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ADDRESS DELIVERED BEFORE THE CANADIAN MEDICAL ASSOCIATION.

By T. K. HOLMES, M.D., Chatham, Ont., President.

Gentlemen of the Canadian Medical Association—When, a year ago, you paid me the high honor of electing me to the presidency of this Association, I will not pretend to deny that the distinction that appointment conferred afforded me the most lively gratification, which, however, was qualified by several considerations that were to me of quite a serious character. Not the least of these was the knowledge that I must address an audience distinguished for intelligence and for scholarly attainments, both professional and general, and that the learning and ability of my predecessors in office would not detract from the difficulty of the task. Indeed I felt, and still feel, that my chief qualification for the position in which your kindness has placed me is an unswerving interest in the prosperity of this Association, which has influenced so strongly and so favorably the medical profession of this country. While expressing my most sincere thanks for the highest honor at your disposal, I feel sure that the same kindly feeling which prompted its bestowal will render easy the duties of presiding officer, and that the same zeal which has hitherto marked the scientific work of this Association will characterize the meeting now convened.

Romance and history combine to render the city of Quebec the most interesting spot in Canada, and our Association may well be congratulated on the privilege it enjoys this year in holding its session in a place rendered famous by so many circum-

stances. The adventurous quest and the indomitable will of the early navigators who laid the foundation of civilization in this country when they planted the colors of France along the shores of the St. Lawrence may well serve us as models for emulation in our more peaceful search after that scientific knowledge which contributes so much to the happiness of mankind. If our efforts be at all comparable to theirs, equal honors and equal blessings may be expected to result from our endeavors. In this connection I may express the wish that the same spirit of enlightenment and progress that characterizes our parent countries, France and England, may animate their descendants in this young Dominion, and that the Canadian profession of medicine may not be unworthy the great names of Harvey and Lawrence, of Hunter and Pasteur. It will certainly contribute greatly to the progress of medical science in this country if the two races whose ancestors have led the van in Europe go hand in hand and vie with each other in creating a professional status here inferior to that of no other country. Some of the means by which we may hope to accomplish this will be the subject of my remarks to-day.

The architect who aims at lasting fame not only lays broad and deep the foundations of his work, but anticipates each step in the growing structure even to the crowning event of its completion. He selects the material, superintends each process of manufacture, shapes every part, and embellishes the whole until it rises in symmetry and perfection, and stands the glorious and enduring monument of his creative genius. In this land there is arising a temple whose foundation is based upon the accumulated labors of some of the greatest architects of human happiness. Their names shine with brilliancy unabated all down through the vista of past years, and animate and enlighten all who labor in the same profession and emulate their achievements. We are the privileged architects of this temple of medicine in our country and generation, and I trust that the marks of our skill may not be indistinguishable in the rising edifice. The progress of scientific medicine in the recent past is the result very largely of the development of the science of biology which has done so much to establish medicine on a scientific basis.

Until the study of life in its elementary forms was rendered possible by modern instruments of precision, empiricism necessarily entered largely into all medical progress, and it was maintained as an opprobrium that medicine was no more than an enlightened empiricism. This is true, but it could not have been otherwise since, until the birth of biology as a science, medical knowledge had either to remain at a stand-still or to progress by a series of empirical jumps which sometimes left it in a more advanced state of usefulness, and sometimes failed to do so even in the slightest degree. Although empiricism in medicine has been such a laborious means of advancement, we must admit that it generally contained some grains of truth, and that when it failed to accomplish what was expected of it, the reason of the failure lay, not in the worthlessness of the efforts at progress, but in the difficulty of separating the grains of truth from the abundant chaff in which it was contained. Each new fashion, while it has contained some truth, has failed and given place to another little in advance, not because it contained no truth, but because the truth it did contain was incomplete. When, however, the study of biology was established on a scientific basis, medicine, which is but an applied science of biological doctrine, became less empirical and more scientific, and by the aid of physiology and pathology, which are the necessary sequence of biological investigation, has advanced to the present high and satisfactory position it occupies. The very fact that morbid processes are viewed and studied from a physiological standpoint and are estimated and measured by the laws that govern elementary processes of life renders it certain that the progress of the recent past and of the present is on surer lines and firmer foundation than ever before, and that the future of medicine will be the glorious sequel of the present, as the present is the glorious sequel of the past. It justifies the belief that the advantages to the human race likely to accrue from the prosecution of medical studies and investigation pursued on these lines will be far greater in the future than in the past, that physiology and pathology, which are but in their infancy, are destined to illuminate the dark places in medicine and reveal the true cause of much human suffering and premature death.

We are accustomed to regard with wonder the achievements of modern invention in the art of war, and to contemplate with amazement the perfected instruments of destruction that strengthen the hands of modern belligerents, but the general who advances to battle with all these at his command has no greater advantage over a barbarous foe than modern medical searchers after truth in the realms of disease have over their empirical brothers of the prebiological period. Possessing these advantages, and stimulated by this prospect, it is reasonable to suppose there will, in the near future, arise men whose investigations, beginning where those of Sanderson, Koch, Virchow and Pasteur leave off, will be equally brilliant and equally conducive to human happiness and longevity. The country that produces these men will be the country that affords the best medical education to those entering the profession, and that most facilitates original investigation for those who have chosen that field of labor. No physician in this country worthy of the profession to which he belongs can be indifferent to the position Canada shall occupy in the honorable and honored competition in which so many are and will be engaged.

The future of the medical profession in this as in any other country will largely depend upon the natural ability and the mental and moral training in childhood and youth of those entering its ranks; so that in considering any scheme for the creation of a high standard of medical qualification, domestic training and the plan of education pursued in public schools must be recognized as bearing an important part.

It has been said that poets are born and not made: a saying that is not untrue when applied to medical men, for a combination of mental and moral qualities which cannot be wholly acquired enters into the character of every great physician. It is cause for regret that greater discrimination is not exercised in directing young men in the choice of a business or profession, and that convenience and not natural aptitude should frequently determine a young man's course in life. There are so many examples of men rising from obscurity to great eminence in every vocation that there has arisen a popular impression that all obstacles and natural defects can be compensated

for or can be overcome by diligence and perseverance on the part of any aspiring youth. It would be wrong to underestimate the value of industry and high aspiration, but these, while they can improve all and can render mediocrity respectable, can never supply the place of genius. While it is impossible to create genius by any system of training, it is almost impossible to repress it altogether by any carelessness or neglect.

"That many mute inglorious Miltons lie buried in our churchyards, I venture to doubt: the fire of a Burns is not easily hidden under a bushel, but some smaller lights may be quenched, and the best of such men, like Burns himself, may be thwarted and broken in heart." (*Dr. Allbutt.*)

Other things being equal, the child who, from infancy, is trained to think and to reason correctly and to express its thoughts clearly, will be more likely to attain eminence in mature life in all pursuits of an intellectual character than the child not so trained; indeed, skilful training in early life is essential to success in persons of average natural capacity, and is of unquestionable importance to all.

The efforts to establish and to maintain an efficient system of education in this country are worthy the highest commendation, but the task is a difficult one and there is danger of enthusiastic legislators over-stepping the mark and making our sons and daughters mere receptacles of knowledge instead of creators of knowledge by failing to recognise that it is vastly more important that a man should think and reason correctly than that he be the possessor of multitudes of facts and definitions. Physicians, with such questionable elementary training, are like the artificer well supplied with the tools of his craft but lacking the skill to use them. It is not to such that we may look hopefully for real progress in our science; they make up the great army of routine practitioners who trouble themselves little with profundities and are like Dr. Sangrado, who felt quite sure that those of his patients who, under the care of his pupil Gil Blas, died from excessive bleeding and the copious drinking of warm water, did so because this his panacea was not applied with sufficient vigor and determination. It is probably not incorrect

to say that most medical men in Canada are of opinion that the chief defect in our school system lies in the oversight here referred to.

The curriculum for medical matriculants in Canada must create a higher average intellectually among young men aspiring to the profession, but there can be no doubt that a widening of the curriculum so as to embrace a more extensive knowledge of the natural sciences would greatly facilitate the acquisition of knowledge presented to, and required of, medical students. An acquaintance with the laws relating to climatology would serve a useful end in the study of epidemic and endemic diseases, and in an estimate of the influence of climate on disease in general; an acquaintance with minute organisms and histological structures such as could be readily acquired in any high school provided with a microscope would prepare the mental soil for the reception and quick germination of the seeds of knowledge sown by teachers of physiology and kindred subjects in medical schools. The medical student, who learns something of biology, of cells and germs, and of bacterial life only after he has entered upon his course of medical lectures, is at a great disadvantage and loses much time in a bewildering effort to master names and technicalities, and I can conceive of no more irksome task for a teacher than to lecture to a class of young men laboring under this disadvantage.

The relations existing between medical schools and licensing bodies in this country are so satisfactory that little desire has been manifested to alter them, and it is beyond doubt that to these relations we owe in great measure the improved status of medical education here.

When the great discovery of Columbus opened to the old world the unknown and virgin resources of the new, the most progressive nations entered eagerly into keen competition for the advantages this discovery presented. National ambition and individual courage and endurance combined towards the great aim and object of colonization and development of natural resources in this continent. The results are patent to all; a newer and greater freedom and civilization in the new world

are the rich fruits of these vigorous pioneer efforts, and the evidence exists in the glad and prosperous millions of the western world. Analogous to this is the meteoric brilliancy of the discoveries in medical science within the past fifty years. Physiology, pathology, the etiology of disease, physiological medicine, preventive medicine, these are some of the fields laid open to the modern physician, and they leave no lack of opportunity for the exercise of ambition, skill, and philanthropy. Nearly all European nations and the individual States of the neighbouring Republic have shown their determination to participate in the honorable achievements in medicine thus rendered possible in the near future. Schools for the pursuit of original investigation have been liberally endowed by these governments, and this liberality has been supplemented by the wise and princely donations of private individuals.

Sanderson and Klein, Koch and Pasteur, our own Osler, and many others scarcely less distinguished, are devoting their lives with indefatigable zeal to the elucidation of scientific questions upon which rests the superstructure of medical practice, and they are enabled to do so only through the liberality of the various governments under which they live. Research of this kind can only be carried on successfully by men naturally adapted to such work, and who are free from the care and anxiety inseparable from the lives of those engaged in the active practice of their profession. Hence the absolute necessity for the endowment of institutions of this character. The large expenditure necessary to the equipment of a laboratory for such work has greatly retarded it in Canada, and until means are provided we must be content to occupy an insignificant place in the great race now being run. Can it be that this country or its wealthy citizens will remain indifferent in this matter, while our nearest neighbor is lavishing millions of dollars to attain honorable eminence in the progress of medical science? Scarcely a State in the Union that has not its well endowed university, and the princely gifts of Cornell, of Johns Hopkins, of Mr. Stanford, of Mr. Vanderbilt and of Sir Donald A. Smith are the great beginning of greater things. Who can estimate the bless-

ings to the human race that must arise from the wise munificence of these noble men! Millions yet unborn shall speak their names with feelings of reverence and love, nor will other monuments be needed to make their names immortal. In this connection, I would suggest that a committee of this Association be appointed, to report at the next annual meeting upon the best means of establishing one or more laboratories where original investigation in medical studies may be carried on.

Medical societies constitute a most important factor in the advancement of medical knowledge, and it is much to be regretted that they are not everywhere established. It is safe to say that the maintenance of active local societies contributes immensely to the knowledge of their members by encouraging careful observations in private practice and more extensive reading and research. Aside from a scientific point of view, the harmony engendered by these meetings eliminates much of the jealousy and misunderstanding that are so humiliating and so subversive of individual happiness and public respect. The general organization of small local societies would be a sure means of improving the representation at the larger ones, and would secure to them papers and discussions of a higher character. Provision has been made in Ontario by the Medical Act for the formation of territorial associations in the different electoral divisions, and in some of them most prosperous societies have existed for many years, and the reports of their proceedings constitute valuable additions to medical literature.

Of all the means of medical progress, few could be more advantageously utilized than the accumulated experience of men in private practice if they could be induced generally to keep a systematic record of their more important cases. Time, skill, and the privilege of post-mortem examinations are essential to the successful recording of cases, and their absence is doubtless the chief cause of the neglect so universal in this matter. Time so consumed would be more than repaid by the increased skill acquired; the high standard of qualification now required of graduates should remove the second difficulty, and if requests for autopsies were made in all cases necessary to verify a diag-

nosis or to elucidate an obscurity, the prejudice now existing against them in the public mind would to a great degree disappear. Let rural practitioners who underrate their opportunities of contributing to the general fund of medical knowledge remember that Jenner, McDowell and Koch were not metropolitan physicians, and were unknown to fame until their great discoveries, wrought out by diligent study and observation, placed them among the great benefactors of mankind. Observation and reflection are the parents of discovery, and never fail to produce their offspring, although the gestation may be long and the labor hard. Every truth so revealed is like a lantern, the light of which may be turned on the dark places of our field of investigation and new truths stand clear to our mental vision, and we walk boldly and safely on, using each new thought to illumine the obscurity that surrounds and precedes us.

The building up of a science is a slow and laborious process, and facts must be supplied by a multitude of workers. The scholar who deciphers the cuneiform inscriptions of ancient Babylon or the hieroglyphics of Egypt, and contributes to our knowledge of these nations, must be aided and preceded in his work by the archæologist who discovers and the laborer who unearths these imperishable records of past events. So in the building up of medical science, the humblest worker is not to be despised, for his contributions may be and often are essential, but to be available, his thoughts and observations must be recorded, that they may be weighed and winnowed by those suited to the task.

All who have read the lectures of Murchison on "Functional Diseases of the Liver," of Roberts on "The Digestive Ferments," or of our own Osler on "Malignant Endocarditis," must be impressed by the great impetus given to practical medicine by these, and will need no arguments to convince them of the desirability of the endowment of similar lectureships here. From a literary and scientific standpoint, the advantages accruing to the profession from such lectures would be important, but of even more importance would be the encouragement afforded to the more gifted and aspiring of our own Canadian physicians

and surgeons. As Canadians we may feel proud of our country and of its physical and political excellencies, but we may rest assured that, so far as we medical men are concerned, others will estimate us by the reasonable and practical standard of our contributions to medical knowledge and by our scientific attainments. No conservative clinging to obsolete methods on the one hand, or the multiplication of weak meretricious literature on the other, can impose upon the learned in the professional world, and the sooner we create strong incentives to scientific work the sooner will the workers be forthcoming. I would here offer the suggestion that this Association take into consideration the establishment of lectureships similar to those in England and other older countries.

