and transferred to child No. 3 and child No. 4. On the sixth day lymph was taken from child No. 3 and transferred to calf No. 21. The vesicles of this calf were scraped 122 hours later. The material thus obtained was powdered up and mixed with double the quantity of lanolin. This mixture formed the contents of one of the tubes (*a*). The other tube (*b*) was obtained in a very similar manner. The lymph from each of these tubes was inserted by Dr. Klein in a separate calf, and in both cases typical vaccinia was the result. From one of them three children were vaccinated, and in all the result was typical vaccinia, indistinguishable from that raised at the Government Animal Vaccine Establishment. There was no general eruption, and in no way did they during the several weeks that they were kept under observation show anything different from the process of normal vaccinia, and from these children other children were vaccinated with typical results. A calf was also vaccinated with a similar typical result.

## Editorials.

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### AN OFFICIAL ORGAN NO LONGER.

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THE Ontario Medical Council has abandoned an official journal. They decided at the last meeting not to renew the contract with the *Dominion Medical Monthly*; notwithstanding the fact that they agreed to supply the journal for the low sum of twenty-five cents per name. This amount would simply have covered the cost of postage, as a recent ruling of the Post Office Department declared that the *Monthly* was not a legitimate subscription journal. Advertisers will no longer be deluded by the cry of an official organ.

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### SKIAGRAPHY.

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WE publish in this issue a skiagraph of a fœtus at about the seventh month. This very distinctly shows the point of ossification at this particular period of development. It shows very clearly how the bones of the forearm alter their relative relationship in pronation and supination; the points of ossification in the ilia and ischia; the metacarpal and phalanges of the right hand, showing distinctly down to the terminal phalanx, while those to the left are less distinct, owing to the hand being closed. Ossification in the several vertebræ is seen, and the manner of development is clearly defined. There is no evidence of internal organs in this skiagraph, the shading across the abdomen being due to the printing process.

The time of exposure was thirty-five minutes, but that has been greatly reduced, and we are now able to secure an excellent skiagraph of the hand in three minutes.

A very interesting discovery was made a short time ago, that crystals of iodoform are practically impervious to the "X" ray. In cases on which an iodoform dressing is applied an error might easily be made, by mistaking these opaque bodies for grains of powder, shot, etc.

The focus tube is the prime factor in reducing the exposure, and it is only reasonable to suppose that very shortly the time will be so far reduced that it will be little longer than instantaneous.



## MUSKOKA HOME FOR CONSUMPTIVES.

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WE are glad to learn that the trustees of the National Sanitarium Association are making good progress in their efforts to provide a "public institution or institutions for the isolation, treatment, and cure of persons affected with pulmonary disease." As we have before stated, the first sanitarium will be established in the Muskoka district. The site selected is on Lake Muskoka, and is said to be a "beautiful spot," seventy acres in extent, sloping towards the south and the lake, and protected on the other sides by a pine forest and rocky ridges. A large administration building and a number of cottages will be built during the summer. The "cottage system" is, beyond doubt, the best plan which has yet been devised for the treatment of consumption; and we are glad to know that it will get a fair trial in this country. The officers of the association have requested us to announce that applications for the position of resident physician will be received up to the first of July next. They should be sent to the secretary, Dr. N. A. Powell, 167 College street, Toronto. The other officers and trustees of the association are: Sir Donald Smith, Montreal, president; Chief Justice Sir William Meredith, Toronto, vice-president; W. J. Gage, Toronto, treasurer; Messrs. W. E. H. Massey, G. A. Cox, Hon. G. W. Ross, Edward Gurney, Hugh Blain, D. E. Thomson, of Toronto, and Mr. James Ross, of Montreal.

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## THE ONTARIO MEDICAL COUNCIL.

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THE recent meeting of the Ontario Medical Council was in many respects a very important one. As a matter of course, Dr. Rogers, of Ottawa, the vice-president of last year, was on the first day elected president, and proved himself to be an excellent presiding officer. Dr. Thorburn, of Toronto, who has shown a great amount of executive ability for some years, and has been one of the most active and influential members, was elected vice-president. Many of the discussions at the various sessions were somewhat "heated," and were perhaps not less interesting on that account. Some of the members talk too much at times, but as a general rule do not get prosy. Partyism has not yet died out, but that is probably not an unmixed evil. There appears to be a governing party and an "opposition"; and both sides certainly possess men endowed with marked ability. We must say that there was manifested a desire to work in the interests of the general profession, and to maintain a high standard of medical education.

Much excellent work was done by the various committees. The Education Committee, under the able chairmanship of Dr. Britton, of

Toronto, had to consider many important matters. We have before referred to the desire expressed by representatives of all the medical colleges of Ontario, excepting Queen's, that there should be a change in the regulations respecting the prescribed course for medical students. The committee decided to allow medical colleges an option of having either four winter sessions of six months each, with one summer session of three months, or four sessions of eight months each without a summer session; but retained the clause which requires a fifth year for clinical or laboratory work. With reference to the work of other committees we have not much to say at present. The Finance Committee was able to present a satisfactory report. The past year has been fruitful in the way of payments of annual dues. Something like six thousand dollars has come into the treasurer's hands from the profession of the province. We think that there is an almost universal opinion amongst the members of the profession in Ontario that the Medical Council, with all its defects—which are not so many after all—has accomplished much good, and deserves our hearty support and sympathy. The most suitable way in which we can show our loyalty is to pay our dues promptly. We will refer to certain matters which came up for discussion in future issues.

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#### ONTARIO MEDICAL ASSOCIATION.

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THE sixteenth annual meeting of the Ontario Medical Association, which met at Windsor on June 3 and 4, will be remembered by those who were present as one of the most enjoyable gatherings of the association.

The quality of the papers presented was well up to the standard, although we are of the opinion that more original matter should be brought before the association. The men in Ontario are doing good work, but are altogether too backward in bringing their work before the profession.

One regrettable feature was the absence from the meeting of some who had promised to present papers. In a great many cases this was undoubtedly unavoidable, but in some instances it was not so. It is wrong for a physician to promise a paper and not keep that promise; it is worse than wrong, because someone else particularly interested in the same line of thought may have gone to the meeting principally to hear that paper. If a man promises a paper, he should either be there with it, or have it in the secretary's hands to be read by him to the meeting.

To the president we must extend our congratulations on the suave and graceful manner in which he presided, ruling with decision and despatch.

The Committee of Entertainment, composed of the physicians of Windsor and Walkerville, had arranged such an elaborate programme that it was really too much like work to accept all their many kindnesses, but we are satisfied that the roll call at these many entertainments was fully as large as at the sessions of the association.

A moonlight excursion down the Detroit River on the steamer *Sappho* was arranged to take place after the business session of the first night. Here a lunch was provided, and music for those who cared to dance. The ladies of Windsor and Walkerville who were present helped greatly to make the excursion a success. The weather was by no means pleasant, but the surroundings and company made one and all forget this disagreeable feature.

On Thursday, after hard work in the morning and a part of the afternoon, the association in a body was taken into custody by the Windsor Medical Association, and the remainder of the day was devoted to sight-seeing. Street cars provided the means of transit to Walkerville, where a very sumptuous lunch was tendered to the Ontario Association by the Windsor Association through the kindness and generosity of Hiram Walker & Sons. A large marquee was erected on their lawn which faces the river, and here men dispensed the good things to satisfy the pangs of thirst and hunger of over one hundred doctors.

Most enjoyable was the musical selection by Mr. Harold Jarvis, "The Death of Nelson"; while less artistic, yet quite as enthusiastic, were the songs by our old stand-bys, Dr. A. A. Macdonald's "*ta Pherson,*" with pipe accompaniment, and the mournful termination of Dr. Allan Baine's ditty. After speeches and a few toasts the company were conducted through the storehouses of the firm. A group picture was taken, but most unfortunately the plate was broken, and there is no photograph of 1896 to awaken pleasant recollections. An exhibition of the Walkerville Fire Department was given, after which the party embarked on the ferry for Detroit. On arriving at the factory of Parke, Davis & Co. about twenty guides were awaiting, who conducted the members through the premises from cellar to garret. It was a revelation to all. This firm is doing a tremendous business, but it is worked by such a system that no hitch occurs, and mistakes are practically impossible.

Nothing was concealed, and nothing extra was evidently done for this particular occasion, yet it was worth the whole trip to go through this huge laboratory. Their experimental department alone would supply sufficient material to interest a physician half a day. The firm paid a graceful compliment to the association by having their private band on the lawn play "God Save the Queen" and "The Maple Leaf Forever." From here the members took cars to the Detroit Museum of Art, and were taken in charge by Mr. Frederick Stearns. Mr. Stearns, who was the

founder of the firm of Frederick Stearns & Co., whose extensive laboratories in Detroit and Windsor are well known to the profession in Ontario, has been three times around the world since retiring from an active connection with the firm. He has made a great collection of Japanese art, and presented the same to the Detroit museum. The members greatly appreciated the thoughtfulness of Mr. Stearns in showing this very handsome collection of art. The building was greatly admired, more especially as the architect of the same is a Canadian.

The Windsor committee still had more sights to show, and brought the association across the river to the vineyard and wine vaults of Messrs. Girardot, one of the oldest, if not the oldest winemakers in Canada. The members can testify to the palatability of the wines, and the generosity and kindness of the host.

The members of the profession in Windsor were exceedingly kind. They gave up their time entirely to the association, and were always present to give information and show courtesy to the strangers within their gates. It is hardly fair to particularize, but from our personal knowledge the bulk of the work fell on Drs. Cruickshank, Casgrain, Reaume, Ashbaugh, Coventry, Sanson, and Hoar, and to these gentlemen, together with rest of the committee, the Ontario Medical Association is indebted for one of its most pleasant meetings.

