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#### THE

# Canadian Practitioner

EDITORS : ADAM H. WRIGHT, B.A., M.D. Tor. EDMUND E. KING, M.D. Tor.

ASSOCIATE EDITORS :

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JOHN CAVEN, B.A., M.D. Tor.

MANAGER ADVERTISING DEPARTMENT: MR. W. LLOYD WOOD.

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# Original Communications.

SOME PRESENT METHODS OF TREATMENT OF PATIENTS AT THE ASYLUM FOR INSANE. LONDON, ONTARIO.\*

By A. T. Hobbs, M.D., Assistant Physician.

#### HISTORY.

N the autumn of the year 1894 my attention was drawn to a couple of pamphlets written by Drs. Kirkley, of Toledo, and Rohe, of Baltimore, which detailed their observations of some gynecological work done upon insane women and their conclusions arising out of their brief experience in this new departure. There being a normal population of five hundred and fifty insane women in London Asylum, and as a large number of these became insane during the puerperium, it was reasonable to suppose that there must exist among such an aggregation many unsuspected cases of pelvic disease.

<sup>\*</sup> Read at the meeting of the Ontario Medical Association, held at Toronto, June, 1898.

The pros and cons of the subject were carefully considered by my superintendent, Dr. Bucke, in conjunction with Dr. Meek, of London. As a result, we concluded to investigate the matter fully, and ascertain for ourselves whether much or little utero-ovarian disease existed as a complication in the already chequered lives of these unfortunates. Looking up the histories on which they were transferred for asylum treatment, we selected a number of women whose record seemed to indicate their having had, at some time previous to their committal to this institution, illnesses brought about by the accidents which maternity so often entails.

The first five cases we examined somewhat surprised us, as each case presented one or more lesions of the genital tract which would, in their sane sisters, imperatively call for relief. There were diagnosed in this quintet an ovarian tumor, a subinvoluted uterus, a perineum torn to the sphincter, a retroverted enlarged uterus, and a cervix hypertrophied and lacerated. Having thus brought home to us the prevalence of hitherto unsurmised ailments, our professional instincts impelled us to deliberate as to the appropriate method necessary to remedy this co existing physical disease of those already deranged mentally.

Before entering upon this new field facilities requisite to the prosecution of the contemplated surgical treatment had to be provided. We had, and still have, an apology for a hospital in two associated and overcrowded dormitories of twenty beds each, on the fourth storey of the main building; but had not at that time any equipment worthy of the name. We fitted up a room formerly occupied by some of the employees, adjoining these infirmary wards, with a crude, wooden operating table, a couple of gas stoves, some granite basins and surgical instruments. With these means constituting our whole armamentarium, we proceeded to test our theories as to the advantages of supplementing ordinary treatment by surgical aids.

We selected five or six of the aptest of our female attendants, instituted a course of training interspersed with anatomical and physiological lectures, paying special regard to inculcating all the many details involved in the nursing of the different forms of surgical cases. It gives me great satisfaction to state that we now have the co-operation of a band of nurses devoted to this special work and skilled in every particular requisite to the preparatory treatment and after-care of their charges. It is impossible to overestimate their valuable services in assisting to bring to a successful termination surgical operations done upon these irresponsible

mortals, the after-management of whom entails watchfulness and a capacity to assuage their various trying moods usually accentuated by their post-operative condition.

The constant admission of a large number of insane patients in addition to the existing population necessitated the appointment of one day a week to keep pace with the demands of surgical clinique. A regular staff of assistants had to be arranged for and several city doctors kindly volunteered their services in this connection. Dr. Meek, our consulting gynecologist, and Dr. Stevenson, our regular anesthetist, and Drs. Ferguson and W. Stevenson are always on hand to give Dr. Bucke and myself the advantage of expert help in the prosecution of this work. The institution and incidentally the Government are deeply indebted to those gentlemen who give so much of their valuable time without recompense in aiding in the amelioration of the miserable condition of so many of our suffering fellow-beings.

Another invaluable adjunct to our methods of treatment was the establishment of a massage department. We have now two specially trained nurses, male and female, devoting several hours of each day in effectually applying this very useful manipulation in properly selected cases.

Such then is a brief history of two of the recent methods of treatment which the institution for the care of the insane at London has recently adopted with so much success, the results of which I will now present to you in as concise a form as is compatible with the time at my disposal.

#### MASSAGE.

The scientific rubbing, slapping, and kneading of the muscular anatomy of a patient, which is known as "Massage," has produced results that will compare favorably with any method devoted to the increase of body weight and the generation of force known to us as vital energy. Many of our inmates on their admission appear utterly devoid of general tone and are much below their normal weight. These debilitated patients are usually the ones selected as appropriate subjects for the application of "Massage." They are either given a forty minutes' daily seance or undergo an hour's rubbing repeated three times a week. Preceding each manipulation they are given a cold or tepid bath, then the masseur applies an inunction of cocoa butter to the body and proceeds to perform his appointed task. When through his laborious work he sponges down the body with a solution of equal parts of alcohol and water.

After drying the patient the masseur concludes with a gentle but swift hand rubbing until the skin begins to glow. The patient is weighed weekly while undergoing this process and a careful record kept of any loss or gain in weight. During the first two weeks there is usually but little increase manifested. Succeeding this, however, a rapid and steady gain is noted, varying from a few ounces to three pounds a week. It is not an uncommon experience for a patient to add to his weight twenty to thirty pounds as a result of a few weeks' treatment.

The class of insane who have benefited mostly by massage. have been the melancholics. These latter are almost universally subject to constipation, which becomes markedly relieved by the kneading of the abdominal muscles in the direction of the course of the large intestine. Among the useful adjuncts in the treatment of our clientele massage is certainly one of the best.

#### GENERAL SURGERY.

In an institution of the size of the London Asylum, with its one thousand mental cripples, there exist, as a matter of course, many cases of physical ailment which demand relief, and which are amenable only to surgical measures. Under the category of general surgery are included all operations performed other than gynecological. Of these there were thirty-two. The indications requiring surgical procedure were the presence of tumors, malignant or benign, depressions of the skull, caries of joints, appendicitis, hernias, and so forth.

The only ones requiring special mention are the radical cures of hernia, of which there were twenty-one. The prevailing type was inguinal, only one being a femoral. In all but one the Bassini method was followed with uniform success. The cure of the rupture, which meant the removal of a source of annoyance, gave general satisfaction to these patients, as many subsequently so expressed themselves. I desire to draw your attention to the fact that the post-operative history observed in these cases showed no mental improvement that could be attributed as a result of the operation done.

#### GYNECOLOGICAL SURGERY.

The most important of our present methods of treatment is the application of surgery. The eradication of pelvic disease is the most important advance that we have made in this institution in our methods of treatment among our female insane. In our work in this department there has been brought to our recognition a

serious fact, viz., that perhaps one-sixth, if not one-fourth, of all the women in asylums for insane are there because of the special infirmities of their sex and the disasters and penalties of their lives as wives and mothers. Our investigations and results in gynecological surgery have proved so remedial, its initiation has been fraught with results so unexpected, as to be hardly credited unless actually witnessed. We have already examined one hundred and thirty-six women with reference to the presence or absence of disease in any portion of the reproductive system. Out of this number, one hundred and twenty-six had organic lesions or malformations incompatible with normal genitalia. The one hundred and thirty-six women were selected patients out of a total of over seven hundred and fifty female patients under observation since the commencement of this special investigation. The one hundred and twenty-six patients in whom gynecic disease was located represents nearly seventeen per cent. of the total number of the normal female population. This large percentage of pelvic disease is almost incredible, especially to those who are accustomed to regard insanity as practically the only malady affecting the insane. But, if the brain is the prime seat of mental derangement, it should not be forgotten that it is only one of the organs that enter into the construction of the human machinery. Of these one hundred and twenty-six patients there were one hundred and twenty-one whose condition necessitated operative procedure for the restoration or amelioration of physical disorders which either caused or complicated disturbance of the nerve centres.

Interrogation of insane patients on symptomatology as an aid to diagnosis was practically valueless. The sexual delusion often portrayed by female patients afforded no help in arriving at a definite conclusion and usually, when present, were misleading. Ofttimes a patient has referred certain sensations as symptoms induced by the presence of an internal tumor, which, on examination, was found to have had only an imaginary existence. Their distorted mental faculties obscure their judgment and their perverted sensations are erroneously attributed to hypothetical sources.

Observation and question, which are of the greatest importance in determining the origin of ill-health in sane women, are utterly unreliable in establishing the presence or absence of any pathological condition of the pelvic organs in their insane sisters. It is a peculiar feature that the greater number of serious ailments discovered in our mentally-deranged females were only disclosed by actual examination. Without anesthesia it would have been manifestly impos-

sible to have carried out the various manipulations and instrumentations so absolutely necessary to a systematic examination of the pelvic organism in our asylum patients. The constant use of ether as a general anesthetic has thus far been unattended by any untoward effects. The insentitive condition induced by its inhalation is, in these patients, rapidly recovered from and is very rarely followed by any nausea or vomiting. Anesthetization for the purpose of examination is troublesome, but an examination of the insane without its aid is valueless.

A full analysis of the pelvic diseases in the one hundred and twenty-one operable cases would not be possible in this paper. A summary, however, of the various lesions diagnosed will give an approximation of their relative frequency.

Diseases of the uterus numbered two hundred and are subdivided into:

1.—Endometritis	cases
2.—Subinvolution71	66
3.—Retroversions40	"
4.—Dysmenorrhœa and menorrhagia. 16	66
5.—Complete procedentia	"

Diseases of the cervix uteri totalled eighty-four and were as follows:

1Hypertrophy	26	cases.
2.—Lacerated	36	
3.—Cystic	19	
4.—Polypi	3	66

Of tumors of the uterus there were ten and were classified into:

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      1.—Fibroid
      8 cases.

      2.—Epithelioma
      1 "

      3.—Sarcoma
      1 "
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Diseases of the ovaries and tubes including cysts of all kinds numbered nineteen.

Injuries to the vagina, including fistulæ, were twenty-eight.

These made a grand total of three hundred and forty-one gynecological diseases in one hundred and twenty-one patients, which is apparently a large number of diseases; but many patients had more than one primary or secondary lesion. The following observations apply to one hundred and ten cases, comprising the total number operated upon, exclusive of a number of cases too recent to be presented in this report.

In the treatment of what is professionally termed diseases of women, gynecologists, like other specialists, differ as to methods. Many gynecological procedures, adopted as standards by the majority of physicians, are useless or inapplicable when applied to the insane. The employment of ovarian or uterine medication, the application of the Apostoli method for the reduction of fibroid tumors and the introduction of pessaries for displaced uteri and adnexa, could not be applied with even a fair modicum of success. The restlessness, meddlesomeness, and lack of control, inherent in the insane, would make medication a task laborious to the operator and likely to arouse an antagonism in the patient because of the necessity of its frequent repetition. The questionable potency of the electrical or Apostoli treatment and the difficulty of its manipulation prevented its adoption where apparently indicated.

The different mechanical devices or pessaries for the support of corrected displacements of the uterus were given a fair trial but had to be abandoned. These patients would not tolerate their presence in the via natural's and would remove them soon after they were introduced. These were some of the difficulties that rendered unavailing recognized but tedious methods which in the main are only palliative even under the most favorable conditions.

The only radical treatment for the insane, as for the sane, with gross gynecic lesions, we believed to be that afforded by the resources of recent surgical science. Thorough preparation of surgical dressings, scrupulous attention in the observance of aseptic details, and a familiar knowledge of the technique involved in the various operations, now renders the most critical surgical operations comparatively free from hazard to the patient's life.

Since our resource to surgical aid, three and a half years ago, one hundred and ten women have undergone operative treatment, representing one hundred and ninety-six distinct operations. These embraced eighty-three curettages, thirty-eight trachelorrhaphies and amputations of the cervix, twenty-six operations for suspension of the uterus, twelve ovariotomies, seventeen hysterectomies, two laparotomies for tubercular peritonitis, one celotomy for removal of a broad ligament hematoma, and seventeen perineorrhaphies.

These operations were done primarily and specifically for the removal of physical disease and the promotion of bodily comfort. The finale of medical, dietetic, and hygienic measures in the general management of lunarics by all alienists is to bring the physique to the highest attainable point. If it is shown that surgical art can aid medical science in promoting this desideratum even among the

insane it should be added to the armamenta ium of all hospitals devoted to the care of those wards of the State. Furthermore, if it is admitted that by surgical means sources of exhaustion, worry, pain and misery can be eradicated, and a state of good bodily health established, is it not reasonable to argue that mental improvement or recovery may result as a sequence to the restoration of the system to physical well-being? We maintain that our results thus far warrant us in urging asylum authorities to test the effects of the removal of operable gynecological disease among the insane.

Results: For the purpose of simplifying the classification of the one hundred and ten gynecological cases, and giving their present mental condition in brief, the main operation done on each patient will determine her classification in the accompanying table.

- 1. Of the twelve ovariotomies done, seven recovered, four improved, and one died on the twelfth day from pneumonia complication.
- 2. Out of seventeen hysterectomies—of which nine were vaginal and eight abdominal—there recovered five, three improved and two died, one the third day after the operation from exhaustion, and the other on the seventeenth day from secondary hemorrhage induced by patient on the fourteenth day by pulling out the ligatures.
- 3. The replacement of dislocated uterus was the operative treatment in twenty-two cases, either by the Alexander method or ventrofixation. Only four of this number have as yet recovered mentally, although eleven others have shown more or less mental improvement.
- 4. There were thirty cases in which the chief operation done was the removal of diseased cervices. Of these, twelve are now well mentally and nine others have improved. A most gratifying record.
- 5. Of twenty-one cases in which minor uterine diseases were removed usually by curetting, there recovered twelve and two improved. Also a most satisfactory showing.
- 6. The remaining eight cases embraced operations for vaginal lesions, fistula, etc. No mental recovery followed in any of these cases and in only three was there any improvement observed.

Reckoning the one hundred and ten cases together, it follows that 40 or over 36 per cent. were restored mentally, 32 or 29 per cent. showed an improved mental status, while in 35 or 32 per cent. the mental condition remained stationary, and 3 or less than 3 per cent. died within a month succeeding operation. It is due to us to state that no death has occurred from any operation during the past

two years, during which period the last twenty-six gynecological operations were done. I am also positive in stating that a number of those operated upon would inevitably have died were it not for the timely restoration afforded by the operation. Our improved results during the past two years were no doubt due to the increasing efficiency of treatment gained by experience, and especially a better knowledge of the most effective post-operative management of our cases.

