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THE
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PRESIDENT'S ADDRESS DELIVERED
AT THE MEETING OF THE CANA-
DIAN MEDICAL ASSOCIATION
HELD IN OTTAWA, SEP-
TEMBER 21st, 1892.

BY JOHN L. BRAY, M.D., F.R.C.S.K., CHATHAM, ONT.

GENTLEMEN,—Allow me, in the first place, to offer you my most heartfelt thanks for the great honor you have conferred on me in electing me President of the Canadian Medical Association; and while I appreciate your kindness and feel proud of the distinction, the high honor only makes me more conscious of my inability to fill the position with credit to the profession and satisfaction to myself. Following, as I do, my immediate predecessor, Dr. Roddick, only makes this more obvious; but I trust you will extend to me a helping hand, and at the same time shut your eyes to my deficiencies.

Now I am not going to deliver a scientific address on medicine or surgery, as that duty has been delegated to those much better able to perform the task than I am, but will take instead a review of medical education and the advances made in that direction since the birth of this association twenty-five years ago; secondly, say something about medical reciprocity between the provinces and the barriers that now exist to prevent this, and how they may be removed. And what time could be more fitting or what place more appropriate for such a retro-

spect? We meet to-day to celebrate our silver anniversary, in Ottawa, the capital of our country, on this the twenty-fifth anniversary of its birth. What memories are recalled by a few—and oh! how few they are—that were present when this association was formed a quarter of a century ago! What changes have taken place since then! The magnificent building we now occupy was not then erected. The city of Ottawa was a city only in name; and of the noble men in our profession who were instrumental in forming this society, how many have gone to their long home, and are forever at rest from the cares and anxieties of this world! The reaper Death has year by year since that time been cutting down first one and then another of our members, without regard to age, ability, or position. Since our last meeting we have to mourn the death of Dr. James Ross, who so ably presided over our deliberations two years ago in Toronto, whose kindly smile and friendly greeting we miss to-day, from whose large experience we have all more or less profited, and whose wise counsels we would all do well to follow. But we have with us to-day Sir James Grant, Dr. Hingston, Dr. Fenwick, and perhaps a few more who were present at the birth of this association.

When we see how our country has grown and developed since that time, it is sad to think that this society has not kept pace with the Dominion, and I trust the remarks made by Dr. Roddick in Montreal last year on this subject will bear fruit, and that in the next twenty-

five years this association will rival in numbers, as it does now in ability, its great neighbor, the American Medical Association, and I hope before we close our labors some steps will be taken by the formation of a committee or in some other way to promote this object.

It will be in the recollection of some present to-day the condition of things as they existed prior to the formation of this society in 1867, and the passage of the Upper Canada Medical Act about the same time. You will remember that there were three licensing bodies in old Canada at that time, independently of the medical schools and universities. The latter were degree-conferring institutions, but they virtually possessed the licensing power, inasmuch as the holder of a degree from any of these bodies was entitled to practise medicine on proving indenture, paying a small fee, and having a license signed by the Governor-General. All he had to do was to send his degree with an affidavit to the Provincial Secretary, when his Excellency, taking for granted that he was fully qualified, having secured a degree from some college or university in Canada or Great Britain, would attach his signature to the provincial license, which enabled him to practise in that or, in fact, any other province; so that in reality we at that time had in Upper and Lower Canada, to say nothing of the other provinces now constituting the Dominion, seven or eight licensing bodies responsible to no central authority, vieing with each other in their efforts to turn out the greatest number of doctors independently of quality. The licensing boards in Canada consisted of the Upper Canada, the Homœopathic, and the Eclectic Medical Boards, all constituted by royal charter, and electing or appointing their members in different ways. The Upper Canada Board was appointed by the Governor-General for life, or during good behavior. How the others were appointed I cannot say, but probably in the same way, on the advice of one or two of the more prominent members of these schools. You can imagine it was not so very difficult to become a full-fledged doctor in those days. The schools and universities fixed their own curricula both for matriculation and professional examinations, and the licensing boards, some of them at least, I believe, required no standard

of matriculation at all, and almost none of a professional character; consequently the education required to become a doctor at that time was not of a very high order. So low had the requirements sunk that not only the profession, but the schools as well began to think it was time to make some change, and demand a higher standard. I am speaking now more particularly of Ontario. The first step taken to remedy the then existing state of things was by the Act of 1865, known as the Parker Act, whereby a council was formed who had the power to fix the standard of matriculation as well as that of the medical curriculum. But while they had the right to make a standard, they were powerless to enforce it, no authority being given them to appoint examiners or conduct the examinations, which was left to the colleges as heretofore; and although the provincial board was done away with by this Act, the Homœopathic and Eclectic Boards were not interfered with, which, instead of remedying, rather increased the evil, as the number of licenses from these boards for the next year or two amply testified; and while this Act was an improvement in some respects (being a starting point), it was found to be still very defective. It was felt that the plan of allowing each school to examine its own students, even although the council fixed a standard, did not prevent a great many unqualified men from getting into the profession; for if the curriculum was difficult, the examinations were in many cases made easy, and in the event of a student being rejected by his college (which was a rare occurrence) there was nothing to prevent him from going before one or other of the remaining medical boards, and I fail to recollect a single instance where a student taking this course was not granted a license to practise medicine, surgery, and midwifery.

This state of affairs induced the council to consider what steps they should take to remedy this evil, and the conclusion they arrived at was a wise one. They thought that if it were possible to unite all branches of the profession and bring them all under one law, they could then control and direct medical education. In order to do this it was necessary to give and take, and a compromise was effected with the homœopathics and eclectic, as well as the different medical

schools and universities, whereby the whole profession was united and brought together, and became subject to one central authority, viz., the Medical Council of Ontario, made up of representatives elected and appointed from the general profession, the medical schools and universities, and also from the homœopathic and eclectic bodies. This Act came into force in the year 1868, and gave the council power not only to make the standard of all the examinations, but to appoint examiners to conduct them; and I am happy to say that from that time till the present the standard of medical education has been rising year by year, not only in Ontario, but over the whole Dominion, until to-day in Ontario we have a curriculum standard equal to that existing in any country in the world, and a Medical Act to enforce it which is the envy of the United States, and which England has tried in vain for years to adopt. I am sorry to find that a hostile feeling has risen against the council through some clauses added to the Act in 1891, which feeling I would be glad to see removed. But while I am aware that a few faults are to be found, I am also aware that a great many virtues exist in the Act as it now stands, and it behooves the whole profession to see that no action is taken to impair its usefulness, detract from the dignity or lessen the influence of the Medical Council, which is the safeguard of medical education in Ontario, and which exerts an influence over the whole Dominion; for every province would suffer if the Ontario Medical Council were abolished and the old system of free trade resuscitated. I cannot believe that there is one who has the welfare of the medical profession at heart in this country who would wish to see us return to this condition, and for this reason I would ask those who are opposed to some clauses in our Act to pause and consider well before they do anything to embarrass the council or vitiate the Act, and by so doing play into the hands of the charlatans both in and out of the profession. As it is we stand alone, looked upon by the general public as a close corporation, who do nothing but increase the fees and legislate for our own pockets; and these views are encouraged by a certain class of men who have not the ability to obtain our license, or, having obtained it, branch off in some disreput-

able way in order to make more money, and victimize the very public whom they profess to champion as against the regular practitioner. Fortunately for the profession and public, we have a clause in the Act to enable the council to purge the profession of such unworthy members, and to punish others who trade on the incredulity of the public by fraudulent practices without being registered. Therefore I reiterate the statement that we must be careful in interfering with the present law, by amending some minor clauses which may be objectionable, that we do not get the whole Act wiped out; and I would suggest here, as I have already done in another place, that the members of the profession in Ontario who are aggrieved at the workings of the Act meet the Medical Council, discuss the whole question, frame such amendments as may be in the interests of the profession and public, and then go to the legislature as a united profession, asking for such alterations in the present Act as they have agreed upon, and I am sure the legislature will grant them. I hope the association will pardon me for this digression, but I speak feelingly, having the interest of the profession at heart, and knowing something of the differences existing between some members of the profession and the Medical Council of Ontario.

Prior to 1867 the matriculation examinations in all our colleges was more a matter of form than anything else, and could be passed at any time before going up for the degree. At the present time it is quite different. Now it is equal to a second-class teacher's certificate, with Latin, physics, and chemistry compulsory, or junior matriculation in arts in any university, with the science course; and the day is not far distant when it will become still higher and eventually reach a degree in arts; and can any one say that this should not be so? A physician, above all men, should be thoroughly educated, for education is a great refiner; and in what calling or profession is this quality more essential than in ours? What scenes we witness, what confidences we receive! In and out of the family circle at all hours and under all circumstances, and always battling with pain, disease, and death. And here it is that the refined physician shows the result of his early training, by soothing pain, curing or relieving

disease, and sympathizing with the bereaved; and, mark my words, it is only the man who thoroughly knows his profession that in the long run reaches the top of the ladder, and who deserves and receives the gratitude of his patients and the esteem and respect of his confrères.