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### INTER-PROVINCIAL REGISTRATION.

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THE important question of inter-provincial registration for Canada has been referred to in THE CANADIAN PRACTITIONER somewhat frequently during the last two or three years; but, we fear, the profession of our province does not give to the subject the careful consideration it deserves. This is certainly strange when we consider that Ontario has more to lose by a narrow spirit of provincialism than any of her smaller sisters. It is not in the best interests of Ontario that her graduates should be prevented from going to the eastern or western provinces to practise medicine without passing an additional examination. What is the reason that inter-provincial registration has obstacles placed in its way which appear, up to the present time, to have been insurmountable? The following quotation from an editorial which appeared in the *Maritime Medical News* (Halifax), in the April issue, gives fairly well a view which is entertained by a large number of physicians living in the outlying provinces:

“The subject has for several years past occupied the attention of the Canada Medical Association, but year after year the report of the various committees appointed to investigate the matter and present a suitable

scheme was a monotonous and helpless *non possumus*. At the meeting before the last this report was not received kindly, and it was stated plainly by various members that if there was to be any earnestness shown in the matter it was time it was apparent, that it had been played with too long, and that a definite result should be obtained whether favorable or unfavorable. The consequence was the appointment of a strong committee, which met last year at Kingston. This committee, if they did nothing more, were successful in locating and bringing to light what all along has been the great stumbling-block, viz., the opposition of the Province of Ontario to any scheme which would differ in any material manner from the course of study and length of time of study authorized in that province. The members outside of Ontario were told, and in rather a patronizing manner too, that inter-provincial registration was a very good thing indeed, but in order to obtain it they must insist on a five years' course of study as Ontario does, and make the curriculum in all points equal to hers if this desirable object was to be gained. But the Ontario representatives were promptly told that while it was true that province demanded a five years' course, yet, as the course was only six months, their total number of months consumed in study was only thirty, while the McGill students, for instance, whose course only extended over four years, yet each course being of nine months occupied in study thirty-six months, and thus had a longer curriculum than the Ontario men. So far, then, from the McGill men being asked to raise their standard to that of Ontario, the boot was on the other foot, and they were in a position to ask Ontario to raise its standard to theirs. Thus for the first time the complaisance of the Ontario representatives received a rude and unexpected shock, and when they were told that if they obstinately adhered to their Chinese wall that that wall would be the means not only of keeping men out of their province, but that in the future it would be the means of confining their men within their province—in other words, that if Ontario shut ten Ontario men out, then these gentlemen began to see that their position was not so impregnable as they imagined, and that it would be wiser to take a wider and deeper view of the matter than they had hitherto taken. It will be seen that now at last the various parties are in a position to treat, and this is an advance that has not hitherto been made."

We regret exceedingly the general tone of these remarks, which is rather ungracious—to say the least of it; but we must admit that the writer is correct in thinking that Ontario has not taken much trouble to show a conciliatory disposition towards the other provinces in matters pertaining to a medical curriculum with a common standard for the whole Dominion. The Ontario Medical Council has, however, done much to raise the standard of medical education; and, in that respect, was many

years ago far ahead of the times as far as this continent was concerned. We believe now that this body, which has done so much for higher medical education in Canada, is disposed to make fair concessions ; and we hope that the committee of the Canadian Medical Association which was appointed to consider the question of inter-provincial registration will be able to obtain the co-operation of representatives of all sections of the Dominion, and present a satisfactory report at the next meeting. It happens that the president of the association is a member of the Ontario Medical Council. Dr. Thorburn has broad and liberal views on the subject, and, we hope, will do all that he can to assist in finding a happy solution of the many difficulties which surround the vexed question.

# Meetings of Medical Societies.

## ONTARIO MEDICAL ASSOCIATION.

THE sixteenth annual meeting of the Ontario Medical Association was held at Windsor, June 3 and 4. President F. LeM. Grasett occupied the chair.

After the routine of opening, Dr. H. T. Machell read a paper on

### THE TREATMENT OF PUERPERAL SEPTICÆMIA.\*

Dr. Hummison thought the lacerated cervix was one source of puerperal infection, but, not being so apparent as a torn perinæum, being hidden away, its repair was often neglected. He called attention to various forms of puerperal sepsis he had seen, and emphasized the importance of its early recognition and thorough treatment.

Dr. A. A. Macdonald said that the physician was not always to blame for midwifery cases that went wrong, nor should this impression get abroad. He had seen cases of puerperal sepsis occur after he had taken every precaution. In hospital practice pre-partum douche could be done, but this was not always easily carried out in private practice; nor was it necessary, unless among the lower classes, who were filthy in their habits or victims of gonorrhœa. In the most cases the free use of soap and hot water would insure a sufficient degree of asepsis. In clean cases he thought it was not necessary to see that all the placenta came away; it would probably do so itself in a day or two. In many cases search was not made for cervical tears. As to the general treatment of the septic condition he agreed with the essayist.

Dr. Alexander McPhedran, of Toronto, read a paper on

### TONGUE-LIKE ACCESSORY LOBES OF THE LIVER.†

In a paper on

### THE RATIONAL TREATMENT OF TYPHOID FEVER,

Dr. Armour, of St. Catharines, upheld the value of purgatives. He held that the great majority of drugs recommended for this disease were of

\* Will appear in THE PRACTITIONER.

† See page 401.

little or no use. The principal ones he laid stress on were calomel, salts, opium, and alcohol, in selected cases. He would allow gruel, soda biscuit, eggs, and the like, if milk diet did not agree.

He had treated forty-three cases in this way without a death. Thirteen were apparently aborted between the fifth and fifteenth day. The average duration of illness was twenty-four days. During the early part of the same period he had a record of forty-one cases treated in the orthodox way with antipyretics, antiseptics, turpentine, quinine, enemata, restraining supposed excessive diarrhoea with opiates, astringents, with an average duration of thirty-two days and three deaths. Of these one died of pneumonia on the thirty-fourth day; one on the twenty-second day from nephritis, and one on the forty-third day from occlusion of the bowels with stercoraceous vomiting, two weeks after perforation had been diagnosed. In reviewing reported cases he had noted that a large proportion had died after astringents and opiates had been given to check the diarrhoea.

The President then delivered his address, which will be found elsewhere in this issue.

Dr. Burt, of Paris, read a paper on

#### THE TREATMENT OF MAMMARY CARCINOMA.\*

Dr. A. B. Welford, in discussing this paper, showed how the mortality in operations for mammary carcinoma had decreased from 17 per cent. in pre antiseptic days to 2.5 per cent. during the antiseptic. The highest percentage of cures, using the three-year limit, was from 20 to 25 per cent. He discussed the question whether there was such a mortality from recurrence. He thought it was due to the fact that the will of the patient was too often taken into consideration in deciding upon operation, and also to some extent to faulty operation. If Hutchinson's view was taken, that cancer was not due to any special material introduced from without, but simply to modification of the tissues which occurs in chronic inflammatory action, then might it not be supposed that in tissues which were in a condition of degeneracy the ordinary process of healing, with its necessary irritation, should produce the same state of affairs as that for which the operation was performed. As would be expected, recurrence appeared nearest the sternal margin of the gland, first in the residuary breast gland and secondly in the axilla. These facts point to the necessity of complete and thorough removal. Cosmetic effects should not influence the surgeon. The doctor then referred to his first case, which was as successful as any he had ever had, where he removed a large ulcerated scirrhous, adherent to the muscles beneath, and extending to the extremesternal large gland, the axillary glands being badly involved. He removed the entire gland, the two

\* Will appear in THE PRACTITIONER.



pectoral muscles, and a superficial layer of the external intercostals, the fasciæ covering the serratus magnus, the axillary glands and fat, and the whole surface of the skin, excepting the anterior axillary fold, leaving a large gaping wound more than 8 inches in vertical diameter. No attempt was made to unite the edges excepting by adhesive straps. The wound took thirteen weeks to heal, assisted by skin grafts. This was sixteen years since, and the woman was now in good health with no signs of recurrence. The essayist called attention to a method of determining whether there was any diseased structure left after operation by the nitric acid test. The doctor then gave statistics of some results in these cases, which he said he was sorry showed 50 per cent. of fatal recurrence.

Dr. McKeough, in discussing the technique in operations for mammary cancer, said that the incision would depend partly upon the situation of the tumor; usually an elliptical or circular incision from the sternum to near the axilla answers. The amount of skin sacrificed should correspond to the prominent part of the organ; this is necessary even when the tumor is not attached to the adjacent skin or the nipple retracted, as the suspensory ligaments which extend from the breast tissue to the integument contain lymphatics which easily become infected with cancer cells. Every vestige of the mammary gland must be removed. The skin should be undermined and elevated, and all the lobules of the breast, which sometimes extend in the fatty tissues nearly as high as the clavicle, inwards as far as the sternum, downwards to the abdominal muscles, and outwards and backwards to the latissimus dorsi, should be carefully detached and removed. The incision should extend down to the great pectoral muscles, and, in order to completely remove the pectoral fascia in which the lymphatics proceed outwards, Cheyne recommends shaving off a layer of the pectoral muscle. This, he believed, should be done in all cases, and is sufficient usually without removing, as Halstead does, the entire muscle, unless nodules of cancer can be felt in the muscular substances, in which case the whole muscle should be removed from the breast. The functions are much more impaired when the pectoral muscle is entirely removed; but when it becomes a question of cure or recurrence, the impairment of functions should not be a point for debate. Hæmorrhage is controlled by the hands of an assistant or by pressure forceps, and is usually very profuse. The axilla is attacked by an incision from the angle of the breast wound along the lower border of the pectoral muscle. After cutting through the skin and superficial fascia the knife is discarded for the fingers or some blunt dissector, and the entire axilla, including adjoining spaces of Morbenheim, must be completely denuded of all fat, glands, and lymphatics until the important vessel and nerves stand out as in an anatomical dissection. It is almost the unanimous opinion of surgeons of experience that the

axilla should be opened up and cleaned out in every operation for malignant disease of the breast. Keen, who has operated over two hundred times, says that he cannot detect enlarged glands in the axilla once in ten times until it is opened. It is highly important that the breast and adjacent fat, including the glands and fat from the axilla, be removed *en masse*, and not in piecemeal, and it is important that no diseased structure should be cut into so as to liberate cells which might infect healthy tissue. It is also an advantage in separating the glands and diseased tissue in the axilla to have them dragged down by the weight of the previously incised breast. An advantage in widely separating the skins for the removal of all possibly infected tissue is the greater facility with which the edges of the flaps will coapt when brought together. If the skin will not readily come together, it is better to bring the flaps as closely as possible without undue tension, and adopt skin-grafting at the time or subsequently in order to close the wound.