A detailed though concise presentation of a few cases with the mental history, prior and subsequent to operation, will sufficiently exemplify the general effects of the treatment employed.

- J. E. W.—Puerperal mania of seven months' duration. Forced alimentation had to be maintained for months previous to and for two weeks subsequent to operation. Had a delusion that if she ate any tood she would immediately be decapitated. Examination revealed a flabby atonic subinvoluted uterus with pronounced endometritis. Thorough curettage was followed by mental recovery in three weeks. Has now remained well over two years.
- A. S.—Chronic mania of two years' standing, strong and apparently healthy. Future mental recovery doubtful. Examination showed an extensive hypertrophy with a severe bilateral laceration complicated by a large subinvoluted uterus. Repair of the cervix and curettage of the uterus was done. She went home quite well in two months and has remained so for two and a half years.
- M. F.—Chronic mania of two years. Diagnosed a retroverted subinvoluted uterus. Curettage of uterus and replacing it in a normal position by Alexander's method. She improved slowly and has now fully recovered. A recent letter states that she remains well and is managing her own household affairs. Two years have elapsed since the operation.
- C. S.—History since puberty pointed to disturbed menstrual periods. As she grew older she became steadily worse. At time of operation she was twenty-six years old and had been declared a lunatic for five years, the last four of which were spent in an asylum. When transferred to London Asylum for special examination the case appeared to be absolutely hopeless. Diagnosis was made of an enlarged left ovary as big as an orange, which subsequently proved to be mainly cystic with a small amount of fibroid stroma, and the right ovary although small was found adherent to intestines. Uterus was small, being undeveloped. Ovaries were removed and patient made a rapid physical recovery. For two months there was no change in her mental condition, being at times excited, destruc-

tive and violent. At the end of two months she became suddenly well and has been so for sixteen months. She has been at home for a year and has taken her place once more in the household and society. She has menstruated regularly since the operation without the slightest discomfort.

A. F.—Was a remarkable case. She was picked up on the G. T. R. station platform, London, wandering around aimlessly. Could give no account of herself nor answer any question satisfactorily. Her mental condition was of a subacute or incomplete form of psychocoma. After being a patient for two months and no improvement apparent she was examined. Both ovaries were large and diseased and with uterus and tubes were prolapsed and adherent. Both ovaries and tubes were removed and uterus suspended to abdominal wall. For the succeeding two days she was very excited but woke up from sleep on the morning of the third day perfectly well. She gave us a complete history of herself and location of her friends and children (she being a widow) in Pennsylvania, where she returned after being under observation for six months, during which time she remained mentally and physically well.

.L. S.—A case of chronic mania of erratic mental history for sixteen years. She is now thirty-two years of age. Always worse at menstrual periods. Examination disclosed a pelvic mass with very little mobility. On opening into the abdomen it was found that all the pelvic organs were bound together to the intestines by old, strong adhesions. The only operation offering any chance of success was a complete hysterectomy. This was done. Ovaries were several times larger than normal and fibro-cystic in character. A good physical recovery followed. She is still under observation although quite well mentally since the operation on the 11th of January.

F. W. T.— Delusional mania of five years' duration. Had been an asylum resident for two years. During the summer of '96 attention was drawn to an increasing abdominal protuberance. Examination disclosed a rapidly growing fluctuating tumor. After a delay of some weeks, consent to operation being given, the tumor and uterus adherent were removed. The contents of tumor proved to be three quarter fluid and one-quarter solid irregular mass, papillomatous in character. After a week's excitement she quieted down, gained rapidly in flesh, and was taken away by her friends in December. She is now discharged and her friends state she is very well.

When reflecting on the results which were attained in the one

hundred and ten female lunatics, one cannot but be impressed by the remarkable manifestation that follows the extirpation of diseased sections of the reproductive system in a number of the cases. almost instantaneous resolution of the mental faculties in some, and the steady evolution of the normal cerebral functions in others, cannot but afford incontrovertible evidence in support of the relation of physical cause and mental effect. Proof of the interdependence of the brain upon the rest of the body and especially on the organism concerned in the genesis of the human species can be fairly demonstrated by the study of ordinary physiological functions. Witness the mental attitude of females during the development, continuance of active life and decadence of the sexual system. That their varying moods and hysterical phases are often exhibited during the periods is current knowledge to all medical practitioners. Is it not reasonable to assume that, if these delicate and complex organs are so commonly disturbed by periodical physiological causes, that the implantation of pathological conditions upon these causes, must in no usual degree disturb the mental equilibrium, especially in those predisposed to mental weakness. The validity of this inference is practically established in our experience by the good mental results that followed the removal of gross pelvic lesions.

And further, our experience in this special work brings out this important fact that the elimination of certain forms of utero-ovarian disease was usually succeeded by either a return to a normal mental state or a marked improvement in their mental condition. Also that there are derangements of these same organs which, when rectified, have little if any influence on the mentality of the insane, although the physical health may be immensely bettered.

For etiological purposes we may classify our cases into inflammatory and non-inflammatory cases. The former consisting of diseases of the ovary and uterus, arising from inflammation; the second, or non-inflammatory group, embracing dislocated uteri, accidental tears of the vagina, and new growths.

In the inflammatory group of sixty-three cases made up of twelve celiotomies for chronic ovaritis, thirty amputations for hypertrophied cervices and twenty-one curettages for endometritis: there was a mental recovery rate of over 49 per cent., over and above 23 per cent. who improved.

The non-inflammatory or mechanical group of forty-seven cases included seventeen hysterectomies for the removal of uterine tumors and complete procidentia, twenty-two replacements of dislocated uteri and eight cases of repair of vaginal tears. The subsequent

history of these forty-seven cases gave a recovery rate of only 19 per cent. and 36 per cent. in whom was noted some improvement. It should be stated in this connection that some of the recoveries following hysterectomy had chronic evaritis in addition to the lesion for which hysterectomy was done.

Two explanations may be offered as a solution of the problemwhy inflammatory disease of the uterus and its adnexa are such potent etiological factors in exciting alienation in females. The first I will term the Reflex Theory. The innervation of all these pelvic organs is supplied from the same plexus, that of the inferior hypogastric, possibly the most important of all the nerve plexuses, controlling as it does the delicate and complex organic mechanism charged with the reproduction of the human species. The continual disturbances of these lower nerve centres incidental to inflammatory deposits must react upon the higher, begetting in some the delusional manifestations which determine mental alienation.

Internal Secretion Theory: In the recent physiological theory of internal secretion, we may find the true solution of the deleterious effects that diseased sexual organs exercise upon the distant seat of reason. Some physiologists claim "there is a normal and constant contribution of specific material by the reproductive glands to the blood or lymph and then to the whole body." (American Text-book Physiology, Ed., '96, p. 901.) Shaefer, in his Physiology, Ed., '98, p. 937, says of internal secretion: "That these (the generative glands) react upon the rest of the organism through the nervous system." Applying this hypothesis to pathological conditions of these same organs, it is not fair to conclude that instead of, as in health, the contribution of this great power in the induction of nerve force, there is precipitated into the general circulation an abnormal noxious element, distributing its virus throughout the patient's economy.

The introduction of these diluents of unknown virulence, invading the inmost recesses of the higher nerve centres, may engender an abnormal functionality in females possessing delicately poised minds. In the removal of these diseased organs, or by appropriate surgical measures directed to diseased sections, we can eliminate these sources of mental toxemia. These causative factors being removed, the natural forces will gradually re-assert themselves in re establishing the prior state of sanity. The theories enunciated are possible interpretations of the positive relations that certain pelvic diseases bear to insanity. If, in our experience, one-third of the gynecological cases recovered mentally and another third improved, such results support Prof. Michael Foster's statement in his

address before the British Science Association in Toronto last August, "that this, at least, stares us in the face, that changes in what we call the body bring about changes in what we call the mind. When we alter the one we alter the other."

We are not the only physicians in Canada who have had brought home to them by actual experience the relationship that exists between diseases of the organs of reproduction and mental derangements. Several independent observers have already placed on record sundry such cases that have occurred in their own private practice. Notable among these, I take the liberty of mentioning Dr. Holmes, of Chatham, who, in his thirty years of practice, had as many as twenty-four mental recoveries succeeding operations of this character.

Dr. Ernest Hall, of Victoria, B.C., not long ago examined a female patient in the asylum of that province who was suspected of having some lesions in the pelvis. Dr. Hall, who recommended operation, removed two fibro-cystic and adherent ovaries. The patient made a rapid recovery, both physically and mentally, and is now once more attending to her household duties after a residence of two years and eight months in an asylum as an apparently chronic hopeless lunatic.

Dr. Burgess, Superintendent of the Protestant Hospital for Insane, Montreal, reports having had to send three of his female patients to the Montreal General Hospital to be operated upon for utero ovarian disease. All three patients were restored to mental and physical health as a sequence of the operation. Two c: these cases and the one reported by Dr. Hall had fibro-cystic disease of the ovaries similar to that described in my own ovarian cases, and they afford certainly strong additional evidence of the causative relation of pelvic to mental disease.

In conclusion, I wish to say that I have no desire to magnify the value of surgery as a mode of treatment among the insane, nor do I want to claim that all the mental recoveries succeeding operation were due solely to its influence. I must emphatically state, however, that many of those who recovered their reason would not have done so without surgical interference. To hope to relieve these poor sufferers from both physical and mental derangements by simple incarceration and the well-nigh useless adjuncts of ordinary treatment, and to refuse these unfortunates the advantages which medical science offers to other women, is to reject the aids of modern science, to follow the methods of mediævalism, and to prefer to a modern hospital for the insane an old-time eighteenth century madhouse.

#### THE PHYSICIAN AND LIFE INSURANCE.\*

By James Thorburn, M.D., Medical Director, North American Life Insurance Company, Toronto, Ontario.

IN my address, delivered before this Association in the city of Montreal two years ago, I alluded to the enormous amount of life insurance transacted by the various life insurance companies in Canada and the United States. Since then it has increased more rapidly than ever before in the same period of time, and at the meeting of the British Medical Association, held in Edinburgh last month, for the first time in the history of the Association a section was devoted to the consideration of Life Insurance, and was largely attended by some of the most eminent men.

To such an extent has life insurance been appreciated and laid hold of by the people of every civilized land that there is scarcely one of our profession, the world over, who has not be n brought in contact with it directly or indirectly; and as this vast and farreaching institution is taking a more important place in the economics of the world, as each year rolls by, it has occurred to me that it might not be out of place to refer to some features of the business which directly touch our profession.

In Canada, at the close of last year (1897), the amount of policies for which Canadian, British and American companies (exclusive of assessment and fraternal associations) operating in Canada were responsible for amounted to three hundred and forty four million, three hundred and fourteen thousand, four hundred and forty eight dollars (\$344,314,448); while in the Republic to the south of us the aggregate insurance of the regular life companies, amounted to no less than five billion, one hundred and eighty-three million, six hundred and ninety four thousand, two hundred and fifty dollars (\$5,183.694,250). These almost incomprehensible liabilities have been assumed by the life companies on the strength of the judgment, skill, honesty and integrity of the members of our honored profession.

<sup>•</sup> Real before the Canadian Medical Association at the annual meeting at Quebec, August, 1898.

That one of the greatest of all financial undertakings, one which affects probably more persons and more families than any other single business enterprise in the world, depends so largely upon the wisdom and probity of the members of our profession is perhaps one of the most eloquent and potent tributes that could possibly be paid to it.

In Canada the amount of insurances effected for the past twenty-two years, from 1875 to 1897, aggregated the large amount of \$702,000,545. If to this be added the amount which the companies refused to undertake in consequence of defective family or personal histories, which I estimate would not be less than one-tenth of the accepted, or \$70,200,000, we obtain an aggregate insurance applied for of \$772,200,545. The average policy of insurance applied for is approximately \$1,500, and I therefore estimate that the profession in Canada, during the period referred to, has been called upon to make not less than \$14,667 examinations for life insurance companies. The fee for medical examinations varies with the different companies, ranging from about \$2.50 to \$5.00. Assuming an average fee of \$3.50, I estimate that the profession has been enriched during these past twenty-seven years by life insurance companies operating in Canada by no less a sum than \$1,801,334.

The premium rates for life insurance in Canada are based on tables of mortality constructed from the records of life insurance companies in Great Britain and the United States, and the materials entering into and which form the basis of these mortality tables are those select assured lives, which have been carefully examined. scrutinized and sifted. All lives presenting defective histories have been carefully discarded, and only those lives included which searching medical and other examinations indicated were good and eligible risks. The foundational element of selection, which enters into the calculation of premium rates charged by life insurance companies, is a most significant reason why only lives which are unexceptional in character should be recommended, and, on the other hand, why those lives presenting inferior or defective histories should be excluded. If the mortality tables, which form the basis of the premium rates of life insurance companies, had not been constructed from select material, but from the general population, then this vital point of recommending only first-class lives for acceptance would not probably have the force that it has under existing conditions. If a company is in the habit of insuring inferior lives on the basis of a mortality table constructed from select material, only one result can follow, and that is disaster and loss.

I have shown that the profession in Canada has been substantially benefited by fees for life insurance examinations. The average fee is in excess of what the average practitioner would receive for an equal amount of skill and labor exercised in his every-day professional duties. It appears, therefore, to me that the physician should give a full, satisfactory and complete report to his company. not merely answering the questions which have been proposed in the examination blank, but entering heartily, judiciously and earnestly into the merits of the case, weighing carefully the question in his own mind, whether the particular life, under all the circumstances presented-occupation, environments, personal history, family history and appearance—is likely to prove a profit or a loss, that is, whether the applicant is likely to live out the full expectation of life or die at a premature age. Any medical man who does not give all the facts within his knowledge, which will enable the company to satisfactorily determine whether the life is eligible for insurance or not, is lacking in his duty, and sooner or later his actions will be revealed.