I am indebted to Dr. Pepper, of Philadelphia, and desire to return him my most sincere thanks, for a copy of his address containing a vast amount of information on the subject of medical education, delivered by him a few years ago. In speaking of the system of medical education in the United States (and his remarks would have applied to Canada a few years ago, although not quite to the same extent), he says that if we would learn the truth and know the estimation in which our medical education has of late been held by other countries, it needs only to examine the changes which have taken place in their system of medical teaching, proportionate to the vast advancement in medical knowledge, and then turn to the picture of our own position as drawn by those most competent to depict it. He proceeds to say that in every country but ours, without, so far as I know, a single exception, where a system of medical education can be said to exist, certain general principles will be found embodied in that system. These are, first, a matriculation examination; second, a sufficient length of time devoted to medical studies; third, a careful personal training of each student in all practical and clinical branches; fourth, careful grading of the course; and, fifth, impartial examinations by disinterested individuals. On the whole, these are about the requirements necessary in the Dominion at the present time for a student before receiving the right to practise. Dr. Pepper goes on to say that there are some in this country who would cry out at once that so prolonged and elaborate a course of study as I have mentioned is not necessary in America to produce good practical doctors, but that it can only tend to develop a class of over-educated, supercilious, impractical medical men, too good and fine for the average work of a physician. No frame of mind is more enjoyable than the self-complacent contentment of the optimist who holds the candle of his own excellencies so close to his eye that it dazzles him, and makes him blind to the broad sunlight of truth and progress

flooding the world. Such objections as the above might be expected if the elevated system of teaching which I have sketched were adopted only in one or two very old and wealthy countries, for it might then seem to be due to a highly artificial state of society. But when we see that not only the older and more highly civilized and more densely populated countries, such as England, France, and Germany, but in those whose state of civilization and the condition of whose people we should be slow to regard as favorable, compared with our own, as Russia and Spain, in those such as Brazil and Australia, whose forms of government and social system are younger even than our own, and, finally, even in countries which, like Mexico and the republics of South America, we are supposed to regard as only semi-civilized, and where the instability of government and the frequent convulsions of social order would seem to render any fixed and comprehensive educational policy impossible; when we see that in each and all of these a thorough plan of medical education is held essential for the welfare of the community, for the development of medical science, and for the interests of the medical profession itself, it is surely time to consider carefully if we are not sadly at fault in this; and if, while elsewhere the requirements of medical education have been made to keep pace with the growth of medical knowledge, with us they have not been controlled by other and far less proper influences. Now, if we consider the present state of medical science and note the vast advances that have been made during the past twenty-five or thirty years in all of its departments; if we reflect upon the enormous extent of accurate information of minute technical knowledge and of special practical training which is now required to fit a man to practise medicine scientifically, and to render to those sufferers who seek his help the full measure of the benefits which the healing art is now capable of bestowing, shall we be surprised at the careful and prolonged course of study that we find is imposed in all countries but our own upon the applicant for the degree of medicine?

Surely no one can fail to appreciate the enormous importance of having thoroughly trained and skillful physicians.

When overtaken by serious accident or illness, all other means of relief fail, and the most wealthy, the most powerful, the most illustrious must, like the poor and unknown, cast their dependence upon the skill which, under God's guidance, the physician shall display in battling with disease and death. No other study presents difficulties and complexities so great as those which beset the study of medicine. In no other occupation in life are such varied culture of the mind and training of the senses demanded. Yet I learn on inquiry that the average time of apprenticeship to the following trades or callings is: For barbers, three years; for carpenters, printers, turners, plumbers, pattern-makers, at least four years; for machinists, five years; and for pilots, seven years. Can it be that the apprentice must practise five years before he is regarded as a skilled workman, fitted to mend or make machines of iron or brass, and that in this land of intelligence, progress, and common sense one who has studied medicine less than one-third that time may have his license to meddle with and make or mar that most wonderful machine — *man's body* — infinitely complex, gifted with boundless capacities, and freighted with the awful responsibility of an immortal soul? Can it be that seven long years of pupilage must pass ere the young pilot may be trusted in charge of a vessel to guide it through the crooked, narrow channel, where only the hidden dangers of sunken rocks or treacherous shoals beset him, while in less than one-fourth of that time we profess that one may qualify himself to pilot the most precious craft—a human life—through the long, dark, intricate windings of disease, where at every turn death lies concealed, so close at hand and so difficult to avoid that nothing but the most intimate knowledge of his profession and consummate skill can insure safety? A strange seeming contrast, and yet the following careful examination of the state of medical education as it exists in all the medical schools on this continent, with a few honorable exceptions, fully supports the paradox. He then goes on to give the curricula, course of study required, and methods of examination of most of the medical schools of the United States, and compares them with the colleges of other countries. But I need not follow him further in this direc-

tion, and have only introduced his remarks to show the state of medical education as it exists where there is no central governing power having supervision over the different teaching and degree-conferring bodies, as was the case in Canada up to the year 1868. But I am pleased to say that to-day Canada, as a whole, has one of the highest standards of medical matriculation as well as medical teaching to be found in the world; and what we want particularly at the present time is to assimilate the systems existing in the different provinces, thereby making one uniform standard for the whole Dominion.

And this brings me to the second part of my subject, viz., the question of medical reciprocity between the provinces. In reading over the Medical Acts of the different provinces, I find that Ontario is the only one that has a central examining board appointed by the council, before whom every student desirous of practising in that province, no matter from what country he may come or from what university he may have a degree, has to pass. I further find in the Ontario Medical Act this clause: "When and as soon as it appears that there has been established a central examining board similar to that constituted by this Act, or an institution duly recognized by the legislature of any of the provinces forming the Dominion of Canada, other than Ontario, as the sole examining body for the purpose of granting certificates of qualification, and wherein the curriculum is equal to that established in Ontario, the holder of any such certificate shall, upon due proof, be entitled to registration by the Council of Ontario if the same privilege is accorded by such examining board or institution to those holding certificates in Ontario."

I find in the Manitoba Medical Act that the University of Manitoba is the sole examining body for the province, and in that respect comes nearer to the requirements of Ontario than any other, and I see no reason why as long as this remains so reciprocity should not exist between Manitoba and Ontario. Now it appears to me there are just two ways whereby reciprocity between the provinces can be brought about, and these are, first, the repeal of that portion of the British North America Act which gives the various provinces sole control over all educational matters, by taking from them this right

and vesting it in the Federal Government, and the appointment of a Dominion Medical Board; or, secondly, the establishing of Medical Councils for each province, which shall appoint a Central Examining Board similar to that of Ontario, and when this is done let representatives from each provincial council meet, say, in Ottawa, and fix one uniform standard of medical studies to be adopted by all the provinces. Now, as to the first, I think it is entirely out of the question, and can be put aside as utterly impracticable, as I feel sure the local legislatures would never consent to have the control of the educational system taken out of their hands. As to the second proposition, I see no good reason why it should not be adopted. In all the Provincial Medical Acts, so far as I am aware, full power is given the councils to fix the periods of study, make their own curricula, and conduct their own examinations in the way which to them may seem best. Now, all the colleges and universities in the Dominion, so far as I can learn, require four full years of study from a student before going up for his degree, excepting those of British Columbia, whose council is satisfied with three. The teaching in all these institutions is very similar, so that it would not be a difficult task to make them uniform in this respect. Then all that remains to be done is to appoint a Central Medical Examining Board for each province, to examine and recommend for license all graduates, leaving the universities the power of granting degrees only. I shall make no more suggestions on this point, as committees from each province were asked to meet in this city to discuss this matter fully, and I trust their deliberations will result in bringing about the object we all so much desire.

There is one thing that must always be borne in mind, however, and that is, no matter how or by what means reciprocity is brought about, the standard of medical education must always be advancing. This is something we owe both to ourselves and the public, although the latter are slow to appreciate the sacrifices we are constantly making in their behalf. When will they understand that it is more to their interests than ours that medical men should be thoroughly trained and well educated? These same people would never think of retaining an uneducated and in-

competent lawyer to conduct a case when only their money or property was at stake, nor would they employ a poor mechanic to build their houses, nor hire a worthless laborer who was incapable of doing the work entrusted to him; yet they do not hesitate to put themselves under the care of and intrust their health and lives to those travelling charlatans who are without the slightest pretence to a thorough medical training (or as Dr. Campbell, one of the homœopathic members and vice-president of the Ontario Medical Council, puts it, "Those uneducated, incompetent, and dishonest persons who prey on the misfortunes of the sick and distressed; parasites on the profession and plunderers of the people"), and pay enormous fees, and these in advance—such fees that if any reputable physician should dare to charge the one half his bill would be disputed; he would be called an extortioner, and his neighbors warned not to employ him. This is no exaggerated picture, and therefore it behooves us as members of the Canadian Medical Association, having the welfare of the public at heart, to work together not only to elevate the standing of our profession, but to enlighten the public as to who are worthy of their confidence, and to warn them against the incompetent, uneducated, and unlicensed men, as well as the registered quack who sells his license to some foreign institution and robs the deluded people who employ him of both money and health.

In speaking of reciprocity, it has always appeared to me the height of absurdity that in this young country, made up of the different provinces and territories, confederated together under one general government—that in each of these provinces an educated medical man (already registered in one) should be required to pass an examination before being allowed to practise his profession on entering another province, or else be humiliated by being dragged before a magistrate and fined, or sent to prison. What a spectacle it would be and how injurious it would prove were the chief medical officer of one of our transcontinental or inter-provincial railways like the C.P.R. or G.T.R. made to pay a fine for setting a fracture or amputating a limb for some poor unfortunate injured in an accident on one of these roads outside the province in which the medical officer was

registered; or in a case of a suit for damages being brought against one of these companies in any province beyond the limits for which the chief medical officer's registration extended, what would be thought by the public if the court refused to hear his evidence because he was not a registered practitioner in that particular part of the country? Yet as the law now stands in some of the provinces he, in the first instance, could be fined, and, in the second, his evidence would be of no legal value. Under these circumstances I think it the duty of the medical councils of each province to consider this matter fully; and not only consider it, but adopt some means to remedy the evil, injustice, and absurdity of the present state of things.

Let us, then, as members of this National Medical Association, throw aside all minor differences of opinion as to provincial rights and use our influence individually and collectively to attain this object; and, like the two great political parties, who, twenty-five years ago, united for the noble purpose of bringing together under one government the scattered provinces under the British crown in North America into one great Dominion, in whose capital we now meet, so let us assimilate, unite, and bring together the different systems of medical education now existing in these provinces and form one great universal system, with a standard so high that it will carry with it not only the respect and admiration of the people of this country, but secure the recognition it would deserve from the universities and medical councils of Great Britain and the continent; and just as Canada is destined to take her place among the most progressive and enlightened countries of the earth, so shall her sons who are graduates of her universities and registered by her medical councils take their stand among their confrères from the older countries in the world's medical congress, and feel proud to be called Canadians.

A FATAL CURIOSITY.—A weaver in Accrington, England, put a turpentine stupe over his abdomen for the relief of a severe colic. It did not seem to burn as much as it ought, and he struck a match to see what was the reason. The match ignited the turpentine, and the man was burned to death.—*Med. Record.*

RHINOLITHS.

BY DR. PRICE-BROWN, TORONTO.

Until within the last few years the literature to be obtained upon the subject of nasal calculus was very limited. Erichsen, in his work upon "Surgery," 1873, merely gives it a passing allusion; while Bosworth, in his "Throat and Nose," published in 1881, does not even mention it. In his later work, however, issued in 1889, he devotes considerable space to the subject, recognizing its importance, and assigning to it the position in medical science to which it is entitled.

The patency of the nares, both anteriorly and posteriorly, will always render rhinal calculus of rare occurrence. Still, so long as people, particularly children, will continue to put foreign bodies into their noses, some of these will be retained, with the possibility of calcareous deposit upon their surfaces, and the resultant formation of rhinoliths.