The dressing of the wound is important ; if all oozing can be stopped and the parts left perfectly dry, drainage may be dispensed with ; otherwise it is better to leave in a piece of sterile iodoform gauze for twenty-four hours. The wound should be united with interrupted silkworm-gut sutures. It is very necessary, in applying sterilized gauze dressings and bandage, to have firm equal pressure everywhere to completely close all dead spaces, so as to prevent any accumulation of serum. The arm should be kept confined to the side for a few days. If drainage is not used the dressing will not require changing for a week or ten days, when the wound should be found perfectly healed.

The mortality from the complete operation is very small, considering the important structures exposed and the shock consequent upon a more or less prolonged operation. The results of a number of leading American surgeons who have published their results recently show a mortality of less than 1 per cent.

Dr. C. B. Oliver, of Merlin, read a paper on

#### THE PRESERVATION OF THE PERINÆUM.

His practice, in cases where the perinæum was rigid, was to introduce two fingers of the right hand into the vagina, and with each pain stretch the perinæum in advance of the head. When full expansion is complete two fingers are introduced behind the occiput, and this part of the head is brought well down under the pubic arch. This, he claimed, should be a routine practice. He also advocated the method of expelling the head in the interval between pains by means of the thumb or finger in the rectum.

Dr. A. A. Harvey read a paper on

BRONCHO-PNEUMONIA IN CHILDREN.

The doctor dwelt at considerable length on the pathology, cause, and symptoms of this disease. The principles of treatment to be observed were to equalize the temperature, liquefy and get rid of the exudate, and to support the system. The writer called attention to the hygienic precautions to be observed. In the first stage he advised purgation by means of some form of mercury. Emetics were only allowable when the child became cyanotic, lethargic, and respirations embarrassed. As a febrifuge he recommended a neutral saline fever mixture. In extreme cyanosis he had had good results from the application of emplastrum lyttæ as a counter-irritant. Sinapisms were useful in the first stage to abort the attack. Later, when the exudate begins to be poured out, they were of little use. Then he preferred an application of the tincture of iodine, the patient being afterwards enswathed in cotton wadding. The food should be nourishing, and be given in such quantities as the patient could digest, and at regular periods.

Dr. Charteris, of Chatham, read a paper on the

TREATMENT OF DIPHTHERIA.

But first he pointed out the causes direct and predisposing to its occurrence and then outlined the symptoms. He believes it is a local disease primarily. He uses the iron and chlorate of potash gargle, or one of listerine and carbolic acid, or a spray of hydrogen peroxide. Internally, he prescribes quinine and stimulants, if the heart be weak. Calomel he prefers as a cathartic. In such cases as require mercurial inhalations, he volatilizes from one-half to one drachm of calomel over a lamp, allowing the fumes to reach the patient under a sheet which is supported by an umbrella. Statistics are mostly in favor of antitoxin. He has used it with marked benefit in a number of cases. Nourishing liquid diet should be administered. The condition of the kidneys should always be closely attended to, to guard against albuminuria.

Dr. Gibson, of Belleville, was appointed chairman of this section, and Dr. E. H. Stafford, secretary.

Dr. Holmes reported three surgical cases. The first was the

OPERATION OF NEPHRORRHAPHY,\*

done on a man who was suffering from very great debility accompanied by pronounced nervous and dyspeptic symptoms. The anchoring of the kidney gave complete relief. The reader described the technique of the operation. Case number 2 described the removal of a renal tumor by the anterior method. Case 3 was an abdominal hysterectomy done after the method advocated by Howard Kelly.

\*Will appear in THE PRACTITIONER.

Dr. J. H. Carstens agreed that the nephrorrhaphy should not be done until symptoms became serious. Fibroid tumors should be removed at once.

Dr. F. R. Eccles gave his experience with cases of nephrorrhaphy in regard to the diagnosis. He had often found a condition of hydronephrosis. By pressure over that region he had found that quantities of urine would be passed.

Dr. McGraw, of Detroit, called attention to the differential diagnosis between floating kidney and dilated gall bladder.

Dr. McLean, of Detroit, spoke of the value of such operations on neurotic patients.

Dr. Metcalfe referred to a case of floating kidney in which nephrorrhaphy was done. This was followed by great importance of symptoms.

Dr. G. T. McKeough read a paper on the

#### TREATMENT OF ABORTION.

He regretted that abortion had to be only too often treated now, and gave a detailed treatment of the prophylaxis of the disease. He stated that abortion might be due to many causes, such as constitutional disease, or some local cause of irritation. The doctor said that, of course, rest must be absolute, and that opium was the drug to be chiefly relied on. He said that it was difficult for the physician to make a direct prognosis, and that seemingly serious cases had often ended well, although the hæmorrhage had been great.

When the abortion is inevitable, and the ovum is dead, nature required, as a rule, little assistance, but when the ovum was alive the case was very serious. Dr. McKeough gave a lengthy description of the treatment he adopted in the latter case, stating that he had experienced great success. He laid great stress on the use of the kite tampon, which he favored, and also the use of curettes, etc. He preferred the lithotomy position for the patient, and said that, of course, hands, instruments, etc., should be thoroughly antiseptic.

Dr. Longyear, of Detroit, Dr. Hummison, and Dr. Spence, of Toronto, discussed the paper.

Dr. Edmund E. King gave a demonstration of the

#### ROENTGEN PHOTOGRAPHY.

During the demonstration Dr. King described the apparatus required to produce the rays and the skiagraph. A number of interesting photographs were shown and a picture of a hand taken. The most recent applications of this new discovery in diagnosing various surgical lesions and in the study of embryology was dealt with by the speaker in closing.

Dr. H. C. Scadding showed Hewitt's apparatus for inducing anæsthesia. He said that the use of nitrous oxide with ether, as recommended by

Clover, produced unconsciousness without struggling or a feeling of smothering. It was safe, too. Hewitt's special apparatus allowed the administration of air through valves or nitrous oxide, or these together with ether, at the will of the operator.

Hewitt's apparatus for giving nitrous oxide gas and oxygen was likewise exhibited. This combination was infinitely more safe in dental work than chloroform. It produced no cyanosis; there was no jactitation; the respiratory and circulatory functions were not embarrassed.

The delegates were then given an excursion on the Detroit River by their Windsor confrères, which was thoroughly enjoyed.

Dr. Cruickshanks read a paper on the

#### DIFFERENTIAL DIAGNOSIS OF TYPHOID FEVER.\*

He began by giving a history of the Windsor outbreak and a discussion of the various forms of treatment. With regard to the subject proper, he said it was easy to decide between typhoid and malaria by the use of the microscope. He showed the absurdity of the term typho-malarial fever. There was no such disease. Seldom or never did typhoid and malarial fever occur concurrently—the only condition to which the name was at all applicable. The greatest difficulty he held in the differential diagnosis was to distinguish typhoid from gastric fever. He believed that typhoid fever aborted. During the outbreak there were some one hundred and fifty cases, some lasting a few days, some two months. He based his belief that these short cases of fever were typhoid because they had occurred during the typhoid epidemic and were not common at other times.

#### THE TREATMENT OF PHTHISIS

was the subject for discussion in medicine, led by Dr. Geikie. In strong terms the doctor presented this subject, as, he said, on account of the great prevalence of the disease and its great fatality. He said there was not much novelty in the subject, yet the principles of treatment should be always borne in mind. He dealt at considerable length on the prophylaxis of this disease. He recommended tuberculous people to refrain from matrimony. He dealt with the treatment of those cases where the disease was prone to be lit up. To keep the digestion in good order was of prime importance. Abundance of fresh air and good food should be strenuously insisted upon. The speaker dwelt on the value of cod-liver oil, creasote, iron, strychnine, as constitutional remedies, and turpentine, carbolic acid, eucalyptus as inhalations.

Dr. Hodge, of London, read a paper in discussion.†

Dr. M. V. Mann, of Buffalo, in a paper on

THE ABSORBABLE LIGATURE IN ABDOMINAL SURGERY, advocated, in opposition to Mr. Tait's treatment of the pedicle by the cautery, the use of catgut. He showed its advantage over the non-ab-

\*Will appear in THE PRACTITIONER.

†Will appear in THE PRACTITIONER.

sorbable ligatures which Mr. Tait had shown were so unsatisfactory. He dwelt on the necessity of absolute sterilization of the gut, and the proper technique in its appliance.