As many of you gentlemen present will live to an old age, and will, no doubt, during your period of life, have the privilege of examining a large number of applicants for life insurance, I would point out to you that your capabilities and efficiency will most certainly be judged by your respective companies, according to the rate of mortality experienced on lives accepted on your recommendation. An examiner, whose record discloses a low rate of mortality, will be considered in the most favorable light, and his services will be appreciated and sought after; while, on the other hand, one whose record shows an abnormally high rate of mortality need not expect recognition or preferment from life insurance companies—he, most certainly, will not be sought after to perform the remunerative and important work which his carelessness and bad judgment have lost to him.

I would now like to refer specifically, for the benefit of the younger members of the profession, to a few points which I think should receive special attention in making an examination of an applicant for insurance.

Read over carefully each question proposed in the medical report form, and give an answer commensurate with its importance.

If a double question be asked, do not, as ninety per cent. of the examiners have done to my knowledge, answer the first part, and omit to answer the second part, and thus necessitate communication from head office. Ex. gr. "State the rate and quality of the pulse." The rate will be given, but invariably the quality will be omitted.

If an applicant has had one of the númerous diseases which are mentioned in the blank do not simply state the fact of its occurrence, but make careful enquiries and record details, such as origin, date, severity, duration, effect upon the constitution, and give your own opinion as to its probable hereafter effect upon the applicant's life.

A very easy, but very unsatisfactory, answer, and one which it would appear the profession delight in giving, is "don't know." This answer should rarely, if ever, be accepted, as positive or negative information should be forthcoming. Take for example the case of an applicant whose father and mother are dead; you ask at what ages, and from what diseases, they died. The very first answer that will come to the applicant's lips is "don't know," but by judicious, careful, tactful questioning, you will, in ninety cases out of a hundred, be able to determine the approximate ages at death and the diseases from which they died. If he cannot give you the information he will be able to suggest some member of the family who can. should be followed up. The same remarks apply to the history of an applicant's grandparents, which history I know to be most The applicant, himself, in all likelihood, will know very little concerning his grandparents, but, if either or both of his parents are alive, the desired information can and should be obtained from As the examiner is paid a good average fee for his examination he should not hesitate to undertake the trouble involved to secure necessary and exact information.

Heredity is a subject which has had much fanciful speculation, but as to its influence on posterity there can be no doubt whatever. Where a trace of consumption exists in the family record it should be minutely enquired into, and, in addition to the applicant's own immediate family history, the following additional history should be secured :-

- (1) The parents', brothers' and sisters' ages, and state of health, if living; or, if dead, ages at death, previous health, and causes of death.
- (2) The same information regarding uncles, aunts and grandparents.
- (3) The applicant's mode of life—active or sedentary—environments at home and in connection with avocation.
  - (4) Whether subject to colds, cough, etc.
  - (5) Use of stimulants.
  - (6) Weight compared with height; chest expansion.

Consumption is one of the most tatal of diseases and deaths

resulting from it are more numerous in life insurance companies than from any other single known disease. Although exhaustive personal examination may reveal nothing whatever abnormal, two cases of the disease in a man's immediate family history will usually be sufficient cause for rejection.

The history of syphilis in an applicant or his ancestors is a most serious matter. It is a disease of a most dangerous and insidious character, and an applicant personally exhibiting a history of it should invariably be rejected. After an apparent cure it may recur on the slightest exposure, and its influence is felt in many successive generations. One author has said, "In its wake, resulting from immoral degradation and the loss of constitutional vitality which it occasions, follow pauperism, licentiousness, blindness, deafness, diseased kidneys, lungs and heart, melancholia, headaches, neuralgia, rheumatism, epilepsy, chorea, consumption, discoloration of the complexion, scorbutic scars upon the lower extremities, and a disposition to ocdema and dropsy."

Insanity is another disease which, if there be the slightest history affecting the applicant himself, or of any members in the family, should elicit most careful and searching enquiry. It is well known that any nervous disease in the parent may produce epilepsy in the children. Pietzel says, "The tendency to commit suicide has been transmitted from parent to offspring (usually from father to son) for several generations, and, strange to say, this tendency is frequently manifested about the same period of life in all members of the family—any nervous disease in a parent may produce epilepsy in the children. Hysteria, chorea, obstinate incuralgia, following even simple nervousness." Where there is any history of insanity the following points should be carefully analyzed:—

- (1) Whether the applicant has, is now, or is likely to, come under severe mental strain, from business, domestic relations, or any other conditions.
  - (2) His past and present habits of life.
- (3) The origin, duration and severity of the trouble which gave rise to the insanity in the applicant or his connections.

A few words on habits. Applicant's addicted to the excessive use of alcohoiic stimulants should not be recommended. Other improper habits, such as opium, cocaine, chloral, etc., are sufficient to debar a person from obtaining life insurance. Intemperate men rarely confess the extent of their indulgence to the examining physician, but in private consultation they freely unbosom themselves. The examiner, therefore, has to probe carefully and deeply to as-

certain the applicant's habits. Such an answer as "temperate or moderate," are merely relative terms, and do not give a clear, intelligent and definite conception of an applicant's habits. The examiner should report:

- (1) What liquor, if any, the applicant drinks.
- (2) His daily habit. At what time in the day is liquor partaken of.
  - (3) His past habits.
- (4) Whether he has undergone any special treatment for the liquor or drug habit.
- (5) If he has any connection with the sale or manufacture of intoxicating liquors.

Those who have taken any special treatment for the liquor habit should be promptly rejected.

The reputation of a physician may suffer very seriously in consequence of a perfunctory examination. I have heard an applicant boast, when I have requested him to strip so that a proper examination of his heart, chest and lungs might be made, that "Doctor ..... of the ..... Assurance Company, simply placed his ear to my chest over my vest," and on other occasions I have been told that the examining physician did not even go so far as that, but simply gave the applicant a punch on the breast and one on the back. Such an examination must necessarily seriously injure the professional reputation of the physician, and reflect injuriously upon the company for employing such an examiner. The applicant should at least strip to the waist. Many diseases of the chest and abdomen have been brought to notice by variations from the healthy condition of the skin. A healthy man invariably has a healthy skin. Note should be made as to whether the skin is moist or dry; pale, blanched or livid; jaundiced or of that earthy hue which is suggestive of serious organic disease so closely associated with disordered nutrition, emaciation, sclerotic affection. The appearance and development of the chest should be considered and examined-whether enlarged and bulging or contracted and depressed.

It not infrequently happens that you are called upon to make an examination expeditiously and under adverse circumstances. The physician, if possible, should have the applicant come to his office where he can perform the examination privately and carefully, and where he can conveniently secure all the necessary instruments and appliances. Under no circumstances should a third party be present at the examination; nor should an examination be undertaken if ample time will not admit of every care and scope being exercised

Be suspicious of the agent or the applicant who endeavors to make you rush through with an examination. Don't be rushed. To my knowledge persons have been insured on an examination being made on the rush who would have been turned down had the usual careful examination been made.

The pernicious custom of making examinations in business offices adjacent to machinery, or where much noise and confusion are present, results in many errors, especially in the examination of the chest. A quiet place should be chosen, where any minute variation in the character of the cardiac or respiratory sound would be discernible.

Never allow any other person but yourself to fill in the report. This is in direct contravention of the rules of all properly managed life insurance companies—but there are some agents who will endeavor to be present at the examination, and are plausible enough to secure your consent to write down the answers to the questions. The result of this, not infrequently, is that material information is omitted, or interjections inserted which are purely the imaginations of the agent.

Life insurance companies are not charitable institutions. are business enterprises, and as such their affairs should be conducted in a defensible business-like manner.

There is another side to the subject, and that is that justice should be done to the applicant. Life companies do not desire risks which are not likely to prove profitable to them. On the other hand, it is a serious injustice to report carelessly or in such a way that the head office will form an improper opinion, detrimental to the applicant. If an applicant be rejected by a life company, that fact is registered in the offices of all the other life insurance companies, and will greatly weaken the applicant's chances of securing insurance at any other time.

In my observations I have noticed very unjust and foolish the part of the physician and applicant. on The applicant would tell the physician that he did not want the insurance, and ask him to make such a report on his life as would insure his rejection. The physician yields, probably because the applicant or the members of his family are his patients. What is the result? At some subsequent period the applicant desires insurance, but on applying is told that, owing to a certain previous condition of affairs, no company will entertain his application. An explanation follows that the statements previously made had been falsely stated by the applicant and physician. The result is that

the company is suspicious of the applicant's present statements, and refuses to entertain his application. It, however, upon investigation it is found that the doctor was implicated, he is, or should be, summarily dismissed from the company's service. An examiner should be above suspicion in this matter.

I have merely touched on some important features of life insurance, in so far as they concern the physician, but I think I have said sufficient to indicate the great responsibility which rests upon our profession in the discharge of one of the most important and sacred trusts committed to any class of persons. My conviction is that the system of life insurance is but in its infancy in this and other lands, and that, in view of the enormous money interests involved, the life insurance companies will expect the profession to be more in sympathy with their requirements, and that they shall exercise their best skill and judgment under every condition.

### ANÆSTHETIC NOTES.

SELECTED FROM NUMEROUS ARTICLES IN "THE MFDICAL PRESS AND CIRCULAR."

BY

#### H. CRAWFORD SCADDING, M.D.,

Physician to Victoria Hospital for Sick Children and St. John's Hospital.

I should like to say a few words about the administration of anæsthetics to children in surgical cases. Unfortunately, almost everyone seems to consider himself a born anæsthetist, and that when it is a question of giving an anæsthetic to a child he can perform that simple duty as well as, if not better than, anyone else. Without intending at all to detract from his own merit as an anæsthetist, he says to himself, "Anyone can give chloroform to a child!" Yes, that is quite true, so far as it goes. But it does not go quite far enough. The business is not completed until the child is given safe and sound to the parents again. And, upon my word, I sometimes wonder that this part of the arrangement does not more often fall through. That it does so seldom fail is, I fear, the result of good luck rather than good management.

I am glad to say that practical instruction in the administration of anæsthetics is now regularly given at St. Mary's Hospital, and the very fact of its being a needful course with us should suggest to students that the staff are of opinion that no man is born a master of the art, or even that he becomes one by attendance as a dresser or a spectator in the operating theatre.

A practitioner in the country pays me the compliment of requesting me to some down to perform some operation, and, asking me to fix a time, he often concludes his letter by saying, "My junior partner, or my assistant, will give the anæsthetic." I often wish that he wouldn't! If he is one of our old students, or if I am told that he has held some resident appointment, I possibly feel safer. But it often happens that I have to keep one eye on him and the other on the patient, and to do this is not to operate in comfort.

Young practitioners as anæsthetists may be classified according to their merit and abilities. There is, to begin with, Class A, which is composed of good administrators. This is a small class. Class B contains the nervous anæsthetists, and Class C contains the self-satisfied and reckless gentlemen. With your permission, I will, for the purpose of still further simplifying this grouping, place B and

C, the nervous and reckless men, together in one class, which I will call D. Class D is an extremely large class, for "D bad" comprises as well as describes the bulk of young practitioners as anæsthetists, and it is so because most of the self-satisfied members of it will keep saying to themselves, "Anyone can give chloroform to a child." There is but little hope for Class D. They go on till they meet with a catastrophe, and even this does not always stop them, or suffice to impress upon them a due sense of the importance or responsibilities of the office of anæsthetist.

I cannot attempt to explain the peculiarities of all the different varieties of Class D, but I may give a sketchy account of them. The "nervous" administrator sprinkles a few drops of chloroform on the mask, puts the bottle aside, and tries to feel the child's pulse. Then, having repeated the process two or three times, and finding that the child is, by chance, quiet, he tells me that I may begin. Unobserved, I give the child a little pinch, which makes him kick or cry. "Oh," says my friend, "I thought he was under; his reflexes are lost." Though I hold a different opinion, I say nothing, but stand patiently by until I feel sure that I may use my scalpel, without the entire household being thereupon disturbed by a piercing cry.

The reckless gentleman is, indeed, a terror! He positively slops the lethal fluid on to the mask. And when, shortly afterwards, he repeats the process, some of it drips through the soaking flannel and perhaps into the child's mouth. Some of it trickles into his eyes, or, like the patriarchal ointment, runs, metaphorically, down to the skirts of his garment. I say "metaphorically" from a desire to be truthful; for, as a matter of fact, I have never seen the chloroform actually run down to the skirts of the child's clothing. Perhaps because the child on whom chloroform is being administered ought to he, and is, lying flat. But I have seen the fluid soak into the hair, the pillow, and the mattress, and even form a little pool upon the floor. All this while the gentleman may be conversing with his chief concerning certain patients attended by him that day or subsequently to be visited. I suppose he has given chloroform a good deal-perhaps to a dozen or twenty children-so that he has become hardened in his work, and I sometimes wonder if, like the callous clown who was digging Ophelia's grave, he will break out singing.

When the anæsthetist is becoming conversational, I usually interrupt him by asking him in a suggestive manner if the patient is all right. Sometimes he sees what I mean by my question; but,

as might be expected, he more often does not. I need hardly say such a gentleman is a source of great anxiety. And I think there would be little blame if, on the conclusion of the operation, I declined the tea which the child's mother has thoughtfully prepared for me, and, instead, helped myself liberally from a small decanter on the sideboard.

The good anaesthetist minds his own business, and I can assure you that it is quite enough for him always, and occasionally more than even he can conveniently manage. He does not watch the operation, and he certainly does not speak an unnecessary word. To carry on a running or even an interrupted conversation with anyone while the patient is being anæsthetized he would, with me, regard as little short of criminal.—The Young Practitioner and the Sick Child, by Edmund Owen, M.B. Lond., F.R.C.S., in The Medical Press.

#### FURTHER CHLOROFORM FACTS.

If the evidence tendered before coroners in reference to deaths under chloroform could be accepted as scientifically accurate and trustworthy, then chloroform would certainly have to be regarded and treated as one of the most erratic and dangerous agents known to us. It is often stated, glibly enough, that the victim had not inhaled more than a couple of drachms or so before breathing ceased. This we flatly refuse to believe, experience leading us to the conclusion that the anæsthetist merely guessed at the amount, and took care to "guess low." Sometimes, as in the last case on which we commented, it is frankly admitted that five or six drachms were poured on to the towel-amply sufficient to cause alarming symptoms if any large proportion of the vapor found its way into the lungs within a comparatively short space of time. At an inquest held last week at Bisham, near Wigan, on the body of a student who had succumbed while chloroform was being administered for the purpose of dealing with an arm damaged at football, it was stated that only two-thirds of a drachm, that is to say, forty minims, had been used when respiration ceased, death being attributed to paraiysis of the respiratory centre of the brain induced by the anæsthetic. Although the method of adminstration is not described, we cannot help thinking that two-thirds of an ounce must have been meant, for it is inconceivable that the smaller amount could have determined dangerous symptoms, or indeed, any symptoms at all. The time will probably come when every case of death under an anæsthetic will be enquired into by a medical expert appointed by the Government. It is not so much the fatalities as the circumstances under which they occur that excite one's indignation.