Of all means enumerated for the advancement of medical science, individual effort undoubtedly ranks first. Associations can teach and stimulate, but they can never supply the place of study and observation. Truth only yields her wealth to him who lays siege to her shrine. Emmerson says the hardest task in the world is to think. We try to look in the face an abstract truth, and we cannot do it. The mind swerves from the encounter, and thick darkness prevails. We return to the charge and try to force Truth from her citadel, and then in a moment, when we least expect it, a rift in the cloud comes, a ray penetrates our minds, light floods in more and more, until objects, dim at first from sudden light in dark places, become real shapes, and we guage their dimensions and estimate their proportions with unerring exactitude. Few truths are discovered but by this laborious process, and because we evolve them slowly and often only partially by delving beneath the surface of things, it is better to labor so than not to work at all, for when the surface is broken and disturbed, others will see clearly what we only half perceive, others will perfect what we are able only to dimly outline.

It requires no prophetic eye to perceive the future greatness of Canada. Her vast extent and varied and inexhaustible natural resources everywhere abounding are such that it would seem impossible for any series of unfortunate events to stem her

progress, or to divert her course in the contest of nations for pre-eminence in all that constitutes true greatness. The spirit of progress is abroad armed with the all-compelling weapons of modern invention, hampered by no medieval absurdities and thwarted by no ignorant prejudices; we are justified in entertaining the most exalted and hopeful view of the future of our country, and may deem ourselves fortunate in bearing a part in the development of so fair a heritage. As physicians, the part, we assume, is not an insignificant one. To enact wise laws, to encourage commerce, to preserve peace within our borders, and to command the respect of neighbouring nations are objects worthy the most exalted ambition and the most patriotic determination; but will it be said that the aims of medical science are less exalted or less conducive to national prosperity or individual happiness? To cure disease, to alleviate suffering, to extend the limit of human life, to enlarge the field of human usefulness, to be able to prevent disease by removing the cause; surely the profession that devotes its energies to the accomplishment of these objects is entitled to the fostering care of governments and to the liberality of wealthy citizens.

"A sound nation is a nation that is composed of sound human beings, healthy in body, strong of limb, true in word and deed, brave, temperate, sober, chaste; to whom morals are of more importance than wealth. It is to form character of this kind that human beings are sent into this world, and those nations who succeed in doing it are those who have made their mark in history. They are nature's real freemen and give to man's existence on this planet its real interest and value." (*Froude.*) In the not-distant future this Dominion will be the home of fifty millions of people with all the wealth and all the greatness that implies, a thought that may well inspire us with feelings of pride and satisfaction; but the wise man will not be so much impressed by the vastness of our territory, the multitude of our people, or the size and wealth of our cities, but will be more concerned in the problem of the social advancement, the civil liberty, the physical perfection, the scientific status and the moral rectitude of our teeming population. When that time

comes may the science of medicine have contributed its share towards the creation of a people unsurpassed for physical perfection and mental sprightliness and for all those virtues that are born of these. Should these hopes be realized, then, indeed, would happiness prevail and prosperity sit as a ruling genius on the brow of every hill, the bosom of every lake and the bank of every stream ; and the application to our country of the language of one of England's greatest poets would scarcely be considered hyperbolical, when he says :

> " All crimes shall cease and ancient fraud shall fail
> Returning Justice lift aloft her scale,
> Peace, o'er the world her olive wand extend
> And white-robed Innocence from heaven descend."

QUARTERLY RETROSPECT OF SURGERY.

By FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S, Eng.,
Surgeon to the Montreal General Hospital ; Professor of Anatomy and Lecturer on Operative Surgery, McGill University.

Tetanus.—The pathology of tetanus is as yet but little understood. Cases of cure of this disease are from time to time reported, they are doubtless quite authentic, and show that the disease is not necessarily fatal. Chloral in large doses is the favorite remedy, and in some cases the results of treatment by this drug are encouraging, whilst in others chloral appears to have not the slightest influence for good on the disease. Till the pathology of the affection is better known, all treatment must be to a greater or less extent empirical. Many observers look upon tetanus as due to the introduction of some virus from without, for nearly all the cases follow the receipt of an injury ; the cases of so-called idiopathic tetanus being rare, and in some instances due to forgotten injury. The nervous theory has much in its favor, and a cure which recently has occurred in Zurich illustrates this. A boy, aged 14, was admitted to Conrad Brunner's wards at Zurich for a fracture of the left radius, which had occurred three weeks previously. The 14th day after the fracture the child observed that he could not stretch the fingers of his left hand ; his parents noticed that when he walked his body was bent forwards. The symptoms became more and more

marked, and the child was sent to hospital. Symptoms of tetanus, risus, trismus and emprosthotonos were marked. On examining the patient, there was evidence of a fractured epiphysis of the radius, badly reduced, and a bulky callus just below the articulation. The parts were exposed by incision, when it was found that there was pressure on the radial nerve by new formation attached to the callus. The compressed nerve was set free and the prominent portion of the radius resected. The symptoms of tetanus slowly disappeared. Three weeks after the operation the patient was well. (*Paris correspondence of British Med. Journal*, July 3rd, 1886.) I on one occasion saw a case of tetanus where the post-mortem examination showed in sole of foot a small piece of leather (thrust into foot by a nail), and near this an abscess the size of a pea surrounding the terminal filament of a nerve.

The nervous theory, however, does not account for all the cases. For instance, in those cases where tetanus follows decomposition in a wound. Such a case lately came under my notice at the Montreal General Hospital. A man had two of his fingers crushed, and at the end of a week presented himself for surgical treatment. The fingers were in a gangrenous condition and horribly fœtid. Amputation was immediately performed, but next day tetanus developed, of which he died in a week. Chloral was employed in full doses without effect. In such a case as this the theory of M. Gauthier is applicable, viz., that certain chemical changes, the result of decomposition, ensue, and the products are certain animal alkaloids or leucomaines, which produce symptoms like those of poisoning by strychnine or some other vegetable alkaloid.

At the 15th annual congress of German surgeons held recently in Berlin, Rosenbach of Göttingen read a paper supporting the germ theory of tetanus, and gave the results of a number of experiments performed on guineapigs and mice. (*Med. News*, Aug. 7, *Med. Record*, June 5th, and *Centralblatt f. Chirurgie*, No. 24, 1886.) A man was received into the Göttingen clinic suffering from tetanus consequent on gangrene of the feet. Rosenbach took some small pieces of tissue, an hour after death,

from a part of the foot below the line of demarkation, and put them under the skin of the thigh of two guineapigs. The animals soon became tetanic. From these, other guineapigs were inoculated in a series, one from the other, and then the virus was transferred to mice. All the animals inoculated ultimately died of tetanus, the most marked symptoms being spasm of the extensors of the tail and of the hind legs. In the inoculation material Rosenbach discovered a bristle-shaped bacillus similar to that described as the cause of earth tetanus; this he successfully cultivated in coagulated serum. He was not able to obtain pure culture of any single bacillus, but he succeeded in causing tetanus with this mixed bacillus. The bristle-shaped bacillus was always obtained in conjunction with the bacterium of putrefaction. However, as the latter alone does not cause tetanus, he thought it only reasonable to attribute the production of tetanus to the bristle-shaped bacillus. Rosenbach thinks the experimental result is important from its correspondence with the fact that tetanus in human beings is apt to follow putrefactive wounds. The next thing to find out is the orign of this bacillus; in this connection it is interesting to note that Nicolaier and Flügge, whilst investigating the micro-organisms of garden soil, discovered that a culture of a certain form of bacillus found in it when injected into rabbits, guineapigs and mice caused symptoms like tetanus as well as malignant œdema. In regard to the mode of propagation of this bristle-shaped bacillus and infection of the whole system, Nicolaier found it in the sciatic nerve once and in the spinal cord twice. Rosenbach found it twice in the spinal cords of rabbits that had been inoculated. In Rosenbach's cases the inoculation period was not less than 24 hours or more than 36.

In the discussion which followed the reading of this paper, König stated that the experimental tetanus produced by Nicolaier and Rosenbach in animals was identical with that which occurred in man and that which not unfrequently occurs after castration in horses. In these the spasms often began in the muscles of the extremities and back. In man, tetanus does not always begin with trismus, but there is, sometimes, first spasm

in abdomen or extremities and muscular rigidity at the point of injury. Socin said that he also had produced tetanus by the inoculation of garden-earth, which was undoubtedly true tetanus. Ebermann (St. Petersburg) thought that the presence of ptomaines might explain the occurrence of tetanus.

The tendency of the present day is to attribute every disease to some special form of germ, and tetanus has not escaped; even senile gangrene has its special bacillus. The germ theory of tetanus is by no means proved by the experiments of Rosenbach; the weak point in the theory is the very small number of these bristle-shaped bacilli that have been found throughout the body. The germ theory does not account for those cases of idiopathic tetanus that are occasionally seen (especially in young females), due to such causes as shock, fright, and injuries where there has been no wound of the skin. Other cases, again, support the theory that tetanus is due to some form of infection. Betoli relates the case of three slaves who died of tetanus after eating the flesh of a bull which had succumbed to the same disease. (*Quoted in New York Med. Record*, June 5th, '86.) The affection does not follow immediately on receipt of the injury, but only when certain putrefactive changes have ensued; the theory of leucomaines would apply here.

Whatever be the cause of tetanus, it is most probable that it is due to irritation of the nerves of the periphery, which is propagated along the trunks to the medulla; this is inferred from the peculiar symptoms and occasional recovery after administration of full doses of narcotics. Whether the irritation is due to bacilli, leucomaines, or something else, at the present stage of our knowledge of the pathology of the disease it would be a difficult matter to determine. More experiments are needed to convince the profession that the cause has been discovered in the bristle-shaped bacillus. It would also be interesting to know why dark races are more often affected than white, and why the disease is more prevalent in warm climates.

Verneuil (*Bull. et Mém. de la Soc. Chir. de Paris*, T. XI, p. 438), in speaking of tetanus, says: 1, Tetanus, as a complication of wounds, has not materially diminished with the intro-

duction of antiseptic surgery; still, on the whole, the prognosis has from year to year improved, and recovery is no longer looked upon as a miracle. 2, Failing a precise knowledge of the ætiology of the disease, treatment is of course empirical, but recovery can be looked for only by the use of narcotics which destroy sensation and tactile irritation. 3, Of all the remedies, chloral is undoubtedly the best; good results now follow the use of opium and its derivatives. Chloral and morphia together, properly administered in full doses and given continuously, afford better results than any other remedies. 4, Tetanus is a cyclical affection, having a varied course, average duration being three weeks. 5, Indication for treatment continues throughout the disease, and remedies must be administered without intermission. Frequently the fatal result is due to irresolution and frequent change of remedies. (*Quoted in Centralblatt f. Chirurgie*, No. 30, '86.)

Dr. M. L. Moreau (*Alger Médical*, Jan. and Feb. 1886) reports a case with symptoms of tetanus cured by rest, sedatives and electricity. Patient had trismus and opisthotonos. He recovered in four days (?), during which period morphia and chloral were given in full doses, the patient kept thoroughly at rest, and was enveloped in cotton wool. The patient was of a neurotic temperament, and to obtain relief from his pain he covered his body with needle punctures. M. Moreau looked upon the case at first as one of hysteria, but on careful watching came to the conclusion that it was more allied to tetanus.

There is no doubt that many of the reported cases of rapid recovery from tetanus by morphia, chloral, etc., are cases of hysteria. I have seen several such which were diagnosed as true tetanus and yet recovered rapidly. The diagnosis of hysteria was confirmed by the attacks recurring at intervals of several months.

Treatment of Stricture by Electrolysis.—At a meeting of the Royal Medico-Chirurgical Society of London held in May last, Dr. Steavenson and Mr. Bruce Clarke contributed a paper on the treatment of stricture of the urethra by electrolysis (*Lancet*, May 29th, '86). The more extensive use made of electricity in surgery and gynæcology abroad, and especially its successful

employment in the treatment of stricture of the urethra, induced the authors to undertake a series of observations to test the accuracy of the reports which had reached England. Their results bore out in every particular the reports of successes received from America. Electricity, on account of its power of splitting up compounds into their chemical elements, can be used as a substitute for ordinary caustics to the human body. It can be applied with success to parts difficult of access, such as the male urethra and the uterine cervical canal. Its effects would be limited to the points touched by the electrode. The caustic effects could be arrested or not commenced until the applicator, in the form of the electrode, was *in situ*, and the direction and extent of the caustic action was entirely under the control of the will of the operator. The authors gave the details of six cases of stricture of the urethra treated by this method. The advantages of the operation were as follows: There was usually no bleeding. If hemorrhage did occur, it was accidental, and usually showed that too strong a current had been used. No anæsthetic was required. If pain or discomfort were produced, it was trifling. The patient could, in the case of slight strictures, pursue his occupation during treatment. No antiseptics were required, as the process itself was aseptic. In the majority of cases there was no contraction or return of the stricture. Eschars produced by caustic alkalies were said to heal with less contraction than wounds produced in any other way, and electrolysis with the negative pole of a battery was a means of applying the same destructive action as was caused by caustic alkalies to parts difficult of access in a way which was impossible by any other method. Probably other chemical decompositions and contractions take place at the negative pole besides those characteristic of the caustic alkalies, but they have not up to the present time been thoroughly made out.

In the discussion which followed, Mr. Berkeley Hill said that, like the American cases, there was too little detail as to the existence, size and nature of the stricture; moreover, the final results had not yet been observed. He mentioned a case of stricture 2½ inches from the meatus, in which he had used this

method, and observed the action with an endoscope. After applying the instrument 15 minutes there was an increase of one millimetre in the diameter of the urethra, but even this was not maintained, and after subsequent applications, with great narrowing of the stricture, other methods of treatment had to be employed. Altogether, he felt sceptical as to the real result of this method of electrolysis.

Mr. S. Edwards related a case of stricture where he could only introduce a filiform bougie, when by electrolysis he increased the diameter of the urethra so much as to be able to pass a No. 24 pewter instrument.

Mr. Buckstone Browne felt certain that several of the cases enumerated would not have needed internal urethrotomy, and could have been successfully treated by gradual dilatation.