#### TWO CASES OF SLOW PULSE.

Dr. Dewar, of Essex, presented two patients, in the first of whom the pulse had been down to 22 for a considerable length of time—falling even to 16, and unaffected by exercise. For two years the patient, a man of 63, had suffered from indigestion and general debility with epileptoid seizures. The pulse of the second case was 25 to the minute. He gave a history of *petit mal*, but otherwise enjoyed fair health.

#### OCCIPITO-POSTERIOR POSITIONS.

This was the title of a paper by Dr. A. A. Macdonald, of Toronto. He said there was a decided variance of opinion as to the frequency of this class of disease. Some say it is rare. Others the reverse. The essayist believed there was want of closeness of observation. He believed due credit was not given to nature for those cases where turning took place during the descent of the head; at any rate, the presentation occurred with enough frequency to keep the physician always on the guard, and also frequently enough to warrant him in energetic treatment. There was a difference of opinion as to the gravity of this case. Sir James Simpson had said that they require a greater time than the occipito-anterior positions. The difference was not great, and nature could with facility complete the labor in this common class of patients. Others think differently. Penrose said that if he were to be asked what was the obstetric difficulty which had caused the most maternal and foetal deaths and the most accidents, leaving women wrecks, he would say occipito-posterior position, where the occiput had rotated into the hollow of the sacrum. Currier had reported a case where both mother and child had died. The teaching of the present day by many men was to endeavor to rectify the malposition by manual interference. This failing, apply forceps and pull hard and long. The report of the discussion of the above case contained nothing about anæsthetics. Herman divides these positions into two classes, the easy and the difficult; the former being bregmato-cotyloid, the head being well flexed, so that the anterior fontanelle lies opposite the acetabulum. The occiput meets the resistance of the pelvic floor, and is pushed forward so that it turns opposite the sacro-iliac sychondrosis under the pubic arch. In this case labor ends just as though the occiput had been in front from the beginning. Most cases end in this way, but in the other group the head is not well flexed, and the frontal eminence is opposite the acetabulum. They are called fronto-cotyloid. The chief causes of this imperfect flexion are the relation of the axis of the uterus and the pelvic brim, and the

greatest transverse diameter of the head is behind its centre; that is to say, the bi-parietal diameter is behind the oblique diameter of the brim in a part where there is less room for it than would be the case in an occipito-anterior position. So, if the child's head is of a fair size, it does not descend so readily, flexion is retarded, or even extension may be favored, thus rendering labor difficult. Another case is a very large or very small head, excessive liquor amnii from deformity of the pelvis. The first step of treatment was to make an accurate diagnosis. Some claimed that this is easy, but the essayist, to make sure, recommended administration of chloroform and the exploration of the parturient canal with the aseptic hand. It may be even introduced into the uterus when the exact position is wanted. If the occiput is found towards the back, the malposition can be rectified by grasping the head and turning it towards the front. The body of the child may be rotated also, if necessary. This sounds easy, and is easy if taken in time. The membranes are ruptured, the hand is pushed in before the liquor amnii has had time to escape, and the head may be turned. If the head is engaged, it may be necessary to push the whole body of the child upwards before attempting to rotate, and hold it there while forceps are applied.

CASE 1. Mrs. H., aged 27. Second pregnancy. Has a considerable amount of mitral stenosis, and during gestation suffers from palpitation, cough, shortness of breath, and congestion of the lungs. The chloroform acted well on the heart. The position was left posterior with full flexion. The head was small and easily extricated by forceps.

CASE 2. Mrs. O. four years ago had a ruptured perinæum and rectocele. Labor was tedious, continuing all night. At 8 o'clock in the morning, the os being dilated, occipito left posterior presentation was made under complete anæsthesia. The hand was introduced into the uterus. The head was pushed above the brim and given a quarter turn into the occipito left anterior, producing flexion at the same time. The shoulders were braced into a position to correspond with the head. Forceps were applied, and there was a rapid delivery.

CASE 3. Woman with a narrow pelvis. All labors difficult. Labor pain commenced on the 24th of the month, and lasted till the 27th. When occipito left presentation was noted, the head not tending to engage, the same procedure was done as in the last case. Rapid and successful delivery.

CASE 4. Woman fourteen hours in labor. Bregmato-cotyloid presentation. Woman nearly exhausted. The same method employed. Forceps were applied, but delivery being very difficult it was found that the head had rotated back into the faulty position. This was corrected, and delivery effected.

Dr. F. R. Eccles, London, read a paper on "Missed Abortion."\*

Dr. A. Primrose read a paper on

AMPUTATION AT THE HIP JOINT FOR ADVANCED TUBERCULOUS DISEASE.†

After his advocacy of this procedure, the essayist reported cases which proved the correctness of his views on this question.

Dr. Reeve read a paper on

CONSERVATIVE SURGERY OF THE EYE.

He gave a little review of the work that had been done along several lines in this specialty. For the removal of particles in the anterior chamber, and even in the deep portions of the vitreous, the magnet had proved highly successful. Within ten days he had seen two cases in which there were two particles on the retina revealed by ophthalmoscopic examination. In both cases the particles were moved by the magnet, and in one useful vision was retained. The reader discussed the question of asepsis in connection with the eye and its adnexa. He spoke of the danger of infection from the secretion regurgitating from the lachrymal sac, which was generally charged with organisms. Regarding the subject of prophylaxis of sympathetic ophthalmia, while enucleation was regarded as the shortest and safest and most decisive treatment of the eye that must be sacrificed, allusion was to be made to evisceration—the emptying of the scleral cup. This avoided the necessity of resorting to an artificial eye. The chief objection raised against it was that shrinkage of the eye following the operation. Then he referred to the method of the modification of the enucleation of the operation where, instead of an artificial vitreous, of allowing the cavity to fill with blood. This was a method the essayist himself had first advocated, he believed. The subsequent shrinkage which occurs prevented the results from being as good as was anticipated.

Dr. Reeve then discussed the question of iridectomy for eyes "going to the bad" as the result of adhesions—a closure of the pupils caused by the neglect of the iritis. It had been used also in ulcers of the cornea following purulent ophthalmia. In cases where the eye tension increased and the eye becomes glaucomatous, early iridectomy would often preserve the eye and its vision. He referred to the almost magic effect of this operation in acute glaucoma. The essayist also discussed the treatment of perforative wounds followed by prolapse of the iris. The essayist then spoke of the suspicious small growth of the eyelids and eyeballs. He also noted the change that had been made in the treatment of strabismus. The old rule of operating early in life was not now observed, because it was now known that instead of the squint causing amblyopia the reverse was the case; and that correction of the squint could be made by proper

\*Will appear in THE PRACTITIONER.

†Will appear in THE PRACTITIONER.



lenses. Later, an operation might be used if necessary. The subject of tenotomies and operation for cataract were then referred to. Reference was then made to the treatment of lachrymal affections. He called attention to the importance of early recognition of stricture of the nasal duct in the prevention of this condition. The danger in mucocele lay partly in the fact that it provided a nidus for germs, and from it there was a danger of infection of the cornea. The paper next dealt with the causes of astigmatism and entropion and some modern points in their treatment.

Dr. J. M. Cotton, Lambton Mills, read a paper on "Hæmoptysis."\*

Through Dr. T. T. S. Harrison, the committee on necrology made their report, which was adopted.

The committee to consider the question of lodge practice reported that it could not propose any fixed scheme yet applicable to the whole province, but they strongly condemned the growing evil, and recommended that an effort be made to have each society in the province take the subject into its consideration and pledge itself in every way whatever to make lodge practice by any physician discreditable. This pithy report was signed by Dr. J. Spence, of Toronto, chairman, and was adopted.

A cordial vote of thanks was tendered to the profession of Windsor for the hearty and munificent manner in which they had entertained the visiting members of the Ontario association.

The officers elected for the year are : President, Dr. Coventry, Windsor ; first vice-president, Dr. Eccles, London ; second vice-president, Dr. Clarke, Kingston ; third vice-president, Dr. Machell, Toronto ; fourth vice-president, Dr. J. P. Armour, St. Catharines ; general secretary, J. N. E. Brown, re-elected ; assistant secretary, E. H. Stafford, Toronto ; treasurer, Dr. Carveth, Toronto.

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### TORONTO MEDICAL SOCIETY.

**T**HE regular meeting was held May 14, 1896, Dr. Wm. Oldright president, in the chair.

#### UNSUCCESSFUL RESULT OF TENDON UNION.

Dr. Peters presented a butcher whose right hand was in a semi-flexed condition. Some months previous the patient had attempted to drive the knife he held in the hand down into the block, the little finger being lowest on the handle. His hand slid down over the blade. The flexor tendons were severed of the little, middle, and ring fingers. The tendons were stitched at the time of the accident. The wound healed well, but there followed only limited movement of the fingers. He complains of pain

\*Will appear in THE PRACTITIONER.

when he endeavors to straighten the fingers. The most serious condition, however, is his inability to flex the fingers. He asks if something can be done to relieve the condition. Dr. Peters thought there would be no danger in opening by incision to ascertain the condition of affairs. If the ends of the tendons were already approximated, no harm would be done; and, if not, a longitudinal incision might be made and the ends brought together, even though there might be a subsequent adhesion of the sheath with the tendon.

#### ERYTHEMA MULTIFORME.

Dr. McPhedran presented a child from the Sick Children's Hospital, suffering from erythema multiforme. Was admitted March 24. A week before a rash came out over its limbs, extending over the face and the trunk. It was itchy and patchy. Gradually grew worse. It appeared first as an erythematous eruption, becoming afterward bullous. There was a great deal of irritability of the conjunctiva and of the larynx, the latter causing a troublesome cough. The temperature was variable (chart shown), running as high as 105°. Beside the bullous condition, numerous vesicles were to be seen.