#### CHLOROFORM IN ADENOID OPERATIONS.

The choice of an anæsthetic in cases of removal of naso-pharyngeal adenoids might have formed a useful, interesting, and practical subject for discussion in the Laryngological Section at the current meeting of the British Medical Association in Edinburgh. tion has again been drawn to the disadvantages of chloroform in such cases by the report of a fatal case under this anæsthetic in the Laryngoscope for this month. The patient, who was under the care of Dr. Hintrel, of Buffalo, N.Y., was a boy of eight years of age. The chloroform was administered carefully by a skilled anæsthetist. He was taken badly with vomiting and severe spasm of the glottis. On account of the vomiting and incidental delays, about one ounce of chloroform was administered in all. The administration was stopped in order to allow of the performance of the operation, the pulse at the time being good. The operation occupied but a very Just at its conclusion the boy gave a few hurried few moments. gasps, and respiration and pulse ceased at once. No post-mortem was allowed. In discussing the case Dr. Hinekl affirms that the brief anæsthesia usually required for the adenoid operation may be obtained in the majority of cases by nitrous oxide and ethyl bromide, or ether may be used, and his conclusions are as follows: (1) Statistics show an exceptionally high mortality from chloroform anæsthesia in the operation for the removal of lymphoid hypertrophies of the pharynx. (2) The observations of the Vienna pathologists show that sufferers from adenoids frequently belong to an abnormal constitutional type that has been found peculiarly susceptible to chloroform narcosis. (3) In view of the statistical and pathological data presented, the general use of chloroform in the operation for hypertrophied tonsils of naso-pharyngeal adenoids is inadmissible. views will probably accord with those held by the majority of laryngologists in this country. Nevertheless, we believe that chloroform is still largely used in adenoid operations.

#### THE LAST CHLOROFORM FATALITY AT BIRMINGHAM.

At the inquest on the body of the little girl who died at the Infirmary under chloroform after undergoing an operation for the removal of post-nasal adenoids, the jury added a rider to their verdict enjoining on hospital authorities to obtain the consent of

parents in writing before administering an anæsthetic. More to the point would have been a question as to why gas was not administered instead of chloroform, especially as many throat specialists hold that the latter anæsthetic ought never to be resorted to for such a short and trifling operation. Had there been a medical assessor he might also have asked sundry questions as to the precautions taken to avert the recognized contingencies associated with this particular operation. Unfortunately the report of the proceedings gives no information on most of the points one would like to have discussed.

#### A LADY'S VIEW ON CHLOROFORM ADMINISTRATION.

In one of the monthly reviews for this month a lady discusses the question of chloroform administration under the head of "Death and Torture under Chloroform." The burden of her complaint-for her article is an attack upon the present mode of administration—is that "chloroform is frequently administered in such a way as to cause extreme and unnecessary suffering "-and she brings charges against anæsthetists of "a certain school" whose practice is to forcibly stifle the patient into unconsciousness. This, we learn, is caused by the inhaler or cloth being held close over the nose and mouth, and when this is the case needless suffering, she affirms, is inflicted upon the patients. She speaks with scorn of the "school of stiflers," as she calls the anæsthetists who adopt this method, and further states that the only chance to effect any reform in this regard is to make it illegal for the inhaler or cloth in chloroform administration to be held nearer than a regulated distance from the face. The assertion is made that numbers of medical men object to the close method of administration, but that it is impossible for them to intervene, inasmuch as the anæsthetists would not listen to any remonstrance. Lastly, it is suggested that every patient should refuse to be chloroformed until it has been ascertained what method will be employed by the anæsthetist, and until a guarantee has been given that only an open cloth will be used. and that at a distance that will permit of entire freedom of respiration throughout the operation. It will be observed that both remarks quoted above and the suggestion are novel, but they cannot be taken seriously. Any attempt to generalize upon such a matter and draw up rules for future guidance would be found impossible from a practical point of view. Anæsthetists must be conceded the right of knowing their own business best, and they must be

left to employ that mode of administration which, in the interests of the patient, experience has taught them to be the safest. Of course, out of many thousand administrations there will be certain to be a few patients who have objection to make. But such complaints can only be regarded as illustrating the old saying that "it is impossible to please everyone."

#### DEATH UNDER CHLOROFORM AT EDINBURGH.

A death took place under chloroform at the Edinburgh Infirmary a few days since, the victim being an out-patient who had dislocated one of his finger-joints. In view of the method of administration which is almost exclusively resorted to north of the Tweed, the history of the mishap is instructive. The report says, "After the first few inhalations the patient began to shout loudly, kick about, and fight, and it required the force of four or five doctors to hold him down." This, we have often pointed out, is the invariable result when a patient is made to breathe the air so laden with chloroform vapor as to be suffocative. It is, therefore, not surprising to read further on that "signs of asphyxiation then set in," and the man died. When will anæsthesists learn that restlessness is a protest on the part of the patient against too strong a vapor? Probably not until many other victims have paid the penalty of an unscientific method of administering a powerful and, when unskilfully handled, lethal, drug.

# Selected Articles

THE STETHOSCOPIC AUSCULTATION OF PERCUSSION.

(Considerations upon the technique of this method applied to the stomach.)

By Dr. P. VILLARI.

THE delimitation of the stomach, especially in its pathological condition, has been, during the last few decades, the subject of profound study, particularly by Italian physicians, because all have been aware of the too frequent fallacious results of direct percussion of the stomach, which is surrounded by viscera almost equally resonant. The experience of the uncertainty of this method has made more urgent the need of surer means and indeed new methods for the delimitation of the gastric area have gradually been brought to light.

At the present time, the method of Frerichs and that of Piorry are preferred for this purpose.

Frerichs' method often gives rise to erroneous deductions. In the first place the different diameters of the stomach, especially if a tumour or other affection be present, may be changed by the tension from gas. In the second place the distension of the gastric walls can vary greatly, according to the employment of large or small quantities of effervescent powders. Moreover, in certain persons, it often occurs that the tympanitic resonance of the colon cannot be distinguished from that of the stomach, and so in practice it happens that the two resonances are added together, giving rise to wrong conclusions. Finally it is always possible to have an incontinence of the pylorus, which, as Ebstein has shown, makes an essential change in the condition found, since the gas, instead of remaining confined in the stomach, flows out into the bowel through the open orifice.

Piorry's method, which consists in fixing the inferior limit of the stomach, as that which has the greatest diagnostic value according to Maraghanc, is most applicable in practice. It has, however, its defects. First of all, we must introduce a proper quantity of liquid into the empty stomach, in order to produce the dull zone on the abdomen, which indicates, in the erect or half-sitting posture, the boundary of the greater curvature of the stomach. Further, not all patients can have this method tried on them, especially when their stomach will not tolerate the slightest distension from liquids. And lastly, according to the greater or lesser amount of liquid introduced into the stomach, its lower boundary is essentially changed.

Many other methods have been propounded, especially for fixing the greater curvature. Thus Leube uses a rigid gastric sound, which he introduces into the stomach and palpates its lower extremity through the abdominal walls. Ferber has thought of utilizing the noise of stomach splashing, called forth by little shakes upon the epigastric region. Purgecz adds to the sound a manometer which gives positive pressure as soon as it passes the cardiac opening; the rest of the sound, which still enters, shows the vertical diameter of the stomach. Schreiber introduces a sound with a bladder, which swells up the stomach. Mader proposes in doubtful cases to fill up the colon, from the rectum, with gas or fluids. All these methods, while having their good points, are difficult to apply clinically, and often give unreliable results.

The stethoscopic auscultation of percussion is a method which deserves to be counted among the best. It is, as I shall show, most reliable, and we can, without fear of erring, prefer it to all other methods. It must not be confused with auscultatory percussion, which consists in percussing upon the anterior or posterior wall of the thorax, or listening with the ear placed on the wall. The stethoscopic auscultation of percussion can be applied to all the organs of the thorax and abdomen.

The method is not of ancient date. In 1840 Canman and Clark, by means of a wooden stethoscope, listened to the different regions of the body, which they, percussing, caused to vibrate more or less. Experimenting thus on the different parts of the body, they affirmed that they could clearly limit the cardiac area and the liver, and also obtain important results for the spleen and kidneys in cases of ascites. Canman and Clark, in the application of their method, considered it a sine qua non that there should be two observers, one to listen, the other to percuss. Bartk and Roger,

while recognizing that the stethoscopic auscultation of percussion is a great help in clinical diagnosis, held that it was difficult to apply in practice. Roncati likewise wrote that such a method was too complicated on account of the necessary presence of two persons. MacBride, by constructing a special stethoscope, made with two tubes of caoutchouc, curved so as to be united below and above, capable of being introduced into the auditory meatus, removed the greatest objection put forth by Canman and Clark.

In later years DeDominicis, and especially Bianchi, have studied the question of the stethoscopic auscultation of percussion. The latter established the fact that there is a general law which governs the development of phenomena already observed by Canman and Clark. He then extended the field of the clinical and practical applications of this method, to all the organs of the thorax and abdomen.

Bianchi starts out from the idea that any body percussed gives vibrations more or less deep, according as the body is more Thence comparing various bodies of different less dense. densities and percussing, we shall find that the vibrations caused by that percussion do not transmit themselves to the neighboring bodies. The observation is strengthened by an experi-Place rubber balls in contact with each other, so as to leave no space between; applying the stethoscope upon one and percussing it, one perceives a fairly marked vibration, which does not become more marked, when, instead of percussing the ball on which the stethoscope rests, the next ball is percussed. We perceive thus a distant percussion sound, but not clear and distinct vibrations. Keeping some of these balls and placing beside them others solid or full of liquid, we obtain still the same result. We conclude, therefore, that the vibrations of the percussed ball do not transmit themselves to the next one, and that the degree of the vibrations varies according as the body is more or less dense.

What happens in the experiment, says Bianchi, happens also in the human organism. We shall obtain, auscultating and percussing a given organ, only its vibrations; the other organs surrounding will not participate in any degree in the sound given to the auscultator. Moreover, the vibrations of a body are perceived, although the percussion may be upon an organ situated over it. The blow is thus transmitted to that auscultated, and since this is in communication with the ear, only its vibrations are perceived, these being caused by the transmitted blow. And so, in Bianchi's opinion, the stethoscopic auscultation of percussion is an important means of examina-

tion, which can, with exactness, fix the limits of any organ of the body.

The theory of Bianchi is not free from objections. Physics tells us that any body percussed gives vibrations; "no body can give sound without entering into more or less rapid vibrations." The vibrations, however, are not of themselves high or low. "The degree of the sound depends only on the number of vibrations executed in the unit of time by the sonorous body." That is to say, when the number of vibrations increases in the unit of time, the sound becomes more acute or high; whereas it becomes lower when this number diminishes. Moreover, the sonorous vibrations propagate themselves through all the bodies, solid, liquid, or gas-If Bianchi had experimented not with rubber balls, but with balls of glass or any other body, he would have perceived, percussing always the same ball, the vibrations upon all the others. Caoutchouc is a substance which transmits sound very badly. have taken different balls of glass, have suspended them each on a string, and have placed them in contact; percussing always on one ball. I have perceived the sound with the stethoscope upon all the others. The sound, however, was of maximum intensity upon the ball percussed and auscultated; of least intensity upon the most distant ball. Moreozer, the sound gradually diminished in intensity as I proceeded to auscultate upon the balls in order from that percussed; so that, even to an experienced ear, it was impossible, with closed eyes, to distinguish whether the stethoscope rested on the second, on the third, on the fourth ball, from that percussed. This agrees with the law of physics, that sound diminishes with distance. and that it is still further attenuated by the objects of any sort which are placed upon its path.

What happens in the experiment, happens also in the different parts of the organism. The different organs of the body are in close contact, and hence it follows that the vibrations caused in a given organ are transmitted to the organ near it. These vibrations are thus combined, acquire a special pitch, and especially to an ear not experienced in this kind of research, affect essentially the limits of any organ. Further, in the human organism, the depth of the sound of the various organs varies, according to their greater or lesser thickness, their volume, their tension, and their density.—

Translated from "Giornale Internazionale delle Scienze Mediche," by Harley Smith.

# Progress of Medicine.

## LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF

#### PRICE BROWN, M.D.,

Laryngologist to Western Hospital; Laryngologist to Protestant Orphans' Home.

At the opening of the section on Laryngology and Otology, at the recent annual meeting of the British Medical Association, at Edinburgh, the president of the section, Dr. Peter McBride, delivered the following address (*British Medical Journal*, August, 1898):

THE EXPANSION OF LARYNGOLOGY AND OTOLOGY.

The time is long past when there was a necessity for defending the existence of laryngology and o'clogy as special branches of study. It used to be said by the opponents of specialism that it tended to a narrowing of the mental horizon on the part of its votaries. The inclination now is rather to complain that the surgical limits of our specialties are being unduly extended. Indeed I have been told that a well-known teacher of surgery in this school is in the habit of demonstrating a very small area in the neighborhood of the umbilicus, which in the near future will represent the region upon which the general surgeon will still continue to exercise his skill.

Experience has shown that no charge of mental narrowness can be brought against the best workers in our specialties, but the danger of excessive extension is, perhaps, more real. Let us consider first how easy it is for the laryngologist gradually to extend his field, both on the medical and surgical side. You are all familiar with the indications of general disease which are often first detected by the laryngoscope. We discover, it may be, some lesion of the chest, nervous system, or even kidneys, which we feel ourselves perfectly able to treat, and so, unless the laryngologist be careful, he may be led to encroach seriously upon the domain of the general physician.