Like all new-fashioned methods of treatment, the results reported are very favorable, and there are no failures. The method of treatment of stricture by electrolysis was introduced by Dr. Newman of New York about two years ago, when he published a paper on *Tabular statistics of one hundred cases of urethral stricture treated by Electrolysis without relapse.* Little detail was given, and the fact that all the cases were completely successful makes one suspicious. No doubt many of the strictures were such that any ordinary treatment would have availed. I know that some specialists in urethral surgery never fail to find stricture in every case examined, even if it needs a No. 25–30 instrument to detect it, and they cut every case, with the best results, of course, and without any relapses. But are they as successful in cases of true stricture, which are of long standing, and will admit, perhaps, only a No. 1 catheter or a filiform bougie, and where there is a quantity of indurated tissue about the seat of stricture? It seems incredible that when a lot of tissue is destroyed by electricity that no scar tissue forms as the results of healing; how is the solution of continuity caused by the electrolysis restored? In one case reported by Mr. Clarke, rigors occurred. Dr. Newman apparently had no ill results at all following his operations. Urethral fever was never met with. This seems almost too good to be true, and if the results were

not so invariably excellent, and one or two relapses had occurred, this method of treatment would have inspired more confidence. The method of operating is as follows: A gum-elastic or celluloid bougie, with a wire running down to the centre and terminating in a metal end from the electrode; this being connected with the negative pole, is held gently pressed against the stricture, and should be of a size larger by two or three mm. than is the stricture itself. To the positive pole is attached a pad electrode, which is placed over the sacrum, the patient lying on it. The battery used is Stoehrer's 30-cell. A current strength of from 5 to 8 milliampères is found requisite, and is gauged by means of a galvanometer.—(*S. Edwards. Annals of Surgery*, August, 1886.)

Surgical Treatment of Scrofulous Glands of the Neck.—Last year appeared a small book containing two clinical lectures on "*Scrofulous Neck and the Surgical Treatment of Scrofulous Glands*," by Dr. Allbutt and Mr. T. Pridgin Teale, both of Leeds. In these lectures the authors dwelt on the importance of early surgical interference in enlarged scrofulous glands of the neck, and a number of cases were reported in which this method of treatment was successfully employed. In cases where sinuses existed and the gland was broken down, the diseased structure was scraped out with a sharp spoon. These gentlemen were not the first to advocate or to perform extensive excision of scrofulous glands of the neck, but by the publication of their lectures they drew the attention of English and American surgeons to the subject. At the International Medical Congress held in London in 1881, these gentlemen also, in an able paper, announced their views on the treatment of scrofulous glands, which, in short, were "to radically extirpate every caseous gland and so quench promptly the smouldering fire." Since the introduction of antiseptic surgery, operations in the neck have become much more common and enlarged glands have been removed with impunity. I have myself removed as many as 30 to 40 enlarged glands in the neck at one operation, with the best results. The patients, as a rule, recover rapidly. The removal, after the first incision along the posterior border of the sterno-

mastoid, should be effected by the fingers, aided, occasionally, with a few cuts of the knife. In many cases, although the glands from external manipulation may seem only enlarged and not softened, in turning out the deeper ones they are often found quite caseous. Care should be taken not to operate on a patient affected with lymphadenoma, and to avoid this mistake the glands in other situations (than cervical) should be examined, and also the spleen. Where there is a persistent elevation of temperature, without suppuration sufficient to cause it, it is better to delay operating.

The advantages of removing scrofulous glands are: 1, Freeing the patient from a tedious and exhausting local disease, which disfigures. 2, Removal of foci of infection, and so, perhaps, preventing general tuberculosis. 3, Improving the general health of patient by early removal.

In the *Lancet* of June 19th and 26th is a paper by Mr. Kendal Franks of Dublin "*On the nature of Scrofulous Glands in the Neck and their Surgical Treatment.*" After speaking of the connection between tuberculosis and scrofulosis, and stating his belief in their identity, he says that tuberculosis of the cervical glands was shown to be the result of the entrance of the tubercle bacillus at some contiguous abraded part, and most cases could be traced to some local affection, as eczema of the head, ulcers in the mouth, sore throat, etc., all of which afforded a nidus for the bacillus. The constitutional peculiarity, the "vulnerability of tissue," was a most important factor in determining a proper soil for the development of organisms, and much depended on the dose of the poison received as to the future progress of the case. Three courses were open to the gland to pursue: 1, Death of the bacillus and consequent resolution; this was unusual. 2, Suppuration and expulsion of the tuberculous virus; this might occur in one gland after another, and was of common occurrence. 3, The extension of the disease along the course of the lymphatic glands, and if this were not arrested, subsequent generalization of the disease. Mr. Franks urged that surgical measures should be guided by our present knowledge of the dangerous nature of the disease, that constitu-

tional measures which should be used in all cases should not be trusted to exclusively, once the diagnosis as to the tubercular nature of the disease was established. He referred to three surgical measures as being the best, each of which was applicable to its own class of cases :—

1. *Scooping* should be confined to cases in which a sinus already existed, or in which a superficial abscess was connected with a caseous gland beneath the cervical fascia.

2. *Cautery Puncture*, recommended by Treves, was most applicable to softened caseous glands which had formed extensive adhesions.

3. *Excision*, which had the widest applicability, was chiefly suitable in cases where the glands were still hard and movable. It was applicable to extensive disease as well as to more limited cases; but he urged that it should be employed early, when practicable, before softening or adhesiens were formed. It was then possible to eradicate the disease through a small opening and thus save the patient from extensive operation subsequently, or, if that were not resorted to, to a prolonged and exhausting process of suppuration.

Mr. Fred. Treves, in an article on "*Rest in Treatment of Scrofulous Neck*" (*Lancet*, June 5th, 1886), strongly advocates the necessity of rest in the treatment of scrofulous neck. He says that, as a rule, scrofulous affections of the neck run a very chronic course, and are very obstinate in their relation to treatment. He attributes this to the fact that the neck is a part of the body that is in constant motion. When there is a glandular affection of the axilla, groin, etc., rest is enjoined, but the need for rest in affections of the neck is overlooked. He would suggest the employment of rest as a routine measure in the treatment of every case of scrofulous neck, it should supplement all other local procedures, and among them hold a predominant place. To obtain rest, he advises the employment of a splint, which he figures. It may be of felt, and takes its fixed point from the shoulders and back. The centre of the splint is strengthened by a slender strip of metal. This strip is carried up along the back of the neck, and at the occiput meets a cross piece which

is moulded to the outline of the skull. The cross piece is kept in place by a narrow ribbon that encircles the forehead. In young girls and women, the cervical part of the splint can be entirely concealed by the hair. The splint in children and in males may be secured by straps. In adult females, it may be more conveniently attached to the stays. The felt is freely perforated, and the whole apparatus is very light. This apparatus keeps the neck still, but not rigid. It is not worn at night. Mr. Treves has had the best results from this method of treatment, and uses it not only for scrofulous necks, but for keeping the neck quiet after operations.

After discussing the cause of enlarged glands, and condemning the use of local applications, such as ointments, iodine and other remedies to the enlarged glands, while the cause of enlargement still exists, such as coryza, ozœna, eczema, diseased teeth, tonsillitis, etc., he goes on to say that the affection may be occasionally primary, and he has seen enlargement follow blows or result from a definite exposure to cold. He reviews the general management of the affections, advising sea air, cod-liver oil, etc., and then goes on to speak of local treatment, when he makes the remarkable statement that "excision with the knife, so far at least as the neck is concerned, can be rarely practised." Excision, he says, is only suitable in those cases where a "solitary gland or a small well limited cluster of glands persists obstinately after other manifestations of scrofula have disappeared." Operations upon larger clusters of glands, even where the individual tumors appear quite free, are often exceedingly dangerous. The glands are found on exposure to be less movable than they appeared, to extend deeply, and put in danger the great vessels and nerves or the dome of the pleura if obstinately pursued with the knife. He further says, "Extensive operations of this kind appear to me to be rarely justifiable." Of course Mr. Treves prefers his own cautery-puncture, which, he says, is an admirable method of treatment for large softened glands superficially placed. He also advocates scraping out diseased glands where sinuses exist, and advocates the opening of strumous abscesses and other collections of pus in the glands by cautery-puncture.

I cannot agree with Mr. Treves in his remarks on excision of glands of the neck. My colleagues and I, at the Montreal General Hospital, have frequently removed numbers of scrofulous glands from the neck with the best results. The patient has always borne the operation well, and has rapidly improved in general health afterwards. We have never had any bad results follow, or any accidents occur during the operation, although in some cases the dissections were most extensive. Having never employed cautery-puncture, I cannot speak from present experience, but I should fancy that in the treatment of deep-seated glands its use would be much more dangerous than the knife.

Treatment of Aneurism by the introduction of Steel-wire into the Sac.—Last February Dr. Cayley brought before the London Medico Chirurgical Society a case under his care, in which Mr. Hulke had introduced 40 feet of steel wire into the sac of an aortic aneurism, with the result that the portion of tumor acted upon became solidified. Three important points were established by this case: 1, That the introduction of foreign substances into aneurisms is usually easy. 2, That, so far as present experience goes, this proceeding appears to involve very little danger when it is carefully carried out. 3, That only nine cases in which this operation has been performed have yet been published, so that our experience of it is far too limited to warrant any conclusion as to its real value.—(*Lancet*, July 17th, '86, p. 120.)

In the number of the *Lancet* above alluded to is a very interesting report of a case of aneurism in St. Bartholomew's Hospital under the care of Mr. Howard Marsh. The aneurism appeared to be one of the carotid, just as it emerges from the chest. After consultation, distal ligature was proposed and agreed to. Mr. Marsh operated on December 19th, 1885, and tied the carotid on the level of the cricoid cartilage. He divided it between two kangaroo tendon ligatures. On dividing the vessel the lumen was found entirely filled with a firm clot adherent to the arterial coat and apparently of some age. The healing of the wound progressed favorably till the 21st, when the patient was suddenly attacked with difficulty of breathing.

Later on he grew worse, his face became dusky, and he seemed in a dying condition. On being propped up, however, he seemed to breathe more easily, and his condition improved. The swelling at the root of the neck increased, and it was determined to introduce some foreign body into the sac. On the 10th of March, having selected a point a little removed from most prominent part, where the skin was unaltered, he passed a fine trocar and canula about an inch and a half into the aneurism sac and then withdrew the trocar. No flow of blood followed. A fine probe was then passed through the canula for a distance of fully three inches; it entered readily, but still no blood escaped. He endeavored then to pass some horse hair, but could not do so. A probe was introduced again, and was felt to be moving round in a cavity, but still no blood escaped. The canula was now withdrawn. No bad result followed the operation. Some time afterwards a small abscess formed in front of the aneurismal sac, which was opened. Through this the aneurismal wall gave way, and the patient died five days subsequently of hemorrhage. At the post-mortem, a large aneurism of the arch of the aorta, involving the lower part of the carotid, was found. Mr. Marsh remarks, in connection with this case, that there is always great *primâ facie* probability that an aneurism at the root of the neck will prove to be connected with the aorta rather than with that of the vessels which are derived from it. In this case, distal ligature of the carotid was useless, because the vessel was already occluded. The canula and trocar never fairly entered the blood-stream, but evidently became entangled in clot; this, of course, prevented the introduction of the horse-hair.

Splenectomy.—At a meeting of the Royal Medico-Chirurgical Society, held in April last, Mr. Knowsley Thornton read a paper on two cases of splenectomy (*Lancet*, April 17th, 1886). This paper contained a detailed record of a case of splenectomy for cystic spleen in a girl aged 19. The pedicle was ligatured with silk and the ligatures cut short. The operation was performed with full antiseptic precautions. The patient made a complete recovery, and is now in better health than before the operation. Another case of splenectomy for hypertrophy of the spleen was

also related. In this case there was retraction of a small artery from the middle loop of the three ligatures, with hemorrhage into the omentum and remarkable general oozing, and cyanotic condition of the patient, who apparently rallied from the operation, but died from internal hemorrhage in five hours and a half. Tables of 11 successful and 23 unsuccessful splenectomies, with 4 successful partial splenectomies, were appended, with remarks on the causes of success and failure. All the cases in which leukæmia was present were fatal, and operations under these circumstances are, the author contends, unjustifiable. Credé had collected most of the cases in von Langenbeck's Archives. Splenectomy for hypertrophy of the organ was not so favorable for operation as wandering spleen and cystic disease of the organ. Mr. W. Haward's case had been included in the table; it happened in 1881, and was one of leukæmia. So far as he knew, the girl was now in a good state of health, and menstruating normally; as a house and parlor-maid, she performed a fair amount of hard work. In one of the successful cases the woman bore a child after the operation. In another case, the woman was in good health nine years after the splenectomy.

Mr. Thornton stated that it was interesting to observe that in his successful case the girl acquired an enormous appetite; also, that the reason that operations for leukæmia were so unfavorable was that the blood in these patients coagulated with great difficulty, and there was a proneness to hemorrhage. The President, Mr. Pollock, narrated a case of a man who died two days after a large hemorrhage into the legs.

Successful Nephrectomy on a patient of 23 *months.*—Dr. Rosswell Park of Buffalo reports the case. (*Medical News*, May 22nd, 1886.) The right kidney was removed, exhibiting fibro-cystic degeneration. The operation was performed by abdominal section in right linea semilunaris. Child made a good recovery. Dr. Park remarks that his patient is the youngest who has ever survived nephrectomy. The abdominal incision was not made from choice, but necessity, the tumor being altogether too large for removal in any other way.

New and Original Method of Dressing.—Dr. C. W. Strobell,

in the *New York Medical Record*, June 26, 1886, has devised a new and certainly original method of dressing. He surrounds the wound with a thin glass globe so constructed as to fit closely to the part, and provided with openings for drainage tubes. The advantages are that the wound can be looked at without removing the dressings; that it is isolated from sources of infection, as the globe can be hermetically sealed, etc. The author gives no less than seventeen reasons, for which I have not room here, why this method of dressing should commend itself to the profession.

Treatment of Orchitis and Epididymitis.—Mr. Fred. W. Lowndes (*Lancet*, July 24th, 1886) says that the practice suggested by Mr. Furneaux Jordan he has found most beneficial, and has followed it for the last eleven years. The affected testicle is painted with a strong solution of nitrate of silver (two drachms to one ounce), at the same time rest in bed is strictly enforced, and the inflamed organ is supported on a pillow to prevent it hanging down. When the patient is obliged to follow his occupation, the cure is slower, as complete rest cannot be obtained by suspensory bandages, etc.