#### AIKIN'S HUMERUS SPLINT.

Dr. Peters gave a demonstration of Aikin's splint in treating fractures of the humerus. This splint, he said, was devised by his old teacher and colleague, W. T. Aikins, and was the best splint for any and all fractures of the humerus he had yet seen. He had seen no similar splint described in any work in surgery. The material used was ordinary hoop iron, one and one-eighth inches wide. Heavier or lighter strips might be used, depending on the age of the patient. Sufficient of the band was taken so as to make a posterior arm extending from the shoulder to the elbow, a continuation of the arm at the shoulder being bent down and across the chest eight or ten inches, and a continuation at its bend at the elbow along parallel to the forearm flexed at right angles for several inches, say, to the wrist. In the original splint the upper limb ran along the acromion process and spine of the scapula for five or six inches. He, the speaker, had modified this upper limb to arch over the shoulder and down across the chest in the way described. The lower limb running parallel with the forearm flexed should be, say, 3-4 inches away from the arm, so that when the upper limb is made firm to the chest and shoulder extension may be made from the lower limb by bandaging the forearm tightly to it while extension is being made on the muscles that run parallel to the humerus. This was the great feature about the splint. It allowed Nature's splints—the muscles, fasciæ, skin, blood vessels, and—nerves to act as factors in the retention of the fragments in their proper position. The

advantage this splint had over others was that it might in all cases be applied immediately, though the fracture might be accompanied by a great deal of swelling, or even be a compound fracture. The inflammatory condition of the wound might be treated as readily with the splint in position as though there was nothing applied to the arm at all. Dr. Peters then referred to each of the various fractures of the humerus, and also those complicated at the elbow with joint involvement or dislocation, and showed how it was applicable to each.

To make the application of the splint plain he applied it to a subject in the presence of the members. He pointed out that it should be well padded in all points, and made perfectly comfortable. To retain it to the chest and shoulder the best thing was a good wide strip of adhesive plaster; each strip which was used should first make one complete turn around the limb of the splint before being attached to the skin.

Dr. Oldright spoke of the value of this splint on treatment of fractures of the surgical neck. By its aid the lower fragment could be prevented from being drawn inward by the pectoralis major and the latissimus dorsi. He had used the apparatus, and could speak in the highest terms of its efficiency.

Dr. Cameron said that by putting the arm into the flexed position there was danger of exaggerating the carrying angle, which would interfere as much with the carrying angle as though it were straight. Normally the arm and forearm should be in parallel planes when the arm is flexed.

#### LOCOMOTOR ATAXIA (?)

Dr. B. E. McKenzie presented a man aged 52 who had lived, so far as was ascertainable, a regular life, excepting in the use of tobacco. He had suffered from ulcers of the toes, which for a number of years would not heal. They had now healed, however. About a year ago his right knee began to swell. This was accompanied by œdema of the leg. A marked knock-knee was produced by the increased swelling in the tuberosities of the tibia. The patient was unable to walk without assistance, nor could he stand with his eyes closed. The Argyle-Robertson pupil phenomenon was present. The patellar reflexes were absent.

The opinion of members present was that this was a case of locomotor ataxia with a Charcot's joint.

Dr. Hay read a paper on "Observations of Abdominal Surgery from a Model Sanitarium."

Society then adjourned.

## THE PATHOLOGICAL SOCIETY.

THE regular meeting of the Pathological Society of Toronto was held on April 25th. The president, Dr. G. H. Carveth, in the chair.

Present : Drs. Graham, Oldright, Amyot, W. P. Caven, McPhedran, H. B. Anderson, H. J. Hamilton, Cameron, G. Acheson (Galt), Fotheringham, Peters, F. N. G. Starr, and Mr. J. J. McKenzie.

Visitors : Drs. Harris, Boyd, Boulton, and Spence.

## PAGET'S DISEASE.

Dr. Graham presented a living specimen, a female aged 48, showing an eruption on the left nipple, which had been in existence eight months. It had commenced to the inner side of the nipple and had extended across the skin. When overheated, an abrasion of the surface occurred, and this would not heal. Upon examination during the morning, the surface appeared quite raw, but now looked partly healed. The edge is well defined. There is some induration in the gland. The question is as to whether the condition is one of simple eczema or a case of Paget's disease.

Dr. Amyot thought that a person would be unlikely to have a localized eczema for such a long period.

## LABIAL CHANCRE.

Dr. Carveth presented a man who had a small growth on the lower lip. It commenced five weeks ago as a crack, and subsequently became indurated. There is an enlarged gland under the symphysis of the jaw.

The question is as to whether the condition is, chancre, epithelioma, or simple papilloma.

Dr. Oldright asked if the epitrochlear glands are enlarged.

## ATROPHY OF FEMUR.

Dr. Primrose presented the femur of a child aged 13, which had been removed by amputation a few weeks before. Two years ago he had excised the head of the femur for hip-joint disease.

The specimen was presented to show the amount of atrophy that had taken place in the bone. The atrophy is on a par with that in other parts when it occurs from disease. He called attention to the minimum amount of condensed tissue in comparison to the large quantity of cancellous bone.

Dr. Carveth asked if this does not commonly occur in amputation of a part of a limb.

Dr. W. P. Caven asked at what age the patient commenced disuse.

Dr. McPhedran thought it difficult to say how much was due to atrophy and how much to arrest of development.

Dr. Primrose said that wherever there is disuse there is atrophy. In infantile paralysis there is marked atrophy, and in dislocation of the hip.

#### TUBERCULAR TESTICLE.

Dr. Hamilton presented a specimen of D. W. O. Stewart's, of Guelph. It is thought to be a tubercular testicle. Dr. Stewart has cover-glass preparations showing tubercle bacilli in the urine, and will show them in person at the next meeting.

#### CERVICAL CARCINOMA.

Dr. Oldright showed a specimen from . . . W., aged 55, presented himself at St. Michael's Hospital, the first week of the month, with a growth on the left side of the neck about one and a half inches below and behind the angle of the jaw. He was not able to give a clear history, but from his statements, after questioning him closely, I gather that he had what he called a mole for about seven years, and that it became sore about two years ago, gradually assuming an ulcerated surface. On presentation it was about one and a half inches wide and two inches long. I removed it without unnecessary delay, keeping well away from the tumor in all directions.

A section has been prepared by Dr. Amyot, who will show it to-night, and which proves the growth to have been carcinomatous.

The point of interest is the tendency which these "moles" have to take on rapid growth and other features of malignancy after remaining apparently harmless for many years.

Dr. Graham asked for Dr. Oldright's views as to the origin of carcinoma; according to Welch, Cohnheim's theory seems still to be generally accepted.

#### ECTOPIC GESTATION.

Dr. Amyot presented a specimen for Mr. Cameron, showing ectopic gestation.

Dr. J. Spence showed a foetus from a case of extra-uterine pregnancy. The patient had menstruated last on December 24, but felt as usual until February, when she commenced to feel ill. She took to bed on April 4, though she had been very ill for two weeks before this. A mass was felt in the pelvis in Douglas' cul-de-sac, and slightly to the right. The uterus was hard, the os soft and patulous.

She was admitted to Western Hospital, April 23, and operated upon the next day. The abdomen was distended with blood. When removing clots the foetus and placenta escaped. There was a pyosalpinx in the other side. There was a history of gonorrhoea ten years before.

Dr. Carveth said that it has been stated that these cases do not occur in the country, but only in the city, where there is "gonorrhoea and pus tubes."

Dr. Oldright asked why cases are more frequent now than formerly.

Dr. Amyot showed a heart in which there was an incompetent aortic valve, and an ascending colon showing carcinoma.

Dr. J. T. Fotheringham gave the clinical history of a case of

MYOCARDITIS, PERICARDITIS, AND ENDOCARDITIS, COMPLICATING  
TYPHOID FEVER.

Patient taken ill January 20. Temperature, 104° F. in morning, after night spent at dancing party. Girl, æt. 20. Typhoid soon over—in one week or so from being first seen; temperature normal, but pulse persistently rapid—130 or so. Not much quickened by exertion, as she could move about room or into adjacent room with very little increase of rate, but up to 160 or so if friend came in to call. Possibly an example of the emotional weakness which characterizes recovery from typhoid more markedly than some other acute diseases.

March 6. Gave digitalis, 15-m. doses, three times a day. Accident in room; fall.

March 7. Treatment the same. Much excited again at breaking thermometer.

March 8. Pulse bad, 170. Called at 10 a.m.; again at 3 p.m., giving 30-m. dose of digitalis and waiting one-half hour, with result that pulse grew slower and improved. At 6.45 p.m. found her nearly moribund; pulse 210, and very bad. Stayed all night. Stimulation by strychnine, morphine, and whiskey, and mustard and ice bag to heart alternately.

March 9. Pulse 170 to 180. At 4.45 p.m. ½-m. nitroglycerine, repeated each hour; pulse, at 6.50 p.m., 142, and at 7.50, 120.

March 10. Omitting nitroglycerine once (at 8.50 p.m.), it began to rise, and at midnight was 150, and at 2.15 a.m. was 138 again, and at 2.50 was 90, and dicrotic.

Valuable lesson as to persistence of degenerative changes in heart after typhoid. Digitalis detrimental, though not given till convalescence had been over a month established.

Clinical evidence showed (1) myocarditis (action of digitalis); (2) endocarditis, two murmurs very plain mitral regurgitant, and slight aortic obstruction; (3) no evidence of pericarditis.