Turning now to the surgical aspect of the same specialty, the old rule used to be to call in a surgeon when external incisions were required. Of course to carry out this absolutely would be impossible, for tracheotomy is an operation we must all be prepared to perform when the indication is urgent. The laryngologist of to-day, however, does not confine himself to this. He performs thyrotomy and excisions, removes goitres and sometimes cervical glands, so that he thus annexes, as it were, a considerable portion of the general surgeon's territory. If these operations are to come within our sphere of work, then it almost logically follows that we shall in the near future undertake external operations on the esophagus and stomach, as well as extensive dissections involving the removal of tumors from the neighborhood of the large vessels of the neck.

In otology there is the same tendency towards extension on the surgical side. Thus the aurist no longer fears to open a cranial cavity, nor does he hesitate to perform such operations as ligature of the internal jugular; he has not, however, the same direct temptation as the laryngologist to enlarge his field at the expense of the physician. The same expanding tendency may be observed, too, in connection with the nose, although here there is not quite the same scope.

I am content, gentlemen, to place these facts before you. There is a good deal to be said for and against this growing desire of the younger specialists to annex fresh territory. It is a question for each one of us to decide for himself how far he shall take part in this policy of expansion. Only if it creates against us a certain feeling of antagonism on the part of physicians and surgeons we must not be surprised, and I think much could be done towards mitigating such antagonism by taking care that our position—be it in the van or rear of this movement—is logically unassailable.

Another direction in which our expanding tendencies have manifested themselves is in our immense literary activity. I suppose I shall not be considered far wrong in saying that most of the best that is written sooner or later finds its way into English, French and German, as being the most widely known languages, although we are well aware that much excellent matter makes its first appearance in Russia, including Poland, Scandinavia, Denmark, Holland, Spain and Italy. To most of us, however, only those works which appear in the three languages first referred to are accessible.

It may not be uninteresting to glance for a moment at the most striking national peculiarities of our literature. The Anglo-Saxon writer (whether European, American or Colonial) usually aims at

brevity, and on the whole I am inclined to think that there is a slight tendency to put points of purely scientific and theoretical interest on one side in favor of the more directly practical, and in some cases to dispense with all literary references to the subject treated of. In striking contrast to the Anglo-Saxon is the German In his work we find the most elaborate attention to detail, and a very strong tendency to discuss the subject from every possible point of view, and even then not always in the fewest possible words. His literary references to the works of his compatriots are generally full and accurate, but this cannot always be said of those to foreign literature, and withal he is not over tolerant to the foreigner who overlooks a Teutonic authority. Moreover, there is among Germans a great tendency to polemic writing, and sometimes even to personality. With all these drawbacks, however, we must admit that the best literature in our specialties at the present time is produced from Germany. It may be because of the large number of workers, or due to greater facilities afforded by the Government and circumstances of the country, but the fact remains. As we all know many excellent works emanate from French pens, and in the absence of polemical writing we have reflected the racial courtesy. It has sometimes appeared to me as if the amount of material did not quite justify the existence of all the journals which are devoted to our subjects in that language, but the frequent appearance of excellent, interesting and original articles in all of them must be fully admitted. In speaking of French journals, however, I cannot refrain from noticing the odious custom of interleaving advertisements with the text-a practice which certainly cannot conduce to the dignity of medical journalism.

Let us now turn from national to individual characteristics, for in the study of the individual we come nearer the forces which make for and against expansion.

The first and best type of author is undoubtedly represented by the man who has really something new and valuable to communicate. It may be the result of scientific research or of clinical observation, while sometimes it takes the form of valuable generalizations, deduced from facts either original or quoted from literature.

There are, however, numerous other and less praiseworthy types. We all know that in most instances diseases which are least amenable to treatment are those for which innumerable curative agents have been recommended, and further, how each new remedy is said to be followed by numerous successes, often occurring only in the hands of its inventor. When the method employed is harmless, little mis-

chief results, but when operative measures are advocated in this way a grave evil arises.

A danger of specialism has always been the tendency of some specialists to magnify the importance of the part of the body with which they are familiar, and I do not think that otology, laryn gology, and rhinology can plead that their votaries have been altogether guiltless in this respect. Specialism is only good so long as it rests upon a broad basis of anatomical, physiological and pathological facts; and so long as no attempt is made by writers to juggle with these facts in order to elevate the part at the expense of the whole, it would be ill-judged to give any examples, but no doubt works will occur to some here in which this mistake has been made.

Far be it from me to suggest that there are many writers who indulge in misrepresentation. Absence of the highest critical faculties, and a limited knowledge of general medical and surgical science, sometimes associated with an almost morbid desire to magnify the importance of a special organ, account for much writing which is ill calculated to bear the clear light of criticism.

Again, what I may call undue therapeutic credulity is responsible for much that, is scientifically worthless. It is but rarely, I trust, that lower motives, such as a desire to establish a temporary notoriety, and to benefit directly therefrom, actuate authors in our specialties. Still, it must be remembered that we are but human, and that there is no more certain way of establishing a reputation of a sort than by originating some new and startling theory, remedy or operative procedure. Under these circumstances, would it be surprising if some, driven by vanity, and others spurred on by hopes of aggrandizement, were to fall before the temptation?

Let us finally turn to another great difficulty which has arisen of late years, and which confronts the serious student, not only of laryngology and otology, but of almost every branch in medicine and surgery. It is, of course, necessary for every specialist to follow the literature of his subject, but perhaps the burden falls most heavily upon those who are engaged in lecturing and upon writers of text-books. All of you know how voluminous are the works devoted to our specialties; you are aware of the numerous journals which appear in French, German and English; there is further a considerable array of monographs, and finally we have an ever-increasing number of text-books. All this bears very heavily upon the conscientious reader, for it must be remembered that until a work has been read it cannot be classified or criticised. No separa-

tion of "wheat from chaff" is therefore possible without an immense amount of wasted time and energy. Among our large current literature there is much that is good, but more that is valueless. This may seem a rather sweeping statement, but if you will throw your mental glance back over recent years and compare the actually valuable additions to our knowledge with the amount written in the same period I am sure that you will agree with me that they are not proportional; indeed, we might not be far wide of the truth in calling them inversely proportional. It may be urged that the system of abstracting papers, now so largely in vogue, is of value in saving time and labor to the over-burdened student. No doubt this is to some extent true, and certain journals are, by employing a carefully selected staff of workers, enabled to present an epitome of all that is being done in various parts of the world. It is, however, necessary to warn readers that such abstracts are by no means always correct representations of authors' views, and it is perfectly certain that some periodicals which profess to give abstracts of current literature are lamentably defective, in so far that they confine their attention to reviewing only articles which appear in a few of the better known journals of each country. I have thus merely outlined some of the difficulties which every experienced reader can fill in and amplify for himself. The important question I wish to bring forward is. Can this be remedied? It appears to me that it might be by adopting some such method as this:

- 1. The establishment of a body composed of men of ripe experience and wide reading in each country equivalent in position to the collaborateurs of the Centralblatter and journals of to-day.
- 2. The selection of two or three of those collaborateurs to form a small central committee in each metropolis,
- 3. The employment of a staff of abstractors composed of young workers.

The advantages of such a scheme would be obvious. The collaborateurs would each have assigned to them certain journals, and it would be their duty to send in a return to the central committee, indicating the names of the papers which were considered worthy of a place. The list so accumulated would be again checked by the central committee, and in this form handed over to the abstractors.

It will be seen that the adoption of some such method as this would produce a periodical of reasonable dimensions, because many published works would probably be rejected by those responsible or selection. Of course, we have something similar in the various

year books, but it must be remembered that the reading specialist can hardly accept any single author as his guide; while, on the other hand, he might be quite satisfied to have the important works chosen for him by a strong, responsible committee of each country.

In conclusion, I beg to say that I desire in no sense to reflect upon the excellence of works which endeavor to give, and in some cases actually do give, abstracts of nearly all papers which are written on our subjects. In doing so, however, they must give the bad with the good, for, although every now and then we find an abstractor bolder than the rest who describes a paper as containing nothing new, yet a desire to avoid discourtesy prevents this being frequently done. If it were once understood that only papers of importance were to be abstracted an immense amount of space would be saved, and a most valuable publication would result, which, if it were published in English, French and German, ought to be commercially as well as scientifically successful.

### TRACHEOTOMY UNDER LOCAL ANÆSTHESIA.

B. Franckel (Berl. Klin. Woch., June, 1898) has performed twenty-three tracheotomies under cocaine during the past three years. Many of these have been performed under circumstances in which it would have been dangerous to have given a general anaesthetic.

His plan has been to inject hypodermically a 20 per cent. solution in two places near the site of operation; or a 10 per cent. solution in four places. In children the 10 per cent. solution was always used. In adults the amount injected was .04 grm. of cocaine.

Patients dreaded the cocaine less than the chloroform. One of the advantages of operation under local anæsthesia is the removal of all necessity for undue haste.

### MALIGNANT POLYPUS OF THE NOSE.

Hunter Mackenzie (Brit. Med. Jour., July, 1898) gives the history of a case of this exceedingly rare disease. The patient, female, aged 60, had nasal polypi on one side and malignant polypus on the other. The sarcoma was not discovered until late in the disease. Several attempts, by snare and galvano-cautery, were made to remove the growth. Only portions were taken away, and each time the bieeding was severe. Finally the patient died. Microscopical examination proved it to be a round-celled sarcoma.

The point that Mackenzie dwells on particularly is the impor-.

tance of early diagnosis. This depends mainly on two facts—1st, the occurrence of repeated attacks of bleeding; and, 2nd, the site of attachment of the neoplasm. It is usually sessile, and is attached to some portion of the septum.

### LARYNGITIS EXUDATIVA.

Schech (Munch. Med. Woch., June, 1898) gives an account of this disease. In it there is inflammation of the laryngeal mucous membrane, accompanied by exudation, which may either be apthous, vesicular, or herpetical. The disease may be either acute or chronic. It likewise very frequently recurs. Although the prognosis is generally favorable, death will sometimes arise from asphyxia. Treatment by gargles and sucking ice. Arsenic should be given internally.

## PEDIATRICS.

IN CHARGE OF

### W. B. THISTLE, M.D., L.R.CP., Lond.,

Lecturer on Clinical Medicine and Diseases of Children, University of Toronto; Physician to Victoria Hospital for Sick Children; Clinical Lecturer on Diseases of Children in the Woman's Medical College

AND

### W. J. GREIG, B.A., M.D.

Nothing of greater interest or of more importance has occurred in pediatrics during the year than the collective investigation by the American Pediatric Society on the subject of Scurvy. Subjoined is an epitome.

American Pediatric Society's Collective Investigation on Infantile Scurvy in North America.

The information on which the report is based was obtained from the personal experience of the members of the committee and from answers to circulars sent out to the professors of pediatrics in all the American medical colleges, and to all physicians applying for them, or who had reported cases in the journals.

Altogether 379 cases were gathered. The most important information obtained may be shown under the following headings:

Age. The disease is most apt to develop between the ages of seven and fourteen months. The youngest child was one of four weeks, and the oldest of nine years.

Social position. The fact that eighty-three per cent. of the cases occurred in private practice, and in 303 cases the hygienic surroundings were said to be good, shows that the disease is more apt to occur among the well-to-do.

Previous Health. In the majority of cases the health had been good. In 118 cases the child had suffered from various diseased conditions; most of them must be regarded as accidental and to have had no causative relation to the scurvy.

Diet. This is the most important etiological factor. In answer to the question "Do you believe that the food had anything to do

with the development of the disease?" there were affirmative replies in 275 cases, negative in 24.

### Food Given-

Breast milk alone in	10 (	cases.
" with raw milk and amylaceæ	ı case.	
" sterilized milk and amylaceæ	I	44
Raw milk	4 (	cases.
Milk (nothing said about heating) alone	8	"
Peptonized milk	4	**
Amylaceæ with peptonized milk	4	"
Sterilized milk alone	68	"
" " with proprietary foods	2 I	64
" " amylaceæ	8	"
" " peptonized	10	"
Pasteurized milk alone	16	"
" " with proprietary foods	2	"
" " amylaceæ	1	case.
" " peptonized	1	"
Peptonized milk alone or combined	14	cases.
Amylaceous Food (not proprietary) alone	6	"
In various combinations (nine of oatmeal)	18	"
Table food (nothing else mentioned)	11	"
" with condensed milk	r	case.
Mellin's food (nothing further stated)	42	cases.
" with milk condensed, sterilized or pasteurized		**
Malted Milk (nothing further stated)	42	41
" with cream or amylaceæ or other foods	4	**
Condensed milk alone	32	**
" with milk, with cream, with table food or	-	
with other proprietary food	6	"
Reed & Carnick's Soluble Food	13	"
Imperial Granum	6	"
Liebig's Food alone	I	case.
" " with milk	1	"
Lactated food; alone 3, with condensed milk	I	"
Nestle's "has " 1, " sterilized peptonized milk	1	+6
		•

Among other articles mentioned, one case of each: Gardner's food, Robinson's barley, Ridge's food, Brush's food, animal broth, Bartlett's pepsinated food, lactopreparata with malted milk.

In a number of instances the writers simply said "Proprietary foods." In all 214 cases, or 60 per cent., were fed on these foods.

Symptoms. Pain in motion or handling was present in 314 cases, and was felt in different parts in different cases.

Pain when at rest	91	cases.
Interference with motion, true or false paralysis	319	"
Rigidity present in	96	"
Weakness of the back in	97	"
Depression of the sternum	34	"
Swellings in or about joints	165	".
Shafts of limbs involved in	197	"
Gross results—Swellings in soft tissues	97	"
" subperiosteal	114	**
" in both places	16	"
Gums—Unaffected in	16	66
Affected in	313	"
Form of affection—Swelling in	293	"
Sponginess in	249	**
Discoloration in	259	"
Bleeding in	188	**
Ulceration in	91	"
Cutaneous hamorrhages present in	182	**
Mucus " " "	164	
Fever (mostly slight) " "	182	·
Anæmia present in	254	4.6
Blood examinations were made in	15	"

Hemoglobin generally reduced, some only 35 per cent.

Red blood corpuscles also reduced in number.

Rickets was associated in several cases, but the committee express the opinion that it was an accidental association.

Diagnosis. The disease for which infantile scurvy was repeatedly mistaken was rheumatism. The apparent paralytic condition was also a cause of error.

Duration of disease before treatment was commenced varied from one day to two and a half years.