The earliest case on record was that reported by Mathias de Gardi,¹ giving an account of the removal of a rhinal calculus as large as a fir cone. During the next two hundred years only three or four cases were chronicled. In 1727, Wepfer² gave the curious history of one in which the calculus was completely buried and covered by mucous membrane. From this time forward cases were more frequently recorded, and by 1889 some forty others were added to the list. Since then twenty others have been gathered from the various medical journals of Europe and America, one of the most recent that I have seen being that of Wagner,³ of Halle. In his case, which occurred in a child 13 years of age, a cubical hole was left in the lateral side of the nose, produced by the impression of the stone upon the upper jaw.

The formation of rhinoliths is controlled in a large measure by the same laws as those directing the production of calculi in the other mucous tracts of the body. Let a foreign body be permanently retained within the nasal cavity, and the probability is that it will become a nucleus for the deposition of the earthy constituents of the normal fluids secreted by the nose; and so long as it is retained will gradually increase in

(1) "Practica Venise," 1502, post II., cap. xiv, p. 308.

(2) "Ephem.," 1727, obs. 192, p. 905.

(3) "Journal of Laryngology," Feb., 1892, p. 73.

size as well as density. In most of the cases recorded a nucleus was discovered; and even when the nucleus was absent, a hollow in the centre of the stone would indicate its presence in former years, prior to the period of its absorption—as in Bosworth's⁴ case, which on section after removal revealed a cavity in its centre corresponding in shape and size to a kidney bean, the presence of which had no doubt led to the formation of the calculus.

The character of these inserted nuclei differ in many cases very widely from each other. In Ruysch's⁵ case the nucleus was a piece of amber; in Baber's⁶ case, a rag; in Seifert's,⁷ a button; in one of Chiari's⁸ cases, the nucleus was a piece of cork, in the other a piece of bone; in Wright's,⁹ a sponge; in Major's,¹⁰ a sea shell; in Ball's,¹¹ a pea; while quite a number have been reported in which the nucleus had been a cherry stone.

I believe there is only one case on record of the rhinoliths being multiple, that of Axmann¹²; and there is only one likewise of their being bilateral, the case of Nitsche,¹³ the nucleus in each case proving to be a cherry stone.

A chemical analysis of rhinoliths proves them to consist largely of the ordinary saline ingredients of nasal mucus, which, according to Robin, consists of:

Chlorides of sod. and pot., 5.60,
Phosphates of lime and mag., 3.50,
Sulph. and carb. of sod., .90 to 1000 parts.

Schech states that rhinoliths consist of 80 per cent. of these salines, combined with a fraction of iron and 20 per cent. of organic matter.

The symptoms are largely those that we might expect from the presence of a foreign body, their precise character being dependent upon the form, size, and position occupied. The soft parts, cartilages, and bones are often crowded out of place, the deformity being frequently accompanied by ulceration and profuse offensive discharge.

In Hendley's¹⁴ case the nose was greatly swollen, while a sinus opened externally discharging pus. In Bovill's,¹⁵ there was ptosis, epiphora, and partial paralysis of left side of face. In Nolte's,¹⁶ the hard palate was perforated. In Bettman's¹⁷ and Clark's cases, mucous polypi were developed.

The formation of nasal calculus is usually exceedingly slow, commencing almost invariably in childhood, adult life often being reached before the stone is discovered and removed. When no anterior deformity exists, hiding and closing over the calculus, diagnosis should not be difficult, as touching with the probe would produce the characteristic grating, quite different from that of necrosed bone. The fetor of the latter is likewise more horrible.

Of course, the only treatment for rhinolith is removal; and as it is frequently too large to admit of passage through the nostril, crushing has to be resorted to. This can usually be accomplished by a strong duck-bill nasal forceps, or a small lithotrite, but is often a by no means easy operation, and will require a general anæsthetic, or, what is probably better, complete local anæsthesia by cocaine. In Mackenzie's¹⁸ case extensive hemorrhage resulted after the crushing, followed by facial cellulitis. In Hendley's, the calculus was removed after splitting up the external nose; and Nolte's was extracted through the pharynx, after cutting through the soft palate.

Although such a large number have been reported during recent years, still they are usually a list of isolated cases, more than one from the records of one individual not frequently occurring. Each instance, however, when analyzed, has special features of its own; and on that ground the following cases may not be uninteresting:

Case 1. On Dec. 23, 1891, Miss R.,* æt. 19, was referred to me by Dr. Nichol, of Cookstown, for the removal of deflected septum, the right nasal passage being completely occluded by the deformity. On examination, the central part of the right ala was very protuber-

(4) "Diseases of Nose and Throat," by Bosworth, 1889, p. 327.

(5) "Observ. Anat.," Amsterdam, 1733, obs. 44, p. 42.

(6) "London Lancet," Ap., 1887, p. 772.

(7) *Ibid.*, p. 86.

(8) "Annales des Mal. du Larynx," etc., Jan., 1890.

(9) "Medical Record," Oct. 12, 1889.

(10) "Journal of Laryngology," Sept., 1890, p. 384.

(11) "British Med. Journal," March 1, 1890.

(12) "American Jour. Med. Sciences," 1869, vol. 5, p. 204.

(13) "Monats. fur Ohrenheilk.," July, 1891.

(14) "British Med. Jour.," Dec., 1886, p. 1161.

(15) "British Med. Jour.," Oct. 16, 1886, p. 718.

(16) "Allg. Med. Cent. Zeit.," 1887, p. 1180.

(17) "Jour. Amer. Med. Assoc.," Sept. 6, 1884.

(18) "Op. Cit.," p. 438.

*Reported to Toronto Med. Soc., Jan., 1892.

ant, giving a full, puffy appearance to that side of the nose. The anterior part of the triangular cartilage was thickened and deviated to the right, pressing against the right lateral wall and inferior turbinated, and apparently giving rise by pressure to the alar deformity. The interior of the right naris could not be examined on account of the cartilaginous obstruction; but on the left side, the forward concavity of the septum was compensated for by a very large convexity further backwards.

After removing the deflected septum by Bosworth's method, I discovered behind it a foreign body of some kind, partially covered by mucous membrane. When I could examine it more thoroughly, it proved to be a nasal calculus, $\frac{3}{4}$ inch by $\frac{5}{8}$ by $\frac{3}{8}$. After applying freely a 20 per cent. sol. of cocaine, I attempted to remove it by forceps. Various fragments broke away, but the large centre piece, in spite of a good deal of traction, could not be made to pass through the anterior portion of the bony cavity. Finally, I succeeded in splitting it into two lateral halves by means of a strong duck-bill forceps, the blades being placed above and below the rhinolith, the extraction being accomplished at the same time, both fragments being withdrawn by the one effort. On examination, each half presented a hollow semi-globular facet about the size of a split pea.

By a continuation of treatment the septal cartilage operated upon healed, breathing became normal, and the offensive catarrhal discharge disappeared. As might be expected, the nose assumed a more natural shape.

On enquiry, the patient acknowledged having put something into her nose when she was about seven years of age. She thought at the time that she had got it out again, and said nothing about it. It was two or three years subsequent to this that the nose commenced to fill in.

There is no doubt that the pea was the cause of the difficulty; and having remained in the nostril for twelve years had resulted in the formation of the rhinolith.

To account for the complete anterior deviation of the nasal septum to the right is somewhat difficult, except on the principle of compensation. As the ossification of the vomer is not complete until after puberty, it would yield readily to the pressure of the enlarging

foreign body, the result being the posterior deviation to the left. The anterior septal cartilage, however, being free, would naturally yield to the respiratory pressure, and this being confined almost exclusively to the left nostril would gradually force over the triangular cartilage to the right, producing the characteristic deformity.

Case 2. July 4, 1892, Mrs. N., æt 28, music teacher, presented herself for treatment. Had been troubled with excessive discharge from left nostril for many years. Six years previously she had consulted a licensed quack, and was under his care for three years continuously without receiving any benefit. Subsequent to this she obtained some relief by syringing the nostril daily with salt and water.

On examination, there was no apparent deformity. Even after shrinkage produced by cocaine the floor of the left nasal fossa could not be seen, either by anterior or posterior rhinoscopy. On introducing a curved cotton-holder, however, a dense gritty substance was found to cover the floor of the whole inferior meatus, and with ordinary force was immovable.

After applying a stronger solution of cocaine, I broke off several fragments. These proved the foreign body to be a rhinolith, and at two other sittings, with crocodile forceps, I broke it into fragments. Some of these were extracted through the anterior naris, and others pushed through the posterior choana. Two pieces were unavoidably swallowed, and owing to their size and angular character produced a sensation of choking until washed down by water. The dimensions of the two largest fragments, still in my possession, are respectively $\frac{7}{8} \times \frac{1}{2} \times \frac{3}{8}$ and $\frac{5}{8} \times \frac{1}{2} \times \frac{1}{8}$ of an inch. The whole calculus must have been at least 2 inches in length, and varying in width from $\frac{3}{8}$ to $\frac{5}{8}$ of an inch, according to the capacity of the various portions of the meatus, while nowhere could it have been more than $\frac{1}{4}$ inch in thickness.

Notwithstanding the application of a 20 per cent. solution of cocaine, the fracturing produced considerable pain, and, as might be expected, was attended by a good deal of local hemorrhage. There was no resultant inflammatory action, however; and the patient made an excellent recovery, with complete cessation of catarrhal symptoms; while the unpleasant odor of breath from which she had suffered for

years, and which always attends such cases, was entirely removed.

On comparing the two sides, after removal of the rhinolith, I noticed that there was a decided difference in the plane of the floor of the two nasal fossæ. Although the mucous membrane of the affected side had not been broken, yet the constant pressure, which must have been present for fifteen years or more, had retarded the growth of the palate process of the maxillary bone, reducing it to little more than a shell, and making the floor of the meatus almost a quarter of an inch lower than its fellow of the opposite side.

The unusual shape of the rhinolith rendered its etiology obscure. The patient denied ever having put anything into her nose; but she remembered, when a child, receiving a severe blow from a hard substance on the left side of the face and nose, from the effects of which she suffered for a long time. Query: Could there be any connection between a fractured palatal process and the rhinolith?