Later in progress of case, digitalis, 10 m., and, again, strophanthus, were tried, 5 m. in enema, with same detrimental effect on heart.

Strychnine, latterly hypodermically,  $\frac{1}{30}$  grain every six hours, was used throughout.

Rate improved, but quality grew worse, more irregular, till April 13, when pulse running 100-130, but very irregular and shabby. She died very suddenly, from heart failure.

*Points.* (1) Damage probably done during night before first seen. Over-exertion, causing heart lesion. Murmur distinct when first seen in bed (none there three days before). Then cleared up for a few days; then returned, and persisted to end. (2) Absolute uselessness, or worse, of digitalis and strophanthus; proving once more the rule that for their successful use one must presuppose a healthy heart muscle. (3) Value of nitroglycerine in slowing heart—contrary to usual statements in textbooks of Lauder Brunton's simile *re* "engine on slippery rails."

Dr. H. B. Anderson gave an account of the post-mortem on this case and showed the heart:

Post-mortem staining. Very little subcutaneous fat.

*Abdomen.* Considerable amount of serous effusion into peritoneal cavity. No signs of any inflammation.

*Thorax.* Large amount of clear serous fluid in both pleural cavities. Very slight amount of pericardial fluid. No pericardial adhesions.

*Lungs.* Hypostatic congestion.

*Liver.* Nutmeg.

*Kidneys.* Pelvis bile-stained, surface granular, capsule slightly adherent, kidneys enlarged.

*Spleen.* Partly enlarged and congested.

*Heart.* Weight 33 ounces. Stopped in diastole. Ante-mortem and post-mortem clots. Left auricle dilated and full of clots.

*Heart muscle.* Firm, pale. Inferior cava much enlarged. Superior cava normal. Left ventricle,  $\frac{7}{8}$  inches; left auricle,  $2\frac{1}{2}$  lines. Right ventricle,  $\frac{1}{4}$  inch; right auricle,  $2\frac{1}{2}$  lines. Aorta abnormally small.

*Valves.* Tricuspid admits five fingers. Length  $4\frac{1}{16}$  inches. Septal cusp, thickened and retracted, held down by chordæ tendinæ. Infundibular and external cusps normal.

*Pulmonary.* Normal. Length  $3\frac{5}{13}$  inches.

*Mitral.* Thickened and orifice stenosed, fatty degeneration of chordæ tendinæ. Length  $3\frac{1}{8}$  inches.

*Aortic.* Orifice stenosed, chronic, fibrous, and thickening. Length  $2\frac{5}{8}$  inches. Valve next mitral torn away from position, forming a nodular mass which hangs into ventricle. No sinus of valsalva.

One coronary artery atheromatous.

Dr. Acheson, Galt, said that he has a patient at the present time who has a heart that he thinks would closely resemble the one shown by Dr. Anderson. The patient has ascites (chylous).

Dr. Amyot showed a specimen of papilloma of the ovary for Mr. Cameron.

NÆVI.

Dr. Starr presented two specimens of nævi.

(1) The large one was removed from the back of an infant six months old. It commenced at birth as a tiny red spot in the skin. It was situated in the middle line between the scapulæ, and clinically resembled a spina bifida. It was circular in shape, and measured one inch and a half across, and was pedunculated and projected from the back fully an inch. It was removed without difficulty. He presented microscopic slides which showed a large amount of rapidly proliferating connective tissue cells, closely resembling sarcoma.

(2) The small one was removed from the forehead of an infant aged fifteen months. It had suddenly commenced to enlarge. Microscopically it presented a similar appearance.

Mr. Cameron thought that many of these cases may properly be looked upon as angeio-sarcomata.

Dr. Amyot thought the slides very much like sarcoma.

#### SPINA BIFIDA.

Dr. Boulton showed a specimen of spina bifida. Deformity in lumbar region. At birth the sac was half the size of an orange, umbilicated, but not tense. On examination when twenty-four hours old the sac was twice as large and tense, tension increasing on coughing and crying. Membranes were very thin and delicately traced over surface with vessels, and apparently it was a spinal meningocele. In two days there were small areas of pus under the membranes; one week after the sac was broken and discharged pus; in three days more there was no sign of membranes, but only a thickened surface over the region of the spina bifida, discharging pus from the centre, which was much depressed. Treatment, local antiseptic and laxative. All symptoms of meningitis from the first. Child died at age of sixteen days from tetanus causing starvation. Post-mortem, showed much thickening of membranes, and inspissated pus, cord in position. Growing from the posterior surface of the anterior portion of the dura mater, in the middle line, and a little higher than the centre of the spina bifida, was an oval, hard, bony nodule, about the size of a pea, firmly attached to the dura mater, but not to the body of the vertebra, being movable, direction directly backwards into the cord. Child born one month after expectation of full term; labor, precipitate; presentation, foot. One foot was club-footed. Previous child of same mother had evidently been dead some weeks before labor.

Dr. Peters showed three card specimens.

(1) Fragments of bone from a case of compound comminuted fracture.

(2) Tubercular testicle.

(3) Fingers, from a child, showing the amount of damage that may be done to internal structures without affecting the skin to any very great extent.



Dr. Primrose asked if the tubercular process originated in the testicle or in the epididymis. Or, may it not have come from a primary lesion at the neck of the bladder and have extended to the vesiculæ seminales? Suppose the disease is already in the neck of the bladder, was there any use in removing the testicle?

Dr. Peters said primary disease of epididymis is very common, and of the testicle rare. It is common to find the disease extend from the testicle to the bladder; uncommon to find it spread from vesiculæ seminales to testes. Primary disease of both epididymes has occurred. In the case from which the specimen came the prostate is hard, and the vesiculæ seminales can be felt, but no nodules could be discovered.

The nomination of officers was then proceeded with.

The meeting then adjourned.

## RESULTS OF FINAL EXAMINATIONS, 1896.

### UNIVERSITY OF TORONTO.

Passed the final examination with honors : M.B.

*Medicine.*—Class I.—C. Graef, E. L. Roberts, A. S. McCaig, A. H. Macklin, W. Goldie, G. S. Burt, J. A. Rannie, W. H. Nichol, T. H. Bier, W. B. Gwyn, I. G. Smith, equal ; F. W. Hodgins, D. K. Smith, equal ; E. B. White, E. L. Robinson, Miss C. Sinclair, equal ; G. More, D. Buchanan, S. H. Westman, C. G. Thomson, equal. Class II.—E. M. Hooper, A. W. Partridge, J. A. Marquis. Class III.—W. J. Beasley, T. C. Bedell.

*Clinical Medicine.*—Class I.—Goldie, McCaig, Robinson, equal ; Graef, Westman, equal ; Beasley, Bier, Marquis, equal ; Roberts, Hodgins, Macklin, Nichol, Rannie, White, equal. Class II.—Partridge, Bedell, Burt, Gwyn, Hooper, D. K. Smith, I. G. Smith, equal ; More ; Miss C. Sinclair, Thomson, equal. Class III.—Buchanan.

*Surgery.*—Class I.—Roberts, Nichols, Macklin, McCaig, Thomson, Beasley, Graef, Miss C. Sinclair ; Goldie, Rannie, D. K. Smith, equal. Class II.—Hooper, More, equal ; Westman ; Buchanan, Hodgins, White, equal ; Bier, Partridge, Robinson, Burt, equal. Class III.—I. G. Smith, Bedell, Gwyn, Marquis.

*Clinical Surgery.*—Beasley, Goldie, Graef, Hodgins, Hooper, McCaig, Marquis, Roberts, Robinson, Miss C. Sinclair, D. K. Smith, I. G. Smith, White, equal ; Bedell, Buchanan, Burt, Gwyn, Macklin, More, Nichols, Partridge, equal. Class II.—Bier, Rannie, Thomson, Westman, equal.

*Surgical Anatomy.*—Class I.—Hodgins, Roberts, equal ; Graef ; McCaig, I. G. Smith, equal ; Partridge, Goldie ; Bier, Rannie, Westman, equal. Class II.—Macklin ; Robinson, Miss C. Sinclair, White, equal ; Burt, Hooper ; Buchanan, Gwyn, equal. Class III.—Beasley, More, equal ; Nichol, Marquis, D. K. Smith, Bedell, Thomson.

*Obstetrics.*—Class I.—Partridge ; Nichol, Roberts, equal ; Westman, McCaig, I. G. Smith, Rannie, Macklin, Hodgins, White, Graef ; Beasley, Gwyn, equal. Class II.—Buchanan, Thomson, Burt, Robinson, Bier, Goldie, Miss C. Sinclair. Class III.—Marquis, More, Bedell, Hooper, D. K. Smith.

*Gynecology.*—Class I.—Goldie ; Bier, Graef, Roberts, equal ; Burt, McCaig, equal ; Rannie, Marquis, Partridge ; Hodgins, Macklin, equal ; Nichol, Robinson, equal ; Bedell, Gwyn, Thomson, equal ; I. G. Smith, D. K. Smith, White, more. Class II.—Miss C. Sinclair, Westman, Beasley, Buchanan. Class III.—Hooper.

*Medical Jurisprudence.*—Class I.—Westman, Macklin, Goldie, McCaig, Thomson, equal ; Burt, Nichol, equal ; Buchanan, Rannie, Roberts, Robinson, D. K. Smith, White, equal. Class II.—Beasley, Bier, Graef, Hodgins, Hooper, equal. Class III.—Gwyn, More, equal ; Bedell, Marquis, Partridge, equal ; Miss C. Sinclair, I. G. Smith, equal.