Duration of treatment before marked improvement was noticed, varied from one day to three months. The greatest number of improvements occurred during the first two weeks.

Duration of treatment before recovery was complete varied from one day to nine months. Greatest number occurred during the first four weeks.

Treatment. The results of treatment may be stated as follows:

1st-Cases recovering with drug only (no change in diet)..... 2nd-Cases recovering with fruit juice alone (no change in diet) 3rdheef ∡th and fruit juice combined (no change in diet)..... 5th-Cases recovering with change of diet, often including fruit and beef juice with or without drugs..... 25 6th—Cases recovering under change of diet often including beef juice and use of drugs (no fruit juice)..... 20 7th-Cases recovering under change of diet often including beef 1st. That the development of the disease followed in each case the prolonged use of some diet unsuitable to the individual child and that often a change of diet which at first thought would seem to be unsuitable may be followed by prompt recovery.

2nd. That, in spite of this fact regarding individual cases, the combined report of collected cases makes it probable that in these there were certain forms of diet which were particularly prone to be followed by the development of scurvy. First in point of numbers are to be mentioned the proprietary foods.

3rd. In fine, that in general the cases reported seem to indicate that the farther the food is removed in character from the natural food of the child the more likely its use is to be followed by the development of scurvy.

Fatal cases. Twenty-nine deaths occurred in the 379 reported cases. It is difficult to determine in how many of these the scurvy itself could be held responsible for the death; probably in few, if any.

Autopsies. The reports of six were handed in and the following were some of the pathological conditions found in the different cases: Hæmorrhagic spots on the pericardium and surface of the liver; subperiosteal hæmorrhage of the long bones; separation of the lower epiphysis from the shaft of the left femur; sub-pleural hæmorrhages; broncho pneumonia; hæmorrhage into the muscles of the left thigh; swelling about one knee and both ankles; well-marked exudative nephritis; maceration of the lower end of the shaft of the femur; right leg from knee to ankle stuffed with a puffy mass replacing normal tissue; bloody serum in pleural cavity; perforating ulcer of stomach; tubercular (?) process in veritoneum.

Report signed.

J. P. CROZIER GRIFFITHS, M.D., Philadelphia, CHAS. G. JENNINGS, M.D., Detroit, JOHN LOVETT MORSE, M.D., Boston,

### Minority Report.

- (1) From a study of this report and from due consideration of other known facts, scurvy appears to be a chronic ptomain poisoning due to absorption of toxins.
- (2) It follows the prolonged use of improper food, and abnormal intestinal fermentation is a predisposing factor.
- (3) Sterilizing, pasteurizing, in cooking of milk foods is not, per se, responsible for the scurvy condition.
- (4) Change of food, administration of fruit juice and treatment of any underlying cause is the rational therapeutic procedure in scurvy.

(Signed) Augustus Caille, M.D.

The presentation of this report was followed by an animated discussion, first on the wisdom of publishing the conclusions, and secondly on the effect of sterilization and pasteurization of milk in producing scurvy. The report was finally adopted by a vote of 18 to 1.

The report shows that sterilization and pasteurization, especially the former, are not perfectly harmless procedures. But it must be acknowledged that, looked at from the point of view of utilitarianism, "the greatest good to the greatest number," sterilization and pasteurization cannot be discarded at present. They have certainly done more good than harm. In the discussion Dr. Booker pointed out that their use is confined to the months of June, July, August and September, and that they should not be used during the winter months unless the milk supply is suspicious in character—for instance, when we have reason to suspect that the milk supply is infected either by dirt, infectious disease or tuberculosis.

In this opinion the reviewer cordially agrees. W. J. G.

## GENITO-URINARY AND RECTAL SURGERY

IN CHARGE OF

EDMUND E. KING, M.D. Tor. L.R.C.P. Lond.,

Surgeon to St. Michael's Hospital; Physician to House of Providence and Home for Incurables; Assistant Surgeon, Toronto General Hospital; Surgeon to the Emergency Hospital.

TREATMENT OF DEEP URETHRAL STRICTURES BY INTERNAL URETHROTOMY.

Dr. Gwilym Davis (University Medical Magazine, August), in a paper on this subject, says that the prevailing sentiment of the profession is against the employment of internal urethrotomy for deep strictures of the urethra—that is, for those involving the bulbous and membranous portions—and he cites authorities in support of this statement. He compares internal with external urethrotomy and expresses his belief that the comparative value of the two methods is slightly in favor of the internal method for effecting a cure.

"The ultimate ground," he says, "on which a decision must be reached is the relative dangers of the two procedures. There are two-hæmorrhage and sepsis, with or without urinary infiltration-As regards the former, I have heard of no deaths caused by it in internal urethrotomy, nor have I had any trouble from that source, but I have heard of a death from hæmorrhage after external urethrotomy, and have felt it necessary, not only to most carefully ligate all possible bleeding points, but also to pack the wound snugly and retain the packing in place for several days. The question of urinary fever and sepsis is the real buttress on which the opposition to internal urethrotomy rests. The fear of this is largely a heritage from former practice rather than from recent results. It is practically eliminated by modern antiseptic methods. I am hardly prepared as yet to admit that urinary fever is due solely to an infectious element. Chills sometimes follow too closely on urethral manipulations to exclude other agencies. It is more likely to be due, at least to some extent, to nervous disturbance in addition to sepsis. Urinary infilration is to be avoided by leaving a catheter in the bladder for three days, at which time the wound will have been so closed

by plastic material as to prevent the urine gaining access to the tissue spaces. Sepsis is prevented by rendering the urine antiseptic, by administering antiseptics, by the mouth as well as using them locally, and by observing a careful technique."—N. Y. Medical Journal.

# THE URETHRAL LENGTH AS DIAGNOSTIC OF PROSTATIC ENLARGEMENT.

- Dr. E. L. Keyes sums up a paper read before the American Association of Genito-urinary Surgeons as follows:—
- (1) The urinary distance varies in the adult healthy male from something over six to something under ten inches, but may be honestly averaged at eight inches.
- (2) The shorter lengths are found in short individuals having a small penis. A large organ naturally contains a long urethra, and this is most certainly the case if the individual be tall.
- (3) The age of the individual seems to cause a very moderate increase in the urethral length, irrespective of disease, or perhaps even of individual size.
- (4) In prostatic hypertrophy the urinary distance averages more than eight inches, and is longer in cases of peripheral general hypertrophy than where the enlargement is median, or in cases of bar.
- (5) In a doubtful case a consideration of the urinary distance may become an important element of diagnosis.—Am. Jourl. Med. Science.

## Editorials.

## INTERPROVINCIAL RECIPROCITY.

E are pleased to be able to say that there were many pleasant features in connection with the recent meeting at Quebec, not the least among them being the hospitality shown by the physicians of the city and vicinity. We wish, however, to refer especially to the question of a fixed standard in things pertaining to medical education for the whole Dominion, with machinery to confer a license conveying a right to practise in any or all the provinces.

The most feasible plan seems, by almost common consent now, to be a common standard for our various curricula, and inter-provincial reciprocity. The difficulties in the way seem smaller as we study them more carefully, and the earnest desire shown by prominent physicians in all the provinces is likely to produce good results in the near future. All in attendance at the Quebec meeting appeared to agree as to the desirability of having a common license for the whole Dominion.

# THE MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

THROUGH an unfortunate accident certain editorial comments on the meeting of this association for 1898, together with a circular letter from the secretary referring to the same, failed to appear in our July issue. We were never particularly enthusiastic over the meeting, but we had no desire to ignore it.

The meeting was held in Quebec, August 17th, 18th and 19th, and was a fairly good one although the attendance was small. It has been with many a matter of regret that the meetings of recent years have been in many respects disappointing.

Is it not possible to have in this Dominion a Canadian Medical Association which will be a credit to our country? We think it is. We have had some excellent meetings—notably at Montreal, Ottawa, Hamilton and Toronto. Why shouldn't they all be good?

That is not an easy question to answer; but it is generally understood the peripatetic feature has much to do with the poor success that has attended many of our meetings.

Some, looking for a remedy, have suggested that one city should be selected as a permanent place of meeting; and that there should be a committee of management, to some extent, at least, permanent in character. We might put these ideas in definite shape by naming Ottawa as the proposed place of meeting, and recommending a committee of management composed of the president, secretary, treasurer, and nine other members, with a rule that three shall drop out each year, when three others shall be elected to take their place.

## THE MEETING OF THE BRITISH MEDICAL ASSOCIATION.

THE meeting of the British Medical Association for 1898 was held in Edinburgh, July 26 to 29, and is said to have been an excellent one in all respects. It is pleasant for us in Canada to notice the many complimentary references to the meeting of last year in Montreal, which were made at various stages of the Edinburgh meeting.

A fairly good Canadian contingent appeared at Edinburgh. Among them were the following: Drs. Cameron, Goldie, Macallum, McIlwraith, Peters, Porter, Primrose, Reeve, and Smith, of Toronto; Drs. Buller, Gardner, Grace, Gunn, Hall, Lachapelle, Macphail, Roddick, Shepherd, Smith, Sterling, and Stewart, of Montreal; Sir James Grant and Dr. Church, of Ottawa; Dr. Harrison, of Selkirk; and Dr. Neu, of London. Dr. Grasett, of Toronto, had gone over and intended to be present at the meeting, but was forced to return much sooner than he expected, on account of the serious illness of his only son (since recovered). There were registered altogether 1914, this number including about sixty-five foreign guests.

The British Medical Journal, August 6, says editorially: "Many circumstances combined to render the Edinburgh meeting, from every point of view, one of the most successful which the Association has ever held. Edinburgh is a great medical centre, and is always regarded with loyal affection by those who have been introduced to the study of medicine within its walls. The great traditions of the Edinburgh Medical School are so well known to the whole medical profession that all were certain that the scientific work of the meeting would be of more than ordinary distinction; while the

beauty of the city itse'f, and of the surrounding country, not less than the many historical and literary associations of the northern Athens, appeal to the love of nature and of literature for which our profession is still distinguished."

## DISPOSAL OF THE SEWAGE OF TORONTO.

R. CHAS. SHEARD, the Medical Health Officer of Toronto, recently presented to the City Council an able and elaborate report on the disposal of the sewage of the city, ending with the following conclusions:

Firstly—Some form of intercepting or trunk sewer will undoubtedly be required to conduct the sewage to outfall works.

Secondly—The drainage of the greater part of the City of Toronto is generally southward and eastward, and the character of the land in the eastern portion of the city appears to be better suited for sewage treatment than that of the western portion.

Thirdly—Pumping of the sewage either in whole or in part will apparently be required.

Fourthly—Chemical treatment of sewage, while it may produce a clarified effluent, will not accomplish complete purification. Precipitation and filtration of the effluent, or filtration of the sewage in its entirety, by properly constructed filter beds, or broad irrigation, appear to give the best results.

Fifthly—In addition to the original cost of sewage works, including intercepting sewers, additional cost for maintenance will be necessary, which, in the various cities and towns where sewage disposal works are operative, is between thirty and forty cents per capita.

Whether the treatment of the city sewage can be carried to completion in one operation, or whether it should be accomplished by degrees, but still as part of a systematized plan, are questions which are largely controlled by financial and engineering considerations.

### THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

IN our last issue we called the attention of the reading portion of the profession to this library which has now been in existence for ten or eleven years. Though first contemplated by a few of our prominent Toronto confreres, it has been a provincial library from the beginning. The Ontario Medical Association, in recognition of its advantage to the profession throughout the prov-

ince, has shown its fraternal interest by voting a substantial bonus each year. Long may it continue to do so! and be an annual reminder to every one of us that we too may do something to encourage an institution whose only aim is the advancement—not only of the actual members of the association, but also of the individual members of the profession throughout the province. In fact, our provincial brethren are treated in a more liberal manner than are the city members of the association; while the latter are compelled to subscribe for stock in the association, and pay an annual fee, the former have only to write to the librarian and ask for any book or books on the shelves, all the cost entailed being the charges of boxing and express. In this way any physician in good standing may consult the authorities on any subject at the cost of a trifle. Who among us would not give considerable to have at our service the latest literature upon puzzling cases which turn up every few months? The library, with its four or five thousand complete volumes, and its list of monthly and weekly journals, offers the opportunity which we trust our rural and urban readers will promptly and persistently take advantage of.

There are still a number of physicians, resident in Toronto, who have not joined the association, while others, who have become members, have not given it a very loyal support. A few such as Drs. Graham, Greig, Powell, Hamilton, Wilson, Ross, Machell, and others have done a great deal of work, the magnitude and importance of which are, we fear, not properly understood and appreciated. Let others of us do more in the future to assist them than we have in the past.

# THE MEDICAL DEPARTMENT OF THE ARMY IN THE UNITED STATES.

UR neighbors in the United States were not in any way prepared for the late war waged against Spain. Under such circumstances we need not wonder that grave defects were found in the organization and equipment of the medical department of the army. The Medical Record of July 30th contained an editorial which reflected very seriously on the efficiency of this department in the Cuban campaign, and practically accused Surgeon-General Sternberg and his staff of incompetency. It quoted from the New York Sun to show that the sick and wounded were in many instances sadly neglected.

Surgeon-General Sternberg and Lieut.-Colonel Senn sent two communications, which were published in the *Record* of August 6th, explaining the enormous difficulties which the department had to contend with, and describing the vigorous efforts which were put forth to overcome them. Dr. Sternberg states that General Shafter's army at Tampa was well supplied with medicines, dressings, etc., for field service, but a large proportion of these were left behind on account of insufficient transportation facilities. The men with their guns and rations were first hurried to the front, while the medical supplies were forwarded more slowly.

We think the department should hardly be blamed for errors in transportation which occurred through no fault of the medical officers. There can be little doubt now that the reports in the Sun, and other daily papers, were grossly exaggerated. We believe in this country that Sternberg, Senn and most of their brother officers in the army medical department are thoroughly competent and conscientious, and in the recent war did the best that mortal man could do, under the circumstances, in the way of providing relief for the sick and wounded; and are somewhat surprised that a leading and influential medical journal in their own country should assist the lay press in pressing against them such serious charges.

(Since the above was written articles have appeared in subsequent issues of the *Record* which do full j ustice to the heads of the Medical Department, and place the blame where (as we have indicated) it properly belongs. The *Record* evidently has no animus in the matter, but is simply anxious "to get at the truth.")