POST-NASAL ADENOIDS.*

BY J. D. THORBURN, M.B., L.R.C.P. AND S. EDIN.,
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Mr. President and Gentlemen:

So much has been written upon post-nasal adenoid vegetations that it was with some feeling of diffidence I selected this subject for my paper; but it is one of such importance, especially to us Canadians, that I deemed it worthy to be brought before the association. Post-nasal adenoids were known to Hunter, but were first described by Wilhelm Meyer, Copenhagen, who gave a description of the etiology, structure, and the symptoms arising from their presence. Since that time many writers of greater or less worth have contributed much upon the same subject.

"Adenoid vegetations consist of a collection of hypertrophied lymphoid structures, found, as a rule, in young children and infants, more rarely in adults, congenital in some, developed in infancy in others, and showing a tendency to disappear at puberty." The etiology of these true hypertrophic changes in the lymphatic glands is not well understood.

From a study of cases, we are forced to admit that scrofula, tuberculosis, syphilis, rheumatism, and the various exanthemata, are all predisposing causes. Many authorities deny, however, that the above-mentioned dyscrasia influence the formation of the growths, and explain their presence as being due to inflammatory changes, resulting in a tendency to hypertrophy of the glandular and surrounding tissues lining the post-nasal space.

"When, from any cause, we have partial occlusion of the nasal fossæ, so long as respiration is conducted through the nose, there is, of a physical necessity, a diminution in the barometric pressure behind the seat of stenosis. This inevitably results in more or less over-filling of the blood vessels, which in its turn leads to hypernutrition."

The inflammatory changes of this region being increased by primary catarrhal changes, characterized by repeated attacks of acute rhinitis, hypertrophy of pre-existing elements is nowhere more conspicuously seen than in the case of post-nasal adenoids.

The *modus operandi* of the diminished barometric pressure behind the stenosis is as follows: As you know, when air passes behind an obstruction into a cavity, it becomes rarefied; this rarefaction of air has a suction power, which is influenced by each respiratory act in such a manner as to cause a drawing upon, and then a more or less relaxation, of the tissues.

The bony structures cannot be influenced in a direct manner; therefore the soft parts are subjected to a greater suction-pump action in order to compensate for the inability of the hard framework. In time, the blood vessels running through the yielding tissues become permanently dilated, and the increased blood supply leads in turn to hypernutrition and true hypertrophy.

The most common causes of the stenosis are (a) congenital osseous malformations; (b) small nostrils; (c) deflected septa; (d) septal spurs; (e) hypertrophic rhinitis; (f) simple engorgement of the tissue covering more especially the inferior turbinated bones; (g) thickened septa; (i) then, again, adenoids are found associated with atrophic rhinitis and cleft palate.

Bosworth says, "As a rule, the seat of obstruction is situated near the anterior part of the nasal fossæ, and that in the case of deflected

*Read before the Ontario Medical Association, June 2nd, 1892.

septa we often find the V-shaped contraction of the superior maxilla." After the above explanation, one can appreciate why the vault of the pharynx is the seat of adenoid vegetation, accepting the barometric theory as being the true one in the great majority of cases; still there are other causes to account for the presence of adenoids which shall be mentioned later on.

Not being satisfied with the various classifications of adenoids as given by different authors, I have attempted a classification for myself, based upon clinical experience, and have found it of some service, both as regards diagnosis and treatment, and hope it will prove of value to others.

First, those resulting from nasal stenosis, which I again subdivide into (1) soft, (2) firm, (3) mixed.

(1) The soft variety occurs in young children, subjects of a slight nasal stenosis. The dimensions of the growth and shape vary from day to day, at one time being small and flat, at another large, and sending down finger-like prolongations; these changes are, no doubt, owing to transitory œdema of the tissues.

Associated with these changes in size and shape, we find a corresponding increasing and decreasing nasal stenosis. From the appearance, structure, and behavior of the growths, one would almost be justified in calling them a polypoid form of the disease. It is this variety that gives rise to the repeated attacks of acute rhinitis and otorrhœa in young children.

(2) Firm. These obtain in a totally different type of patient, in contradistinction to class 1. They are found in healthy, robust subjects, are slow in growth, firm in consistence, more regular in outline, showing a tendency to lateral and downward extension; do not vary in size from day to day. There is a marked nasal obstruction, and as a rule greatly enlarged tonsils. The best defined symptoms indicating their presence is facial deformity, noisy breathing and snoring, and if far advanced we find well-marked pigeon breast.

(3) Mixed. Fill in the gap between 1 and 2, both as regards structure and symptoms.

Besides the above classes, I wish to draw your attention to at least two other varieties which have certain peculiarities of their own, not so much in structure as in etiology and symptoms.

We find in a certain number of young adults well-marked adenoids of large size, localized in the vault of the pharynx, firm in consistence. Upon post-rhinoscopic examination, the growth, instead of presenting a grayish appearance, presents rather that of a bluish-red, the same as seen in passive inflammation of mucous tissue. Associated with this form are enlarged tonsils, showing on their surface indications of former inflammatory attacks. Now it has been proven beyond doubt by Lennox Browne and others that these attacks are due to rheumatism. This being the case with the buccal tonsils, it must of necessity be the same with the pharyngeal tonsil, which is similar in structure and functions.

The following history will go to prove my statement: H.J., æt. 15, schoolboy; healthy, but has a history of growing pains (rheumatism); and slight rheumatic attacks; father and mother both subject to rheumatism. Previous history: Except for above attacks and also a tendency to "ulcerated throat," he has enjoyed the best of health. Did not snore as a child, but does now. Present attack began with a severe cold, complained of rheumatic pains throughout the body; these lasted three days, when the throat became involved in a right-sided tonsillitis, followed by the same condition on the left side. Leaving there, the pharyngeal (Luschka) tonsil was attacked; this, jumping from place to place, lasted three weeks. After a tedious convalescence the patient recovered, but now has a permanently enlarged pharyngeal tonsil. This is one of many cases that have come under my notice.

The fifth and last variety is that of the chronically enlarged pharyngeal tonsil, the outcome of repeated attacks of inflammation caused by the presence of the vegetable parasite, leptothrix buccalis, and occurring chiefly in young adults. This parasite shows its presence in the form of small white or yellowish spots the size of millet seeds, covering a cheesy mass, which when pressed and squeezed between the fingers emits a very offensive odor. These masses are to be seen studded over all the nostrils and even on the base of the tongue. The patient is made aware of their presence from their taste, which is quite as bad as their odor.

These masses cause localized inflammation in the substance of the affected part, and in time

a true hypertrophy of the same. The symptoms arising from their presence are more of those of a post-pharyngeal catarrh than of obstruction. The patient also hawks up from time to time some of the cheesy masses. Race or climate has but little influence over the growth of adenoids. The only exception in this rule is the Hebrew race, who are prone to adenoid formation. Before describing the general symptoms of adenoids, it would be well to refer to the functions of nasal respiration.

(1) Air passing through the nostrils is brought to the temperature of the body. (2) It is moistened and filtered. (3) Gaseous exchange takes place. Any interference of these functions would tend to lead to bronchitis, croup, asthma, and other diseases of the respiratory tract.

Symptoms: In the infant the inability to feed, when not due to "tongue-tie," is generally due to the presence of adenoids. In older children we have the well-marked adenoid expression of countenance due to *linea labialis*, extending downwards from the angle of the mouth until it becomes lost in the lower portion of the face. An open mouth, stupid expression, pinched nostrils, go to make up the picture. Snoring when asleep is a very prominent and distressing symptom; when there is no actual snoring, the patient sleeping with his mouth open has his rest disturbed, and in the morning his lips are dry and parched. Inability to pronounce various letters, as the explosive labial, is another almost pathognomonic sign, as poat for boat.

Attacks of deafness are common; these may be due to a simple or a purulent catarrh of the middle ear or to an indrawing of the drum-head. The sense of smell and taste are impaired, headache is complained of, as well as blood escaping from the back of the mouth. Time will not permit me to enumerate the many other symptoms caused by these growths.

Examination of the mouth and throat shows almost certain indications of the presence of adenoids; higher up in the vault inspection we see enlarged buccal tonsils, and on the back of the pharynx œdematous solitary glands standing out from the surrounding tissue. The next thing we notice is the remarkably small space between the soft palate and post pharynx. If possible, the next step in verifying the diagnosis

is examination by means of the post-rhinoscopic mirror, a difficult procedure when adenoids are present. If unable to see them, pass a guarded finger up behind the soft palate and ascertain by feeling their absence or presence. Upon the withdrawal of the finger, it is frequently found covered with a bloody mucus.

Treatment: I will not say anything about the medical treatment as applied to the removal of the growths, inasmuch as I do not consider it worthy of attention. Surgical interference affords us the only means of getting rid of the disease. In children, when the growths are soft, my mode of treatment consists in scraping away the tissue with the finger nail, no anæsthetic being required. In growths of firmer consistency one of the various forms of sharp spoons, forceps, or curettes are to be recommended, according to the locality of the growths and the temperament of the patient.

In my practice chloroform or ether are never used unless absolutely necessary, and that occurs in very few cases; cocaine has no anæsthetic effect upon the diseased tissue. The after-treatment consists in insufflating boric acid through either nostril. I never use a nasal wash until some days after the operation, owing to the tendency of washing into the Eustachian tube some of the *débris*. Place the patient in bed, and do not allow him to take of either too hot or too cold food. After the wound is healed, remove the obstruction or exciting cause.

Selections.

ABSTRACT OF A PAPER ON EXCISION OF THE BREAST FOR CANCER.*

BY W. WATSON CHEYNE, M.B. ED., F.R.C.S. ENG.,
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King's College Hospital, etc.