Enucleation of Eyeball, with Transplantation and Reimplantation of Eyes.—Dr. C. H. May (*Medical Record*, May 29th, 1886) gives an interesting account of this operation. The operation was first performed by Dr. Chibret, 4th May, 1885, when the eye of a rabbit was put into the orbit of a girl æt. 17, from whom the eye had just been removed for disease. The operation was a failure. Next, Mr. Terrier performed transplantation June 15th, 1885; sloughing of cornea resulted on the third day. M. Rohmer performed the third transplantation June 22nd, 1886; the cornea sloughed on the seventh day. The next transplantation was performed by Dr. H. W. Bradford of Boston (*Boston Med. and Surg. Journal*, Sept. 17, 1885). He sutured the remains of the optic nerve of a patient to the optic nerve of the rabbit's transplanted eye. On the 18th day "conformation and tension was good, cornea clearing, and allows iris to be seen; ocular movements in all directions good." M. Terrier performed a second operation, Oct. 19th, 1885, after

Dr. Bradford's method; the operation was a failure. So out of five cases four were failures. In four, rabbit's eyes were used, and in one a dog's eye. After giving a summary of the results obtained, with a study of the changes taking place in the transplanted organ, the author describes a number of experiments (24) of transplantation of eyes in rabbits, of which a full report is given, and to which I refer the reader. In many cases the cornea, which was clear up to the 15th or 16th day, sloughed on exposure to light.

Treatment of Angioma.—Dr. R. Campana has found multiple punctures, followed by the application of lint and dried perchloride of iron, of great service in the treatment of small capillary angiomata. For 24 hours after the operation there is a superficial reaction in the form of an erythema, but by the second or third day the part treated becomes pale. If one operation is not sufficient, it is to be repeated. In one case of angioma cavernosum upon the face of a child, he effected a cure in one month by galvano-cautery.—(*La Salute*, 1885, Nos. 9 and 10; quoted in *Jour. of Cut. & Ven. Diseases*, April, 1886.)

Treatment of Clubfoot.—Mr. Robt. W. Parker (*Brit. Med. Jour.*, July 3rd, 1886) writes an interesting paper on the above subject, and gives a brief abstract of the anatomy of club-foot. He, in conjunction with Mr. Shattock, made a number of dissections of club-feet, mostly in still-born children, and came to the conclusion that the deformity was not caused by paralysis or a spasmodic contraction of certain muscles, for after all the muscles were removed the deformity would persist, and could not be overcome till some of the ankle and tarsal ligaments had been divided. The neck of the astragalus generally, but not always, had an exaggerated inclination inwards and upwards. The ligaments chiefly at fault he found to be those placed on the inner border of the deformed foot, viz., the anterior portion of the internal lateral ligament of the ankle joint, the astragalo-scaphoid and calcaneo-scaphoid ligaments, all three being blended into one indistinguishable capsule of great strength. These ligaments being the chief cause of the deformity, he advocates their division. The chances of relapse are lessened, and the time necessary for

rectification of a severe talipes much shortened by division of these ligaments. The ligament most needing division is quite subcutaneous, and extends from the tip of the internal malleolus across the astragalo-scaphoid articulation, on to the internal cuneiform bone, and loses itself in a fibrous expansion on the fore-part of the inner border of the foot. The extent and direction of the fibres which chiefly oppose rectification of the foot can be felt with the finger-tip when traction is made on the inverted foot. A curved tenotome is entered immediately in front of the anterior border of the internal malleolus, the blade being kept between the ligaments and the skin, and the cut made by turning the knife against the ligament and cutting till all resistance ceases—in fact, till the bone is reached. The foot is placed in a plaster boot, which is left on for a week or ten days, and after this, manipulation, etc., may be commenced. Mr. Parker does not pretend that this treatment cures club-foot any more than tenotomy, but he holds that with proper after-treatment it hastens rectification. He does not think division of the tendons is needed in all cases.

Correspondence.

NEW YORK, Aug. 16, 1886.

It would seem that the new code, or no code, party find that the removal of all restraint and allowing each individual to act in accordance with his conscience, has not had that beneficial effect in elevating the moral and ethical standard of the members of the profession which they predicted it would have. Because baulky and vicious horses often take the bit in their mouth and bolt, in spite of checks and reins, the members of the stated party arrived at the conclusion that horses, in general, would go better if all checks and reins were removed and the animals permitted to go at their own sweet will. A short experience of this method seems to have been sufficient to reveal the fallacy of this reasoning. The readers of New York journals will well remember that the fight between the two code parties had to be fought out in the conservative and dignified Academy of Medicine, notwithstanding that a great effort was made by the leading

members on both sides to keep that body free from the dispute. The contest ended in a victory for the no-code party, which they signalized by electing, by an unheard-of majority, one of their leaders president, and by abrogating all clauses of the Academy relating to ethics and removing all power of discipline over its members. To quote from a correspondent to the *Journal of the American Medical Association*, "as there is nothing whatever in the regulations of the Academy of the faintest ethical import, it is evident that a fellow can be suspended or expelled for a breach of certain routine rules solely. He may be a debauchee or sot, a blackleg or a thief, but so long as he acts in accordance with these 'regulations' the Academy cannot touch him, and if it attempted to do so, the defence that he had not violated the regulations would hold good in any court of law. There is not even the saving clause of 'conduct becoming a gentleman' anywhere to be found." Recent experience bearing on this point has influenced the Academy in amending its constitution. At a meeting held June 3rd, article 8, section 1, of the constitution was amended to read: "The Academy may suspend or expel a fellow for violation of its regulations, or the commission of any act which unfavorably affects the character of the medical profession or the interests of the Academy."

Although the summer, so far, has been unusually cool and pleasant, the rate of mortality among children has been much higher than preceding years. This increase of mortality is due chiefly to a hitch between the Board of Apportionment and the Board of Health. Hitherto the Board of Health appointed a sanitary corps of fifty physicians, whose duty it was, for the remuneration of $100 a month, to visit the tenement houses and prescribe for the ailments of children whose parents were unable to pay a fee. The Board of Apportionment refused this year the allowance of $10,000 to cover the expenses of the sanitary corps of physicians. They allege as a reason for their refusal the extravagance of the Board of Health and the number of sinecure offices under its administration. If the Board of Health, they say, would practise a little economy, its present allowance ($170,000) would be sufficient to cover all necessary expenses, including that of the sanitary corps of physicians.

Your city may find that consolation which companions in distress feel, in the fact that here in New York there is an anti-vivisection party evidently organized for the sole purpose of satisfying the uneasy consciences of a few perverted sentimentalists who have not sufficient moral strength to endeavor to allay the human suffering and misery that exists, but who pour out their overflowing benevolence in hampering the honest efforts that are made to benefit mankind. As the eminent head of this party has recently been giving utterance to remarks disparaging to vaccination, it may be that, ere long, this city will meet with the same difficulty in averting recurring epidemics of smallpox that Montreal so sadly experiences.

Another of New York's great medical men has passed away. Dr. Frank H. Hamilton, well known by your readers through his classical treatise on fractures, died on the 11th inst. from pulmonary disease of some two years' standing. Dr. Hamilton was born in 1813, at Wilmington, Vt. He was graduated at the University of Pennsylvania in 1833, and began practice in Auburn, N.Y. After trying his fortune in a couple of other towns in the State, he removed, in 1844, to Buffalo, where, in conjunction with the late Dr. Flint and the late Dr. White, he was largely instrumental in building up the medical department of the University of Buffalo. In 1862, Dr. Hamilton came to New York, having previously been appointed professor of surgery in Bellevue Hospital Medical College, a position which he resigned in 1875. During the war of the Rebellion, he served in the medical department in the army, and rose to the rank of medical inspector. He was one of the consultants in President Garfield's case, and, in conjunction with Drs. Agnew and Bliss, was almost constantly in attendance. Besides the treatise on fractures already mentioned, Dr. Hamilton was the author of a work on military surgery and a general text-book of surgery. His other writings, though not numerous, possess a substantial worth, and are written in a clear and attractive style. Notable among these are two that appeared in the *New York Medical Journal*. "The Asiatic Cholera as it appeared at the Suspension Bridge, Niagara County, N.Y., in July, 1854, and its

Lessons; what we know of Cholera" (*N. Y. Med. Journal*, Nov. 15, 1884), and a paper entitled "Dislocation of the Head of the Radius downward, by Elongation" (*N. Y. Med. Journal*, Jan. 3, 1885). The deceased was a member of the American Medical Association, of the Medical Society of the State of New York (of which he was president in 1885), of the New York State Medical Association, and of the Society of Medical Jurisprudence and State Medicine. At the time of his death he was one of the surgeons to Bellevue Hospital and a consulting surgeon on the staff of several institutions.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

UNDER THE CARE OF DR. F. J. SHEPHERD.

Compound Fracture of outer table of Frontal Bone—Pneumonia—Recovery.

(Reported by DR. H. S. BIRKETT, House-Surgeon.)

Wm. B., aged 30, sailor, admitted to hospital 28th May, 1886, suffering from injuries to head and left hip. The same morning, whilst working on a vessel, patient tripped and fell down the hatchway to the hold, a distance of 30 feet, striking on the left side of his head and left hip. On admission, his condition was as follows: Quite conscious; no paralysis or anæsthesia; pulse 80, full and regular; respirations 18, unembarrassed; pupils equal, and respond to light.

On examination: A strong, tall, well-built man. A wound 2½ inches long is found on the side of the head, beginning half an inch above and behind angular process of left frontal bone, and extending directly backwards and upwards. This wound communicates with the outer table of the frontal bone, which is fractured into four or five narrow pieces. These are not detached, but kept in place by bands of periosteum. The wound was well cleaned with bichloride (1–1000), a drainage-tube introduced, and edges brought together by catgut sutures. Dry dressings; ice-bag applied. Examination of hip shows only evidences of severe bruising.

The next day patient was partially delirious; unable to retain anything on his stomach; no pain in head; pulse 108, weak and shabby. Every eighth respiration is a long-drawn inspiration, followed by a cough, with expiratory act. Temperature 98½°. Retention of urine, which was relieved by catheterism three times a day, this condition continuing for fifteen days, at the end of which time he passed his urine naturally. Urine presented no abnormal features, except being covered with a very fine, thick froth. Patient was ordered champagne and morphia hypodermically when required. His condition remained unchanged for two days, at the end of which time he became quite rational. No pain in head. Pulse 84, and of good volume. Respirations 20, unembarrassed and natural. Temperature 98½°. Wound has united well; no swelling; no suppuration. Tube removed and dry dressings applied.

Five days later, patient developed pneumonia, which involved the whole area of right lung, and by the 30th June was quite convalescent and allowed to get up. From this time until exit (19th July) the progress of the case was one of continued improvement, the wound having become perfectly healed, no head symptoms, and patient gained much in weight and strength.

Remarks—The interesting question arises here as to the cause of the pneumonia. Was it septic? The extensive wound of the frontal bone was always aseptic, and healed, except at point of drainage, by immediate union.

Compound, Comminuted and Depressed Fracture of Skull, followed by Epileptic Fits—Recovery.

(Reported by Dr. H. S. Birkett, House Surgeon.)

J. D., aged 28, carter, admitted to the hospital on 8th June, 1886, suffering from injury to head. On this morning, whilst driving a horse, the animal shied at a passing engine, throwing the patient over the dashboard to the ground, and before he had time to get out of the way the horse kicked him on the head. Patient, after the injury, got up without assistance, and wished to continue his work, but was brought to the hospital instead. On admission, his condition was as follows: Patient is a strong and healthy looking man. Complains only of a cut in his head.

Has no pain in head; no vomiting; gait perfectly natural; vision normal; sensation and muscular power quite intact; pupils active and equal; no dizziness; no confusion of mind, gives a perfectly connected history of the accident.

On examination, a clean cut wound, 3 inches long, is found on the left side of the head, beginning at posterior fontanelle and extending downwards and forwards to parietal eminence. The wound communicated with the parietal bone, which is found to be broken into two irregular pieces, both fragments together corresponding in length to that of the wound itself. The fragments are depressed, and the inner riding on the outer one. No protrusion of brain substance. No hemorrhage. The wound was thoroughly cleansed with bichloride (1–1000), edges brought together by silk sutures, medium-sized drainage-tube introduced, and the wound dressed with iodoform gauze and jute—all kept in position by a firmly applied bandage.

About an hour after the dressing had been applied, patient was seized with a convulsion, which came on without any premonitory symptoms, and lasted a minute and a half, during which time his condition may be described as follows: Both upper and lower extremities were in a state of extreme flexion; the muscles clonically contracted; body bent to right side, resting on hip and side of head; head also flexed and partially bent under body; lower jaw firmly set, but accompanied with grinding of the teeth; pupils contracted to a pin's point, and insensitive; respirations hurried, and at one time ceased for five seconds, at same time radial pulse lost for a similar period, and during which time patient became markedly cyanotic. Froth exuded from the mouth; was quite unconscious; no involuntary evacuations. The bandage was immediately cut and dressings removed, and in a few seconds patient's condition was as follows: Is quite conscious; complains of severe frontal headache; is very restless, tossing and rolling from side to side; pupils dilated and sensitive; sensation and muscular power intact; still grinds his teeth; tongue slightly bitten on both sides; no vomiting. Ordered ʒss doses of potassium bromide every four hours per rectum, as patient was unable to retain it on his stomach. The

wound was dusted over with iodoform, and a piece of antiseptic gauze and ice-bag applied.

For the next ten days the case progressed very favorably. Complained of no pain in head; no tenderness on pressure; slept well, and took nourishment very well. The wound had well united. The drainage-tube daily shortened, and removed on the tenth day; no suppuration; temperature ranging from 98° to 99°. On the 19th June, the wound took on a slight erysipelatous action, and patient was immediately isolated. Hot lead and opium applied to wound, and iron given internally. Temperature 102½°. The case subsequently progressed very favorably, heat, redness and inflammatory signs rapidly disappearing; temperature fell to 99° on the second day after removal, and remained normal until patient's exit (5th July), when his condition was as follows: Enjoys excellent health and looks well; small sinus, 2 inches long, at lower end of wound, into which a probe, when passed, detects small piece of bone, which seems to be becoming covered over with granulations. Has no paid in the head; no tenderness upon firm pressure over seat of recent injury.

Remarks.—The interesting points in this case are the great degree of injury which took place without motor or sensory disturbances and the occurrence of convulsions on the application of a dressing which, pressing on an already depressed portion of the skull, caused just sufficient irritation to bring on reflex spasms, which ceased almost immediately on removing the bandage and dressings. In this case no surgical interference was felt to be justifiable, as no symptom of compression or irritation were present when admitted, and when the convulsive attack came on, as immediate relief followed the removal of the dressings, the case continued to be treated expectantly. It will be interesting to watch the after history of this case.