## Meetings of Medical Societies.

### CANADIAN MEDICAL ASSOCIATION.

THIRTY-FIRST ANNUAL MEETING, HELD AT QUEBEC, AUGUST 17, 18, 19, 1898.

FIRST DAY-AUGUST 17TH.

THE thirty-first annual convocation of the Canadian Medical Association began August 17th, under most auspicious circumstances.

It was in the historic city of Quebec that the association first saw its birth, and it was particularly appropriate that it should again this year revisit the place of its birth, in view of the important matter to be brought before it, viz, interprovincial registration, a subject of great importance to the medical profession in Canada. The meeting thus promised to be an epoch-making one in Canadian medical history.

The city of Quebec 15 one that, on account of many and varied associations, is always of interest to the traveller, but it is not without its special interest to the medical man. It is sufficiently supplied with hospitals, the Jeffery Hale, the Marine, and the Hotel Dieu, the last being, for Canada, of very ancient date, going back Laval University, too, where the meetings were held, two centuries. was founded, in embryo at least, by Mgr. de Laval, archbishop of Quebec, about the same time, and possesses one of the largest medical schools in Canada, the students being almost entirely of French-Canadian extraction, and the teaching based upon the Parisian The university has well-equipped chemical and physical laboratories, and a fair museum. Its glory, however, is its library, which, in some departments, is the best in Canada. It is particularly rich in books bearing upon the early history of Canada, many of the editions being unique and almost priceless.

The meeting was held in the Convocation Hall of Laval University, being called to order at 2.30 p.m. by Dr. Thorburn, of Toronto, in the room of the retiring president, Dr. Moon, who was

unavoidably absent. After addresses of welcome from Alderman Foley, acting-mayor, Drs. C.S. Parke and A. M. Ahern extended to the association a hearty greeting on behalf of the city of Quebec and the University.

Dr. F. N. G. Starr, of Toronto, read the minutes of the last meeting, and Dr. J. M. Beausoleil, of Montreal, was then inducted into the presidential chair.

Owing to the large proportion of the local French-Canadian members present, the somewhat unique feature presented itself of papers being read in French as well as in English.

Dr. Beausoleil, in his presidential address, thanked the association for the great honor it had done him in electing him to the highest position in its gift, an honor that he regarded as conferred upon him, not so much on account of any particular merit of his own, as by way of compliment. He referred to the fact that the association was founded at Quebec in 1867, the year of the Canadian Federation, the object being to promote medical science in Canada and to unite the profession. The first president was Dr.. now Sir, Chas. Tupper, recently Premier of Canada. The subject that he dwelt particularly upon was that of the interprovincial registration of physicians. It is deplorable that a physician in one province should not be able to practise his profession in a neighboring one, and, if the association could this year bring about the destruction of this aromaly, it would be a noteworthy year in the annals of the society. It might be that a lawyer in Quebec could not practise in Ontario, inasmuch as the legal profession worked under different codes, but medicine is the same the world over, and the present restrictions should be done away with, so that a degree in medicine from any British or Colonial university should carry with it the right to practise anywhere in the Queen's dominions. As it is now. owing to the provisions of the British North America Act, which confederated the provinces, each province has autonomy in the matter of education. However, there is now a majority in favor of uniting forces and forming a Dominion board. Ontario alone hesitates, as special legislation is necessary in her case. Still, it begins to look as if this difficulty might be overcome. In conclusion. Dr. Beausoleil expressed the hope that he might, even if in a very small degree, have contributed to this very desirable end.

A vote of thanks to the president was moved by Dr. T. G. Roddick and seconded by Dr. Mullin, of Hamilton.

The regular business was now proceeded with, a large number of new members being elected.

The first paper, by A. Rosebrugh, of Toronto, was in his absence read by title, "The Duty of the Medical Profession in the Question of the Treatment of Inebriates," and was referred to a committee consisting of Drs. Adami, Thorburn, and Muir, with instructions to bring in a finding. (Will appear in Canadian Practitioner.)

Dr. G. Sterling Ryerson, of Toronto, then read a paper on "Monocular Diplopia," which, he said, deserves more attention, being only very inadequately referred to in the text-books. more common, he thought, than was suspected. The overlapping of images was present in monocular astigmatism. He recognized three classes of cases: (1) Those dependent upon diseases of the refractive media, such as astigmatism, facets on the cornea, opacities in the humors, punctures or dislocations of the lens; (2) those with traumatism about the zonule of Zinn, or disease of the ciliary body and iris; partial persistence of pupillary membrane is not often a cause; (3) disorders of the central nervous system. Dr. Ryerson recorded two cases. In the first, which he regarded as hysterical in character, there was diplopia of the right side, associated with right facial neuralgia, tinnitus aurium, augmentation and reduplication of the sounds heard. There was also hyperopic astigmatism. A course of potassium bromide and valerian relieved but did not cure. The second case was one of injury to the left side of the head, the patient remaining unconscious for several days. was diplopia of the right eye and blurring of the discs. was probably some protrusion of the posterior portion of the eve forward.

Dr. D. Marcil then read a paper in French upon "Septic Peritonitis Consecutive to Appendicitis, and its Surgical Treatment." • He reviewed the history of operative interference and made the somewhat startling claim that the first operation was done in Paris in 1893. He thought that some patients might be saved by operation even after general peritonitis had set in.

Dr. Smith then showed pathological specimens, among which was a gall-stone removed from a portion of intestine contained in an umbilical hernia; also a melanotic sarcoma from the leg of a horse. The latter in the horse usually occurs along the course of the short saphena vein and oftenest in gray horses.

Dr. Fred. C. Valentine, of New York, next read a paper on "The Genito-urinary Instruments Required by the General Practitioner." He pointed out the great improvement in the treatment of gonorrhea that has taken place since the days when it was regarded as a skin disease. From Ricard to Neisser is a great step in

the right direction. The general practitioner was deterred from treating cases because of the elaborate armamentarium that was thought necessary, but Dr. Valentine pleaded for more zeal on the part of the general practitioner, as much could be done with simple means. The instruments necessary are a microscope, a centrifuge, an irrigator, syringes, and various sounds and catheters. He described his own irrigator, which consists of a glass reservoir that can be elevated on a wooden frame by a cord and pulley. To this is fastened a rubber tube with a glass nozzle, about which is a metallic saucer. He prefers Beneke's sounds, except in a few cases, when he uses Guy on's modification.

Dr. James Thorburn, of Toronto, then read an interesting paper on "The Physician and Life Insurance." (See page 526.)

### SECOND DAY-AUGUST 18 h.

Dr. James Bell, of Montreal, read a paper entitled "A Series of Cases of Calculus Obstruction of the Common Bile-duct. Treated by Incision and Removal of the Calculi." He felt safe in saying that in no department of surgery has greater progress been made in recent years than in the treatment of gall-stone disease by operation upon the gall-bladder and ducts. Such operations are now followed by a low death rate comparatively. The first successful cholecystotomy was done by Lawson Tait in 1879, and the first attempt to remove stones from the common duct by crushing was also done by Tait in 1884. Later, Thornton introduced needling. Cholecystotomy is an operation now frequently performed, and generally with the most satisfactory results, and in ordinary cases it is almost devoid of danger. To day, incision of the common duct has replaced the cruder operations of crushing and needling. then gave an abstract of six cases upon which he had operated. The patients had varied in age from 33 to 61 years. In two there was but a solitary stone, in three there were stones in the gallbladder as well as in the common duct, in four there was obliteration of the cystic duct and a contracted gall-bladder that contained no bile, in two a large calculus was impacted in the ampulla of the duct within the duodenum, and was removed through an incision in the duodenum. One case ended fatally from pneumonia after the sixth day; another patient was submitted to a second operation 5 1/2 months after the first.

Case 1. A man, aged 52, had his first attack of biliary colic in 1892, and it was associated with transient jaundice. Other attacks followed in three months, in 1893, in 1894, and in 1895. They became,

then, more frequent, with steadily increasing jaundice, drowsiness, anorexia, and loss of weight. The patient was operated on in January, 1896. The conditions found were adhesions of the colon, duodenum, and omentum to the liver; the gall-bladder was contracted and empty; a calculus was found in the ampulla. This was removed by an incision along the line of the duct and coliquely across the duodenum at its posterior border. Drainage was employed. Reçovery was excellent, without complications.

CASE 2. A woman, 56 years old, was admitted to the Royal Victoria Hospital, February 16, 1897, presenting pain and tenderness in the episgastrium, with deep jaundice. There was a history of biliary colic for twenty years, and an attack of acute cholecystitis at the end of ten years. There was jaundice; the urine contained bile, and the stools were colorless. At the operation the omentum was adherent to the under surface of the liver. The gall-bladder was contracted, and contained 12 stones, which were removed. No bile was present. A large stone was in the ampulla. As the gall-bladder could not be brought up to the abdominal wound, the cavity was packed around, and a drain was put into the bottom of the cavity. The patient died of pneumonia.

CASE 3. A woman, 47 years old, complained of pain in the epigastrium, and jaundice. Her first attack occurred in 1881. Until 1894 she had an attack every two years, each associated with jaundice. The stools were colorless. The gall-bladder was shrunken and empty, and a large stone was in the common duct. This was not readily movable, and was removed by incision. Recovery was uneventful.

CASE 4. A woman, 61 years old, first presented symptoms in 1894, after a fall, in which she struck the right side. She had periodic attacks of pain on that side, but no jaundice until 1897. The liver was enlarged; the gall-bladder was shrunken, and contained five stones; the crystic duct was obliterated; the common duct was dilated, and contained a fairly large stone, which was removed by simple incision.

CASE 5. A woman, forty-nine years old, came under observation after two months' illness. She suffered from pain in the epigastrium, followed by jaundice. The attacks occurred about twice a week, and the jaundice persisted. The stools were colorless. The duodenum was firmly adherent to a contracted gall-bladder. A large stone was found in the common duct, which was dilated. On May 6th, almost three months after the operation, the patient had another attack of colic, with increase in the jaundice. The abdo-

men was reopened on July 21st; a movable stone was found in the common duct, and removed by longitudinal incision.

- CASE 6. A woman, 33 years old, came under observation May 6, 1898, with recurring colic and jaundice. Her first attack had occurred two years previously. Operation was performed on May The colon and the stomach were adherent to the liver. The gall-bladder was distended and the common duct was much dilated. A stone, impacted in the ampulla, was removed through an incision into the duodenum. The gall-bladder was then aspirated and three ounces of pus, which proved sterile, were removed. Six stones were removed from the gall-bladder and one from the cystic duct. estimating the value of a surgical procedure the surgeon has to consider (1) the conditions calling for operation and the prognosis under other methods of treatment or under no treatment; (2) the gravity of the operation; and (3) the results that can reasonably be expected. In jaundice due to mechanical obstruction by stones there is but one ground of hope outside of operation, and that is by expulsion of the stone through the natural passages or ulceration into a neighboring viscus. Medicinal treatment is useless. Delay is attended with danger that septic peritonitis or carcinoma may develop. Therefore resort to operation is advisable. The operation is usually not a serious one. The deaths are about one in four, five, or six cases. The dangers are from shock from a prolonged operation; from hæmorrhage, and from peritoneal infection. operation Dr. Bell usually performs is to make an incision in the abdominal wall from the costal margin over the centre of the rectus muscle to about the umbilious. Through this the parts may be explored, and then a second incision is made from the upper end of the first one along the costal border toward the xiphoid for an inch or two. The separation of adhesions is generally the most difficult and important part of the operation. It is advisable to control the flow of bile by the thumb, and drainage was advocated.
- Dr. C. D. Martin, of Montreal, exhibited a series of forms in use in the Royal Victoria Hospital of Montreal for the accurate record of the particulars of disease for statistical purposes.
- Dr. V. P. Gibney, of New York, then read a paper on "The Treatment of Convalescent Club-foot." He remarked that there is no more interesting condition in orthopedics than club-foot and none more difficult to bring to a successful issue, although knowledge of the anatomy and pathology of the part is indispensable to the orthopedist. The reduction of the deformity and the preservation of the induced condition in permanency are two different things, and the

latter is often more difficult than the former. Relapses occur from various reasons. Among them is the failure of the surgeon to effect perfect reposition of the parts, or the corrected position may not be maintained for sufficient length of time. Sometimes the neglect of exercising the atrophic muscles or the use of too complicated boots is responsible. In operating, Dr. Gibney aims at the production of an over-corrected position, but he thought it unwise to maintain this too long. He felt that it is best to endeavor to enlist the intelligent co-operation of the patient and friends, and frankly tell them that the trouble is tedious, and much depended on their effort. The child should be taught to walk properly, as this will correct the tendency to pigeon-toes. After operative procedures the foot should be put up in plaster for from three to six months. obstinate projection of the cuboid, and head of the fifth metatarsal, a cuniform incision should be made in the neck of the os calcis. the foot still rolled Dr. Gibney advocated supra malleolar osteotomy, placing the foot in the position of over-correction. He thought that the surgeon should himself supervise the construction of all appliances, and should occasionally see the patient for months. G. Roddick, of Montreal, asked if Dr. Gibney had any method of developing the stunted limb outside of those metioned in the books, message, etc. Sir Wm. Hingston said that the cases are often very puzzling, e.g., whether to do tenotomy or osteotomy, what tendons to cut, or which to choose, the open or the subcutaneous method. In his experience subluxation is not common, but he asked Dr. Gibney's experience on this point. Dr. Gibney, in reply, said that he did not know of any other methods to improve a stunted limb than massage, selected movements, and properly guided exercise. He advised the employment of an experienced masseur. experience subluxation is not common.