The view which I think is generally held is that the carcinoma begins as an overgrowth of epithelium in the acini or ducts of the breast, and that it spreads partly by epithelial projections from these acini or ducts pushing their way into the surrounding tissues and partly by fresh infection of neighboring ducts or acini; and, further, that the same overgrowth of gland epithelium which produced the original disease

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is liable to occur in other parts of the breast, giving rise to multiple breast tumors, and that it is to this fresh overgrowth that local recurrences are most commonly due where portions of breast tissue are left behind. The latter part of the view is, I believe, incorrect. No doubt the earliest commencement of a cancer must be in connection with the gland epithelium, but I believe that once the disease has commenced the epithelial overgrowth soon pushes its way through the wall of the duct or acinus and passes then into the lymph channels and vessels surrounding it, and that having arrived there the subsequent growth of the tumor occurs entirely by multiplication of the original epithelial cells and their derivatives along these lymph channels. The cancerous tumor is, in fact, a growth in lymphatic canals, and the areolar spaces are in the main dilated lymph vessels and spaces. Hence the cancer cells are in direct communication with the lymph stream from a very early period of the tumor formation, and are constantly liable to be carried away with the fluid lymph; and may either stick further on, giving rise to secondary nodules in the breast or surrounding fat and fascia, or may be carried to the nearest lymphatic glands causing infection and tumor formation there. The neighboring acini around a tumor do not form fresh growth; but, as can be frequently seen in microscopical specimens, they are simply pushed aside, undergo atrophy, and disappear. It can be readily seen in recurrences in connection with remnants of breast tissue left behind that although the glandular epithelium shows irritative changes, the cancerous growth has begun in the lymphatic vessels around; and Mr. Stiles has in a number of instances found plugs of cancer cells in lymphatic vessels in apparently healthy breast tissue far away from the primary tumor. Hence the main point to be considered in connection with the spread of a cancerous growth in an organ is the disposition of the lymphatic vessels in that organ and the paths along which the lymph leaves it.

According to M. Sappey, the mamma is supplied with extremely numerous lymphatics. They commence in connection with the acini in the form of a plexus around them; they then collect on the surface of the lobule, completely enveloping it in a close plexus, and the plexuses

of neighboring lobules communicate. From the lobules they run along the ducts, still in a plexiform arrangement around them, and so they pass from all parts of the breast towards the nipple. Under the areola the vessels, now of considerable size, form a plexus, called by M. Sappey the sub-areolar plexus, which is also joined by the vessels from the skin of the areola and its neighborhood. From this sub-areolar plexus the lymph is carried towards the axillary lymphatic glands by larger vessels, of which he describes four, two from the centre and one from the upper and lower part of this sub-areolar plexus respectively. According to M. Sappey, the whole of the mammary lymph follows the above-mentioned course, but subsequent observers have stated that there is also a plentiful return from the under surface of the gland through the pectoral fascia, and this corresponds with the pathological facts, which leave no doubt on that matter. It follows, however, from Sappey's investigations that at whatever part of the breast a cancerous tumor is formed, though some of the infective material will be carried directly in the pectoral fascia and fat to the axilla, part may also pass through the gland itself towards the nipple. Even where the tumor is at the extreme axillary end of the breast—under which circumstances some surgeons advise removal of the tumor alone, although there may be direct flow towards the axilla—there is also a flow backwards through the mamma towards the nipple, and infective material may thus very readily be left behind if the tumor alone is removed. Hence, I believe that in the case of the breast it is absolutely necessary to remove the whole organ wherever the tumor be situated, because it is quite impossible to say what parts are free from the disease and what are not, and I see no reason for running any risk of recurrence by leaving portions of the breast behind. It is, however, easier to speak of complete removal of the breast than to do it, for it turns out that the breast is a much more diffuse and extensive organ than has been supposed. This has been demonstrated by Mr. Stiles by a very simple method, which I must refer to, as it is one of great practical value in determining during the course of an operation not only whether the whole breast, but also whether the whole disease

has been removed. Mr. Stiles found that when a cut surface on which masses of cells—*e.g.*, epithelial masses—were present was first washed free from blood, then immersed for five minutes in a five per cent. solution of nitric acid, and then washed under the tap for five minutes, the epithelium was readily differentiated from the other tissues by the naked eye, presenting the appearance of dull white spots or masses, while the fat became yellow and the fibrous tissues welled up and became semi-transparent. By treating the breast in this way after removal, it is easy to determine whether lobules of the breast or nodules of cancer have been cut through. In practice, as soon as the breast is removed, it is handed over to an assistant, who puts it through the above process while the operator is going on with the dissection of the axilla. By the time the axilla has been thoroughly cleaned out the breast is ready for inspection, and can be carefully examined before closing the wound, and if any portion of breast tissue or of disease is detected the remaining part is at once sought for and freely removed. I have always used this plan since Mr. Stiles told me of it; and in one very advanced case I found by means of it that I had cut through a nodule of disease in the fat at the outer border of the axilla which I would certainly have overlooked otherwise, and on searching I found the rest of the nodule and removed it. Mr. Stiles' nitric acid method is also applicable to tumors elsewhere; and in one case, where I was removing an epithelioma on the inner side of the cheek, and involving the lower jaw, I detected by means of it a narrow strand of disease running backwards beneath the ramus of the jaw, which I had not observed on dissecting away the growth. I consider this method a very valuable addition to our operative means, the only objection to it being, I think, the length of time that it takes. In the case of the breast, it is necessary to cut off the breast from the axillary fat before clearing out the contents of the axilla in order to have it tested, whereas I find I can get the axillary fat and glands away much more readily by leaving the breast attached, the weight of the mamma hanging over the side pulling down the axillary contents more easily than can be done by the hand. This is, however, a minor objection, and Mr. Stiles may perhaps be able to meet it.

To return now to the extent of the breast, it is found to reach laterally in all directions, especially upwards and towards the axilla, much further than has been supposed, and it is impossible to remove it completely by the small elliptical incision figured in the older text-books. In order to take away the breast completely, it is necessary that the incisions should extend well beyond it at each end, and that a large amount of skin, I believe an amount co-extensive at any rate with the bulging portion of the breast, should be removed. For another reason it is necessary that large portions of skin should be included between the incisions, *viz.*, in order to ensure the removal of the sub-areolar lymphatic plexus and the vessels proceeding from it towards the axilla, and also to take away as far as possible the bands of fibrous tissue which pass from the breast to the skin, the suspensory ligaments of the mamma, which have been found very frequently to contain breast tissue, as well as lymphatic vessels coming from the breast, and which are therefore a source of risk. Further, the skin over the tumor wherever situated should be widely removed, even although it is not actually involved in the disease and that for the same reason, *viz.*, that the bands of fascia running from the neighborhood of the tumor to the skin are very likely indeed to be infected with the disease. Where the skin has itself become involved in the disease—to however small an extent—it must be very freely removed; I should say, some three or four inches clear on each side of the nodule, for the lymphatic plexuses in the skin are very numerous, especially at the deeper part, where the vessels are largest. Hence, as regards the skin incisions, no absolute rule can be laid down; they must be planned so as to ensure complete removal of the breast and to get wide of the disease, and must usually be irregular in shape. As I said before, they should include practically all the prominent part of the breast, and when the growth is above or below the centre of the breast further incisions must be made at right angles, so as to include it. As a rule, even where the removal of the skin has been very extensive, I have generally succeeded in bringing the edges together, and thus getting union by first intention by undermining the skin widely and by using button stitches and

relaxation sutures of silver wire. Where, however, the skin cannot be brought together at all, or where the patient is very spare and the traction is likely to lead to sloughing, the wound can be readily closed by Professor Thiersch's method of skin-grafting, as described by me in *The Lancet* last summer, the grafts being either applied at the time, or, if the patient is at all collapsed, after an interval of about ten days.

Although Mr. Sappey was of opinion that the whole of the mammary lymphatics ran forwards and joined the sub-areolar plexus, it seems clear from the researches of Mr. Langhans, Dr. Heidenhain, Mr. Stiles, and others, and also from clinical experience, that many lymphatics must leave the breast on the under surface and run in the pectoral fascia, generally along with blood vessels, towards the axillary glands; some, however, I believe, also go towards the anterior ends of the intercostal spaces, where they pass into the thorax and join the anterior mediastinal glands, communicating also, I think, with lymphatics about the sternum. Hence it is essential to remove the pectoral fascia thoroughly co-extensive with the mamma and right on to the sternum. Besides the presence of lymphatics, Dr. Heidenhain and Mr. Stiles have found that many lobules of the breast are intimately connected with the pectoral fascia, and would certainly be left behind if the breast is simply torn off as is sometimes done. Indeed, so intimately is the pectoral fascia connected, on the one hand, with the breast, and, on the other, with the pectoral muscle, that Dr. Heidenhain states that it is necessary in all cases not merely to try to dissect the fascia off from the muscle, but also to remove a thin layer of the surface of the pectoral muscle. This is certainly necessary under the tumor and under the central mass of the breast; I doubt if it is so necessary under the peripheral parts of the breast. Dr. Heidenhain found that where the skin was freely removed, the recurrences practically always took a place in connection with the pectoral fascia.

If the tumor has become adherent to the pectoral muscle, the free removal of the affected part is of course indicated, but we must bear in mind that the majority of the lymphatics in muscle run parallel with the muscular fibres, and hence the mere cutting a circular piece out

of the muscle will not suffice; the whole strip of affected muscle must be removed. Dr. Heidenhain points out that the muscular contractions tend to force on any infective material along the lymphatics, and he holds that once a muscle is attacked, even at one place only, the whole muscle should be looked on as diseased, and should therefore be removed. I doubt, however, whether with a small involvement of the pectoralis major it is necessary to remove the whole muscle. I should in such a case only remove a quantity of muscular tissue on each side, being careful, however, to take the whole length of the fibres as far as possible. The spread of cancer in muscle is a matter of great importance in cases of the malady affecting muscles elsewhere, especially in a case of the tongue, where, as we know, recurrence is extremely apt to occur, mainly, I think, because the whole of the muscles affected is not removed.

In the axillary space the main lymphatics run in the fat towards the glands, but some also, I think, run in the fascia over the serratus magnus, and some upwards between the pectoralis major and minor to enter the axillary space above the latter muscle. It is well, I believe, always to remove the fascia over the serratus as far back as the latissimus dorsi, where I have more than once found nodules of cancer, and also to remove the layer of fat and fascia which one finds between the pectoralis major and minor towards the outer part, where also I have found disease. Lastly, it is imperative in all cases to remove all fat and glands from the axilla whether there is any noticeable disease or not, for the glands are usually very early affected, and the mere absence of hardness does not necessarily imply absence of disease. Further, it is not sufficient simply to pull out the glands which are felt to be enlarged; the fat and glands must be removed completely by careful dissection, and that for three reasons. In the first place, as I have mentioned, in the early stage the infected glands are not noticeable, and the removal only of enlarged glands does not necessarily mean removal of all the disease; in the second place, if only the glands are taken away, the lymphatic vessels are left in the fat, and these are often found plugged with cancer cells some distance from the glands; and, thirdly,

it is advisable to remove all the fat, because Mr. Stiles has shown that fresh formation of lymphatic tissue frequently occurs around certain fat lobules under the irritation from the breast disease, and these new lymphatic glands may subsequently become the seat of disease. These fat lobules are, according to Mr. Stiles, lymphatic glands which have undergone fatty involution and again become lymphoid in consequence of changes in the mamma set up by the presence of the tumor.