Enlarged Prostate, with Retention of Urine—Catheterization, Urethral Fever—Recovery.

(Reported by Dr. H. S. Birkett, House Surgeon.)

B. McI., aged 65, carter, admitted to hospital 28th April,

1886, complaining of inability to pass his urine. On the 26th, patient took cold from exposure, and upon awaking next morning found that he was unable to pass a drop of urine, though the desire to do so was very great. He complained of severe pain in the hypogastrium, in the region of the bladder, also in the perineum and along the whole course of the urethra, attended with rectal and vesical tenesmus. The urine could only be passed by drops, and the act was accompanied by a great deal of straining. In this condition patient went to a hospital, where attempts were made to pass an instrument, but without success, some slight hemorrhage following these attempts. He then went to Dr. Roddick, who successfully drew off his urine, and again on Tuesday morning and evening. The urine drawn off had the same characters as it has at present (28th).

Upon admission, patient complained of inability to pass water, sometimes a few drops being passed, attended with great straining, of pain over the hypogastrium, in the perineum, and along the whole course of the urethra, with great rectal and vesical tenesmus. Upon introducing a catheter, about ℥xx of urine were drawn off, with great relief to the patient. The urine had the following characters: Dark-red in color; heavy deposit of mucus; few blood-clots seen; strongly urinous odor; acid in reaction; specific gravity 1024; 15 per cent. of albumen; no sugar. Microscopically, numerous red blood-corpuscles and bacteria termo are seen. Patient is a man of average height and weight, and fairly well nourished. Temperature 98°; pulse 84. Upon examining the prostate, the right lobe, but more especially the middle, is found to be enlarged, and very painful and tender to the touch. Previous history: Patient had an attack similar to the present one two years ago, the symptoms complained of and the character of the urine being the same as the present attack. The cause was exposure to cold. The treatment consisted in catheterization, hot hip baths, and poultices to perineum. Patient is temperate in his habits. At nine o'clock the same evening, drew off ℥xviii of urine, the same in character to that above described.

April 29th.—At 6.30 and 11.15 a.m., drew off ℥xvi and ℥xii

of urine respectively. Patient ordered Supp. Morph. Sulph. gr. i and Amm. Bromidi, gr. xx; Tr. Hyosciami, ʒss; Inf. Lupuli, ʒii; Inf. Uvæ Ursi, ʒi. 5.30 p.m.—ʒvi of urine drawn off, of same character. Patient feels easier and more comfortable. 30*th*—Urine ordered to be drawn off three times daily.

May 1*st*—No change in patient's condition; the bladder to be washed out daily with weak solution of carbolic acid. 8 p.m.—Patient found to be somewhat delirious; talks incoherently at times, rambling on various topics; will persist in getting out of bed. Occasionally will answer questions directly put to him. Temperature 104.5°; pulse 100. Urine drawn off. 11 p.m.—General condition much the same; complains of no pain. Temperature 103°; pulse 94.

May 2*nd*.—Patient more rational; pain not so severe. Temperature 99°; pulse 84. Urine same in amount, but much clearer; small deposit of blood.

May 3*rd*.—Patient's general condition much improved and quite rational. Passed his urine himself, attended with only little pain and slight straining. Urine is clearer; no deposit of blood; quantity increased. Pain in the perineum and along urethra less severe.

May 5*th*.—General appearance and condition of patient much improved. Passes water freely and without pain.

May 7*th*.—Patient continues to improve. Catheterization being done three times daily, and bladder washed out daily with weak carbolic solution. Urine quite clear and of normal odor. Prostate gland less swollen and not painful or tender. Bowels regular; appetite good, and sleeps well.

Remarks.—This case exhibits well the symptoms of urethral or "catheter" fever in an old man with enlarged prostate, who, for the first time, was regularly catheterized. The period of entrance upon "catheter life" in such cases is always an anxious one, and the necessity of rest in bed at the commencement cannot be too strongly insisted upon. The cause of the attack in this man, as in so many others, was exposure to cold.

Society Proceedings.

CANADIAN MEDICAL ASSOCIATION.

First Day.—Aug. 18.

The meeting was opened at 11 A. M. in Laval University, Quebec. In the absence of the President, Dr. Osler, Dr. Sullivan took the chair.

Moved by Dr. Sheard, seconded by Dr. Sloan, that the following members of the profession be elected members of this Association : Dr. E. Jenner, Picton, Ont.; Dr. Rankin, Tavistock; and Dr. Lunam, Campbellton.—*Carried.*

The only report from the special committees was presented by Dr. Mackay, of Woodstock, on Obstetrics. The paper was read by the Secretary, in the absence of Dr. Mackay.

Moved by Dr. F. W. Campbell, Montreal, seconded by Dr. J. E. Graham, Toronto, that a vote of thanks be presented to Dr. Mackay for his interesting report.—*Carried.*

After some discussion as to whether the regular section work should be taken up before the afternoon, the meeting adjourned at the suggestion of Dr. Sullivan to go through the University, Dr. Marois, of the Laval Medical Faculty, kindly showing the members through the Museum and Library of the University.

Wednesday, 2 P.M.

The President, Dr. T. K. Holmes, in the chair.

The President requested Dr. Cassidy of Toronto, in the absence of the chairman of the Committee on Public Health (Dr. Yeomans of Mount Forrest), to make some remarks upon the recent enactments with reference to quarantine regulations concerning vessels entering the St. Lawrence. These enactments have already been submitted to, and approved by, the Provincial Board of Health of Ontario. The order in council governing these matters was published in the early part of this month. It deals with the restrictions upon all steamships and sailing vessels in the St. Lawrence—at the lower ports, at the station at Grosse Isle, at Quebec, and at all other organized Quarantine ports of the Dominion—and at all ports under qua-

rantine directions of Collector of Customs, also the signals for sickness to be displayed at all ports, the disinfection of rags, the hours of inspection, and the penalties for pilots and all officers and masters of vessels. It was pointed out that the chief points in which the report of the Ontario Board of Health differed from the existing regulations are the following: 1st, That the precautions prescribed in the case of an outbreak of cholera on board ship are insufficient to meet the case, and should be rendered more stringent, as indicated in their report. 2nd, It is advised that the inspecting officer at Quebec require clearance papers from Rimouski or Grosse Isle, failure of which shall lead to the vessel being sent back to Grosse Isle forthwith. 3rd, The amount of the fine imposed ($400) is thought to be insufficient to prevent infractions in the case of wealthy trading companies and a much larger sum ($3,000) is suggested, with imprisonment without the option of a fine for a second offence.

Moved by DR. ECCLES, seconded by DR. CLARKE, "That the Canadian Medical Association, at the annual meeting convened at Quebec, views with pleasure the action taken by the Dominion Government in the issue of the quarantine regulations which have been put in force during the present month. We consider that the prompt and thorough enforcement of the aforesaid regulations will be of incalculable benefit to the health interests of the country; and, moreover, it is our opinion that, 'when intelligently applied,' they are calculated to conserve the best interests of the trade and commerce of the Dominion." *Carried.*

The President-elect, Dr. Holmes of Chatham, then read his Address. (*See page* 65.)

DR. R. P. HOWARD, seconded by HON. DR. SULLIVAN, proposed a vote of thanks for the thoughtful and suggestive address which we had listened to with great pleasure. He did not intend to discuss the various problems which had been set before us. He would only say that the general tenor of the sentiments expressed would no doubt commend itself to the members at large. It was only on one subject that he would make a few remarks, one upon which he differed somewhat from the speaker, viz., that of the preliminary education to be required from medi-

cal students. The suggestion in the address is to the effect that this might be extended especially in the direction of the scientific subjects. His own view is opposed to this, believing that the preliminary examination is already too complicated, and not compact or concrete enough. In fact, we might even go backwards with benefit to ourselves. If it were possible, he would favor a general university training. No doubt, if a high standard in medicine was to be upheld, a similarly high standard must be maintained in the matriculation examination.

DR. SULLIVAN does not altogether agree with Dr. Howard. He thinks we are getting on very well. He does not find that, practically, the Arts graduates, as a rule, excel others in their medical studies. Under any circumstances, an examination can be crammed for. The suggestions for improvement or advancement in the examination generally came from the teaching men in the Ontario Council, and not from the members of the general profession. He would also take this opportunity to congratulate the Canadian medical profession upon the progress it had made of late years. For such progress to continue, it was absolutely necessary that the friends of higher education should assist liberally from their wealth. It was, therefore, with great pleasure that he was able to congratulate McGill University upon the handsome endowment they had received from Sir Donald Smith and other public-spirited citizens of Montreal, and he hoped that this fine example would be followed by other donations to Canadian Universities. He cited the case of New York, where, quite recently, princely gifts had been made to certain faculties of medicine. He had been pleased to see Dr. Holmes elevated to the presidency of this Association, and felt sure that the address would be deemed worthy of the man.

The vote proposed was carried by acclamation.

The following new members were proposed by Dr. Lachapelle, seconded by Dr. Sheard, and elected, viz.: Drs. Vallée, Marois and Ahern.

Moved by Dr. Sullivan, seconded by Dr. Graham, that Drs. Sullivan, Geo. Ross and Sheard submit names for election to the Nominating Committee. The suggestion was acted upon.

Moved by Dr. Sheard, seconded by Dr. Geo. Ross, that the following gentlemen constitute the Nominating Committee, and that they meet in this room at 9.30 A.M. to-morrow to transact business without future notice: Drs. Rankin, Tavistock; Sloan, Blythe; Kerr, Winnipeg; Graham and Canniff, Toronto; Ross and Rodger, Montreal; Eccles, London; Lachapelle, Montreal; Marois, Quebec; Smith, Seaforth; Lunam, Campbellton, N. B.; Sullivan, Kingston; Sheard, Toronto; and the President and Secretary.—*Carried.*

The meeting then adjourned for section work.

MEDICAL SECTION—WEDNESDAY, AUG. 18.

The section met at 3.30 P.M., and organized by electing Dr. Canniff of Toronto chairman and Dr. Jenner of Picton secretary.

DR. DANIEL CLARKE of Toronto read an able paper upon "The Medical Jurisprudence of Crime and Responsibility." The following were the conclusions arrived at:—

1st, The natural history of crime shows that brains of chronic criminals deviate from the normal type and approach those of the lower creation.

2nd, That many such are as impotent to restrain themselves from crime as the insane.

3rd, That immoral sense may be hidden from expediency by the cunning seen even in the brutes, until evoked by circumstances.

4th, No man can shake himself free from the physical surroundings in which he is encased.

5th, Crime is an ethical subject of study outside of its penal relations.

6th, Insanity and responsibility may coexist.

7th, Some insane can make competent wills, because rational.

8th, The monomaniac may be responsible should he do acts not in the line of his delusion, and which are not influenced thereby.

9th, Many insane are influenced in their conduct by hopes of reward or fear of punishment in the same way as the sane: the rudiments of free-will remain.

10th, Many insane have correct ideas in respect to right and wrong both in the abstract and concrete.

11th, Many insane have power to withstand being influenced even by their delusions.

DR. SHERMAN of Ogdensburg spoke very highly of Dr. Clarke's paper. He himself, it so happens, is often called into court in cases of crime or to give evidence as to the validity of a will when the sanity of the testator is under dispute. He observes that the views expressed by Dr. Clarke upon these difficult questions coincide most closely with those which his own observation has led him to adopt.

DR. HOWARD thought the general principles laid down by the reader of the paper could not be made the subject of discussion, for upon them the profession was entirely agreed. These principles and the reasoning upon which they were founded had been ably set forth by Dr. Clarke. It was a matter for regret that the members of the legal profession could not be induced to see the matter in the same light.

DR. SULLIVAN was afraid that many alienists still thought differently from Dr. Clarke, bnt he was glad to find that this Association was so unanimous in holding such advanced views upon the important matter of criminal responsibility. Dr. Clarke has shown us the difficulties that lie in the way of making a diagnosis in cases of mental disease, but has failed to point out the remedy. The difficulties are even greater than in organic disease, and younger men would seem to require that experts should lay down some definite rules for them. It is, indeed, a question whether the ordinary practitioner can, or should ever be requested to, give an opinion as to the responsibility of a doubtful individual. He has himself once given an opinion as to the entire sanity of a man who shortly after proved to be quite out of his mind, and who, indeed, subsequently was the author of the tragedy which ended the life of the lamented Dr. Metcalfe of Kingston. The alienists themselves still differed much, and much was required to bring them into line, when it was possible for a well-known superintendent to say, as had occurred recently, that in his asylum all the males were mad through masturbation and all the females through criminal abortion.

DR. CLARKE remarked that no man should hastily decide an obscure case of insanity, *i.e.*, after one or two hasty interviews. Some forms of insanity can be easily diagnosed by the ordinary practitioner, such as dementia, melancholia with delusions, and acute mania; but in cases of delusional insanity, care should be taken not to draw conclusions too rapidly. If the truth is to be arrived at, the specialist giving evidence should not be upon any side, but should be placed in a strictly independent position. Advanced students now in Toronto have the advantage of practically studying mental disease in the asylum, where Dr. C. also

gives practical lectures. Those instructed in this way can back up their opinions upon good pathological grounds. A definition of insanity can never be given. The old legal ground of a capacity to distinguish right from wrong has done untold harm. The only means he knows of by which an opinion can be arrived at is to institute a comparison between the man as he is and his former self, the idea of which is to be obtained by a careful investigation into his past history, habits, etc.

DR. HOWARD would not be understood to say that the profession was entirely at one upon all the points alluded to by Dr. Clarke, but merely upon the great general principles, especially the abandonment of the crude test of knowledge of right and wrong. He thought that in all cases an independent jury of experts should be named, men whose position should be free from any leaning to either side, and whose decision would be final.

DR. DUPUIS of Kingston read a paper upon "Diabetes Mellitus."

DR. CAMPBELL said that his attention had been strongly directed to the importance of temporary glycosuria from a case recently coming under his observation. A gentleman who, during the season, partook largely of strawberries and cream, was examined for life insurance, and refused owing to the presence of a large quantity of sugar in the urine. Dr. C. re-examined him a short time after his diet had been changed, and found it entirely free from sugar. Such cases were not so rare as might be thought.

DR. D. CLARKE alluded to the frequent appearance of sugar in the urine just before and during acute accessions of mania in the insane.