A discussion on "The Surgical Treatment of Empyema" was opened by Dr. E'der, of Montreal. He asked: Was any other treatment to be advocated than purely surgical? In his experience children and strong adults in the country sometimes get well spontaneously or upon repeated aspiration. On the whole he thought that the old surgical rule was a good one, that where there is pus the surgeon should cut down and evacuate it. With regard to the operation, resection of one or more ribs is much preferable to simple incision. Only in children is it justifiable to make a simple incision. With regard to the point of incision, he thought that the rules of the text-books could not always be followed, but he advised, when there is a localized pus collection, incision over the centre of

the region and drainage. He recommended also not placing the patient on the sound side, but to draw him somewhat over the edge of the table and operate from below. With regard to the anæsthetic, chloroform or the A.C.E. mixture should be used. As to washing out the cavity, most authorities discountenance this now. In slow, prolonged cases in which an external opening occurs spontaneously, or there is rupture into a bronchus, should one operate? Dr. Elder thought, as a rule, not, and never in tuberculous cases. In cases in which the general health is obviously suffering, a second lower opening should be made, with an attempt at drainage, except in amyloid cases; or Estlander's operation might be tried. William Hingston said that each case is to be treated on its merits. as no two cases are alike. Having been prejudiced for years against the operation of resection, he had been converted to it by experience. He is in the habit of washing out the cavity, using weak carbolic solution or plain boiled water. He thought that pneumonia is generally the result of empyema, rather than the cause, as is usually taught. Dr. Roddick preferred a dependent drain. With regard to washing out the cavity, he held a mediate position. the pus is very fetid, he always washes out. In those cases that hung fire for months he injected into the cavity weak iodin solution or zinc sulphate, which, by their stimulating action, he thought, hastened a cure. If the pus has broken into the air passages, he would still operate, and could do a radical operation. He preferred a metal tube to a rubber drain. Dr. Muir thought that ninety-nine per cent. of the cases were tuberculous. He preferred operation always in adults, and made his incision as near the backbone and as high up as possible. He also liked a metal drain, using a piece of flunged gas-pipe for the purpose. Dr. Dickson said that, if he obtained more than twenty ounces of pus on aspiration, he concluded that the case would not be cured by this means alone. He would also wash out in fetid cases.

Dr. W. H. Drummond (of Montreal), the author of the "Habitant," then read an interesting historical paper on the "Pioneers of Medicine in the Province of Quebec."

Dr. Ernest Laplace (Philadelphia) then described an ingenious forceps that he had contrived to replace the Murphy button in the operation of intestinal anastomosis. By its use the gut is held in position and can be readily sutured and the instrument be then removed in halves. He stated that the instrument is simple and possesses none of the disadvantages of the Murphy button, or Senn's plates.

Surg.-Col. Neilson, the medical head of the Canadian Militia Service, then addressed the association, asking for their support and counsel in the reforms that it was proposed to introduce in this service. In consequence of the reorganization of the medical service in the Imperial Army, something of the same kind is needed in the Canadian service, as the present system is antiquated. He had been desired by the Canadian Minister of Militia to bring the matter to the notice of the association.

## THIRD DAY-AUGUST 19th.

Dr. T. D. Reed, of Montreal, brought up the subject of the official recognition of the new British Pharmacopæia for the whole of Canada. He pointed out that, owing to there being a different medical and pharmaceutical association in each province, it is difficult to get concerted action on the subject, which is of the greatest importance, and he thought that it would be proper for the Canadian Medical Association to make a pronouncement in the matter. It is important that some date be fixed for the coming into operation of the new book. By arrangement of the Province of Quebec Pharmaceutical Association and the Montreal Medico Chirurgical Society it has been settled that October 1st should be taken as the date. He learned that in Ontario the new book is also official for the coming college session. He therefore moved, and it was seconded by Dr. Mullin, of Hamilton:

"Be it resolved that the Canadian Medical Association, in annual meeting assembled, recommends that October 1st, 1898, be taken as the date on and after which, in the absence of instructions otherwise, physicians' prescriptions should be compounded with the preparations of the British Pharmacopæia of 1898."

Dr. T. G. Roddick then read a letter from Dr. D. J. Leech, of Manchester, the chairman of the British Committee in the revision of the Pharmacopæia, in which he pointed out that the adoption of the British Pharmacopæia seemed to be an act of grace on the part of the various provinces of the Dominion, while Canada as a unit did not accept it officially. He thought this should be remedied.

The association decided then to appoint a committee consisting of Drs. Blackader, Reed, Small, Marois, Cameron, Starr, and MacCallum, to confer with the Federal Government, with a view to formally legalizing and appointing the British Pharmacopæ'a for Canada.

.Dr. A. de Martigny then read an account of two severe cases of furunculosis that he had treated with Marmorek's antistreptococcic

serum with gratifying results. He used 20 cu. cm., and brought the matter to the attention of his hearers in order that the method might be further tested.

- Dr. C. R. Dickson, of Toronto, contributed a paper on "Goitre." He had had opportunity of observing about 300 cases of various forms, and had made use of most of the methods of treatment usually advocated. He pointed out that swelling of the thyroid is the expression of several different pathologic conditions. ophthalmic goitre he had found the best treatment to be absolute rest in bed, a rigid milk-diet, and the exhibition of calomel. the thyroid, if the ordinary methods failed, he employed electropuncture. When suppuration resulted, the abscess was to be opened and drained. In cystic cases he inserted an insulated canula, cleared out the contents, and then filled the cyst with saline solution. He then passed in a current of electricity sufficiently strong to destroy the lining membrane, employing pressure and trusting to the subsequent inflammation to obliterate the cavity. calcification ensues hydrochloric acid can be used to dissolve the Removal is only necessary in malignant cases. Thyroid and thymus extracts he had found useless. In the discussion, Dr. Muir, of Truro, pointed out that exophthalmic goitre is very common in Nova Scotia, occurring chiefly in young females, particularly in blondes. As it occurs in young girls, he thought the pressure of school-work might have something to do with its production. had not seen much benefit from electricity, but placed some reliance on intestinal antisepsis.
  - Dr. F. X. de Martigny then read a paper on "Genital Prolapse and its Treatment," contributed by Prof. Delaunay, of Paris, surgeonin chief to the Hospital Péan.
  - Dr. W. J. Gibson, of Belleville, detailed an interesting case, in which a bicornute uteru; had been mistaken for an ectopic gestation.
  - Dr. D. Campbell Myers contributed a paper on "Neurasthenia," confining his remarks mainly to spinal irritation and the relation of neurasthenia to insanity. Neurasthenia is a complex disease that will be found in time to be divisible into special groups. Spinal irritation bears a close analogy to hysteria and is clearly not due to an organic lesion of the cord, but to psychic disturbance. Dr. Myers thought that those forms of neurasthenia in which the higher centres and emotions were affected sometimes passed over into insanity. Treatment in the early stages is very important. Special

stress was laid upon the necessity for removing the patient from his surroundings and restricting the approach of friends. The Weir Mitchell treatment he used only in selected cases, but the underlying principles are of great value.

Dr. A. Gandier, of Sherbrooke, read a communication on "Tracheotomy versus Intubation in Diphtheria." He pointed out that some cases of diphtheria do not yield to the antitoxin treatment, and those in country practice are very difficult to manage. He emphasized the necessity of vigorous local treatment as well as injections and the use of general supporting treatment. When it is a question of tracheotomy or intubation he prefers the former.

A number of other papers were read by title. The session was conspicuous for the important matters that came before it. Besides the question of the British Pharmacopæia for 1898 the matter of "Interprovincial Registration" of degrees was advanced very materially. Hitherto the possession of a degree in medicine in one province of the Dominion did not confer the right to practise in theothers. This is an anomaly that is undesirable, and for years attempts have been made to overcome the difficulty.

Last year all the provinces except Ontario signified their readiness to co-operate, and decided upon a suitable curriculum satisfac tory to them. Ontario, however, hung fire. This year, however, representatives from all the provinces except British Columbia met, and have fortunately succeeded in reaching a common ground of agreement. They submitted to the association a scheme of study for the entrance to and the practice of medicine, fixing the minimum requirements and adopting a course of four years of at least eight months each. Twenty-four months of this time must be spent in hospital-work. A central board of examiners for the Dominion is to be appointed by the Medical Councils of the individual provinces to examine all candidates for the Dominion license. This Dominion license will bring with it recognition throughout Great Britain and the other colonies. This finding was signed by all the members of the committee, and is to be sent to the various provincial councils for adoption.

A committee to arrange the details of this scheme was appointed, consisting of Drs. McNeill (P.E.I.), Muir (N.S.), Walker (N.B.), Marsil (Q), Thornton (Ont.), Bayne (N.W.T.), McKechnie (B.C.), and Williams (Ont.) Dr. T. G. Roddick, M.P., was also appointed to bring the scheme before the Federal Government, with a view to obtaining legislative sanction to the new board. This result is very gratifying, as it brings within measurable distance a reform that is

of the utmost importance and benefit to the medical profession in Canada.

The usual complimentary votes of thanks to the officers and the local committee were passed unanimously.

The following officers were elected for the ensuing year:

President—Irving H. Cameron, Toronto. Vice-Presidents—Drs. James Bell, Montreal, Q.; J. A. Williams, Ingersoll, Ont.; J. MacLeod, Charlottetown, P.E.I.; Kirkpatrick, Halifax, N.S.; L. N. Bourque, Moncton, N.B.; R. S. Thompson, Deloraine, Man.; Lindsay, Calgary, N.W.T.; S. J. Tunstall, Vancouver, B.C. General Secretary—F. N. G. Starr, Toronto. Treasurer—H. B. Small, Ottawa. Local Secretaries—S. R. Jenkins, P.E.I.; W. G. Putnam, N.S.; T. D. Walker, N.B.; Hon. C. Marsil, Que.; C. R. Dickson; Ont.; George Clingan, Man.; Lowe, N.W.T.; R. E. Walker, B.C.

The publishing committee consists of Drs. A. D. Blackader, John L. Davison, W. A. Young, F. N. G. Starr and H. B. Small.

It was decided that the next meeting-place should be Toron:o.

The following honorary members were elected: Drs. Eugene Delannay, Masse, Jullien, Foveau de Courmelle, Mesnard, Geupin, Paul Lozé, Glatenay, and Noury, all of France.

This concluded a most pleasant session. Many thanks are due to the local committee, who entertained the members royally. The visitors were taken on a much-enjoyed trip to Grosse Isle on the Government cruiser Aberdeen, for the purpose of seeing the Dominion quarantine station. This is under the efficient control of Dr. Montizambert, and is most modern and effective. A drive was also organized to the far famed falls of Montmorency, and the visitors left Quebec with most pleasant recollections of the quaint old city.

## Book Reviews.

A MANUAL OF OBSTETRICS. By A. F. A. King, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children, Columbia University, Washington, etc. Seventh edition. Lea Brothers & Co., Philadelphia and New York, 1898.

We have no special love for manuals, and have generally preferred to recommend, for the use of students and practitioners, the larger text-books on midwifery; but we are compelled to acknowledge that King's little book is exceedingly good, and has become wonderfully popular with students in the United States, and to a certain extent in Canada. It contains practically all that a student wants for the purposes of examination, and at the same time is useful for general practitioners who wish in a hurried way to consult a multum in parvo for cases of emergency. It is well written, well illustrated, and really an admirable book in all respects.

### Books received:

- MEDICAL DISEASES OF INFANCY AND CHILDHOOD. By D. wson Williams, M.D., Physician to the East London Hospital for children. In one 12mo. volume of 629 pages, with 18 illustrations. Cloth, \$2.50. net. Lea Brothers & Co, Publishers, Philadelphia and New York,
- THE ESSENTIALS OF HISTOLOGY. By Edward A. Schafer, F.R.S., Professor of Physiologyin University College, London. New (5th) edition. Revised and enlarged. Octavo, 350 pages, with 325 illustrations. Cloth, \$3.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York.
- DISEASES OF WOMEN: A MANUAL OF GYNECOLOGY. Designed especially for the use of students and general practitioners. By Francis H. Davenport, M.D., Assistant Professor of Gyracology in the Medical Department of Harvard University, Boston. New (3rd) revised and enlarged edition. In one handsome 12mo. volume of 387 pages, with 155 illustrations. Cloth, \$1.75, net. Lea Brothers & Co, Philadelphia and New York.

## Medical Items.

PROF. WILLIAM H. WELCH has resigned as dean of the Johns Hopkins Medical School.

THE Senate of the United States has recently passed a resolution preventing discrimination against graduates of legally chartered medical colleges in appointments to the medical calls of army, navy, and marine hospital service.

THE Prussian Minister of Finance, Herr Von Miguel, has proposed a plan for taxing professors of medicine who also practise. He thinks that any professor enjoying a practice worth \$5,000 per annum should receive no salary.

An amusing tale is told by a country doctor in England. He had been attending for a considerable period a parson, and according to custom, now fortunately becoming antiquated there, attending him gratis. When in due course the parson died, his widow wrote to inquire how much the doctor would allow her for the medicine bottles.

THE GENERAL PRACTITIONER.—Dr. Joseph Price, of Philadelphia, says (Denver Medical Times): "The great broadening of our therapeutical resources, and our great advance in both general and special surgery are largely due to our general practitioners. From their ranks came the fathers. They have not indulged in lofty flights, but have stayed down on the ground and followed the plain, simple ways of common-sense."

THE LATE DR. WM. PEPPER.—We learn from The N. Y. Medical Journal that the name and fame of Dr. Pepper are to be perpetuated in Philadelphia by the erection of a bronze statue by the Department of Archæology and Palæontology of the University of Pennsylvania. Two provisions of his will have been complied with: his dead body has been cremated; his brain has been given to the Anthropometric Society of which he was a member.

#### OBITUARY.

DR RICHARD USSHER TOPP.—Dr. R. U. Topp, of Toronto, died September 6th, after a short illness from typhoid fever. He graduated in 1889, and practised in Muskoka until 1894 when he removed to Toronto.

DR. HENRY B. EVANS.—Dr. Evans, of Picton, died suddenly in the office of Dr. Philip, September 9th. He was bern in Brighton, England, 1820, and became M.R.C.S. in 1842. He was in the service of the East India Company for many years. He came to Carada in 1857, and, after practising for a few years in Kingston, removed to Picton, where he was engaged in professional work up to the time of his death.

WILLIAM PEPPER, M.D., LL.D.—America has lost one of her greatest men through the death of Dr. Wm. Pepper, of Philadelphia, which occurred in California, July 28th, 1898 He graduated in arts and medicine in the University of Penn-ylvania in 1862 and 1864, respectively. He became lecturer in chemical medicine in his alma mater in 1870, and professor of clinical medicine in 1876. He was elected provost of the University of Pennsylvania in 1881 and remained in that position until 1894. When he retired he presented the university with a gift of \$50,000 He occupied many prominent positions in connection with medical organizations, and was honored and respected throughout the whole civilized world. His age was 55, and angina pectoris is said to have been the cause of his sudden death.