*Pathology.*—Class I.—Goldie, Graef, equal ; Rannie, Gwyn, Macklin, equal ; Bier, Roberts, Buchanan, McCaig, equal ; Miss C. Sinclair, White, equal ; More, Robinson, Nichol, Westman. Class II.—Hooper, Beasley, Hodgins, equal ; Partridge, Thomson, I. G. Smith. Class III.—Bedell, D. K. Smith, Burt, Marquis.

*Hygiene.*—Class I.—Graef, Roberts. Class II.—Macklin, Rannie, equal ; Goldie, Bier. Class III.—Beasley, Miss C. Sinclair, Buchanan, McCaig ; Nichol, Partridge, equal ; Thomson, Robinson ; Burt, White, equal ; Marquis ; Bedell, D. K. Smith, I. G. Smith, equal ; Westman, Hodgins, Gwyn, Hooper, More.

*Medical Psychology.*—Class I.—McCaig, Nichol, Rannie, equal. Class II.—Graef, Roberts, equal ; Miss C. Sinclair, Westman, equal ; Burt. Class III.—Bier, Marquis, I. G. Smith, Thomson, equal ; Goldie, More, D. K. Smith, White, equal ; Buchanan, Hodgins, Macklin, Partridge, equal ; Robinson, Hooper, Gwyn, Beasley, Bedell.

*Passed the Final Examination, M.B.*—E. H. Arkell, J. F. Boyle, B. G. Connolly, G. E. Cook, D. T. Crawford, F. A. Dales, G. A. Elliott, W. F. Gallow, A. Gray, W. J. Henderson, E. S. Hicks, A. G. Hodgins, W. W. Jones, D. McCallum, J. M. Carter, C. S. McKee, D. C. McKenzie, W. J. O. Mallock, J. S. Morris, N. W. Price, J. H. Rivers, H. H. Ross, W. L. Silcox, R. H. Somers, F. C. Steele, J. S. Thorne, W. J. Weaver.

*Scholarships and Medals.*—Starr Medals—Gold (under the old curriculum)—J. A. Rannie. Gold (under the new curriculum)—T. W. G. McKay. George Brown Memorial Scholarship—For this scholarship the following candidates rank in the order named : W. Goldie, E. L. Roberts, J. A. Rannie, A. H. Macklin, C. Graef, and E. B. White. Second Year Scholarships—J. G. Hossack, M. M. Crawford. First Year Scholarships—W. Wells, J. R. Stanley. Degree of M.D.—Mr. T. W. G. McKay, M.B.

TRINITY UNIVERSITY.

*Degree of M.D.C.M.*—G. S. Cameron, J. R. McRae, H. Clare, W. J. Beatty, W. H. Weir, E. S. Hicks, G. V. Harcourt, D. Jamieson, N. J. Tait, V. A. Hart, C. H. Millbee, G. W. Barber, P. G. Goldsmith, Miss T.

G. Head, C. H. Brereton, J. S. Nedd, J. J. Elliott, J. Gibbs, W. M. Teetzel, W. A. McIntosh, W. S. Harper, J. H. Rivers, H. S. Roberts, S. H. Corrigan, J. H. Allin, A. W. M. Row, F. J. Hart, G. Welch, Miss M. H. Irwin, J. H. Oliver, J. D. Weir, E. H. Lapp, A. Ruppert, Miss A. Verth, J. B. McMurchy, R. H. Foster, W. G. B. V. Forbes, J. P. Lee, P. S. MacLaren, W. H. Taylor, A. A. Beatty, C. R. Sneath, C. H. Sills, C. H. Smith, L. H. Marks, T. H. Bell, E. B. Boyes, E. Doan, J. H. Dancey, T. H. Caldwell, A. F. Reynar, H. G. M. Nyblett, W. A. Kurtz, G. B. Mills, R. Moore, J. B. Thomson, E. A. Fraser, J. McDonnell, G. Krausmunn, and J. S. Shurie.

QUEEN'S UNIVERSITY.

*Degree of M.D.*—J. Boyle, B.A., Gananoque; P. McG. Campbell, B.A., Admaston; J. J. Downing, B.A., Kingston; A. Embury, Belleville; J. C. Gibson, M.A., Kingston; H. N. Gillespie, Barriefield; C. H. Hudson, Belleville; W. H. Irvine, B.A., Kingston; A. W. Irwin, Kingston; A. W. Jones, Watertown, N.Y.; W. B. Rayler, Morrisburg; W. D. Lyle, Morrisburg; A. A. Metcalf, Almonte; T. F. Mooney, Kingston; H. G. Murray, Kingston; J. F. Macdonald, Kingston; C. McPherson, Prescott; E. W. Teepell, Watertown, N.Y.; B. E. Webster, B.A., Kingston.

*Medallists.*—H. G. Murray and P. McG. Campbell are the medallists of the year.

UNIVERSITY OF MANITOBA, WINNIPEG.

*Degree of M.D.*—Carmel Lorenzo Davidson, B.A., Louis Simeon Gendreau, B.A., Edward Lorne Jackson, John Thornton Mutchmor.

*Degree M.D., C.M.*—John Brown, B.A., George Edmund Curtis, John Ralston Davidson, B.A., Thomas Grant, Joseph Andrew Hall, B.A., George Henderson, M.A., Lewis A. Knight, Robert Macgregor, M.A., James Russel McRae, Alexander Stewart Monro, Arthur Percival Proctor, George Wilber Staples, Bernard Samuel Story.

BISHOP'S MEDICAL FACULTY, MONTREAL.

*Degree of M.D.*—George Hall, Ernest J. Addison, Mary B. Fyfe, James J. Benny.

M'GILL UNIVERSITY, MONTREAL.

*Degree of M.D., C.M.*—E. W. Archibald, B.A., J. F. Argue, C. R. Ault, S. Bonnell, J. M. Brathwaite, P. Brunelle, F. B. Carron, C. H. Church, H. M. Church, J. L. Churchill, B.A., P. Colquhoun, B.A., F. A. F. Corbett, B.A., R. H. Craig, A. P. Crocket, G. R. Deacon, J. E. Dewar, M. Donahoe, L. Drum, B.A., F. J. Duckett, F. B. Elliott, G. H. Ellis, R. B. Ewan, J. A. Ferguson, C. Findlay, E. C. Fish, W. M. Fisk, A. D.

Fraser, H. B. Fraser, B.A., A. F. Foss, A. Goltman, A. J. Grant, D. Grant, G. Hartin, D. J. Healy, E. V. Hogan, B.A., W. B. Howell, E. R. Hughson, A. D. Irvine, F. E. L. Johnston, H. W. Keith, J. K. Kelly, H. G. Kemp, W. N. Kendrick, W. D. Lambly, S. E. Lauder, F. J. Lee, P. C. Leslie, D. P. Lynch, R. H. Martin, R. Mason, R. W. Mitchell, B.A., W. A. Moffatt, E. B. Moles, L. R. Morse, B.A., W. Mowatt, B.A., F. W. Macartney, J. J. F. Macaulay, D. Macpherson, D. D. MacTaggart, B.A., A. W. McArthur, H. K. McDonald, D. McEwan, A. V. McGannon, D. Patrick, A. H. Prescott, W. A. T. Robertson, G. D. Robins, B.A., R. O. Ross, B.A., J. P. Ryan, E. J. Ryan, J. H. Secord, W. Smellie, R. B. Shaw, T. J. Slack, S. R. B. Smith, R. E. G. Smith, B.A., W. H. Smyth, B.A., F. S. Spearman, O. C. S. Stackhouse, C. A. Staples, B.A., C. P. Steeves, B.A., J. A. Sutherland, J. Tees, B.A., T. Tetreau, F. L. Thompson, T. S. Tupper, J. F. Warren, F. H. Wheeler, R. White, W. S. Wood.

*Medals and Prizes.*—The Holmes medal is awarded to George Dougall Robins, B.A., of Montreal, Que. ; the final prize is awarded to George Reginald Deacon, of Stratford, Ont. ; the Clemesha prize is awarded to Robert Oswald Ross, B.A., of Rossville, N.S. ; the Clinical Chemistry prize is awarded to Frederick Burke Carron, of Brockville, Ont. ; the Senior Anatomy prize is awarded to William Oliver Rose, of Lakeville, P.E.I.

#### MEDICAL COUNCIL.

*Final Examinations.*—H. E. Arkell, St. Thomas ; J. F. Argue, Carp ; J. H. Allen, Orono ; G. S. Burt, Hillsburg ; T. H. Bier, Brantford ; T. C. Bedell, Picton ; D. Buchanan, Galt ; W. J. Beasley, Weston ; J. F. Boyle, A. A. Beatty, Toronto ; T. H. Bell, Peterboro ; W. G. M. Byers, Gananoque ; W. J. Beatty, Glencairn ; George W. Badber, Hartford ; C. H. Brereton, Schomberg ; F. X. Boileau, Sturgeon Falls ; J. F. Basken, Dun Robin ; T. H. Blow, South Mountain ; G. H. Berry, Gananoque ; B. G. Connolly, Trenton ; D. T. Crawford, Thedford ; H. Clare, Chapman ; P. M. Campbell, Admaston ; J. G. Cranston, Arnprior ; F. B. Carron, Brockville ; D. A. Cameron, Wallacetown ; Jennie Brennan, Kingston ; Geo. R. Deacon, Stratford ; J. B. Deacon, Pembroke ; Geo. A. Elliott, Owry ; A. T. Embury, Belleville ; J. J. Elliott, Brantford ; Geo. H. Ellis, Dondela ; C. Pindlay, Hamilton ; A. E. Gardner, Belleville ; Wm. Goldie, Ayr ; Charles Graef, Clifford ; Jos. Gibbs, Meaford ; P. G. Goldsmith, Peterboro ; J. C. Gibson, Kingston ; F. B. Gwyn, Dundas ; A. J. Grant, Pembroke ; W. J. Henderson, Little Britain ; F. W. Hodgins, A. G. Hodgins, Lucan ; E. S. Hicks, Port Dover ; Geo. V. Harcourt, Port Hope ; C. D. M. Heydon, Toronto Junction ; W. W. Jones, Mount Forest ; J. K. Kelly, Almonte ; J. P. Lee, Toronto ; D. P. Lynch, Almonte ; Geo. Musson, Toronto ; J. S. Morris, Oshawa ; J. A. Marquis, Brantford ; J. A. Mallóy, Preston ; W. J. O. Malloch, Meaford ; A. H.