DR. GEO. ROSS said that certain cases of glycosuria—persistent, not temporary, as in Dr. Campbell's cases—required to be carefully distinguished from those of diabetes proper. In the former we might have sugar present in the urine for a great length of time, perhaps for years, and yet the symptoms which characterize true diabetes mellitus not showing themselves at any time. It would seem therefore that there are two distinct pathological conditions, in both of which the persistent presence of sugar in the urine may be a factor— in the one case coexistent with average health, and in the other marked by a peculiar set of well-known symptoms. In his most recent work upon diabetes, Dr. Milner Fothergill devotes special chapters to these quite different disorders, remarking at the same time upon the confusion on the subject that still exists in the minds of many

medical men. To emphasize this he relates the history of a case somewhat as follows: A physician in India, examining the urine of a patient, found sugar. Desiring to be certain of his tests, he applied the various solutions to the suspected urine and to his own side by side. To his dismay he found his own urine loaded with sugar. He had been up to that moment in the most perfect health. Uneasy, he returned to England, and was given a strict anti-diabetic diet. His health failed rapidly. After a time he abandoned all attempts at treatment, and resumed his customary diet and habits in every way, with the result of being soon restored to as complete health as he had enjoyed before. Examples of this kind should teach a lesson to be careful in prognosis and in estimating the effect of any medicine or other treatment in any given case.

DR. HOLMES alluded to the liability of those who have been temporarily glycosuric from improper diet to become diabetic. Such persons should always be cautioned against continuing the use of such articles of food for fear of serious consequences ensuing. He thinks that those physicians are most successful in these cases who begin early with a strict dietary and persistently enforce it. Has had some experience of bromide of arsenic, and thinks highly of it.

DR. GRAHAM thinks we might throw these cases into three classes—viz., 1st, Temporary glycosuria; 2nd, A mild form of diabetes; and 3rd, A severe ferm. In some cases of the last series medicine and diet have no effect whatever, whilst the milder forms are distinctly amenable to treatment, and are thereby either much prolonged or positively cured. In odd instances a glycosuria will be produced by a certain article of diet, and by that alone; a case of this kind from peaches had come to his knowledge. Thinks bromide of arsenic decidedly beneficial. Whether a coincidence or not, since he had begun the use of this drug all his cases had done well. The last of these he would mention. Two brothers, aged 15 and 22, were severely injured in the same accident; both became diabetic, all the symptoms, when first seen, being very severe. The urine had now diminished from 12 or 14 pints to 5 pints, whilst the specific gravity had fallen from 1045 to 1028, and even that high figure was mainly from an excess of urea, because there was only a trace of sugar present.

DR. JENNER of Picton, Ont., read a paper upon "Alimentation in Sickness." The writer dwelt chiefly upon the growing importance of dietetics in the management of sick people, giving many examples of the results of neglecting this department in

favor of medication with drugs. He thought that the Canadian schools, as elsewhere, did not give sufficient attention to systematic teaching of the principles of dietetics to their pupils.

DR. ECCLES had often experienced difficulties in the way of having food suitably prepared for his invalids. When he thinks it of special importance, he examines the food himself and gives directions for its preparation. We all rely too much upon medicine and too little upon diet. Thinks it often important to insist more upon the systematic, and perhaps frequent, feeding of patients. Persons who are weak should be allowed to take a light supper. To objectors, he points out that animals mostly feed before sleeping. During digestion there is more blood in the abdominal organs and less in the brain, a condition favoring sleep.

DR. HOWARD expressed himself much gratified at the thoughtfulness which had produced such a paper. It often requires courage, especially on the part of a young practitioner, to tell people that what they require is sunlight, fresh air, and good food, and not medicine.

DR. TRENHOLME hoped that the time is coming when we shall hear much more about diet than in the past.

DR. CAMPBELL maintained that the subject of dietetics was by no means so neglected as the reader would have us believe. He thought that, at the present day, every lecturer upon practice of medicine felt it a duty to lay stress upon the management of diseased conditions by attention to the dietary.

DR CANNIFF said that in the Toronto schools the subject of sanitary science received considerable attention, and the matter of dietetics also held a prominent part in this course.

The section then adjourned.

The section reopened at 7.30 P.M.

DR. PLAYTER of Toronto read a paper on "The value of Mortuary and other Health Statistics." He alluded to the work already done in this direction, especially in Ontario, but showed that nothing had yet been accomplished to procure complete statistics for the Dominion at large. He urged the importance of having the subject of the collection of statistics constantly brought before the attention of the general government. He requested the Association to name a committee for this purpose.

DR. J. E. GRAHAM of Toronto then read a paper upon "Contagious Pneumonia."

DR. HOWARD said that after 37 years' practice, and after having given a good deal of attention to the subject, it was beyond his experience to have met with such a series of cases as seemed to imply the existence of contagion. He would therefore conclude that there must be, in reality, two forms of the disease, one contagious and the other non-contagious. He thinks that, when we get such groups of cases as those related by Dr. Graham, when pneumonia would *seem* to have been contagious, we are dealing with a disorder in some way different from the ordinary form of lobar pneumonia. We cannot say, this is ordinary pneumonia which has assumed a contagious character owing to the existence of certain peculiar circumstances. If we consider the inflammation of the lungs arising from putrid emanations, we must admit that it is probably not a simple pneumonia, and that much has yet to be learned concerning its exact nature, differing, as it does, in area and in its course from the latter. These clinical features must be remembered even in the face of the evidence adduced from culture experiments, etc. What do the oldest amongst us say? Have they ever seen a case of pneumonia where they considered it proper to secure isolation or disinfection? In cases suggestive of contagion, the greatest care will have to be exercised in instituting an examination into all possible causes for the occurrence of several consecutive cases apart from an origin by direct communication. It is quite possible that sometimes an entirely different explanation may be arrived at. He would remark that in Dr. Graham's cases the consolidation was patchy. This is quite exceptional in ordinary lobar pneumonia, although frequently seen in septic cases. The relation of this disease, as well as others, to a microscopic organism is as yet by no means positively determined. Culture experiments afford very strong evidence of the bacteria being the real originators of the disease, but there remain still some debateable points which must be overcome before the doctrine can be considered definitely entertained.

DR. GEO. ROSS said that, although seeing a large number of cases of pneumonia every year, he had not met with any such series of cases as necessarily suggested the association of the latter of these with the first by contagion. He knew of Dr. Wilkins' cases alluded to by the reader of the paper, and admitted that they gave strong support to the idea of contagion. It seemed to him that the extreme rarity of any such groups of cases tended to preclude the possibility of such a common disorder being contagious. If this arose from special surroundings, was it not singular that with hundreds of such cases passing before us, it should only be the lot of one physician at long inter-

vals to meet with examples of its propagation in this way. What peculiar conditions can we think of which would act in this way? If ever contagious, should not this property be manifested oftener? He would rather be disposed to consider that in these localized outbreaks we are really dealing with an affection differing in some essential way, as yet unknown, from the common lobar pneumonia.

DR. GARDINER of London had met with a series in one family which seemed to fall within the category of the contagious. The first patient, aged 20, contracted pneumonia. The mother suffered from chronic bronchitis. She soon fell ill with the pulmonary inflammation. A third member of the family and a grandchild sleeping in the same room were both prostrated by pneumonia within a few days. The only other possible explanation seemed to be a very strong family tendency acted upon by an exciting condition to which all were equally exposed.

DR. FOSTER of Portland, Me., said that in 1872 they had an epidemic of pneumonia in Portland. A singular feature which he had observed in these cases was that in nine out of ten cases the consolidation affected the apex of the left lung. In about one month they had probably 50 such cases. The course of the disease was unlike ordinary pneumonia, and also unlike typhoid fever. In one locality 20 cases occurred. As Medical Health Officer he was called upon to investigate the occurrence. On tasting the water supplied there, he found a disagreeable flavor, reminding one of clam-water. He found that this water was supplied to the greater part of the infected district and came from a deep well, being clear and cold. About ten rods above the well were a row of privies,—a main sewer leading from these was traced, and found to have burst and caused the entire soil intervening between it and the well to have become infiltrated with foul matters. The sanitary defects were immediately remedied, the use of the water forbidden, and the outbreak at once ceased. Another endemic he had witnessed also bore upon this discussion. A young boy died of pneumonia in the almshouse after an illness of only two days. Within forty-eight hours they had thirty cases, the consolidation involving either the whole lung or spots in the lung. He found that extensive repairs had been making in the sewerage and pipe-system of the establishment and to this he attributed the outbreak. The cases were treated by an emeto-cathartic at the outset, followed by iron and quinine, and no more cases were lost. He looked upon cases of this kind as being of the nature of some peculiar lung disorder, resulting from blood-poisoning. He has been thirty years in practice and has never seen a case of pneumonia

which he had even suspected of being originated by contagion. During the outbreak he had noticed that the nurses and attendants were never attacted.

DR. CASSIDY of Toronto remarked that the true etiology of pneumonia was still very obscure. It occurred alike in the houses of the rich and in the poorest hovels. Wherever contagion is thought of we must beware of coincidence which may mislead oftener than we think of. The general causes predisposing to pneumonia are of great importance to the sanitarian, because they are remediable. It has been observed in armies that the men in the barracks have sometimes suffered a large mortality from pneumonia, whilst those in the open air have entirely or almost entirely escaped, and when removing from close barracks to open tents, the disease had completely ceased.

DR. GRAHAM, in reply, said that the patchy character of the consolidation did not apply in his first case. He would admit in his series a difference of type, but no pathological difference. The doctrine of the unity of pneumonia receives strong support. Sternberg has found the same parasite in normal saliva as in malignant erysipelas and in pneumonia. If so, the disease is determined not so much by the parasite as by the soil in which it grows. Dr. G. would still look upon all the pneumonic cases as belonging to the same disease—the first case of a series being an ordinary pneumonia, other cases following it simply because the *materies morbi* finds unusually suitable soil in which to propagate and increase. Those who have experience with the work of developing cultures in the laboratory know that it is a very difficult matter to find a soil upon which certain bacteria will grow at all. An example of this might be given in the micro-organism of chloasma, the microsporon furfur. Dr. Klein searched a long time for a congenial soil, all the commonly employed substances turning out failures. Many bacteria also permit of only a very narrow range of temperature. If this vary within 5°F. they die. The question, "what is the cause of ordinary pneumonia?" yet remains unanswered. A predisposing condition of the system is no doubt necessary. In Dr. Foster's cases, the polluted water may have so disturbed the system of those using it as to play the part of predisposing cause.

DR. J. H. GARDINER of London then read a paper on "The Inhibition of the Heart in Diphtheria." The striking features of the cases related were the marked slowing of the pulse, followed, in two instances, by fatal syncope.

DR. GRAHAM had no doubt that the heart failure here was due to a poison acting upon the nervous centres. Recent dis-

coveries pointed to the development of poisonous substances in ways not yet thought of, as, *e.g.*, in normal urine, and in the formation of ptomaines. In diphtheria, poisons may form and be reabsorbed. It is quite possible that even in tetanus, which was alluded to by the writer as opposed to this view, the same thing might occur. In some way not yet understood, a peculiar chemical substance might be produced, having an attraction for the spinal cord, and acting as an irritant upon it.

Dr. Geo. Ross said that the theory last mentioned seemed the one best calculated to explain the occurrences. He would, however, caution against always attributing a sudden syncope after diphtheria to a central impression. When preceded by inhibitory symptoms, as in Dr. Gardiner's cases, there appeared no reason to doubt this explanation, but he had met with sudden fatality during the convalescence from this disease, where the autopsy showed clearly that the destructive change consisted in extreme fatty degeneration of the heart. Here there had, however, been no symptoms whatever, the pulse remaining at the normal rate. The possible existence of this structural change was another reason why every precaution should be taken during the period of convalescence.

Surgical Section—Aug. 18.

Dr. Fenwick of Montreal in the chair.

Dr. Desjardins of Montreal read a paper on "Keratoscopy as a means of Diagnosis in Astigmatism." After defining the term astigmatism, and stating that errors of refraction affect the vision injuriously though the optic nerve be healthy, he said it was formerly supposed that the fault was in the lens, but it is now known to be due (as first pointed out by Donders) to the curves of the cornea. The lens, according to later investigations, partakes of the same deformities as the cornea. Accommodation is not without influence on refraction. After mentioning that corneal abnormalities are detected by the keratoscope, Dr. Desjardins exhibited and described this instrument of simple construction, made by De Wecker and Maxillor, by which the meridians and amount of astigmatism can easily be determined. Many cases of slight astigmatism can be rapidly detected and suitable glasses prescribed. By the aid of this instrument one scarcely need subject the patient to a subjective examination, and for this reason the author finds it especially useful for children.

Dr. Jas. Bell of Montreal read a paper on "Tracheotomy

in Membranous Laryngitis," in which he advocated dispensing with the tube in the after treatment of tracheotomy. He said that the methods of stitching the cut edge of the trachea to the neck wound and the use of the canula had proved of but little benefit in actual practice. He preferred late to early operation—1, If patient operated on early, many would be operated on unnecessarily; 2, Extension of membrane took place more rapidly after operation; 3, If the obstruction is not rapidly produced, membrane is separated and expelled. The recoveries after early operation were 25 to 33 per cent.; after late operation, 5 to 10 per cent. A greater percentage recover without operation. He next entered upon the question whether the extension of membrane was due to local or general causes, and thought that the weight of opinion is that extension is due to purely local causes and gave a number of cases illustrating this point. After discussing the subject as to whether or no diphtheria was primarily a local disease, he gave his reasons for not liking the tube in tracheotomy—1, The tube never accurately fitted; 2, When the tube is in its place the incision into the trachea cannot be kept under observation; 3, Occasionally the tube from not being in the middle line and being left too long in the trachea ulcerates through, and an artery is occasionally opened; 4. When the tube is in the trachea there is difficulty in expelling through it pieces of membrane; 5, The tube sometimes causes exuberant granulations and warty growths. In place of the tube, Dr. Bell has devised an instrument which he thinks does away with the objection to the tube. It consists of a pair of "clips" which catch the edge of the trachea and hold it apart. These "clips" are held in position by a tape which goes round the neck. He had experimented with these "clips" in a number of dogs and found that they held well and that no ill results followed. In speaking of the place of operation, Dr. Bell stated that he preferred the low operation because there was more room and also because by it we get further away from the disease. In the after treatment of cases in which the "clips" are used he withdraws the mucus from the trachea by means of a glass pigett. He said he did not believe in the close camp bed which is now so often used, but preferred a free current of air. After operation he plugged the trachea or larynx above the wound with an antiseptic sponge; this absorbed the discharge and helped to localize the membrane; over the wound he keeps a piece of gauze and he occasionally introduces vaseline into the trachea. When the tube is used, after two or three days the breathing becomes dry

and the end of the tube becomes coated with inspissated mucus, below this, in the trachea, is a cone of dried exudation which helps to block up the passage. Dr. Bell gave the histories of two cases of diphtheria in which he had operated and used his "clips." One child died and the other, aged 25 months, recovered. In nine cases of tracheotomy in which he used the tube all, with one exception, died. He summed up by saying that the excessive mortality after diphtheria was due to defect in the after treatment. The presence of the tube was a source of irritation and prevented the application of remedies to the trachea itself.