To sum up: In all cases there should be a free removal of the skin, especially over the tumor, very free indeed if the skin is actually the seat of disease; complete removal of the breast, bearing in mind its great extent; removal of the pectoral fascia co-extensive with the breast and right on to the sternum, along with a thin layer of the muscle behind the tumor and the main part of the breast; removal of the fascia over the serratus magnus in the axillary region and of all glands and fat from the axilla, not by pulling out the glands, but by clean dissection; further, if the tumor is adherent to the pectoral muscle, removal of large strips of that muscle. This may seem a very extensive operation where the tumor is small, but the object of the operation is not to remove the tumor, but to rid the patient of her disease, and that can only be done by removing, as far as possible, all the probable seats of recurrence. The operation is fortunately one in which, if performed aseptically, the question of mortality does not come into play, and the results of this very free removal seem to me to promise well. Although I have been brought up to deal more freely with these cases than used to be the fashion, my impression is that there has been an improvement as regards recurrences since I began to act closely in accordance with these recent pathological researches. During the last two years I have operated in this free manner in over twenty cases, and, so far as I am aware—and I know about the majority of the cases—recurrence has only as yet taken place in three instances, in one case being intra-thoracic, and in another—the second of the cases of skin grafting which I published in *The Lancet* of last year—in the form of a small nodule in the skin over the angle of the scapula, three inches and a quarter away from the edge of my former in-

cision in the skin—a striking instance of the necessity of free removal of the skin once it has become involved in the disease.—*Lancet*.

COLONIZATION FOR EPILEPTICS.—Epileptics, a class of people cut off from ordinary social pleasures and pursuits by a disease which robs them actually, in most cases, of their faculties only for a few minutes each day or week or month, have been peculiarly unfortunate in their relations to their fellows in every community in which they are found. If a family of intelligent workers are selected, containing one epileptic, it will be found that as a wage-earner, and as a factor in the little world in which he lives, the epileptic ranks far below his family, usually for the reason that he is an epileptic, and not because he is inferior in ability. Undoubtedly such illustrations can be multiplied indefinitely. Dr. J. Madison Taylor, in an address before the Neurological Society some time ago, which was published in this magazine, pleaded eloquently for a more extended opening of occupations to this class of people. This subject has again been brought to the attention of the medical profession by an address made before the State Board of Charities, at Albany, by Dr. Frederick Peterson, in which he outlined a plan for an epileptic colony. Although this idea is by no means a new one, yet Dr. Peterson demonstrates in detail what such a colony system should be. As the State of New York has passed the law appointing a commission, not only to select a site and to prepare plans for an epileptic institution, but also to prepare these plans on a colony system, the matter assumes immediate practical importance. In the first place, Dr. Peterson believes that all ideas of an "institution" must be lost sight of; on the other hand, it should be rather of the appearance of a small village, in which there should be no very large buildings, nor should there be a symmetrical arrangement of cottages, workshops, etc., as was done at Gallipolis, Ohio. The buildings should be arranged so that they would be entirely separated, provided with their own little gardens, surrounded by hedges, and made as independent and homelike as possible. As to the practical aims of the colony, there should be a school, an industrial college, and a hospital. The colony should be situated in the

centre of population, so as to be easy of access to patients and their friends, and also for a more important reason, *i.e.*, to secure the services of a visiting board of specialists in nervous and mental diseases. Dr. Peterson outlines in detail the arrangement of the various occupations which could be taught to advantage, but suggests that it should grow by a sort of evolution, its wants being supplied as they became manifest. All patients under age could be sent by their parents in just the same manner as they would children to boarding-school. All the patients should be voluntary inhabitants of the colony, excepting those who from mental impairment would require confinement in a hospital; with these ordinary procedures taken in lunacy cases could be carried out, committing them formally to the infirmary of the colony. The evolution of this colony, as outlined by Dr. Peterson, by the New York Commission, will be watched with great interest. Its success will mark a great era in the combination of medical and economic elements.—*University Medical Magazine*.

PUERPERAL TETANUS AFTER ABORTION.—Vinay (*Brit. Med. Jour.*, April 9, 1892) reports a case of this rare complication which occurred last autumn in the practice of a medical man in Paris. The patient was a IV. para, æt. 36. On November 10, 1891, when in the second month of pregnancy, uterine hemorrhages set in, and abortion took place unobserved in the course of these attacks. No tampon was applied. The lochia became foetid, there was hypogastric pain, and it was deemed necessary to use the curette. The operation was done on Nov. 17th under chloroform. Some putrid membrane was removed, and the endometrium was scraped and carefully washed. One hour later a rigor occurred. On the night of Nov. 19th a stiffness began to be felt in the region of the masseters, then trismus, rapidly followed by pharyngeal spasm. In the course of the 20th, the most pronounced tetanus developed. During the attacks emprosthotonos, instead of opisthotonos, occurred, the head and trunk being violently bent forwards. On the morning of the 21st, the attacks were very frequent and severe, and the patient died thirty-six hours after the appearance of the first symptoms.

She was conscious throughout; the pulse did not exceed 108, nor the vaginal temperature 99.8°. Vinay has collected 106 cases of puerperal tetanus. The recoveries amounted only to 12; 59 occurred in labors at term, 7 recovering; and 47 in abortions, 5 recovering. Hence the total mortality is 88.67 per cent., or higher than in any form of surgical tetanus, excepting in cases of wounds on the battlefield, where the mortality is as follows: In tetanus after wounds of the head and neck, 95.2 per cent.; after wounds of the lower extremity, 89.7 per cent.; after wounds of upper extremity, 86.3 per cent. Relapses after one attack of puerperal tetanus have always proved fatal, hence the necessity of prolonged rest in bed when the patient has recovered from tetanus. The disease is as deadly when it sets in late as when it occurs within a day or two of labor. The only treatment which has afforded distinctly good results is inhalation of chloroform carefully maintained for several hours, or large doses of chloral (fifteen grains) hourly, with narcotization when the attacks of spasm set in. Localized tetanus of the uterus is a disease completely distinct from puerperal tetanus.—*Brooklyn Med. Jour.*

THE TREATMENT OF ANGINA PECTORIS.—Angina pectoris and arterial sclerosis are two very common diseases in Russia. This statistical connection is scarcely surprising when it is considered that the former affection is probably due to sclerosis of the coronary arteries of the heart. The severe and prolonged paroxysms of angina pectoris may be explained by the presence of a thrombus or embolus in these arteries. Dr. Kernig, who gave a lecture on the treatment of anginis pectoris before the Medical Association of St. Petersburg, which was published by the St. Petersburg *Medicinisches Wochenschrift*, speaks of two cases in which the *post mortem* examination confirmed the above-mentioned opinion of the etiology of the affection. In both cases sudden death had followed a severe paroxysm, and well-defined softening of the cardiac muscle, with incipient demarcation of the focus of disease, was present. This view of the causation of the paroxysm is supported by a clinical observation which Dr. Kernig made, namely, that in some cases, in a

few days after the paroxysm, pericarditic symptoms were observed, which might be understood as proving that the centre of softening had reached the pericardium. Consistently with this belief, he enjoins absolute rest for about two weeks after an attack, so as to favor the cicatrization of the softening centre in the cardiac muscle. This absolute rest must be maintained even when the patient feels quite well after the paroxysm and has a good pulse. He is, nevertheless, always in great danger immediately after the attack; but with complete rest and prudent avoidance of all unnecessary exertion of the heart he may escape this danger, which will be passed when the softened cardiac muscle has cicatrized. Dr. Kernig treated several extremely grave cases according to this rule without a single relapse, though one of the patients had remained for four years under observation. Patients must be particularly careful at such times, when from previous experience a paroxysm may be expected. Walking in heavy clothes must be absolutely avoided. With the first symptom of an approaching attack the sufferer must rest immediately, and if possible assume the recumbent position. When the attack occurs in the street the patient must immediately be removed to his home, and should certainly not attempt to continue walking. At the same time, Dr. Kernig does not fail to appreciate the value of regular and rational exercise when no fresh attack is imminent and sufficient rest has been taken after the last paroxysm.—*Lancet*.

BOILED MILK AS AN ALIMENT ABROAD.—The practice of subjecting milk to boiling heat before consumption has of late been widely adopted in European countries, whose public hygiene has hitherto been such as to counsel every means of minimizing the conveyance of infection. British travellers, in Latin countries especially, will be reassured by this salutary innovation, experience having taught them that the milk supplied in hotels and pensions and added to their morning meal of tea or coffee has too often been tainted with the micro-organisms of infectious or contagious disease, chiefly from being diluted with impure water, or, not seldom, from containing the desquamatory débris of convalescents from scarlet fever.

Sanitary truth progresses slowly in those regions, and when the public health officer at length succeeded in establishing the unwelcome fact that milk was one of the surest channels by which infectious diseases were diffused, he had to encounter the objection that the boiling process to which he insisted on its being subjected deprives it of its nutrient properties and also its digestibility. Again, however, he has been able to show that reason was on his side and that milk after boiling is not only more easily digested, but has actually a higher nutrient value than in the crude state. We allude especially to Dr. Chamouin's experiments, in which he fed a number of kittens on boiled milk and an equal number of kittens on the same milk as it came direct from the cow or the goat. Those of the former category he found to be twice again as fat and healthy as those of the latter. A kitten, however, which was left to its mother was the fattest and healthiest of all, though this was due to the assiduous attention which the maternal instinct supplied, and which the experimenter pleasantly admitted was beyond the resources of the laboratory. Following up his demonstration, Dr. Chamouin examined the statistics officially issued by the town council of Paris as to the infantile mortality of that city, and finding that the chief cause of this was, directly or remotely, intestinal ailments, he prosecuted his researches still further, so as to include a comparison between those infants that had been fed on boiled and those that had been fed on unboiled milk. As he anticipated, he found a remarkable diminution in the death-rate of the former. His investigation was continued long enough to show that thousands of infants are annually safeguarded from intestinal disease and death by the precaution of boiling the milk on which they feed.—*Lancet*.