Macklin, Stratford ; H. G. Murray, Kingston ; A. A. Metcalfe, Almonte ; C. S. McKee, Peterboro ; A. S. McCaig, Collingwood ; W. A. McIntosh, Simcoe ; J. R. McRae, Lochalsh ; S. H. McCammon, Kingston ; J. P. McConnell, Toronto ; W. H. Nicholl, Brantford ; J. H. Oliver, Sunderland ; J. R. Phillips, Northfield, Minn., U.S.A. ; J. W. F. Purvis, Lyn ; E. L. Robinson, Toronto ; J. H. Rivers, Sarnia ; E. L. Roberts, Lyndoch ; J. A. Rannie, Chatham ; H. H. Ross, Clinton ; Christine Sinclair, Ottawa ; J. A. Sutherland, Toronto ; I. G. Smith, Ridgetown ; F. C. Steele, Orillia ; W. J. Stevenson, London ; C. H. Thomas, Toronto ; N. J. Tait, St. Thomas ; J. S. Thorne, Belleville ; Annie Verth, York ; A. Webb, Kettleby ; S. H. Westman, Toronto ; E. B. White, Chatham ; E. B. Webster, Kingston ; W. H. Weir, Brantford.

*Primary Examinations.*—E. C. Ashton, Brantford ; N. B. Alexander, Toronto ; W. H. Bennett, St. Marys ; F. X. Boileau, Sturgeon Falls ; J. T. Basken, Dun Robin ; M. Baker, Simcoe ; T. H. Blow, South Mountain ; B. C. Bell, St. George ; F. H. Bethune, Seaforth ; Jessie Birnie, Collingwood ; J. A. Butler, Toronto ; G. H. Berry, Gananoque ; D. A. Cameron, Wallacetown ; J. G. Cranston, Arnprior ; F. B. Carron, Brockville ; M. Crawford, Toronto ; F. Cahoon, Picton ; J. W. Crane, St. Thomas ; J. E. Charlesworth, Hespeler ; J. B. Campbell, London ; W. F. Cunningham, Walkerton ; W. J. Clark, S. B. Clemes, Toronto ; Jean Cruickshank, Weston ; C. N. Callendar, Toronto ; E. W. Delmage, St. Marys ; J. M. Dunsmore, Stratford ; J. D. Deacon, Pembroke ; H. H. Elliott, Frankville ; George H. Ellis, Dundela ; J. L. Easton, Thornton ; M. P. Fallis, Toronto ; W. S. Fadden, Kingston ; E. L. Garner, Niagara Falls ; T. A. Grange, Newburgh ; Maggie Gould, Toronto ; A. J. Grant, Pembroke ; J. Grant, Beaverton ; R. Howey, Owen Sound ; J. G. Hosack, Walsingham Centre ; J. J. C. Hume, Toronto ; J. S. Hogg, Seaforth ; G. A. Hassard, Manilla ; G. H. Jackson, Exeter ; J. K. Kelly, Almonte ; C. A. Lang, Granton ; A. S. Lovett, Ayr ; R. W. Large, King ; J. E. Lundy, Preston ; D. P. Lynch, Almonte ; T. H. Lawrence, Sheridan ; W. Moffat, Carleton Place ; A. A. Metcalfe, Almonte ; J. P. Mitchell, Toronto ; F. Moore, Heathcote ; J. B. McMurrich, Toronto ; D. McEwen, Maxville ; J. McCrae, Guelph ; A. McDermid, Coldwater ; A. R. McKay, Dungannon ; T. A. McDougall, Lucan ; A. J. McDonald, Caledonia ; J. R. Nixon, Ashgrove ; C. E. O'Connor, Kingston ; S. Paulin, Chesley ; J. W. F. Purvis, Lyn ; R. C. Redmond, Lansdowne ; J. A. Roberts, Jarvis ; G. A. Sutherland, Thamesford ; R. H. Smith, St. Catharines ; A. W. Spence, A. A. Shephard, A. D. Stewart, Toronto ; C. M. Stewart, Ailsa Craig ; W. A. Scott, Toronto ; W. Stephens, Trafalgar ; W. J. Tillman, London ; W. C. White, Woodstock ; George S. Wilson, Tweed.

## Medical Items.

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DR. J. P. SINCLAIR has resumed practice in Gananoque.

DR. THOMAS W. JEFFS (Tor., '95) is practising in Union, B.C.

DR. CHARLES CARTER, French River, is spending his holidays in Toronto.

DR. MCCONNELL (Tor., '95), who has been doing duty as house surgeon at St. Michael's Hospital, has gone to Big Bay Point for the summer.

DR. THOMAS S. CULLEN (Tor., '90) spent a few days in Toronto early in June. He is likely to remain in Baltimore for two or three more years.

DR. L. M. SWEETNAM has returned to Toronto after a stay of some months in Florida and the West Indies. We are glad to be able to announce that his health is greatly improved.

ASSOCIATE CORONERS.—The following associate coroners have been appointed : Dr. John Marks Stewart, of Chesley, for the county of Bruce ; Dr. Alfred Skippen, of Grand Valley, for the county of Dufferin ; Dr. Michael James, of Mattawa, for the district of Nipissing.

KITSON v. PLAYFAIR.—The appeal of the defendent in this case was set down for hearing on April 30, but Sir Frank Lockwood, counsel for the defendant, stated that it would be unnecessary to trouble the court, as terms had been arranged between the parties in accordance with which the appeal would be withdrawn. The terms of settlement were not made public.

TORONTO GENERAL HOSPITAL.—The following graduates of 1896 entered on their duties as house surgeons of the Toronto General Hospital, June 15 : Trinity Medical College—W. H. Weir, Brantford ; J. J. Elliott, Brantford ; C. H. Brereton, Schomberg ; A. A. Beatty, Toronto. Toronto University—J. A. Rannie, Chatham ; C. Graef, Clifford ; S. H. Westman, 26 Rose avenue, Toronto ; W. J. O. Malloch, Meaford.

ROMAN fever is almost a thing of the past. From 650, in 1881, the deaths from malaria ran down to 254 in 1891, while for the last five years the average has been 149, the number in 1895 being 125. These figures are all the more significant in that the population of Rome has increased from 300,000 to 467,000 in fifteen years. An equally remarkable diminution has taken place in the death rate for all other infectious diseases, so that Rome, even in the traditional unhealthy season, is one of the most healthy capitals in Europe.

THE NILE EXPEDITION : THE NEW PHOTOGRAPHY.—Our Army Medical Department is fully alive to the value and importance which the new photo-

graphy is likely to have in military surgery. It is, we believe, by no means improbable that even in the field hospitals connected with our African expeditions it will be found possible to use the now greatly perfected apparatus for the more accurate diagnosis and treatment of wounds and injuries from the presence of foreign bodies and bullets in the body. At the Netley Hospital Medical School this week, Mr. Sydney Rowland attended by invitation of Surgeon-Colonel Stevenson, and gave information concerning the most advanced application of the Roentgen rays for purposes of military surgery, taking on the spot successful photographs of the bones in a rare case of fracture into the knee-joint, of which excellent negatives were developed. Special arrangements were discussed by which the needful apparatus could be put into a highly portable form, and, with some modification of present methods, adapted to field use, even in the desert.—*British Medical Journal*.

RADICAL CURE BY FIRE.—The Harris District Committee of the Inverness-shire County Council have made a proposal to the Public Health Committee to destroy by fire several hundred of the "black houses" in Harris for sanitary reasons, and to apply to the government for a grant towards the cost of building new dwellings in place of those destroyed. Dr. Ogilvie Grant, county medical officer, submitted a report upon the subject, which presents a most melancholy picture of the existing condition of affairs. These houses consist of three compartments, with a single door of entrance. The first compartment is used for housing the cattle, and there the manure is allowed to accumulate for a twelvemonth at a time. The second compartment, or kitchen, is separated from the first by a rudely constructed wooden partition; sometimes there is no partition at all. The innermost compartment is the bedroom, occupied by the whole family, irrespective of age or sex. The walls have a stone facing within and without, the centre being filled in with earth, which is kept damp by the rain passing through the roof. The fire is in the middle of the floor, and the smoke escapes as it may. Typhus, typhoid, phthisis, and a high infantile mortality follow in the train of these conditions. The legal remedy is, of course, to close the houses; but such a measure would simply result in turning the inmates out on the moors. The tenants, crofters and cottars, have not the wherewithal to provide better houses. The people, Dr. Grant says, are most industrious in the manufacture of Harris tweeds, but the remuneration is scanty. The proposal is that the government should come to the aid of these people, and provide a grant out of which the necessary wood fittings and lime would be supplied for the erection of more wholesome dwellings. The problem is a difficult one, but under the exceptional circumstances of the case the proposal would appear to be not an unreasonable one.—*British Medical Journal*.