In the discussion which followed, DR. A. L. SMITH said, when House Surgeon to Children's Hospital in London he had a large experience with cases of tracheotomy; he felt that the "clip" introduced by Dr. Bell will prove of the greatest possible benefit and will in all probability reduce the mortality after the operation. He had seen one death from ulceration of the tube into a large vein.

DR. KERR of Winnipeg said he had considerable experience while in Nova Scotia. He had performed tracheotomy twelve times and never had a good result. He did not think that tracheotomy was a good operation and had seen several desperate cases recover without tracheotomy. If Dr. Bell's treatment without a tube reduced the mortality it would be a great gain. Dr. Kerr went on to say that the after treatment of tracheotomy was always a source of great anxiety, the tube was apt to get displaced during a fit of coughing. In his last case he dispensed with a tube and stitched the edge of the cut trachea to the wound as recommended by Post; he did not like this method, for when the patient's chin was depressed the opening closed. He thought that with Dr. Bell's instrument he could do better. As to the question of the general or local origin of diphtheria it was too large a subject to discuss at the present time. He had a case of tracheotomy live three weeks and then die of paralysis, so that it was not always the extension of the membrane that killed after tracheotomy and the best after treatment will often fail to produce a good result. He was very doubtful about the good that would result from plugging the trachea above the wound.

DR. SHEPHERD said that he had performed tracheotomy a number of times both in hospital and private practice, his first ten or a dozen cases were all fatal, but during the last two and a half years he had performed tracheotomy in private sixteen

times and had five recoveries. In hospital practice his results were not so good. He thought that the kind of instrument used did not matter much ; it was important that the wound should be kept aseptic, and remove the tube as early as possible—never later than five days. In one successful case he removed the tube on the third day. They were all cases of diphtheria. He preferred the low operation, because the trachea was opened at a greater distance from the disease ; there was more room, and it was not necessary to divide the cricoid cartilage. In the high operation, division of the cricoid had to be frequently undertaken, and often resulted in necrosis. Again, stenosis more frequently occured after the high operation. Dr. Shepherd believed that after operation it was useful to have a warm room (75°–80°F), and that the atmosphere should be saturated with moisture—he always used a camp or closed bed, and the steam of the kettle was conveyed into it by a long spout. The inner tube was removed every hour, and the outer one on the second day. Lime-water was occasionally dropped into the tube. He thought that the tube favored expulsion of membrane. With regard to the antiseptic plugging of the trachea, he did not think it of much benefit ; very often the membrane extends at the time of operation below the wound, and if it did not, the continuity of the mucous membrane could not be interfered with. He had never seen the conical plug in the trachea described by Dr. Bell. All the cases of death after tracheotomy he had seen had been due to extension of the membrane. Theoretically, Dr. Bell's instrument was perfect, but it remains to be seen what it would do in practice.

Dr. Russell of Quebec had not seen half a dozen cases of diphtheria in twelve years, but thinks the last year he had seen a great many cases of membranous croup. He thought this disease was more fatal than diphtheria. Was formerly opposed to tracheotomy, but now thought early operation advisable ; if the operation did not cure, it always relieved. He had performed tracheotomy six times, with two recoveries. He thought Dr. Bell's instrument was most ingenious, and likely to prove very useful. In the after treatment he was strongly in favor of using lime-water spray.

Dr. Fenwick of Montreal said that he preferred the high to the low operation. Dr. Bell's instrument appeared to answer very well. Dr. Marshall Hall, many years ago, devised a somewhat similar instrument made of wire. He had seen one of Dr. Bell's cases treated with the " clip " and formed a most favourable opinion of the instrument.

DR. BELL made a few remarks in reply.

DR. FENWICK then read a paper on "Treatment of Tuberculous Glands of the Neck." He believed that scrofulous glands were intimately connected with tubercle. After giving a sketch of the history of tubercle and Koch's discovery of the tubercle bacillus he said that there must be some predisposing condition in the individual so that he can contract tubercle, the proper soil must be present. The glands of the neck were specially liable to infection especially the submaxillary and those over the larger vessels. Enlargment is rarely single and occurs generally at first in one side of the neck only, often there are external signs of softening of the glands, but when the glands break down and open externally indolent ulcers and sinuses are left. Very little is known of the mode of extension of the tubercle bacillus. In scrofulous enlargement of the glands of neck the author strongly advised early removal of enlarged glands. After removal the general health of the individual improves; if they are left, the patient runs the risk of general tuberculosis, and if he recovers, it is with impaired health and disfiguring scars in the neck. The author prefers removal to laying open and scraping out the gland or the cautery puncture of Mr. Treves. He related a number of cases in which he had removed large numbers of glands from the neck. In his first case which was operated on as far back as 1873 he removed some half dozen glands from the neck beneath the sterno-mastoid, the scar was now hardly to be seen. Dr. Fenwick showed a number of photographs of cases before and after operation, where the results were most admirable, the cicatrices being hardly perceptible.

DR. KERR of Winnipeg said that if we accepted the principle of the identity of scrofula and tubercle, much obfustication would be removed. He was not satisfied with the results of operation, and did not now operate as often as formerly. He found the operation not only difficult and tedious but dangerous, aud the results were not always as good as represented. Dr. Alexander of Liverpool, who formerly operated some twelve years ago very frequently in these cases, has now given up the operation.

DR. SHEPHERD confirmed the statement that the results of operations were not always so perfect as were described by the enthusiastic advocates of the operation, but in many cases the results are entirely satisfactory, occasionally there are high temperatures after operation and sometimes an attack of cellulitis. He had operated in a good many cases and had removed as

many as 20 to 30 glands at a time. In removing glands apparently solid, they not infrequently come to pieces and are found to be quite soft in centre, and these conditions always complicated the operation. After incising the deep fascia he preferred removing the glands with his fingers and an occasional cut with a knife. He had never had any accidents attending the operations. Although he had had no experience of Treves' cautery puncture, he did not think it suitable for glands deeply placed. In sinuses and scrofulous ulcers he had had most excellent results from scraping out the parts with Volkmann's spoon.

DR. TRENHOLME read a paper on "Some details of Uterine and Ovarian Operations." He says the instruments used in these operations need not be numerous or complicated. After describing the usual precautions that should be taken regarding the cleanliness of hands, sponges, and instruments, he said that he preferred Nos. 1 to 20 shoemaker's thread to any other form of ligature. Before using, the thread should be immersed for twenty-four hours in pure carbolic acid, and not put into water at all. In closing the abdominal wound he used silver wire for the dry sutures and horse-hair for the superficial. He laid great stress on the importance of not enclosing any muscular tissue in the suture. The incision should be midway between the pubis and umbilicus and should not be extended to within 1½ inches of the pubis. He advocated short incisions of 2 to 2½ inches. Muscle should never be cut in the incision as it gives great trouble afterwards. The pedicle of the tumor should be ligated in small segments and the large vessels should be ligated separately and the ligature cut short. The cavity of the abdomen should be thoroughly cleansed with sponges and drained when necessary. He objected to abdominal bandages and has only used them after the largest tumors. He allowed his patient after the operation to move freely in bed, this favors the reposition of the bowels. In uterine fibroids, when large, he always divides the mass in the median line, thus each half was enucleated. The string should be cut in shape of a V, and the edges brought together with a running suture and quilted with the shoemaker's stitch. He had found linseed tea enemata of great benefit after operations, also fomentation to the abdomen. No after medicinal treatment was needed except when there was vomiting; for this he had found sipping hot water useful and also ipecachuana in homœopathic doses; he uses the third dilution.

DR. MACFARLANE of Toronto would have liked to have heard

Dr. Trenholme say more about dietetics. In his operations he had found vomiting to be a very troublesome complication; warm water with brandy he had found of great service in these cases, also frequent small doses of Epsom salts as recommended by Lawson Tait. He never gave medicine at all when there was any threatening of peritonitis. He never used drainage unless the adhesions were extensive.

DR. SHERMAN would liked to hear more details regarding the preparation of the patient, also as to whether he referred when speaking of fibroids to extra- or intra-mural growths.

DR. MACDONALD would like to have heard more details as to the closure of the wound, also the value of the clamp in securing the pedicle, and whether operation for ovarian tumors should be performed early.

DR. KERR of Winnipeg had seen hernia follow the operation due to failure of union in central portions of wound. Would like to know why Dr. Trenholme objected to enclosing muscle in his sutures.

DR. SHEPHERD thought that wounds of the abdomen were much the same as wounds of other parts, and that abdominal surgeons made a great ado about their special methods of healing this abdominal incision. General surgeons, who were operating every day in every part of the body, had no fear of including the muscles in their sutures. He did not understand why abdominal wounds should heal differently from wounds of other parts of body. For his part, in performing abdominal section, he treated his incision as an ordinary wound; used silver or catgut sutures and passed them through the whole thickness of the wound of the abdomen; union invariably took place by first intention. Every gynæcologist thought it incumbent upon him to have some special mode of treatment of the abdominal incision and seemed to think that general surgical principles were inapplicable to it. Dr. Shepherd had not much faith in ipecac used in three dilutions; it had about as much effect as river water.

DR. FENWICK said he had operated a number of times for ovarian tumour with fair success. He agreed with the remarks of the last speaker, he always used silk sutures and objected to horse-hair, because knots made by it did not hold well. In treating the pedicle he first clamped it and then tied all the large vessels; afterwards he tied the pedicle with the Staffordshire knot and removed the clamp. He had used hot water occasionally to cleanse the abdomen.

DR. TRENHOLME in reply said he spoke of interstitial fibroids.

He formed the pedicle out of the lateral borders of the uterus in such a way that he left the broad ligaments to sustain the pelvic viscera. He used the shoemaker's stitch to secure primary union. With regard to the external wound he thought that the conditions found, as the abdominal cavity, existed nowhere else. It was of the greatest importance to secure primary union, so there should be no after hernia. In preparing the patient he avoided purgatives as far as possible. In cold weather he kept the extremities wrapped up in cotton wool.

DR. SHEPHERD next read a paper on "Excision of the Tarsus in Tuberculous Disease of the Bones." He commenced by saying that formerly, when there was carious disease of the bones of the foot, the only resource was amputation, but with the advent of antiseptic surgery, and the establishment of conservative principles of treatment, other methods of procedure have been adopted with success. In cases of tuberculous and carious disease of bone, the necessity for amputation was not immediate, and it was the duty of the surgeon to endeavour first to remove the local disease before sacrificing the foot. It was not necessary to perform a Heys', Chopart's or Symes' amputation in these cases, but more to remove all the disease, however extensive. The reader of the paper illustrated this principle by giving the histories of several cases. In one case where there was disease of both feet he removed, in the right foot, the cuneiform, scaphoid, cuboid, and heads of metatarsal bones, and in the left the lower end of tibia, astragalus, part of the os calcis, and the scaphoid; the patient, a girl aged 17, was able to walk about comfortably. In children it was often sufficient to remove the disease with a Volkman's spoon and in them amputation was hardly ever required.

DR. MACFARLANE of Toronto had followed out the principle advocated by the reader of the paper for years. He believed it was the proper method of treatment and should be extended to caries of the spine: in dressing the wound, he never stuffed with anything but placed the foot in a good position and left the rest to nature.

DR. DUPUIS of Kingston said he recently had a case of disease of all the tarsal bones where he amputated, afterwards the tibia necrosed, and he had to re-amputate. He also reported a case of frost-bite where he removed greater part of tissues.

DR. HOLMES of Chatham remarked that Dr. Shepherd's paper was a good exemplification of conservative surgery. He had several times excised the ankle joint with the best results.

DR. KERR of Winnipeg said that patients after operation

should not be allowed to walk about too soon as they were apt to have a splay foot. He did not believe in leaving the wound to nature, but preferred keeping it in an antiseptic condition.

DR. RUSSELL of Quebec also insisted that the wound should be kept carefully protected, and that antiseptic dressings should be applied; if the wound was left to nature it would soon become putrid, and all the danger incident to such a condition would be incurred.

DR. FENWICK said he could mention a number of cases where he had resected the tarsus with the happiest results.

DR. KERR of Winnipeg read a paper on "The Examination of an Abdominal Hydatid Cyst." The patient was an Icelander who came into the Winnipeg Hospital last winter with a large abdominal tumour. From the history, and as the result of exploratory puncture the attending physican, Dr. Whiteford, made the diagnosis of hydatid cyst and handed the case over to Dr. Kerr for operation. The operation was performed in two stages as recommended by Volkman; a cut was first made down to the growth and six days after it was incised. To open the cyst he had to cut through two inches of the liver; the cyst was then emptied and washed out with a solution of iodine. The patient did well and went home in two months. He remarked that these were rare cases: up to 1880 only 150 cases had been reported. This was the second case that had been seen in the Winnipeg Hospital. The other patient was operated on but died on the table.

DR. ECCLES of London, Ont., related the history of a case which had been treated a year ago in the London Hospital.

The section then adjourned.

GENERAL MEETING—SECOND DAY.—AUG. 19.

The meeting was opened at 10 A.M. Dr. Holmes in the chair.

The following report was presented by the Nominating Committee. To be officers for the ensuing year:

President—Dr. J. E. Graham, Toronto.

General Secretary—Dr. Stewart, Montreal.

Treasurer—Dr. Sheard, Toronto.

Vice-Presidents—Ontario: Dr. Dupuis, Kingston. Quebec: Dr. Russell, Quebec. New Brunswick: Dr. Currie, Fredericton. Nova Scotia: Dr. Wickwire, Halifax. Manitoba: Dr. O'Donnell, Winnipeg.

Local Secretaries—Ontario: Dr. McKeough, Chatham.

Quebec: Dr. Bell, Montreal. New Brunswick: Dr. Lunam, Campbellton. Nova Scotia: Dr. Trueman, Sackville. Manitoba: Dr. Chown, Winnipeg.

Chairman of Local Committee—Dr. Malloch, Hamilton.

Place of Meeting—Hamilton.