ENORMOUS GLANDULAR ENLARGEMENT NEAR THE GROIN IN THE RIGHT THIGH CAUSED BY MALIGNANT ULCERATION OF A MOLE.—Mr. Bland Sutton operated on a man, æt. 64, with a large mass in the groin, presenting the usual characteristics of enlarged glands, it was freely movable; the cause was a pigmented mole, situated just below and inside the knee, which had existed all the patient's life; it had begun

to ulcerate four years ago, after which the glands in the groin were noticed gradually to enlarge; there were nodules the size of a split pea in the midst of the pigmented ulceration. This case, Mr. Sutton remarked, was one in which a birth mark having taken on malignant ulceration epithelial cells are cast off and get to the glands, which probably have become pigmented and full of epithelial cells; the type of structure developed under these moles was aveolar sarcoma. The cause, he pointed out, was a small one for the trouble, but it was a good argument in favor of the removal of these moles. In operating, Mr. Sutton first removed the mole itself, cutting through the skin at some distance all round it, the internal saphena vein being divided during the excision of the ulcerated patch; he then carefully sewed up the rather large gap left in the skin. He next dissected out the large mass of glands by a straight vertical incision, having to make also a short one on the outside at right angles, owing to the size of the glandular tumor, about that of a coconut. The glands were found in a most disorganized condition, being much broken down, fluid spurting out on several occasions, and the dissection having to be carried down very deeply; in fact, after the removal the femoral vein could be seen lying bare in the wound. On subsequently cutting into the mass sufficient pigment was found, as Mr. Sutton remarked, to connect the two facts: the ulcerated mole and the glandular enlargement. A few pieces of suspicious tissue were dissected off, and the wound, which then was left perfectly clean, was accurately sown up, a drainage tube being left in.—*Medical Press and Circular.*

A CONTRIBUTION TO THE STUDY OF PUERPERAL ECLAMPSIA.—Goldberg, of Dresden, in the *Archiv für Gynakologie*, Band xli., Heft 3, and Band xli., Heft 1, draws interesting conclusions from 81 cases of eclampsia. Although more frequent in primigravidæ, the mortality is much greater in those who have borne children. Eclampsia beginning in pregnancy is most fatal; least so when it commences in the puerperal state. Profound disturbance of the nervous system is a more unfavorable symptom than the albuminuria, dyspnoea, cyanosis, and bad pulse. The most successful treatment is speedy deliv-

ery. The forceps is especially successful for mother and child. Version and extraction were also successful. Craniotomy was less valuable as a means of treatment. Cæsarean section was followed by septic peritonitis and death. Induction of labor was successful, as was also incision of a rigid os and extraction. Hot baths and packs, chloroform, chloral, and morphine were reliable agents. Large doses of morphine should be avoided, as collapse sometimes follows their use.—*American Journal of Medical Sciences.*

CHICAGO AND THE WORLD'S FAIR.—The existence of cholera in the United States either this year or the next would prove disastrous to the World's Fair. This result would be fatal if the impression became general that the water supply of Chicago was infected, no matter what the facts might be. The prevalence of typhoid in Chicago is already a matter of general knowledge, and its connection with impure water has been stated over and over again in the medical journals. The *Journal of the American Medical Association*, which is published in Chicago, says in its issue of July 23rd: "That it should be necessary, month after month, to boil and filter every pint of water that is used for drinking purposes in a city of more than a million inhabitants is a scandal of monumental proportions upon the city government." A friend who passed the last year in Chicago informs us that the water left standing in pitchers over night is so offensive that it cannot be used. The failure of Congress to pass an appropriation would not have been so serious a blow by half to the success of the fair as the continuance of the present condition of the city's water supply.—*Brooklyn Med. Jour.*

THE MEDICAL MISSIONARY.—A Hindoo, jealous of the encroachments of Western civilization on his traditional beliefs, when asked, "Which of all the methods of that civilization do you fear the most?" naturally enough evaded the question, remarking, "Why should I put weapons in the hands of an enemy?" At last he said, "We do not greatly fear the missionary schools, for we need not send our children. Nor do we fear their books, for we need not read them; nor their preaching, for we

need not listen to it. But we dread the doctors and the women. The doctors are winning our hearts and the women our homes; and when our hearts and homes are won, what is there left of us?" It is, in truth, with the advent of the medical man and the trained nurse that progress has been made in the reclamation of the backward Oriental, and the annals of missionary enterprise would lose half, and more than half, of their practical interest if these two factors of their work were omitted from the record.—*Med. Record.*

THE

Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS
OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

When a change of address occurs please promptly notify the Publishers, THE J. E. BRYANT COMPANY (Limited), 58 Bay Street.

TORONTO, OCTOBER 1, 1892.

TORONTO UNIVERSITY AND CLINICAL TEACHING.

The Montreal *Medical Journal* speaks as follows: "As we go to press, the report of the Standing Committee of the University of Toronto in the Faculty of Medicine, on the subject of hospital facilities, reaches us. It is most interesting reading, and shows that at last Toronto University has awakened to the fact that clinical teaching in the wards (not the theatre) of a hospital is a most important part of a medical education. The report leads us to infer that ward work is not a feature of the instruction given at the Toronto General Hospital, that the students have not the advantages they possess in English hospitals in the way of obtaining clinical clerkships and dresserships, and that thus they do not come into immediate contact with patients. Numerous recommendations are made for reform, and a system of bedside clinics after the manner of those given in London hospitals is advocated. . . . They have gone to the United States, Great Britain, and the continent of Europe for information,

but are apparently unaware that there is a hospital much nearer home where, ever since its foundation in 1820, clinical teaching in Medicine and Surgery has been carried on in the most efficient manner"

It is rather humiliating to those who have watched with interest the steady and substantial advances which have been made in our methods of clinical teaching in the Toronto General Hospital during recent years to be served with such a dish as this. And yet we cannot blame our Montreal contemporary because it quotes the spirit, if not the letter, of the report referred to. It is most unfortunate that the committee should have conveyed the impression (surely without intention) that our hospital furnished poor clinical facilities and no bedside instruction. It is only fair to the committee to presume that its intention was not to belittle any work which had formerly been done, but to give effect to the views of the University staff in some matters of detail which were likely to increase the efficiency of the teaching, which was already good. It is to be hoped, however, that in the future the committee, in sending any of its reports to the world, will adopt methods of phraseology which are likely to do no injury to the Medical Faculty.

The following quotations from the first calendar of the re-established Medical Faculty of the University of Toronto will show that those in authority were endeavoring to make full provision for the various varieties of clinical teaching, and especially bedside instruction:

"The course of instruction in Clinical Medicine will be thorough and systematic. The students will be encouraged to examine carefully all classes of patients both in the outdoor department and in the general wards. The clinical clerks will be expected to keep accurate reports of all cases allotted to them. Regular clinical lectures will be held in the large theatre from 2.30 to 3.30 p.m., and limited classes will be taken through the wards at 11.30 a.m. and 1.30 p.m."

"Special attention will be paid to clinical instruction at the bedside, and wounds, fractures, etc., will be treated, as far as possible, in the presence of the classes, the surgical dressers being expected to do a large portion of the

work in applying suitable dressings, reducing fractures, etc."

"A systematic course of bedside instruction is given to limited classes of students, several such classes being taken through the wards every day from Mondays to Fridays inclusive. Smaller classes of students receive gynecological demonstrations on two days of each week."

It will thus be seen that in 1887 a good system was in operation, and, as a matter of fact, had been carried out by both schools in the hospital for several years. Fortunately, however, the various friends of clinical teaching do not consider that perfection has been reached (we hope they never will), but show a commendable desire to make some advancement in each and every year. While we are quite willing to admit that good clinical work is being done in Montreal, we still have a very decided opinion that for undergraduates no better course of clinical instruction in Medicine and Surgery was given on this continent than that given last session in the Toronto General Hospital, which happens, by the way, to be the largest and best-ordered institution of the kind in Canada.

THE MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

The meeting of the above association, which was held in Ottawa, September 21, 22, and 23, was a fairly successful and certainly a very pleasant one. The numbers present at the different sessions were not large; indeed, on the morning of the first day the attendance was so small as to cast a certain gloom over the meeting. On the same afternoon there was a large gathering assembled to hear the admirable address of the president, and the gloom was to a certain extent dispelled. Not altogether, however, as it happened that a majority of the members who were required to fill the programme of the afternoon were absent. This unfortunate occurrence called forth some strong words of censure, especially from Dr. Campbell, of Montreal.

Such conduct, when avoidable, is, of course, very objectionable, and richly deserves censure; but it will ever be well to exercise considerable caution in applying the lash under such circumstances. The serious emergencies which so fre-

quently arise in the work of busy general practitioners must of necessity alter plans in a fairly large proportion of cases. If absentees, without careful or without any consideration, are to be accused of deliberate intentions to advertise themselves at the expense of association meetings, a large number will hesitate or refuse to promise papers for any special time. Those who have had much experience in such matters will realize how seriously a possibility or probability of such accusations would handicap the efforts of the officers in preparing a programme.

On the second day the attendance was large, reaching about one hundred. Montreal, as usual, sent a large contingent. Toronto, among outside places, stood a good second. The western part of Ontario was only fairly represented. From more distant parts the numbers were small, but those present extended a warm welcome to Dr. Chown, of Winnipeg, and Dr. Milne, of Victoria, B.C.

It was decided to hold the next meeting in London. Some thought that if the World's Fair were not postponed, it might be arranged in such a way that many could attend the meeting and go on to Chicago afterwards. Even without the big fair, it was thought an excellent place because of its position as a centre of a large and flourishing district. Dr. Sheard has done good service to the association in the past, and his unanimous election to the presidency gives general satisfaction. The following is a complete list of the officers:

President: Dr. Chas. Sheard, Toronto. *Vice-Presidents:* Ontario, Dr. Wishart, London; Quebec, Dr. Shepard, Montreal; British Columbia, Dr. Milne, Victoria; Manitoba, Dr. Chown, Winnipeg; Northwest Territories, Dr. Kennedy, Fort McLeod; Nova Scotia, Dr. Lindsay, Halifax; New Brunswick, Dr. Daniel, St. John; Prince Edward Island, Dr. McLeod, Charlottetown. *Local Secretaries:* Ontario, Dr. Waugh, London; Quebec, Dr. Desrosiers, Montreal; British Columbia, Dr. Lefebvre, Vancouver; New Brunswick, Dr. McLaren, St. John; Nova Scotia, Dr. Morrow, Halifax; Prince Edward Island, Dr. F. B. Taylor, Charlottetown; Northwest Territories, Dr. Cotton, Regina; Manitoba, Dr. Milroy, Portage la Prairie. *General Secretary:* H. S. Birkett, Montreal. *Treasurer:* W. H. B. Aikins, Toronto.