Moved by Dr. Sheard, seconded by Dr. Canniff, that the report be adopted and the gentlemen named therein be elected officers of the Association for the ensuing year—*Carried.*

Dr. Canniff, having been absent, wished, by privilege, to say a few words upon the question introduced yesterday by Dr. Cassidy. If infected persons pass through Quebec in a stage of incubation, from its position the city of Toronto is specially exposed therefrom; and indeed this might easily happen. He thinks the resolution passed yesterday might go further and recommend to the Government the appointment of some medical man whose duty it should be to specially watch and keep track of all persons who have been discharged from an infected vessel in quarantine. This would not involve a very large expenditure and might be the means of securing the safety of the Upper Province.

Dr. Fenwick said that he had recently had a letter from the Minister of Agriculture stating that no further appointment could possibly be made in the city of Montreal; that the Government considered that they had a sufficient establishment at Rimouski, at Grosse Isle, and at Quebec, and had determined against further increasing their staff. Dr. F. himself did not think it necessary.

Moved by Dr. Graham, seconded by Dr. Sheard, that the by-law requiring notice of motion for a change of by-laws be suspended.—*Carried.*

Moved by Dr. Campbell, seconded by Dr. McFarlane, and resolved, that the by-law authorizing the formation of committees whose duty is to make report at the annual meeting on Medicine, Surgery, Midwifery and Therapeutics, having been suspended by an unanimous vote of the Association, the President do name at this meeting the reader of an address upon some special subject in Medicine, Surgery, Midwifery and Therapeutics, and that these gentlemen be at once notified of the fact of their appointment by the Secretary. In the event of the gentlemen named by the President failing to perform the duties assigned to them, the President to have the right to name substitutes.—*Carried.*

Moved by Dr. Playter, seconded by Dr. Clarke, Toronto, that

the following be a special committee of this Association to consider the question of a uniform system of vital statistics for the Dominion, and to urge upon the Federal Government the desirability of early action for the establishment of some system for the collection of births, marriages and deaths throughout the Dominion, viz.: Drs. Sullivan, F. W. Campbell, Larocque, J. A. Grant (Ottawa), Canniff, M. J. Ahern, and the mover and seconder.—*Carried.*

Dr. F. W. Campbell said, you cannot get Civil Registration in the Province of Quebec, the registration here is done by the *curés.* They have agreed to give a return to the Government if they are paid for it ; a clause to allow a man not wishing to register with the *curé* to register before a civil officer, was defeated by a large majority. It is useless to expect more in this Province. In a few of the larger cities, statistics are kept and sent in and it seems as if we could not go further than this at present. The subject had been worked at by a committee during the whole of last winter, and this was the conclusion they had arrived at.

The meeting then adjourned to sections.

Medical Section—Aug. 19.

Dr. F. W. Campbell read a paper on "The Treatment of Whooping Cough by Quinine." He spoke of the unsatisfactory character of the treatment usually adopted, and stated that a severe case of the disease in his own family had specially directed his attention to it. He referred to a paper by Dr. Dawson, Professor of Diseases of Children in the University of New York, on the quinine treatment of whooping cough, which appeared in the *Canada Medical Record* for July, 1873, also to one by Prof. Binz, of the University of Bonn, on the same subject, which was published in 1870. The authors of these papers considered pertussis as a neurosis of the pneumogastric nerve, caused by irritating and infectious mucus that accumulates in the pharynx and larynx. In this mucus was found a fungus, on which quinine had a specific action. Quinine also increased the secretion from the buccal and salivary glands, and thus assisted very materially in loosening the tenacious mucus from the pharynx. Dr. Campbell stated that in his hands the quinine treatment had been most successful, and that he now had notes of over one hundred cases of this disease treated in this way, with most satisfactory results. For children of three years and under, he gave it in doses of half a grain every two or three hours, and proportionately in larger doses up to twelve years of age, when two grains might be given.

It should be administered in solution, and *no* sweetening should be added to disguise the taste.

DR. SHERMAN of Ogdensburg, N.Y., said he had used quinine in whooping cough with excellent results. He considered it the very best treatment. He had, however, used sweetening to disguise the taste, and judging from results, saw no objection to it.

DR. MACFARLANE (Toronto) said he had seen an article by Dr. Campbell on this subject a few years ago. Since then he had used quinine in pertussis, and had had excellent results.

DR. GRAHAM of Toronto had employed quinine extensively in pertussis, and could endorse most heartily Dr. Campbell's good opinion of it. Sometimes he had combined it with tannin. So far as his experience went, he saw no objection to the sweetening of the quinine mixture.

DR. CAMPBELL, in reply, stated that Dr. Dawson very strongly objected to any disguising of the bitter taste of the quinine. He had followed the directions in this respect, and was satisfied that they were correct. In fact, he was strongly of the opinion that even the appetizing effect of quinine was much interfered with by the addition of any syrup.

DR. REEVE of Toronto then read a paper upon "Glaucoma."

SURGICAL SECTION—AUG. 19.

DR. KERR reported "Two cases of Gunshot Wound of Hip-joint." Both were caused by the accidental discharge of small shot. The soft parts were much torn and the trochanter in both cases was split and the joint laid freely open. In first case patient was not seen till three weeks after accident during which time had no treatment. His condition was deplorable, the whole wound was in a sloughy condition and horribly fetid, patient was in a septic condition. The wound was thoroughly cleansed and the sphacelated portions freely excised, and wound irrigated and packed with iodoform gauze, and an anterior wire splint applied. The improvement at first was marked but the patient died of septicæmia and exhaustion in a short time. The second case was seen immediately after the accident, the wound was treated in the same way and the limb fixed in an anterior Smith's splint and a posterior splint also employed so that immobility was secured and recovery with a useful limb resulted. Dr. Kerr referred to other methods of treatment, viz., excision and amputation. In these cases the mortality was high. He brought these cases before the

section in order to show what could be done by conservative methods in such cases.

DR. CLARKE of Toronto said that a number of gunshot injuries of the hip were reported in the surgical history of the American Rebellion. He had seen several cases treated when with the Federal Army in Virginia. They were treated under canvas and did well.

DRS. RUSSELL, FENWICK and SHEPHERD also joined in the discussion.

DR. BULLER of Montreal read a paper on "The Treatment of Acute Purulent Ophthalmia." He remarked that eyes were now seldom lost in these cases. Some used hot applications, others cold; some used astringents, others did not; some used antiseptics, others relied on frequent and thorough washings. All were agreed on the necessity of frequently cleansing the diseased eyes. Many remedies were used, as quinine, tannic acid and corrosive sublimate; but the antiseptic treatment was still on its trial. Solutions used as germicides must be strong; weak solutions were of little value as antiseptics. He had lately treated three cases of gonorrhœal ophthalmia. He first used boracic acid and afterwards a solution of corrosive sublimate. The latter in the strength of 1–2000, without improvement, but the application of a solution of 1–1000 was followed by immediate and marked improvement. The patient was discharged cured in twenty-four days. In the second case, the patient was a child aged three years with acute vaginitis. Under similar treatment she rapidly recovered. In the third case, also one of gonorrhœal ophthalmia, there was sloughing of the cornea. He treated by hot fomentations and washes of boracic acid used warm; improvement immediately followed, the slough separated and a clean ulcer was left which soon healed. Dr. Buller thinks in general practice rigid cleanliness is not sufficiently carried out. With regard to cold applications he thought they were the best, but whilst applying them the cornea should be closely watched; if any cloudiness, hot applications should immediately replace the cold and the cornea will be saved.

DRS. SMITH, RUSSELL AND FENWICK took part in the discussion which followed.

DR. SHEPHERD then read the notes of a case of "Ainhum" which he treated in the Montreal General Hospital. The disease affected the little toe of a negro aged 47, born in North Carolina. The little toe became affected some six years before. First noticed a small ulcer on the digito-plantar fold, then a constriction formed at this point, which gradually deepened;

the toe soon become much larger than normal, and very moveable, causing much trouble in walking. The toe was amputated; on dissection, appeared to consist of much thickened skin and fibrous tissue. The bones of the toe were much atrophied and the joint had disappeared; the proximal phalanx looked something like a claw. The reader of the paper then gave a short sketch of the history of the disease, saying it was first accurately described by Dr. Silva Lima of Brazil, that it was a disease confined to the dark races, and was more common in some families and more in men than women. It sometimes affects the fingers and even the limbs. The disease, if left to itself, lasts about ten years and ends by amputating the affected member. The word "Ainhum" is a negro word and means "to saw."

DR. FENWICK reported a case of "Amputation at the Shoulder Joint for Myelo-Sarcoma. Patient, a woman aged forty-seven, seven months pregnant, came to the Montreal General Hospital in the spring of the present year with a large ulcerated tumor a little below the shoulder of the right arm, and a smaller tumor near the biceps. Two years ago received a blow and within three weeks perceived a small lump at site of injury. It rapidly grew and was removed. She was told it was a fatty tumor. It again returned and this time plasters were applied by a cancer doctor which burnt the tumor and caused the ulcerated appearance which was seen when patient was admitted to hospital. Dr. Fenwick amputated the arm at the shoulder joint and patient did remarkably well, never having a temperature higher than 99°F. On examination, the tumor proved to be a myeloid sarcoma. This was the first case Dr. Fenwick had seen where the myeloid tumor first affected the tissues external to the bone and periosteum.

DR. A. LAPTHORN SMITH read a paper on "Alexander's Operation and the Treatment of Displacements of the Uterus." After describing the operation minutely, and also giving a discourse on the anatomy of the parts, Dr. Smith went on to say that the round ligaments were really muscles, and were not in a state of tension except during coition. They are the homologues of the cremaster muscle in the male. He considered that the risks of the operation were great. It was not a justifiable operation except in extreme cases, and when performed, did not permanently cure displacement of the uterus. The author said that displacements of the womb could be corrected by lessening congestion and by keeping the liver clear and the lower bowel empty. The paper was illustrated by diagrams and tables.

In the discussion that followed, DR. TRENHOLME agreed with Dr. Smith that the operation was one that would soon be known only in history. He had operated once, but had failed to find the ligament. He himself had, many years ago, suggested a similar operation.

DR. SHEPHERD had frequently dissected the round ligaments, and had performed operations on the dead subject. The uterus could be easily elevated by pulling out the ligaments. He did not think the fact that a few muscular fibres had been found in the ligament proved that it was now in active use as a muscle, it was more a fœtal remnant of the ligament of the Wolffian body, and was the homologue of the gubernaculum testis of the male.

DR. AHERN of Quebec said that the round ligament was frequently abnormal, and that at its insertion it was often much atrophied. In cases where the uterus was fixed, tightening it would not correct displacements.

The section then adjourned.

AFTERNOON GENERAL MEETING—AUG. 19.

Meeting opened at 2.20 P.M. Dr. Canniff, in the chair.

Minutes read and approved.

DR. MCEACHERN of Montreal was introduced and gave a very interesting account of pleuro-pneumonia in cattle, a disease which has recently invaded the cattle quarantine in Quebec.

Moved by Dr. Graham, seconded by Dr. Reeve, that a vote of thanks be tendered to Dr. McEachern.—*Carried.*

Moved by Dr. Dupuis, seconded by Dr. Graham, that the reports of the sections be accepted as read and adopted.—*Carried.*

Moved by Dr. R. A. Reeve, seconded by Dr. Dupuis, that the President and Secretary be authorized to give credentials as delegates to the International Association to meet in Washington next year.—*Carried.*

Moved by Dr. Reeve, seconded by Dr. Sheard, that a vote of thanks be tendered to the authorities of Laval University for their kindness in placing rooms in the University building at the disposal of the Association.—*Carried.*

The Association then adjourned.

CANADA

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MONTREAL, SEPT., 1886.

THE CANADIAN MEDICAL ASSOCIATION.

We devote this month a large proportion of our space to a full report of the proceedings at the annual meeting of the Canadian Medical Association at Quebec. The meeting was a smaller one than usual but yet representatives from all sections of the Dominion were present, including gentlemen from such distant parts as New Brunswick and Manitoba. The Province of Ontario was largely represented in numbers and distinguished by the active part taken by these members in the scientific work of the Association. It is not to the credit of the Ancient Capital that, although it was known for a whole year that we should meet in that city, and although a Vice-President was specially elected from amongst the resident profession, yet no Committee of Arrangements was ever formed, no accommodation was secured in advance, and no attempt whatever was made on the part of the local members to advance the interests of the Association or the success of the meeting. It is not to their credit that the attendance of local members at the sessions was *nil*, with two or three notable exceptions. It is not to the credit of the medical men of this Province, generally, exclusive of the City of Montreal, that at an important meeting of the Dominion Association held almost at their doors, they were conspicuous by their absence. It was a matter of very general remark amongst the numerous American visitors who happened to be present. At the early meetings of this Association, the attendance, altogether, was much larger, and both in Montreal and in Quebec our French-Canadian *confrères* attended numerously and took an active interest in all the proceedings. We

do not know the reason for the change, but certain it is that of late years, one or two only are to be found at these annual meetings. It is not to the credit of the large body of French Canadian practitioners of the Province of Quebec that neither do they maintain a Provincial Medical Society not will they attend the Dominion Convention when it is brought into their very midst.

In the absence of any arrangements, the annual dinner was not held. We hope this pleasant social part of the meeting will not be omitted next year, but at the same time trust that the Society will insist upon making it a subscription dinner, thus removing any pecuniary burden from the shoulders of the members resident in the locality where we meet.

Dr. Frank H. Hamilton, the well-known surgeon of New York, is dead. We refer to our correspondence from New York for some interesting facts in the life of this prominent and much-respected man.

Medical Items.

The Therapeutic Uses of Cus.—In looking over the files of our esteemed contemporary, the *Dublin Journal of Medical Science*, for another purpose, we have recently noticed an article on "Cus," commending it as a reliable tænicide, with remarks as to the method of preparation that yields the most forcible product. We have no doubt it has been used in this country by patients affected by parasites—in fact, its association with helminthiasis is, to the minds of many, quite natural—but its employment certainly has not been restricted to that or any other special field. The native product, *C. Americana*, is said to embrace a large number of varieties and to attain a greater exuberance of development than its congeners of any other clime. In the mining regions of the Rocky Mountains and the Pacific coast, we find the *C. occidentalis*, a variegated and particularly florid specimen. It is used in large quantities and seems to be applicable to all conditions, much like quinine in the South or whiskey in New York. It is not, however, incompatible with the latter drug. The dose varies greatly. It is usually repeated p.r.n., although we are bound to say that its effect is entirely incommensurate with the popularity of the agent.—*Boston Med. and Surg. Journal.*