The profession of Ottawa were very kind in entertaining the visitors. They gave a conversation on the first evening in the Russell House, which passed off very pleasantly. On the second evening the members' dinner was given, also in the Russell House. About eighty seats were occupied, and all appeared to enjoy themselves.

THE PRESIDENT'S ADDRESS.

The able and carefully-prepared address of the president was heard with much interest. He first directed attention to the condition of things in medical educational matters twenty-five years ago, when the association was formed, and described the great advances which had been made since that time. He showed that in consequence of the formation of the Ontario Medical Council we had now a Central Examining Board with a high standard, instead of a number of examining bodies with low standards, which existed under the old régime. He referred to some elements of discontent among a section of the profession in Ontario on account of certain regulations adopted by the council, and advised caution in attempting to make important changes. At the same time he showed a conciliatory spirit, and suggested, as he had already done at the last meeting of the council, that a peaceful solution of the difficulties might be reached through a friendly conference between representatives of the profession and the council respectively.

He then discussed the very important question of medical reciprocity between the various provinces of the Dominion. This has been considered a burning question for many years by a majority of physicians in all sections of Canada. While all think it exceedingly unfortunate that no such reciprocity does exist, still all who have carefully studied the question are ready to admit that the subject is beset with many serious difficulties and complexities. We hope, however, that they are not insurmountable; but that the efforts which are now being put forth, especially by prominent members of the profession in the Provinces of Ontario, Quebec, and Manitoba, to bring about a better condition of things will be successful.

We have much pleasure in referring our

readers to the text of the address, which appears in this issue, and is well worthy of a careful perusal.

Clinical Notes.

DIPHTHERIA—DEATH FROM EMBOLISM OF BASILAR ARTERY.

BY A. M'PHEDRAN, M.B., TORONTO.

The following case will prove of interest on account of the unusual complication that caused the death. Grace M., æt. 12, became ill with pharyngeal diphtheria on May 30th last. The attack was a moderately severe one, but by June 4th she was convalescing satisfactorily, the throat having cleared. At 3 o'clock on the morning of the 5th she took nourishment, and expressed herself as feeling very well, desiring her nurse to lie down as she herself was going to sleep. A few minutes later she breathed deeply, and by the time the nurse could reach her bedside she was unconscious. Then coma deepened, and she died at 9 a.m.

At the autopsy a firm white embolus was found lodged at the bifurcation of the basilar artery; its origin could not be ascertained. The heart was not examined, but neither it nor the kidneys had shown any signs of disease.

Correspondence.

COCAINE IN HAY FEVER.

Editor of THE CANADIAN PRACTITIONER :

SIR,—There recently appeared in your journal a prescription for the combined use of morphine and cocaine as a snuff in hay fever. While that formula may be a success, I feel bound to say that it is one which will well bear watching, for it involves a risk with some cases that it would not be wise to incur. Morphism from morphia per nares is possible, as a notable case under our care some years since attests. *Vide*, "A curious case of opium addiction," *Maryland Med. Journal*, 29th March, 1884; reprint at command.

While this case is unique, so far as we know, those from cocaine are less so, despite the mistaken and mischievous statements of Hammond and Bosworth as to the non-risk of inebriety from cocaine.

In a paper on "Cocainism," soon to appear, we have cited sixteen cases—chronic cocaine taking; no past or present rum or poppy using—in several of which its use, per nostril, was the genesis of addiction.

J. B. MATTHEWSON, M.D.,
Med. Director Brooklyn Home for Habitues.

Book Reviews.

The Mediterranean Shores of America: or, The Climatic, Physical, and Meteorological Conditions of Southern California. By P. C. Remondino, M.D., member of the American Medical Association, of the American Public Health Association, of the State Board of Health of California; vice-president of the California State Medical Society, and of the Southern California Medical Society. Illustrated with forty-five engravings and two double-page maps. In one handsome, royal-octavo volume, 176 pages. Extra cloth, price \$1.25, net; cheaper edition, bound in paper, price 75 cents, net. Philadelphia: The F. A. Davis Co., publishers, 1231 Filbert street. Toronto: J. A. Carveth & Co.

So many from all parts of North America go to Southern California for the purposes of health that a book such as this is likely to create considerable interest. This region has a variety of climates, and its intending visitors would do well to obtain some definite knowledge respecting them before leaving their homes. This work gives information which is sufficiently explicit to make it valuable. We are pleased to note that the author advises great care and prudence on the part of the patient, who should not, in his opinion, depend too much on climatic effects. The book is well printed and illustrated, and the price is certainly very reasonable.

Annual of the Universal Medical Sciences. Edited by Charles E. Sajous, M.D., and seventy associate editors. Illustrated with chromolithographs, engravings, and maps. Vol. V., 1892. The F. A. Davis Company, publishers, Philadelphia, etc. Toronto: J. A. Carveth & Co.

This book, like the corresponding volume of the series for previous years, is devoted to the subjects of general, experimental, and electrotherapeutics, climatology and hydrotherapy, hygiene, monstrosities, anatomy, and physiology. The object of the authors is to furnish a com-

plete digest of the advances and recent discoveries in medical science made during the past year. Each subject is treated by a specialist in that department, which insures accuracy in detail. The volume, if possible, surpasses in excellence those of previous years, and is well worth the attention of every physician who wishes to keep himself familiar with modern medicine. At the close of the volume is a general index of the whole series, giving also authorities and a synopsis of the treatment of each disease.

A Text-Book of the Principles and Practice of Medicine. For the use of students and practitioners. By Henry M. Lyman, M.D., Professor of the Principles and Practice of Medicine in Rush Medical College, Chicago. In one very handsome octavo volume of 926 pp., with 170 illus. Cloth, \$4.75; leather, \$5.75. Philadelphia: Lea Brothers & Co., 1892. Toronto: J. A. Carveth & Co.

Professor Lyman is well known in the United States as an eminent physician, teacher, and author. He has endeavored in this work to give the fruits of his own observation and experience, and also the substance of the latest editions of the works of Ziegler, Hallepean, Eichorst, Cornil, Babes, and the collaborateurs of the *Traité de Médecine*. The author's method of writing is very concise, but quite clear. There is no attempt at anything brilliant, but the text is essentially orthodox. The directions as to treatment are brief, but admirably definite, and give evidence of sound common sense and good judgment. It is a good book for both students and practitioners.

Therapeutic Notes.

THE BEST NUTRITIVE ENEMA.—Ewald, as a result of experiments, found that eggs, even though not peptonized, were to a considerable extent absorbed by the rectal mucous membrane. According to the *Mercredi Medical* for April 1st, Huber, of Zurich, has recently repeated Ewald's experiments in Prof. Eichorst's clinic, and announces that the absorption of raw eggs is greatly aided by the addition of common salt. The salt is well borne, and causes, as a rule, no irritation of the bowel. He considers that eggs beaten up with salt, in the pro-

portion of fifteen grains to each egg, are the best for nutritive enema. His method of procedure is as follows: Two or three eggs are taken, and thirty to forty-five grains of salt are added. They are slowly injected by means of a soft rubber tube, carried as high up the bowels as possible. Three such enemata are given daily. An hour before each enema, the rectum is cleaned out by means of a large injection of warm water.—*N. Y. Med. Times.*

THE USE OF CREAM.—Very few housekeepers, says *Hall's Journal of Health*, can realize the nutritive value of cream and understand its superiority to any other solid fats in permitting the gastric juice to mix with it in the most perfect manner, and in this way aiding and hastening digestion. It is invaluable in the case of invalids, for it serves as nutriment in a very available form. It is superior to butter, because it contains more volatile oil than butter made from it. It is frequently ordered by the physician for those consumptively inclined, for those with feeble digestions, for aged persons and those who suffer from impaired circulation, cold feet, and who feel chilly for want of nutriment. No other article of food gives such satisfactory results.—*Med. Mirror.*

ALEURONAT FOR DIABETICS.—Aleuronat is the name of a vegetable albumin introduced by Hundhausen, which Erbstein has found very useful as a substitute for bread in diabetic cases. It is a dry yellow powder, without taste or smell, containing eighty per cent. or more of nitrogenous elements and only about seven per cent. of carbo-hydrates. He employs it in preparing soups and other dishes, as well as in making bread, which shows sixty-six per cent. of nitrogenous matter.—*Med. Record.*

THE DYSPNŒA OF ADVANCED BRIGHT'S DISEASE.—Dr. Steell thinks that common dyspnœa of advanced stages of Bright's disease is due to heart failure, and is not toxæmic. He points to the benefit obtained in many such cases from hypodermic injection of morphia as inconsistent with the presence of toxæmia. He recommends digitalis, or, when it fails, strophanthus, citrate of caffeine, nux vomica, or strychnia. In paroxysmal dyspnœa he says the nitrates are dis-

appointing; he recommends morphia, enjoining caution in its use, and its combination with atropine.—*The Birmingham Medical Review.*

FOR HEMORRHOIDS:

R. Morphineæ . . . gr. v.
Hydrarg. chlor. mit. . . ʒj.
Glycerin. . . ʒiv.
Bismuth subnitrat. }
Vaselin. } aa ʒjss.

M. et ft. unguent.

S.—Apply topically.

—*Allingham in Medical News.*

FOR DYSENTERY:

R. Morphineæ sulphat. . . gr. j.
Magnesii sulphat. . . ʒj.
Acid. sulphuric. dil. . . fʒij.
Aqueæ . . . fʒiv.—M.

S.—A tablespoonful every three hours.

—*Bartholow in Medical News.*

Miscellaneous.

If you wish to remove a deciduous tooth and through fear the child will not permit it, slip a piece of rubber tubing over the crown down to the neck of the tooth, and in a few days the tooth will be so loose that it can be extracted with the fingers. This is given upon the authority of Dr. W. H. Eames, and is certainly worth trying.—*Dominion Dental Journal.*

A SEMMELWEISS MEMORIAL.—It is proposed to establish an international memorial in honor of Semmelweiss, who in 1847 recognized the infectiousness of puerperal fever and adopted practical measures that led to a decided reduction in the mortality from this source.—*Med. News.*

THE Chicago Medical Recorder, edited by Dr Archibald Church, and previously published by W. T. Keener, of Chicago, is now being published by the M. H. Kauffman Medical Publishing Company.

NAPOLEON'S PULSE.—According to Corvisart, the normal pulse rate of Napoleon Bonaparte was under forty beats to the minute.

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